

Causal Factors Affecting Staff Performance of Private Hospitals in Yichang City, the People's Republic of China

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Abstract:- The purpose of this study is: (1) Study the opinions of private hospitals in Yichang city on individual, information technology, knowledge management process, knowledge management operations and staff performance of employees. (2) to study the influence of individual, information technology, knowledge management process, knowledge management practice operations that affect staff performance in private hospitals in Yichang city. and (3) to study the methods to improve the operational business performance. This study is a mixed method study. The sample for the quantitative study was 3767 people from 60 private hospitals in Yichang. The sample size was determined according to the criteria of Hare et al., with a total sample population of 400 people, and a qualitative study was conducted. Purposive random sampling method was used for 8 people, including executives and medical staff. The instrument used to collect data was a questionnaire using the structural equation modeling technique.

Major Findings: (1) The factors that influence staff performance in private hospitals in Yichang, the People's Republic of China include individuals, information technology, knowledge management process and knowledge management operations. (2) Individuals, information technology, knowledge management processes, and knowledge management operations have a positive impact on staff performance, where the index measuring the consistency level of the structural equation model is appropriate and harmonized with the empirical data $\chi^2/df = 2.40$, CFI = 0.936, NFI=0.896, RFI=0.875, IFI=0.937, TLI=0.923, CFI=0.936, RMSEA = 0.060 and (3) By strengthening the application of information technology, paying attention to the role of individuals, optimizing knowledge management processes, and strengthening the connection between knowledge management operations and employee performance, Yichang private hospitals can further improve the effectiveness of knowledge management, promote the improvement of employee performance, and achieve sustainable development of the hospital.

Keywords:- Performance; Hospitals and Yichang City.

I. INTRODUCTION

In recent years, the number of private hospitals in my country has shown steady growth. This growth is due to the government's policy encouragement and support for social capital to enter the medical service field, which has enabled private hospitals to be widely distributed in urban and rural areas, providing patients with more diversified medical service options. As an important city in Hubei Province, Yichang City has a total of 96 hospitals, including 60 private hospitals and 36 public hospitals. Private hospitals account for 62.5% of the total number of hospitals. However, with the rapid development of private hospitals, the challenges faced by their management have become increasingly prominent, especially in aspects such as human resource management and employee performance improvement, and there is an urgent need to explore effective solutions.

In today's highly information-based society, knowledge has become one of the most valuable resources for enterprises. With the continuous advancement of science and technology and the accelerated development of globalization, competition among enterprises has become increasingly fierce, and the core of competition has shifted from traditional material resources to knowledge resources. Therefore, the effective management and utilization of knowledge has become a key factor for enterprises to enhance their competitiveness and achieve sustainable development. Emphasized the importance of knowledge management to business success (Davenport, T. H., & Prusak, L. 1998). Against this background, research in the field of knowledge management (KM) has grown dramatically in the past decade and has become the focus of management academics and practitioners.

Knowledge Management (KM), as an important management method and practice, can effectively collect, organize, store, share and utilize knowledge resources within the organization, thereby promoting the organization to achieve strategic goals (Grant, R. M. 1996) and enhancing the competitive advantage of private hospitals. Knowledge management involves a series of activities such as the creation, acquisition, sharing, transfer, protection and application of knowledge, aiming to promote organizational learning, innovation and development. For private hospitals, the introduction of knowledge management practices will help optimize management processes, improve employees' professionalism and performance levels, achieve sustained

competitive advantages through knowledge integration, and improve the overall quality of medical services.

Doctors need accurate clinical information and medical knowledge when diagnosing and treating diseases. Knowledge management can provide medical literature retrieval, clinical guideline query, expert opinion consultation and other services, helping doctors make more accurate and scientific clinical decisions, improving diagnosis and treatment effects and patient satisfaction. Hospitals need to continuously cultivate and develop medical talents, including doctors, nurses, technicians, etc. Knowledge management can provide a wealth of medical education resources and online training courses to help medical staff continue to learn and improve their professional capabilities, and adapt to the development of medical technology and changes in demand for medical services (Al-Qirim, N, 2017).

The impact of the knowledge management process on knowledge management operations and employee performance is mainly reflected in knowledge acquisition and creation, knowledge storage and organization, knowledge sharing and dissemination, knowledge application and application, and knowledge evaluation and feedback. However, good knowledge management operations can improve employees' learning abilities, problem-solving abilities, innovation abilities and teamwork abilities, thereby having a positive impact on employee performance. (Alavi, M., & Leidner, D. E., 2001). Through effective knowledge management processes, organizations can make better use of knowledge resources, improve employee performance and the overall competitiveness of the organization. By establishing an effective knowledge acquisition mechanism, organizations can obtain valuable knowledge resources from the internal and external environment. Through innovative activities and knowledge sharing, organizations can promote the creation and innovation of new knowledge and provide employees with more knowledge assets. By establishing tools such as knowledge bases and document management systems, organizations can organize and classify acquired knowledge, improve the usability and accessibility of knowledge, and provide employees with convenient channels for knowledge retrieval and utilization. By establishing tools such as knowledge sharing platforms and social media, organizations can encourage employees to share their experience and knowledge, promote the dissemination and sharing of knowledge, and thereby improve the overall knowledge level and performance of the organization. Through training and learning activities, organizations can help employees master new knowledge and skills and improve their ability to apply knowledge. By establishing mechanisms such as knowledge application support systems and expert consultation, organizations can provide support and guidance for employees to apply knowledge at work, thereby improving work performance. By establishing a knowledge assessment system and performance appraisal mechanism, organizations can evaluate employees' performance and effectiveness in knowledge management activities, provide them with timely feedback and improvement suggestions, and thereby improve their work performance (Holsapple, C. W., & Joshi, K. D , 2002). All of this requires studying the impact of individuals, information technology, knowledge management processes and

knowledge management operations on employee performance in private hospitals in China, in order to gain a comprehensive and in-depth understanding of how these factors interact to jointly affect the performance of private hospital employees.

In China, private hospitals play an increasingly important role in the medical market. Therefore, improving the performance of private hospital employees is of great significance to improving the service quality and competitiveness of the entire medical industry. First of all, the impact of individual factors on employee performance in private hospitals cannot be ignored. Employees in private hospitals need to have certain medical knowledge and skills, as well as good communication skills and service awareness. These factors jointly affect employee performance and performance levels. Secondly, information technology also plays an important role in employee performance in private hospitals. With the continuous development of information technology, private hospitals can improve the quality and efficiency of medical services by introducing advanced medical information systems, electronic medical records and other technical means. At the same time, information technology can also help private hospitals implement new service models such as telemedicine and online consultation, expand service areas, and enhance competitiveness.

In summary, improving employee performance in private hospitals is a complex and systematic project that requires comprehensive consideration of the interaction and impact of various factors. By strengthening the research and application of individuals, information technology, knowledge management processes and knowledge management operations, private hospitals can continuously improve the professional quality and service level of employees, improve the quality and efficiency of medical services, and make contributions to the health and well-being of patients. greater contribution. It helps to deeply understand the current situation and problems of private hospital management and operation, and provide suggestions and directions for improvement and optimization.

➤ *Research Objective*

- To study the opinions of private hospitals in Yichang city on individual, information technology, knowledge management process, knowledge management operations and staff performance of employees.
- To study the influence of individual, information technology, knowledge management process, knowledge management practice operations that affect staff performance in private hospitals in Yichang city.
- To study the methods to improve the operational business performance.

➤ *Research Hypothesis*

- Hypothesis 1: Information technology positively affects knowledge management operations.
- Hypothesis 2: Individual positively affects knowledge management operations.

- Hypothesis 3: Knowledge management process positively affects knowledge management operations.
- Hypothesis 4: Knowledge management process positively affects staff performance of private hospitals.

- Hypothesis 5: Knowledge management operations positively affects staff performance of private hospitals.

➤ *Research Framework*

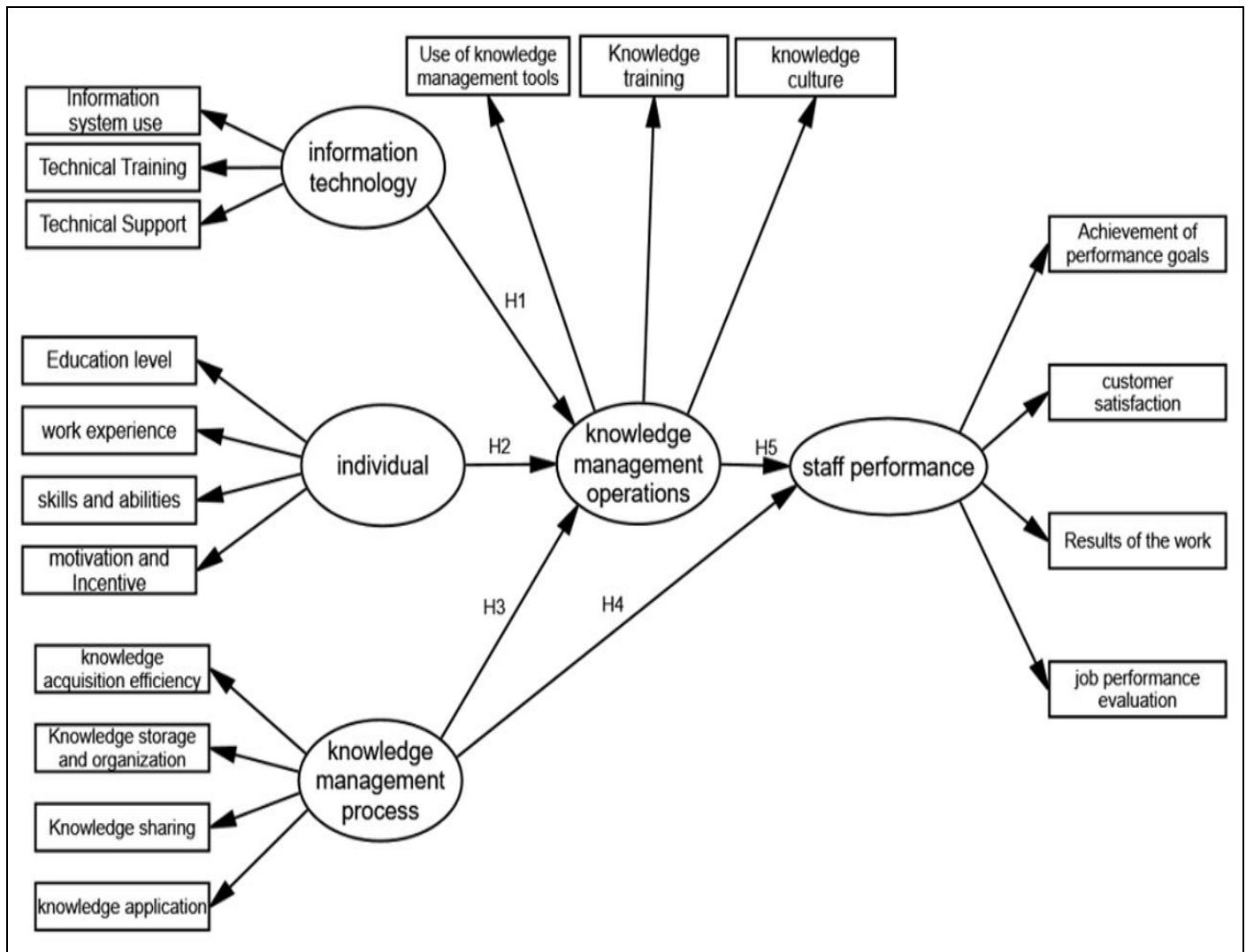


Fig 1 Research Framework

II. LITERATURE REVIEW

➤ *Theory of Staff Performance*

Staff performance not only depends on individual factors, but is also affected by various organizational and environmental factors. Huselid, M. A. (1995) explored the impact of human resource management practices on employee turnover, productivity and corporate financial performance, emphasizing the importance of organizational factors on employee performance.

According to previous research, factors affecting employee performance can be divided into three categories: individual factors, organizational factors and environmental factors. Huang, L., & Hsueh, J. H. (2018) studied the impact of individual factors, organizational resources and environmental dynamics on employees' innovative behavior, and provided empirical research support for the impact of the three types of factors on employee performance. Point out that employees' individual characteristics, such as skills, knowledge, attitudes and motivations, have a direct

impact on performance. For example, employees' skills and abilities are fundamental to getting the job done, while employees' attitudes and motivations determine their willingness to put in the effort and continually improve their performance. Organizational factors are also important factors affecting employee performance. These factors include organizational culture, leadership style, teamwork, incentives, etc. For example, a positive and healthy organizational culture can stimulate employees' sense of belonging and enthusiasm for work, thereby improving performance. Effective leadership styles and incentive mechanisms can guide employees to clarify goals and inspire motivation, thereby improving performance. In addition, environmental factors also have a non-negligible impact on employee performance. These factors include market environment, policy environment, technical environment, etc. For example, the rapidly changing market environment requires employees to have stronger adaptability and innovation capabilities to cope with new challenges and opportunities.

Wang, L., & Netemeyer, R. G. (2002) In his research, he explored in depth how factors such as job autonomy, customer requirements, and individual competitiveness affect salespeople's learning, self-efficacy, and performance. This research not only reveals the intrinsic relationship between these factors, but also reflects the important influence of individual factors on employee performance. This not only helps us gain a deeper understanding of the individual factors of employee performance, but also provides us with effective ways to optimize employee performance. In future research, we can further explore how other individual factors influence employee performance and how these findings can be applied in different industry and organizational contexts.

Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). Investigated the impact mechanism of human resource management on organizational performance through meta-analysis, revealing the impact of organizational factors on employee performance.

Barney, J. B. (1991) proposed the resource-based theory, which emphasized the importance of corporate resources (including organizational resources and environmental resources) for sustained competitive advantage, reflecting the impact of environmental factors on employee performance.

Schuler, R. S., & Jackson, S. E. (1987) explored the relationship between competitive strategy and human resource management practices, providing theoretical support for private hospitals to design employee performance management strategies. In private hospitals, the issue of staff performance is particularly important. As private hospitals face fierce market competition and operational pressure, improving employee performance is crucial to the hospital's survival and development.

Aguinis, H., & Kraiger, K. (2009) explored improved job performance, increased job satisfaction, enhanced skills and abilities, career development opportunities, and higher earning potential for employees who receive training and development. Discusses how training and development programs can help build cohesive teams, facilitate collaboration and communication among team members, increase team effectiveness, and achieve collective goals. The positive impact of training and development programs on organizational performance, productivity, innovation, employee retention, talent acquisition and overall competitive advantage. Provides a comprehensive understanding of the multifaceted impact of training and development on individuals, teams, organizations and society, covering aspects ranging from performance goal achievement to customer satisfaction and job performance evaluation.

Hsiao, R. L., Tseng, Y. H., & Lee, P. Y. (2011) Explore the impact of knowledge management capabilities and supplier relationship management on corporate performance. The importance of knowledge management and supplier relationship management in today's business management is introduced, and their possible impact on business performance is pointed out. The impact of knowledge management capabilities and supplier relationship management on firm performance is explored and may illustrate why this issue is important to management and academia. The relevant theoretical frameworks of knowledge management and supplier relationship management are

introduced, as well as their theoretical links with corporate performance. Describes the research methods they used, including data collection methods, sample selection, research design, etc. Key findings on the impact of knowledge management capabilities and supplier relationship management on firm performance and may lead to recommendations for management practice and future research.

In summary, the measurement standards for staff performance in private hospitals in China should comprehensively consider multiple aspects such as medical quality, patient satisfaction, job performance evaluation, achievement of performance goals, work results, and knowledge management. These standards not only reflect the hospital's comprehensive requirements for employees' work, but also help motivate employees to continuously improve their own quality and comprehensive capabilities, and contribute more to the sustainable development of the hospital and the health and well-being of patients.

➤ *Theory of Information Technology*

The article by Perez-Lopez and Alegre (2012) mainly discusses the impact of information technology on organizational performance and provides theoretical support and practical suggestions for organizational decision-making in the application of information technology. This study explores the direct and indirect impact of information technology on organizational performance through a survey of Spanish companies, and focuses on factors such as the organization's innovation capabilities, organizational culture, and management style. Specifically, the article studies the relationship between the degree of information technology adoption and innovation capabilities, as well as the impact of information technology on organizational culture and management style. It has important reference value for organizational managers and information technology decision-makers to understand the impact of information technology on organizational performance.

DeLone, W. H., & McLean, E. R. (2003) focused on the Information Systems Success Model (DeLone and McLean Model), a framework for assessing the impact of information systems on organizational and user performance. Used to assess the performance impact of information systems at organizational and individual levels. The core of the model lies in its six key dimensions: system quality, information quality, service quality, user satisfaction, user usage and system impact. System quality mainly focuses on the technical performance and reliability of information systems, including system stability, ease of use and efficiency. Information quality focuses on the accuracy and completeness of the information provided by the information system, and the degree to which the information supports user decision-making and task execution. Service quality involves the maintenance of information systems and user support, including system accessibility, response speed and effectiveness of user services. User satisfaction is one of the important indicators for evaluating the performance of information systems. It reflects users' evaluation of the overall performance and services of the information system. User satisfaction is not only affected by system quality, information quality and service quality, but also by factors such as personal expectations, usage experience and perceived value. User usage focuses on the user's use and

frequency of information systems in actual work, as well as the user's dependence on the information system. System impact is the ultimate goal, which measures the extent to which information systems improve organizational and individual performance, including efficiency improvements, cost savings, and business growth. Through a comprehensive assessment of these six dimensions, DeLone and McLean's model provides researchers and practitioners with a powerful tool to better understand the impact that information systems have on organizations and users, and to guide them in how to design and implement effective information system. This model is not only applicable to various types of information systems, but can also be customized and adapted to the specific needs of different industries and organizations. In addition, DeLone and McLean's model also emphasizes the interactive relationship between information systems and users. An information system is not only a technical tool, but also a system that interacts closely with users. User participation and feedback are critical to the success of information systems. Therefore, when evaluating information system performance, it is necessary to fully consider the needs and expectations of users, as well as their interactive experience with the information system. By continuously optimizing and improving information systems to meet user needs and expectations, user satisfaction and system usage can be further improved, thereby realizing the positive impact of the system on organizational and user performance. By comprehensively considering these aspects, it can help researchers and practitioners better understand the performance and effects of information systems and guide them on how to design and implement effective information systems to achieve improvements in organizational and user performance. The article covers Information system use and Technical Support. The DeLone and McLean model proposed in the article considers the impact of information systems on organizational and user performance, including the usage of information systems and the quality of technical support.

In short, the application of medical information technology plays an important role in improving the quality of medical services, reducing medical costs, and improving patient safety. However, the implementation of medical information technology also faces many challenges, such as insufficient training of medical personnel and insufficient technical support. In order to successfully implement medical information technology, it is necessary to strengthen the training and support of medical personnel and improve their information technology application capabilities. At the same time, it is also necessary to continuously improve the technology itself and improve the ease of use and stability of the system. In addition, policymakers and medical institution managers also need to pay attention to the application and development trends of information technology in the medical field and formulate corresponding policies and strategies to promote the continued development and application of medical information technology. In the future, with the continuous development of new technologies such as artificial intelligence, big data, and telemedicine, medical information technology will play an even more important role in the field of health care, providing patients with better, more efficient, and safer medical services.

➤ *Theory of Individual*

Robinson, R., & Griffiths, P. (2005) tell us about the impact of education level on hospital performance, especially the relationship between nurse education level and hospital performance. Involves the impact of education level on hospital performance, especially the relationship between nurse education level and hospital performance. Medical staff with higher levels of education usually have richer medical knowledge and skills and are able to provide higher levels of medical services, thus improving the quality of medical care in hospitals. Medical staff with higher education levels pay more attention to the practical application of professional knowledge and skills, and have better ability to identify and respond to risks and errors in the medical process, which helps to reduce the incidence of medical accidents and errors. Medical staff with higher levels of education may be more sensitive and professional in communicating and caring for patients, and can better meet patients' needs and improve patient satisfaction and overall medical experience. Medical staff with higher levels of education usually have stronger teamwork and communication skills, and can better collaborate with team members to improve the operational efficiency of the medical team, thereby improving hospital performance. Medical staff with a higher level of education are more receptive to new knowledge and technology, can participate more actively in medical research and innovation activities, bring more academic achievements and scientific research breakthroughs to the hospital, and enhance the hospital's academic reputation and influence. To sum up, the impact of education level on hospital performance is multifaceted, including improving medical quality, reducing medical errors, improving patient experience, improving teamwork efficiency, and promoting medical research and innovation. Therefore, hospitals should pay attention to their educational background and academic level when recruiting and training medical staff to improve the overall performance level of the hospital.

Ganster, D. C., & Schaubroeck, J. (1991) Analyzing the impact of educational background and level on performance. Understanding the impact of workplace stress on employee health is critical. Employees with different educational backgrounds may have different abilities to cope with work stress, which may have different impacts on their performance.

Janssen, O. (2001) Personal characteristics such as educational background interact to influence job performance and satisfaction in a private hospital setting. Analyze the impact of employees' educational background and academic level on employee performance.

In summary, education level, work experience, skills and proficiency, motivation and incentives are critical to the performance and success of change in private hospitals. Private hospitals should focus on the training and management of employees' education, experience, skills and levels, as well as motivation and incentives, in order to improve the hospital's performance and competitiveness. By continuously optimizing the structure and quality of its workforce, private hospitals can better respond to market changes and competitive pressures and achieve sustained and stable development.

➤ *Theory of Knowledge Management Process*

Wang, Z., & Wang, N. (2012) studied the relationship between knowledge sharing, innovation and company performance, in which knowledge storage and classification management are considered to be important foundations for knowledge sharing and innovation. In knowledge-intensive enterprises, knowledge sharing among employees is an important means to improve the overall knowledge level and innovation capabilities. By sharing their expertise, experience and insights, employees inspire each other to generate new ideas and solutions. This culture of knowledge sharing not only contributes to the personal growth of employees, but also to the advancement of the entire organization. However, to achieve effective knowledge sharing, a complete knowledge storage and classification management system is essential. Such a system can help enterprises systematically organize, store and classify large amounts of knowledge resources, making them easier to retrieve and share.

Choi, B., & Lee, H. (2002) conducted an empirical study on knowledge management style and its impact on company performance, which involved the effects of knowledge storage and organization. The study also found that knowledge storage and organizational effects also had a positive impact on company performance. Through effective knowledge storage and organization, companies can better integrate and manage internal knowledge resources, improve the efficiency and value of knowledge utilization, and thus create more value for the company.

Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. (2005) studied the formation process of knowledge sharing behavioral intention, including the impact of external motivational factors, social psychological forces and organizational climate on the frequency and effect of knowledge sharing, and the impact on organizational performance. In the era of knowledge economy, knowledge sharing has become a key factor for organizations to continue to innovate and improve their competitiveness.

Alavi, M., & Tiwana, A. (2002) explore knowledge integration in virtual teams and the potential role of knowledge management systems (KMS) in this. The authors illustrate the challenges faced by virtual teams in information and knowledge sharing and how to support knowledge integration through an effective KMS. Through empirical research and case analysis, the article explores how KMS promotes collaboration and knowledge sharing among virtual team members, as well as the potential of KMS in improving team performance and innovation capabilities.

Ruggles, R., & Holtshouse, D. (1999) explore the strategic importance of knowledge management in a rapidly evolving business environment and discuss how organizations can leverage their knowledge assets to gain competitive advantage. Topics covered include knowledge creation, sharing and application, and the role of technology and organizational culture in promoting knowledge-driven innovation and growth. This book provides practical advice and case studies to help businesses harness the power of knowledge to thrive in the digital age.

To sum up, knowledge management process are a comprehensive process that involves the acquisition, organization, storage, sharing, dissemination and utilization of knowledge within an organization. This process is the core of knowledge management and is of great significance to improving an organization's performance, innovation capabilities and competitive advantage. In the literature review, we can find that many scholars have conducted in-depth research and discussions on knowledge management operations. It requires comprehensive consideration and implementation by the organization in terms of strategy formulation, process establishment, technology tool selection, and cultural cultivation. Through effective knowledge management operations, organizations can make full use of internal and external knowledge resources to improve performance, innovation capabilities and competitive advantages. For private hospitals, knowledge management operations are also of great significance, which can help hospitals continuously improve their medical standards and service quality, and improve patient satisfaction and competitiveness.

➤ *Theory of Knowledge Management Operations*

Zack, M. H. (1999) believes that knowledge management tools are very important in knowledge management operations, emphasizing that knowledge management tools not only help in the acquisition, organization and sharing of knowledge, but also improve employees' work efficiency and innovation capabilities. To ensure the effectiveness of knowledge management operations, the use of tools needs to be regularly evaluated. At the same time, it is also necessary to evaluate the efficiency of knowledge acquisition, such as search time, search accuracy, etc., to ensure that users can efficiently obtain knowledge from the platform. Thus, the effectiveness of knowledge training and education can be evaluated to understand whether employees have truly mastered the required knowledge and skills.

Alavi, M., & Leidner, D. E. (2001) believe that the core of knowledge management operations is to effectively integrate and utilize knowledge resources within the organization to achieve knowledge sharing, knowledge innovation and knowledge application. To achieve this goal, knowledge management tools play a vital role in knowledge management systems. These tools not only help organizations collect, store and organize knowledge, but also facilitate the transfer, exchange and application of knowledge.

Research by Pan, S. L., & Scarbrough, H. (1998) highlights the importance of a sociotechnical perspective in knowledge sharing practices. They believe that knowledge management tools are not just technical products, but a combination of social and technical factors that influence knowledge sharing within an organization. The usage of knowledge management tools is closely related to their contribution to organizational knowledge sharing. These tools can only be truly effective when employees actively use them and build relationships of trust, sharing, and collaboration. Therefore, when organizations promote and use knowledge management tools, they not only need to pay attention to the functions and performance of the tool itself, but also need to consider how to cultivate employees' sharing awareness and cooperative spirit to give full play to the role of knowledge management tools in promoting knowledge sharing. However, knowledge culture is a shared set of values and codes of conduct

that encourages employees to actively participate in knowledge sharing, innovation and application. A strong knowledge culture can promote cooperation and communication among employees, stimulate innovative thinking, and improve the organization's competitiveness and adaptability.

Lee, H., & Choi, B. (2003) believe that through effective knowledge management operations, organizations can better manage and utilize knowledge resources, improve employees' work efficiency and innovation capabilities, and promote the sustainable development and innovation of the organization. At the same time, the construction of organizational culture is also an aspect that cannot be ignored in knowledge management operations. By cultivating and maintaining a positive, open, collaborative and innovative organizational culture, organizations can further promote knowledge sharing, innovation and application, and enhance the organization's competitiveness and adaptability. A positive organizational culture can promote trust and cooperation among employees, thereby enhancing the effectiveness of knowledge sharing.

In conclusion, knowledge management operations play a vital role in modern enterprises. Through effective knowledge management, companies can stimulate employees' innovative spirit and creativity, and improve overall performance and competitiveness. Knowledge management operations involve many aspects, including the use of knowledge management tools, knowledge training, knowledge culture, etc. These elements are interrelated and together form the core framework of enterprise knowledge management. By establishing complete knowledge management systems and platforms, enterprises can easily collect, store and share various knowledge resources. Through systematic knowledge management training, employees can improve their knowledge and skills and stimulate innovative thinking. Finally, knowledge culture is the soul of enterprise knowledge management operations. A positive knowledge culture can inspire employees' learning and sharing spirit and promote the creation and dissemination of knowledge. In such a cultural atmosphere, employees are willing to actively share their knowledge and experience and actively participate in team cooperation and innovation. This culture not only improves the work efficiency and quality of employees, but also injects new vitality and motivation into the development of the enterprise. Therefore, enterprises should pay attention to the construction and development of knowledge management operations and continuously improve and optimize all aspects of knowledge management to promote the sustainable development and progress of enterprises.

III. RESEARCH METHODOLOGY

The aim of this research is To study the opinions of private hospitals in Yichang city on individual, information technology, knowledge management process , knowledge management operations and staff performance of employees. To study the influence of individual, information technology, knowledge management process , knowledge management practice operations that affect staff performance in private hospitals in Yichang city. And To study the methods to improve the operational business performance . The research of this article adopts a combination of qualitative and quantitative methods.

Study the impact of individuals, information technology, knowledge management processes and knowledge management operations on employee performance in private hospitals in China.

➤ *Population*

The target population used in this research study is private hospitals in Yichang.

➤ *Sample Size*

Qualitative research A total of 8 people were interviewed this time. They are: 2 senior managers of the hospital, providing insights on hospital operations, policy development and strategic planning. There are 2 doctors, 1 attending doctor and 1 expert doctor above associate senior level. They can provide information on the quality of medical services, clinical practice and doctor teamwork. 2 nurses, 1 head nurse and 1 clinical nurse who can provide insights into aspects such as quality of care, workflow and teamwork. There are two other employees, one administrative support staff and one technical staff, who can provide information about non-medical services, technical support and work environment.

Quantitative study The sample of the quantitative study was 3767 people from 60 private hospitals in Yichang. Using Hair et al(2010), minimum sample= $(18 \times 20) = 360$ respondents. Base on the formula above, the minimum sample size in this research is 360 respondents. Population size 3,767 (source : The People's Government of Yichang Municipality, 2023)

➤ *Research Tools*

• *Tools used in Qualitative Research*

In-depth interviews allowed us to communicate directly with key personnel in private hospitals in Yichang (such as senior managers, doctors, and nurses, etc.) to gain an in-depth understanding of their actual experiences, challenges, and strategies in knowledge management practice. Through in-depth interviews with these insiders, we were able to obtain first-hand, context-specific data that was critical to our understanding of how knowledge management actually works in private hospitals.

In order to study the impact of individuals, information technology, knowledge management processes and knowledge management operations on employee performance in private hospitals in China, our in-depth interviews included the following 5 questions:

- ✓ How important do you think knowledge management is in private hospitals?
- ✓ What are the knowledge management practices in your hospital? Please describe these practices in detail.
- ✓ What do you think is the role of information technology in knowledge management? How does your hospital use information technology to support knowledge management?
- ✓ How do you share and acquire knowledge with other employees in your job? What challenges and difficulties do you see in these processes?
- ✓ How do you think knowledge management affects employee performance in private hospitals? Can you provide some specific examples or cases to support your point?

- *Tools used in Quantitative Research*

The questions in the questionnaire are divided into the following five parts:

- ✓ Part 1: The questionnaire provides general information about the respondent's organization. Include gender, age, education in private hospitals. These individual factors affect the knowledge background and experience of the interviewees and are crucial for subsequent analysis of the impact of individual characteristics on employee performance.
- ✓ Part 2: Focus on respondents' information technology usage. This part contains 3 questions, aiming to understand the frequency and proficiency of employees in using information technology in their daily work, and the impact of information technology on their work efficiency. These questions allow us to assess the direct impact of information technology on employee performance.
- ✓ Part 3: We focus on the individual characteristics of the interviewees, which include four aspects: education level, work experience, skills and abilities, motivation and motivation. These individual characteristics have a significant impact on employees' work performance in private hospitals because they directly Relevant to employees' knowledge acquisition, knowledge application and innovation capabilities.
- ✓ Part 4: Explores the employee knowledge management process. Contains 4 questions designed to understand how employees acquire, share and apply knowledge. This part also involves employees' attitudes and perceptions towards knowledge management, and the impact of knowledge management on their work performance. The answers to these questions will reveal the relationship between knowledge management processes and employee performance.
- ✓ Part 5: Focus on knowledge management operations. It contains 3 questions, mainly investigating the hospital's investment, operational strategies and effects in knowledge management. This section aims to assess the indirect impact of knowledge management operations on employee performance, as well as the hospital's overall performance in knowledge management.
- ✓ Part 6: Evaluate staff performance. It contains 4 questions to measure employees' self-evaluation of their work performance through a Likert scale. This part of the data will be used as a dependent variable, and correlation analysis will be conducted with other parts of the data to reveal the specific impact of each factor on employee performance.

- *The Statistics used in Data Analysis*

During the data analysis process, we will use a variety of statistical data and methods to comprehensively and in-depth explore the impact of knowledge management processes and knowledge management operations on the performance of Chinese private hospital employees, as well as the impact of influencing factors, employment, performance, and training paths on college students. relationship with employability. Here are the main statistics and methods we will use: Descriptive statistics Correlation analysis Regression analysis Structural equation modeling (SEM) and Reliability and validity analysis.

IV. RESULTS

- *Research Results*

This study collected and analyzed data from Yichang private hospital employees and obtained the following main research results:

First of all, this study found that Yichang private hospital employees generally believe that factors such as individuals, information technology, knowledge management processes, and knowledge management practices have an important impact on employee performance. They generally believe that the improvement of individual abilities and qualities, the effective application of information technology, the optimization of knowledge management processes, and the standardization of knowledge management practices are all important ways to improve employee performance. These findings are consistent with existing research and further verify the importance of these factors in improving employee performance in private hospitals. The majority of employees surveyed expressed a positive attitude towards individual learning, information technology utilization, and knowledge management practices within their private hospitals. They believed that continuous learning, the utilization of advanced IT tools, and effective knowledge sharing and management processes contribute significantly to their personal and professional development, as well as the overall operational efficiency of the hospital.

Secondly, through the analysis of structural equation model, this study reveals the path relationship between these factors and their specific impact on employee performance. Research results show that information technology and individuals have a significant positive impact on employee performance, while knowledge management processes and knowledge management practices indirectly affect overall performance by affecting certain aspects of employee performance. These findings provide important clues for our in-depth understanding of factors affecting employee performance in private hospitals. The study found that individual learning, information technology utilization, knowledge management processes, and knowledge management practices all have a significant positive impact on employee performance in private hospitals in Yichang City. Employees who actively engage in learning and utilizing technology, as well as participating in knowledge sharing and management activities, tend to have higher levels of job satisfaction, lower turnover rates, and better performance evaluations from supervisors.

In addition, this study further explores the mediating effect of knowledge management processes on the relationship between knowledge management practices and employee performance. The results show that knowledge management processes play a partial mediating role in the impact of knowledge management practices on employee performance, that is, knowledge management practices not only directly affect employee performance, but also indirectly affect performance by optimizing knowledge management processes. This finding reveals for us the bridging role of knowledge management processes between knowledge management practices and employee performance, and provides a new perspective for improving employee performance.

Finally, based on the above research results, this study puts forward specific suggestions to improve the operational

performance of Yichang private hospitals.

Table 1 Summary of hypothesis test results

Research Hypothesis	Test Result
Hypothesis 1 (H1) Information technology positively affects knowledge management operations.	Accept
Hypothesis 2 (H2) Individual positively affects knowledge management operations.	Accept
Hypothesis 3 (H3) Knowledge management process positively affects knowledge management operations.	Accept
Hypothesis 4 (H4) Knowledge management process positively affects staff performance of private hospitals	Accept
Hypothesis 5 (H5) Knowledge management operations positively affects staff performance of private hospitals	Accept

V. DISCUSSION

Based on the path relationship test results of the structural equation model, we tested the proposed research hypotheses. The following are the test results and explanations of the hypotheses:

- Hypothesis 1 (H1) Information technology has a positive impact on knowledge management operations. The test result is significant ($\beta=0.49$, $p<0.001$), indicating that information technology has a significant positive impact on knowledge management operations. This result is in line with expectations. The development and application of information technology has provided efficient and convenient tools and methods for knowledge management operations, thus improving the effectiveness of knowledge management.
- Hypothesis 2 (H2) Individuals have a positive impact on knowledge management operations. The test results are also significant ($\beta=0.413$, $p<0.001$), indicating that individuals play an important role in knowledge management operations, and their active participation and contribution have a significant impact on improving the effectiveness of knowledge management. This result emphasizes the importance of individuals in knowledge management and is consistent with the views in the existing literature.
- Hypothesis 3 (H3) Knowledge management processes have a positive impact on knowledge management operations. The test results also prove the validity of the hypothesis ($\beta=0.186$, $p<0.01$). The knowledge management process, as a series of orderly and coherent activities, has a significant positive impact on the execution and effect of knowledge management operations. This shows that optimizing the knowledge management process and improving process efficiency and quality are crucial to improving the effectiveness of knowledge management operations.
- Hypothesis 4 (H4) Knowledge management process has a positive impact on employee performance in Yichang urban private hospitals. The test result is significant ($\beta=0.522$, $p<0.001$), indicating that the knowledge management process has a significant positive impact on employee performance of Yichang Urban Private Hospital. This result reveals the important role of the knowledge management process in improving employee

performance. By optimizing the knowledge management process, employees' work efficiency and satisfaction can be improved, thereby improving the overall performance level.

- Hypothesis 5 (H5) Knowledge management operations have a positive impact on employee performance in private hospitals in Yichang City. The test result is significant ($\beta=0.375$, $p<0.001$), verifying the positive impact of knowledge management operations on employee performance. This shows that by implementing effective knowledge management operations, employees' knowledge acquisition, application and innovation capabilities can be improved, thereby improving their performance.

In summary, through the path relationship test of the structural equation model, we verified the five research hypotheses proposed and obtained significant support. These results provide a valuable reference for our in-depth understanding of the application of knowledge management in Yichang urban private hospitals, and also provide directions for future related research.

Through descriptive statistical analysis, we further understand the characteristics and distribution of employees in the sample. In terms of age, employees are mainly concentrated in the middle-aged and young stage, which reflects that the company has a vibrant and innovative workforce. The proportion of employees of different genders is relatively balanced, which helps to create a diversified working environment and promote the collision and exchange of different thinking and perspectives. In terms of job distribution, it covers from grassroots employees to management, which helps us to fully understand the differences and influencing factors in performance of employees at different levels. From the perspective of educational distribution, employees with bachelor's degrees and above account for as high as 82.85%, which fully demonstrates that the company has a high-quality talent team. These employees have solid professional knowledge and strong learning ability, providing a strong talent guarantee for the development of the company. At the same time, the company should also make full use of this advantage, strengthen employee training and improvement, stimulate their innovation potential, and lay a solid foundation for the company's strategic goals and sustainable development. In terms of work experience, employees with more than 10

years of experience account for a considerable proportion. These employees have made important contributions to the development of the company with their rich experience and skills. Employees with 4-6 years of work experience also constitute the backbone of the company. Their stability and professionalism are crucial to the stable operation of the company. In addition, the addition of new employees has injected new vitality and creativity into the company and injected new impetus into the company's development.

From the results of the difference test, we can find that there are significant differences in the role of each factor in the knowledge management process and their impact on employee performance. These differences are not only reflected in the degree of impact, but also in the impact mechanism, further confirming the complexity and diversity of knowledge management in Yichang urban private hospitals. First, the relationship between information technology and knowledge management operations varies significantly. As an important tool for modern knowledge management, information technology can significantly improve the efficiency and effectiveness of knowledge management operations. Through advanced information technology, hospitals can better integrate, store and share knowledge resources and improve the overall level of knowledge management. The results of this difference test further strengthen the validity of Hypothesis 1, that is, information technology has a positive impact on knowledge management operations. Secondly, the role of individuals in the knowledge management process also shows significant differences. Different individuals play different roles and contributions in knowledge management, and this difference affects the effectiveness of knowledge management to a certain extent. Therefore, when hospitals promote knowledge management, they need to fully consider individual differences and characteristics, stimulate individual enthusiasm and creativity, and jointly promote the development of knowledge management. The verification results of Hypothesis 2 once again emphasize the important role of individuals in knowledge management. In addition, there are significant differences in the relationship between KM operations and KM operations and employee performance. As the core link of knowledge management, knowledge management operations have an important impact on the execution and effect of knowledge management operations. At the same time, knowledge management operations are also directly related to the improvement of employee performance. By optimizing knowledge management operation processes and improving operational efficiency and quality, hospitals can further enhance the knowledge level and innovation capabilities of employees, thereby enhancing the hospital's competitiveness. The verification results of Hypotheses 3 and 4 revealed to us the key role of knowledge management operations in improving employee performance.

Finally, differences in the relationship between knowledge management operations and employee performance are equally significant. Effective knowledge management operations can improve employees' knowledge acquisition, application and innovation capabilities, thereby

improving their performance. The results of this difference test further verify the validity of Hypothesis 5, that is, knowledge management operations have a positive impact on employee performance.

While the positive impacts of learning, technology, and knowledge management on employee performance are well established, it is important to note that the effectiveness of these factors can vary depending on the specific context and culture of the organization. For example, the study found that private hospitals with a more open and collaborative culture tend to see greater benefits from knowledge sharing and management practices. Conversely, hospitals with a more hierarchical and closed culture may struggle to fully utilize the potential of these factors. Therefore, it is crucial for private hospitals to foster a culture that encourages learning, innovation, and open communication in order to maximize the benefits of knowledge management on employee performance.

VI. SUGGESTIONS FOR FURTHER RESEARCH

➤ *Operation Suggestion*

In summary, by strengthening the application of information technology, paying attention to the role of individuals, optimizing the knowledge management process, and strengthening the connection between knowledge management operations and employee performance, Yichang City Private Hospital can further improve the effect of knowledge management and promote the improvement of employee performance. Improvement to achieve sustainable development of the hospital. Invest in employee training and development programs to promote continuous learning and skill enhancement. This includes both technical training and soft skills training to improve communication and teamwork abilities. Utilize advanced information technology tools to facilitate knowledge sharing and management. This includes implementing systems for electronic document management, online collaboration tools, and data analytics capabilities to help employees' access and utilize knowledge more efficiently. Foster a culture of open communication and collaboration to encourage knowledge sharing among employees. This can be achieved through regular team meetings, employee forums, and incentive programs that recognize and reward knowledge sharing efforts. Regularly evaluate the effectiveness of knowledge management practices and make necessary adjustments to improve their impact on employee performance. This includes collecting feedback from employees, analyzing performance data, and identifying areas for improvement.

➤ *Further Research Prospects*

In summary, as a complex and important field, knowledge management still has many issues that deserve in-depth research and discussion. By continuously expanding and deepening relevant research, we can better understand the nature and laws of knowledge management and provide strong support for the sustainable development of organizations.

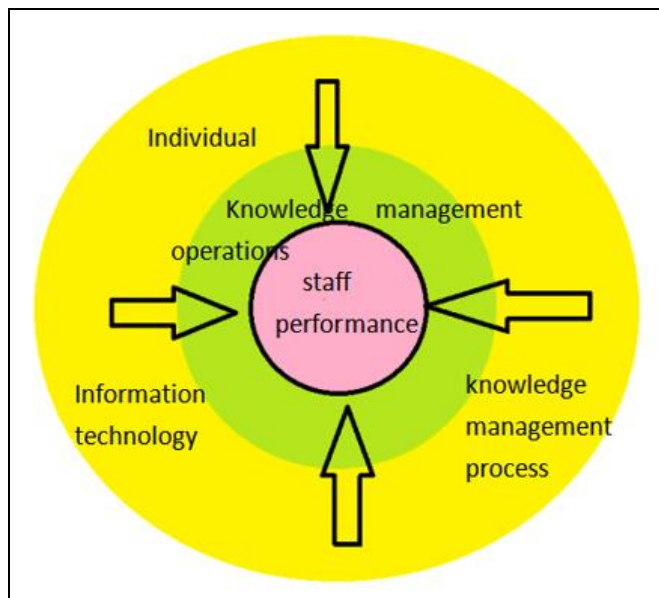
➤ *New Knowledge*

Fig 2 New Knowledge

This diagram shows several key factors that affect employee performance and the relationship between them. The center of the diagram is staff performance, which is the ultimate goal. There are four arrows pointing to employee performance in the diagram, indicating that there are four main factors that affect employee performance. To further enhance the effectiveness of our recommendations, Yichang private hospitals should also consider adopting a comprehensive approach that integrates these strategies. By doing so, they can create a synergistic effect that multiplies the impact of each individual measure. Firstly, hospitals should establish a knowledge-sharing platform that encourages employees to contribute their expertise and experiences. This platform can be in the form of an internal wiki, forum, or even a social media-like tool that allows for easy collaboration and communication. By making it easy for employees to share their knowledge, hospitals can facilitate the spread of best practices and innovative ideas across the organization. Secondly, hospitals should implement a performance management system that ties individual goals to organizational objectives. This system should provide clear and measurable targets for employees, as well as regular feedback and recognition for their achievements. By doing so, hospitals can ensure that employees are aligned with the overall direction of the organization and motivated to achieve their individual goals. Thirdly, hospitals should invest in leadership development programs that focus on creating an inclusive and empowering leadership style. By fostering leaders who are willing to delegate authority, encourage risk-taking, and celebrate successes, hospitals can create a culture that fosters innovation and continuous improvement. Lastly, hospitals should continually monitor and evaluate the implementation of these strategies. By collecting data on employee performance, satisfaction, and organizational outcomes, hospitals can identify areas that need further improvement and adjust their strategies accordingly.

In conclusion, by adopting a comprehensive approach that integrates knowledge management, personal ability development, organizational culture building, and performance management,

Yichang private hospitals can create a synergistic effect that significantly enhances employee performance and drives sustainable organizational success.

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