# Analysis on the Influencing Factors of University Management Performance Based on Knowledge Management Concept

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Abstract: Knowledge management has become the most important guiding theory in the operation and management activities of various organizations in society. Strengthening the construction of scientific and technological innovation team in colleges and universities is an important measure to implement the strategy of rejuvenating the country by science and education and strengthening the country by talents, but there are some problems and difficulties in the process of stimulating it. In this way, the author based on the concept of knowledge management to analyze the influencing factors of university management performance. The study found that scientific and rational administrative management and administrative intervention can effectively improve the hard environment of innovation on the basis of reality, promote the rapid improvement of scientific and technological innovation capabilities, and greatly improve the ratio of scientific research input to output and scientific research management performance. It is an important driving force for promoting the leap-forward development of science and technology in universities, and it is an indispensable measure to form the characteristics of scientific research in universities.

### 1. Introduction

Knowledge management is a new management concept and management model that has been proposed since the end of the 20th century with the advent of the era of knowledge economy. Knowledge management theory comes from enterprise management [1]. Therefore, the performance of colleges and universities is mainly reflected in the efficiency and effectiveness of teaching #research and social service [2]. Only find the main factors that affect the performance of teachers, and establish a management system and operational mechanism that suits them, creating a relaxed and good working environment for teachers. Therefore, the enthusiasm of the teachers can be fully mobilized, so that the limited educational resources can be maximized [3]. Paying attention to the construction of scientific and technological innovation teams in colleges and universities is an important measure to implement the strategy of rejuvenating the country through science and education and strengthening the country through talents. Therefore, the main factors affecting enterprise knowledge management are also reflected in the four stages of knowledge management process, namely knowledge acquisition, knowledge sharing, knowledge integration and innovation, and knowledge application [4]. For a long time, the decision-making level and functional departments of colleges and universities lack sufficient understanding and Reflection on the correlation between scientific and technological management and scientific research performance. They are often only willing to see the annual increase in the quantity of scientific and technological statistics, and lack of careful analysis and rational judgment on whether the data structure is scientific and reasonable in nature [5]. At present, there is no consensus on the strict definition of knowledge management. Chinese and foreign scholars have given a variety of expressions from different angles. With the development of social economy, the concept of knowledge management is being introduced into the library industry and given new meaning.

Knowledge management is to organize and manage explicit knowledge and tacit knowledge within an enterprise [6]. Considering comprehensively the objectives of universities in teaching, scientific research and social services, as well as the differences in the orientation and emphasis of each university in different functional areas [7]. The results of university management should be the

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synthesis of achievements in teaching, scientific research and social services, and the efficiency should be reflected in the efficiency of the application of university resources in these areas, that is, the input-output ratio [8]. With the development of higher education in China, how to effectively use the limited educational resources and improve its efficiency has become a bottleneck problem in the development of colleges and universities [9]. Improving teachers' business ability and teaching quality and improving teachers' overall work performance are the key to the smooth development of colleges and universities. Too much reliance on the main role of experts and professors in technological innovation, while ignoring the administrative control role of science and technology management in the allocation and integration of innovation elements, science and technology policy and planning [10]. Sustained technological innovation capability is the key to building a world-class university and building a medium- and long-term competitiveness of higher education institutions. Strengthening the construction of a scientific and technological team with continuous innovation has become one of the most important tasks for higher education institutions and other science and technology management departments. Knowledge management is a brand-new management thought and management model in the era of knowledge economy. It can be seen that knowledge management refers to the "people" as the center, based on information, through the management of knowledge resources, to achieve organizational knowledge sharing, in order to improve organizational resilience and knowledge innovation capabilities.

## 2. Analysis of External Factors Affecting University Management

Judging from the government's control over colleges and universities! It is mainly reflected in the control of financial subsidies, scholarships, and licensing. Organizational factors include factors such as incentive factors, organizational culture, group pressure and performance evaluation, especially the incentive factors and organizational culture play a key role. It is hoped that through in-depth analysis of the factors affecting the performance of the university's science and technology innovation team, we can find effective incentives to help team managers manage the team more effectively. Many outstanding experts and scholars in colleges and universities are keen on politics, especially some scholar-type leaders lack the correct understanding and necessary understanding of the lack of management knowledge and the connotation of administrative power. Unable to deal with the relationship between administrative power and academic power properly, the decision-making usually tends to be perceptual, the vision is not broad enough, and even the power for personal gain, which seriously affects the quality of management and management performance. From the perspective of educational regulations and policies, an important part of the reform of higher education management system is that the main body of investment in higher education has been transformed from a single state funding system to a state, society and collective individuals sharing educational funds, and private colleges and universities are legalized. This has alleviated the strain of University funds. Working factors include tasks, working methods, working environment, opportunities and other factors. Clear objectives, tasks, smooth work flow, optimal work coordination, equipped with excellent material conditions and equipment, can promote the improvement of staff performance.

Among the factors of economic power, from the perspective of the trend of national economic development, knowledge economy has triggered the demand of society for scientific and technological innovation and people's demand for higher education. Science and technology innovation team exists in Colleges and universities, and colleges and universities exist in society. The changes of various social environments will inevitably affect the development of schools. Similarly, changes in school development goals and strategic positioning also affect the team's strategic development plan. Therefore, it is necessary for us to analyze the impact of external macro-environment on University Science and technology innovation team. The sharing of explicit knowledge in enterprises can be realized mainly through company web pages in the form of reports, documents, databases, etc. The sharing of tacit knowledge in enterprises is a process of enlarging and spreading individual knowledge in organizations. Finally, even if the management department fails to complete the annual assessment index or the recent assessment indicators, there is generally

no punishment system for the members of the leadership team, and the official photo is still in use, and the official career is still smooth. Therefore, the economic environment and the social and cultural environment are generally for the university, whether it is from teaching. Research and social services are more reflected in the rising market demand, and colleges and universities are faced with more opportunities and development space. On the other hand, as people's educational concepts change, the number of people going abroad to receive higher education will rise. # Undergraduate education market will also face competition from foreign universities.

From the perspective of competition, the university education market faces fierce competition between domestic and foreign universities. The competition with domestic counterparts is mainly reflected in the competition for financial support, high-quality teachers, high-quality students and research funding. And the competitive situation is getting more and more fierce, which is evident from the rising ranking of colleges and universities. Along with economic globalization, the internationalization of education has become a trend and trend that has been clearly presented in the world of education development, and has increasingly become one of the important themes of education reform in many countries. It is these relatively independent factors that interact and interact with each other, and ultimately produce realistic employee performance. This theory has important guiding significance for the analysis of factors affecting teachers' job performance. Knowledge Integration and Innovation: Knowledge Innovation is the soul of other innovative activities of enterprises. Only by developing new knowledge on the basis of existing knowledge can enterprises create greater value. In the evaluation index system of academic and personnel, the concept of people-oriented is not fully embodied, the ranking of the members of the project team and the personal contribution of the project leader are overemphasized, and the evaluation of the scientific research team and the participants is not quantified enough, which ultimately leads to less achievements in scientific research and fewer national awards. This inflexible pattern also affects the performance of scientific research management to a certain extent. In order to further improve the quality and performance of scientific research management, it is necessary to innovate and optimize the structure and operation mode of scientific research management.

### 3. Measures to Improve the Management Performance of Colleges and Universities

Colleges and universities should constantly innovate the selection and appointment mechanism of functional department leaders, further establish and improve the evaluation system of department leaders, and optimize the professional structure of functional department leaders. Members of scientific and technological innovation teams in Colleges and universities usually have strong desire to challenge the environment and self-realization because of their high self-confidence and self-realization needs. However, with the development of network technology, globalization and organizational change, the nature of team members'work has become blurred. If the scope of the work becomes broader, the performance of the work depends to a large extent on the contribution of team members to the creation, dissemination and application of knowledge, as well as the coordination and cooperation among them. The application of computer and information technology in school management embodies the integration of school management information and online decision support. Many well-known universities in the world have significantly improved the performance of university management through the implementation of education management ERP system, and also triggered the innovation of university management. The level of human resource management directly affects the performance of teachers. Therefore, human resource management activities are the main independent variables of this study. If the organization can give the team members the necessary pressure to give them a challenging job, they will feel that they are valued and work harder to learn and develop themselves. In addition, universities should further deepen the cooperation between government, industry, and research, and actively explore the joint construction and sharing of scientific research bases, key disciplines, instruments and equipment, and strengthen the leading and supporting role of national-level R&D platforms in industrial technology innovation.

Colleges and universities should earnestly improve the orientation of scientific research

evaluation and assessment, and establish a scientific and effective evaluation and evaluation system. Schools must respect the laws governing the growth of talents and academic development, and avoid short-term behaviors such as quick success. In particular, young scholars who are bold enough to have active and innovative thinking skills should dare to let them take the lead. On the basis of focusing on the existing human resources of the school, exerting the cross-disciplinary and integration advantages, we will actively participate in major international cooperation projects and train scientific research teams. This educational reform theme is directly linked to the development of the world political economy and to the development needs of each country's own society, economy and culture. Campus culture constitutes the soft environment of the school. After the school's strategic objectives are determined, the school's goals, ideas and ways of running schools can be deeply rooted in the hearts of teachers through the way of cultural dissemination in the process of building campus culture, so that they can work together for the common vision of the school. The higher the ranking of universities, the more opportunities for further development can be obtained, and finally a virtuous circle can be formed. The service ability of universities mainly refers to the quantity and quality of talents that can be trained, the quantity and quality of research results provided, and the ability to provide advisory services, technology transfer and other services to the industry. This is the most important environmental factor, which is an important condition to limit or promote the potential of teachers.

Market factors mainly include brand, service ability and price factors. The brand of university mainly refers to the grade determined by the reputation and status accumulated in teaching and scientific research activities, which has genetic effect. According to the theory of modern human resources development and management, the following nine dimensions are selected: target management, post appointment, personnel introduction, personnel development, personnel training, performance appraisal, remuneration, job security and discipline team building. Knowledge application: After testing its effectiveness, knowledge can be integrated into the process, system and control. This is the application of knowledge, which is the purpose for enterprises to acquire and share knowledge, and also the final link to realize the transformation of knowledge to "knowledge assets". Promptly improving the state of scientific research management of the department and further strengthening the scientific research management function of the department will significantly improve the work efficiency and quality of the school's science and technology management chain, and is a necessary condition for realizing the development goal of the school's science and technology. For colleges and universities, knowledge management is to collect all the knowledge and skills, including in the database, in the textbooks, especially in the minds of teachers, and to teach them most effectively. People-oriented, respecting talents, and respecting knowledge must be classified and managed to achieve the goal of "doing the best". It is necessary to establish mutual trust relationships and incentives within the school, and organize teacher exchange meetings from time to time, including formal academic reports, teaching and research activities, and other informal activities.

### 4. Conclusion

Information system factors mainly refer to the application of computers and information technology in school management, teaching and research, and social services. In terms of teaching and scientific research, information system factors mainly refer to the application of advanced teaching methods such as multimedia teaching and distance education, as well as the ability to acquire scientific resources in scientific research and the application of online collaborative research and development tools. In order to mobilize the enthusiasm of the teachers to a greater extent, improve the overall level of the teaching staff, and successfully complete the new tasks faced by various schools, the following measures can be taken: to create a campus culture of a learning university. Schools and team leaders should deeply study the characteristics and needs of various innovative teams, establish a scientific management and incentive system conducive to the development of innovative teams, so as to enable team members to play their abilities. Only in this way can colleges and universities maintain their advantages in competition. Therefore, enterprises

can focus on increasing knowledge management input, accelerating technology and product innovation, strengthening the training and education of employees, improving the relevant incentive system to improve employee satisfaction and other aspects to improve knowledge management performance. The performance of scientific research management in Colleges and universities mainly depends on the strong support of governments at all levels, scientific management and decision-making, and innovation and continuous leap of scientific research groups.

#### References

- [1] Meneghetti N, Facco P, Bezzo F, et al. Knowledge management in secondary pharmaceutical manufacturing by mining of data historians-A proof-of-concept study.[J]. International Journal of Pharmaceutics, 2016, 505(1-2):394-408.
- [2] Ankur J, Satendra S, Shivani J, et al. Concept maps: A tool for knowledge management and synthesis in web-based conversational learning:[J]. International Journal of Applied & Basic Medical Research, 2016, 6(3):151-156.
- [3] Yang G, Gao H. Uncertain Risk Assessment of Knowledge Management: Based on Set Pair Analysis [J]. Scientific Programming, 2016, 2016:1-8.
- [4] Taylor A, Oates T. Technology as knowledge towards a new perspective on knowledge management in electronics[J]. International Journal of Technology Management, 2014, 11(3-4):296-314.
- [5] Herwig, Christoph, GarciaAponte, et al. Knowledge management in the QbD paradigm: manufacturing of biotech therapeutics[J]. Trends in Biotechnology, 2015, 33(7):381-387.
- [6] Jernej A, Nadja D. A Knowledge Management Approach to the Loosely Coupled Systems[J]. Information Resources Management Journal, 2016, 29(1):75-90.
- [7] Wang Y, Yu S, Xu T. A user requirement driven framework for collaborative design knowledge management [J]. Advanced Engineering Informatics, 2017, 33:16-28.
- [8] Sanzogni L, Guzman G, Busch P. Artificial intelligence and knowledge management: questioning the tacit dimension[J]. Prometheus, 2017:1-20.
- [9] Sharma, Richa. Management of transition to biofuels—The role of knowledge management[J]. Energy Sources, Part B: Economics, Planning, and Policy, 2016, 11(5):480-486.
- [10] Nazim M, Mukherjee B. Chapter 1 An Introduction to Knowledge Management[J]. Knowledge Management in Libraries, 2016:1-26.