

Research on the Application of Information Construction of Scientific Research Management in Colleges and Universities

Weipeng Lv

Yancheng Teachers University, Yancheng 224007, China.

Abstract: At present, the use of traditional office software in scientific research management in colleges and universities has been unable to meet the needs of the current scientific research management, so there is an urgent need to establish a scientific research management information platform. After multi-investigation and according to the specific needs, the scientific research management department has jointly developed and constructed the professional system of scientific research management in colleges and universities. After each module in the experimental phase, the scientific research management system realizes the functions of online project evaluation, performance evaluation, statistical report and so on. In view of this, this paper discusses the common problems in the informatization of scientific research management in colleges and universities, and puts forward some strategies for further informatization.

Keywords: Scientific Research Management; Informatization; Application; Design and Implementation

Introduction

Under the requirements of national economic and social development, the training of high-level national talents shoulders the important task of the transformation of economic technology and scientific and technological achievements. Over the past decade, China's scientific and technological investment has increased at an annual rate of 20%, and its scientific and technological output has been continuously improved. The strength of science and technology is in the forefront of the world. In recent years, as the research area by specialization to specialized all-round expansion, social management has entered the phase of modernization development, scientific research management in colleges and universities, service information, scientific research data information step by step from the data resources to develop in the direction of scientific data, for the development of colleges and universities provides powerful data confirmation and support, therefore, the development of scientific research management information has been widely recognized by universities.

1. Current Situation of Informatization Construction of Scientific Research Management in Colleges and Universities

1.1 Limited Coverage of Data Information

With the continuous development of Internet technology and the increasing popularity of the

public, the amount of data stored in it is increasing, and the processing speed is becoming faster and faster, resulting in a large amount of information age. All these are the dual influences of this era on the current social structure and development. All of these pose great challenges to the storage and management of social information. Therefore, the introduction of scientific research management institutions and the increase of investment in hardware and other infrastructure have greatly improved the efficiency of daily scientific research management and the enthusiasm of scientific researchers. Research work also is in from the outside to the top management, docking for internal service researchers such as internal personnel more difficulties, role, wide coverage of management information system, database construction and development of high degree of scientific and technical personnel high fitness, effective integration of scientific research resources at colleges and universities, and timely use of, restricts the reform and development of scientific research of colleges and universities.

1.2 Lack of Resource Sharing Mechanism

At present, the scientific research work in Colleges and universities in China includes the statistics of scientific research projects, job title evaluation, faculty, etc. There are problems such as inconsistency and mutual influence in the utilization of information resources in Colleges and universities. The nature of scientific research management in Colleges and universities also needs timely transformation, update and follow-up. The main reason is that the lack of incentive mechanism for the utilization of scientific and technological resources results in the lack of motivation for resource sharing among teams. Secondly, most colleges and universities have not set up a scientific and technological resource database and information system, and lack of communication management organizations. The precondition of resource exchange is that resource owners and users can obtain information about supply and demand of resources and promote the possibility of resource exchange.

1.3 Insufficient management of scientific research process

Through the development of performance standards and incentive measures, promote the management body to strive to achieve the established standards. Performance criteria are based primarily on the number of papers, patents and other services. At present, although universities have made some achievements, there are some deficiencies in research process management and performance management. First of all, universities lack the mechanism of dynamic monitoring of the whole process of project implementation. Although there is a mid-term inspection mechanism, the mid-term review is the report of the project manager and the audit of the management personnel, and cannot fully achieve the purpose of dynamic monitoring; Secondly, the scientific research and technology management departments of universities are weak in the construction of scientific research team and scientific research team.

2. The application path of informatization construction of scientific research management in colleges and universities

It provides strong data confirmation and support for the development of colleges and universities, the optimization of scientific research management information construction in colleges and universities is an important task of the current scientific research management information construction. therefore, the development of scientific research management informatization has been generally recognized by colleges and universities.

2.1 Pay attention to overall arrangement and orderly implementation

Overall arrangement and orderly implementation are one of the important ways to realize scientific research management. In order to accelerate the process of scientific research management informationization, we should make full use of the possibilities provided by information technology to improve the level of university informationization management. In the process of continuous development of scientific research management information in colleges and universities, we should contact with the reality of colleges and universities, make clear the positioning of colleges and universities, and then implement them one by one to achieve the established goals. If the positioning is not correct, the goal is ambitious or no goal, it will lead to the failure of information design, and get twice the result with half the effort.

In order to realize the informationization of scientific research management, we should pay attention to the information technology and financial input of the school leaders and scientific research departments in the aspects of system and team building, provide and set up relevant personnel, study the needs of the development of university management from the perspective of top-level design, define the development goals, and make use of the existing management mode to carry out the reform. After putting forward the goals and suggestions of phased construction, the scientific research management in the workplace should be practically implemented. Scientific management information development should adhere to the principle of construction and synchronous utilization, constantly adapt to the objectives and requirements of the situation, fully apply the technology of information technology in Colleges and universities, increase the efficiency of the use of information technology resources, so as to achieve the spiral development of management.

2.2 Enhance the concept of informationization in the management of scientific research personnel

For university researchers, it is more important to establish collaborative planning to ensure a more rapid, perfect, accurate and effective supporting service mechanism. In the era of big data, higher requirements have been put forward for the management of scientific research in colleges and universities. On the basis of information, it not only plays an auxiliary role, but also forms a more profound connotation and more practical function. Scientific research needs the coordinated development of software and hardware, especially the quality informatization of scientific research personnel.

2.3 Increase investment in information construction

Information construction is a long-term and arduous task, which requires continuous investment to update the scientific research management information platform to meet the new needs of the country. First of all, we should attach importance to the construction of a contingent of talents and experts, so as to lay a foundation for the establishment of cross-research teams and large-scale projects. As the internal motivation, the expert database can evaluate scientific research achievements, projects and related awards openly and fairly online, and can be transferred openly and fairly to improve work efficiency. In addition, for the specific details of scientific research projects, activities, and funds, big data Center must play a better role in the light of the actual situation of various departments.

Conclusion

To sum up, the scientific research management information of colleges and universities should

be based on information technology, according to the law of management, combined with the actual development and the needs of the school, integrate the management concept, and realize the development of scientific research management informatization.

The establishment and operation of the scientific research management system in colleges and universities, and the smooth progress and deployment of the construction of the scientific research management system are the embodiment of the continuous improvement and development of the scientific research ability of colleges and universities. Scientific research management and communication system should be established by means of scientific research management, and can be updated in a timely manner. It can provide comprehensive, real-time and accurate information for scientific research in colleges and universities. Convenient and rapid service, convenient for teachers to carry out scientific research activities, convenient for scientific research managers to carry out scientific research, to achieve the purpose of improving the efficiency of scientific research management and humanized management.

References

- [1] Wu Hana. On the information management of scientific research archives in colleges and universities under the background of big data [J]. Science and Informatization, 2021 (3): 175-
- [2] Qi Meng. Research Management Informationization construction and Its Innovative application in Universities [J]. Health Required Reading, 2021(9):278.
- [3] Zhao Chen. Exploration of Informatization of Scientific Research Management in Universities under the Environment of Big Data [J]. Science and Technology Wind, 2021(12):86-87.
- [4] Hao Yan. Analysis of the application of Big Data Technology in the Information Management of Scientific Research in Universities [J]. Literature Review journal, 2020(33):195.

Brief introduction of the author: Lv Weipeng (1985 -), male, Han nationality, Yancheng, Jiangsu Province, master's degree, assistant researcher, research direction: scientific research management, educational management.