Research Management Information and Business Process Optimization

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1. Introduction


2. The Necessity and Significance of Scientific Research Management Business Process Optimization under the Background of Informatization

With the advent of the Internet era, information technology has been fully applied in people's lives. The realization of business process optimization and reengineering theory is often
accompanied by the application of ERP system. Due to the continuous development and improvement of the University and the information department campus, it is widely used in various business issues of the University and the University[3]. In the transformation and development stage, the scientific research achievements of colleges and universities should be constantly developed, and the scientific research management process should always adapt to the changes of existing scientific research. Moreover, more and more colleges and universities have established scientific research management system. Provide conditions and information means to optimize management business process. Therefore, the optimization of scientific research management workflow based on the information background provides a standard and smooth basis for the scientific research development of colleges and universities. It is very important to rationalize the process of scientific research and promote the vigorous development of scientific research.

3. Current Situation Description and Problem Analysis of Scientific Research Management Process in F University

3.1 Description of Business Relationship and Process Status of Scientific Research Management

As a comprehensive college, F school is mainly divided into vertical and horizontal research project management, platform construction and research performance management. Relevant work includes[4]: scientific research plan / plan, scientific research policy formulation, scientific research information collection, check and release, project plan and report, contract management, project implementation and acceptance, scientific research fund management and scientific research achievement management. In the independent scientific research management of F, the scientific research activities of social science and science and technology are classified and managed. Figure 1 shows the first business relationship and business process.

![Enterprise Business Process](image)

Fig.1 Enterprise Business Process

3.2 Problems Faced by the Original Scientific Research Management Business Process

For colleges and universities, research is not as large as undergraduate universities, and the number of projects and projects are very small. Generally, the research activities of social science and technology are divided into social science department and science and technology department. More professional[5]. The funds for scientific research in Colleges and universities have not reached a certain level, and the research activities of social science and science and technology have also been separately managed, making the scientific research cause more complicated.

There is a problem of researchers receiving notifications repeatedly. F is a comprehensive organization. If a scientific research project is planned, it includes social science and technology projects. According to this management method, two notifications must be issued. It will also bring chaos to teachers.

The social service function of colleges and universities does not consider the management of level projects at all. F school is characterized by school enterprise cooperation. Many majors cooperate with enterprises. In order to give full play to the role of small and medium-sized enterprises in the service and social service fields of colleges and universities, teachers and
enterprises are encouraged to implement level projects.

The labor burden of scientific research managers is more complicated. For the purpose of social science and technology, both parties declare that the scientific research activities, project implementation, project funding, project approval, including project objective management, and project types are also divided into vertical and horizontal[6]. Need to be proficient in research management and update the portrait at any time. The policy spirit and operation rules of the project, level project, fund management and result management have great labor burden.


4.1 Objectives and Optimization Methods of Business Process Optimization of Scientific Research Management

The existing problems in the implementation of scientific research management projects, the optimization goal is to consider the opportunity of scientific research management information service is fully possible, scientific research talents to reduce the labor burden. In addition, please improve the quality and rate of scientific research projects[7]. In order to improve the quality of scientific research service and work efficiency, strengthen the supervision of scientific research projects and funds, and promote the healthy and orderly development of scientific research in Colleges and universities. The benchmark optimization management method is used to deal with scientific research and business processes to form a virtuous cycle mechanism of “optimization realization feedback optimization”.

4.2 Information Guarantee Measures for Scientific Research Management Process Optimization

The scientific research information management system and optimized management process should complement each other to promote scientific research management. Scientific research management system is mainly divided into system documents, vertical scientific research project management, horizontal project management, scientific research achievement management, scientific research data statistics and other functions. In the field of system documents, it is necessary to upload scientific research management policies, colleges and universities, scientific management manuals, public forms and other documents for scientific research managers to check and download[8]. In the system, project management is the declaration of recording data projects in various scientific research projects. In order to complete the necessary forms, it is necessary to approve and upload the projects in the project approval notification area. So that researchers can get all kinds of scientific research in time. End of project or end of project. Other functions of scientific research project management correspond to scientific management process one by one. In the result management, it is necessary to upload various kinds of classification result information files, result collection and evaluation notices. Scientific researchers can ask about the result categories and upload or modify each result in time. In terms of data statistics function, scientific research management department will sort out scientific research statistics from project classification, implementation year, subject classification and other aspects to provide data support for reader's scientific research plan.

4.3 Business Process Optimization and Design of Information Science Research Management

Through the research and induction of scientific research management in Colleges and universities, through the empirical research of colleges and universities with the same professional groups, combined with the actual research of school F, according to the types of social science and technology, scientific research activities[9]. Business is divided into three categories: vertical project management (including platform construction), horizontal project management, scientific research results management and statistics. According to the main function of scientific research management information system, the business process of scientific research management in F
school is redesigned.

The main optimization points of the optimized vertical scientific research project management process (including platform construction) are as follows:

Clarify the core business and mutual business of each enterprise in each stage of project research.

Clarify business process differences between general projects and extreme projects, increase project evaluation and guidance, and improve project declaration quality and project rate.

Integrate and utilize scientific research information management system.

Budget guidance, use management and project fund supervision. The optimization process clearly shows the activities of the whole project research process. The use of scientific information management system also ensures the fluency of project management process and the integrity of project documents.

4.4 Optimized Horizontal Project Management Process

Horizontal scientific research projects include: scientific research managers, project leaders and commissioned projects. In this process, the contract review method, contract record, project completion, acceptance method, fund use supervision and result filing are defined. The optimized process is from project review, project implementation, project presentation to horizontal project. The whole receiving process confirms the responsibilities of each subject in the project management process and provides clear guidance for researchers.

4.5 Optimized Scientific Research Results Management and Statistical Process

The optimized management and statistical process of scientific research results have completed the school scientific research information management system, and the classified documents of scientific research results have been put in the system to promote the investigation, collection and research results of researchers, and review twice a year. The business process of optimizing scientific research management is divided into business categories, which conforms to the current research volume and the scientific research characteristics of F school, and reflects three types of service and professional scientific management personnel, such as vertical project management, project management level, result management and statistics. Provide more and more clear research services and guidance. From two aspects of information technology means and management service means, it provides support for the smooth development of scientific research management in schools.

5. Conclusion

Scientific research is an important aspect of suggestion structure in higher vocational colleges. The gradual popularization of scientific research management information and the increase of research volume in Colleges and universities, the timely maturity of the core business of scientific research management, the optimization of business process, the combination of the use and process of scientific research information management system, as well as “optimization implementation feedback optimization”, the quality and efficiency of scientific research management work, greatly improving the effect, and the scientific research work of Universities To promote the smooth development of.

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References


