The University Library Science and Technology Information Service Platform Construction of the Students' Innovation and Entrepreneurship

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Abstract. The university library is the information source and ideas of the students' innovation and entrepreneurship, especially in the network and information highly developed today, that the field, way and depth of the university library service for the students' innovation and entrepreneurship activities expand constantly. Based on the analysis of the development and evolution of the university library service function, this paper studies the new development and new changes of the university students' innovation and entrepreneurship activities' needs and plans and designs the service platform system for the university students' innovation and entrepreneurship activities comprehensively under the network environment based on the knowledge service. Meanwhile, we put forward the specific suggestions and countermeasures for the related problems of the construction and operation of the information service platform.

Introduction

Science and technology is the first productive force, along with the continuous improvement of the technology contribution rate in today's economic development process all countries regard the promoting technological innovation as their important strategic choice. Colleges and universities is the important source of national science development and technology progress, and shoulder the burden of national science and technology progress. In this situation, it is a great practically significant research topic that university library how to play its own network resources advantages to build the university library technological information service platform for students' innovative and entrepreneurship based on the knowledge service, regarding the school discipline cluster system as the basis and training the innovative and entrepreneurial talent as the object, in order to support and service with the students work of the innovation and entrepreneurship more targeted and more efficiently.

The Development and Evolution of the University Library Service Function

University library is the school important information center and knowledge repository that plays an important supporting role in the school talent training and scientific research. Meanwhile ,with the continuous development and progress of social economy, the state and society propose the higher goals and requirements for the colleges and universities training the innovative and entrepreneurial talent, as well the change and replacement of modern information carrier make the service function of university library continuous developing and changing, and the following figure shows the evolution trajectory of the university library service function(Figure1).From the figure we can see that university library's service mode, service way, service content and so on have changed, as well have gone through the literature services regarding the paper as the information carrier to the information service based on network, and to the knowledge service regarding the science and technology information service platform as the main body, along with that a country or region evolves from the traditional economy to network, information economy and to the knowledge economy. With the development and evolution of service form and content, market segmentation also appears in the service object delivering from the popular service to the personalized showing he

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service object and content fine, the service mode and way Flexible and the means and process invisible. In this process of the development evolution the form of the library has been converted from physical to virtual library constantly, thus entering a new mode of university library information service that is knowledge service. In this new mode the traditional management functions of university library such as collection, collating information, management books and so on, has become no longer accurate, but the knowledge providing will be the inevitable trend of the library function. In other words, provide the knowledge service during the process of users solving the problems, then after the extraction, restructuring, innovation and integration form the knowledge products meeting the user, needs. Thus, the service function of university library is transforming from the traditional literature and information navigation to the knowledge, knowledge evaluation, information consulting, etc, requiting that the university library must carry out science and technology information service platform construction, through the platform system realize the knowledge integration, restructuring and other information resources in deep level development, only in this way can adapt to the need of colleges and universities innovation and entrepreneurial training talents in the new era[1].

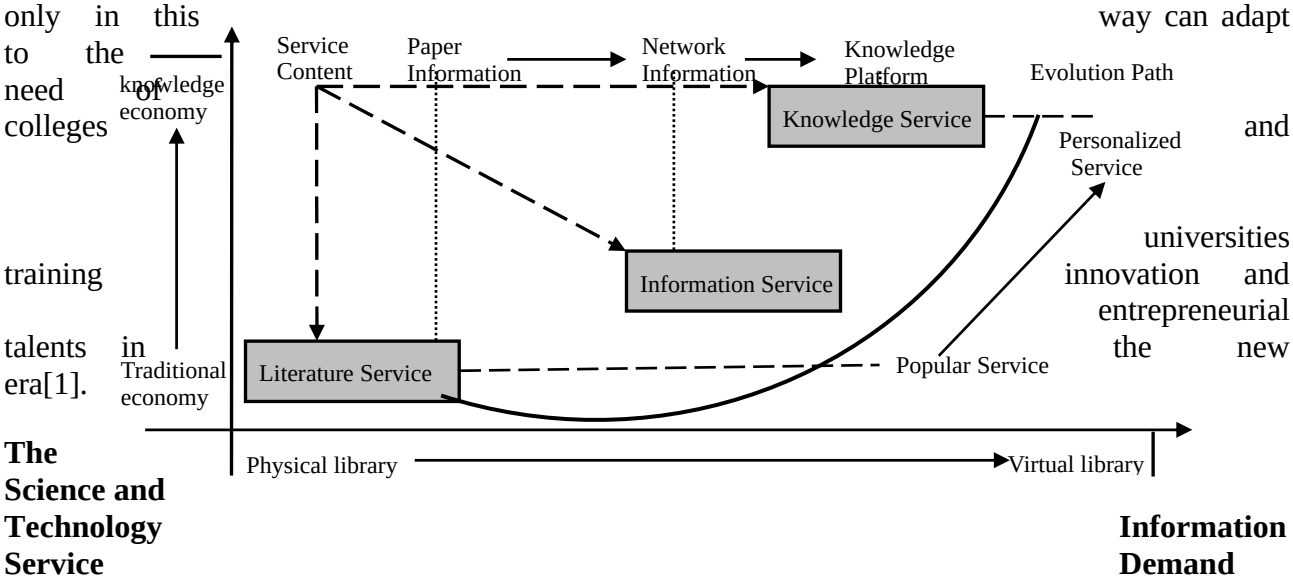

Figure1 University Library Service Development Schematic Diagram

Analysis of Innovative Enterprenerial Talents Training in Colleges and Universities

Uuniversity students' innovative entrepreneurial activity is the important source of the new information, new knowledge and new results, at the same time, this research also needs to grasp and occupy a lot of current new information, new knowledge and new achievements. However, in the internet age, information society, knowledge explosion today, facing the vast knowledge and information derived from different sources, how to collect, organize, process and handle these more targeted, are the reality problems faced by training innovative entrepreneurial talents. This requests university library must change the traditional service mode and approaches, adhere to the service object as the center, set up knowledge library, and explore the library new service function and way with the knowledge service mode.

According to the characteristics and requirements of the service object, information service needs in the process of train innovative entrepreneurial talents reflect especially in the following aspects:

First, from the services, there is specific subject field systematic and detailed technology information demand. That requires university library need seriously study and handle the relationship between points and surfaces in the process of providing science and technology information services, that meaning not only covers the science and technology information service need of different professional disciplines innovation entrepreneurship education and training, but carries out a more comprehensive, systematic, in-depth and targeted science and technology information service combining with the key research subject involved in this unit students' innovation and

entrepreneurship activities.

Second, from service depth, there is ordinary information query to a detailed knowledge service demand in a specific professional field. In terms of innovation and entrepreneurship activities requirements, the common information query has no longer satisfied the students practical needs in the process of innovation and entrepreneurship activities nowadays, thus this requests university library can't only stay in the basic information query function, and must combine with the specific subject field, make full use of the modern network and library information resources, carrying on the process of restructuring, integration, fermentation and innovation ,providing more targeted information, knowledge, ways and ideas for the innovative entrepreneurial talent training.

Third, from the service concept, there is from passive service to the user-centered activities service requirement. Service work of university library needs transform "resource oriented" to "communication process oriented" to "user oriented information". User-centered service system of university library emphasizes the user's position and initiative, need to understand and design related technologies and methods of the library service according to the user's purpose, requirement and behavior way, so that form a organic service system or model into the modern information and knowledge environment;

Fourth, from the service mode, there is the service need from the popular demand to personalized services. That meanings modern university library should transform from the service object of the non-differentiated "batch production and supply" to the service object of the difference "ordering production and supply" with MY Library providing the specialized knowledge and information needs. Through the personalized services platform, provide the personalized push and real-time consulting service, etc., according to the professional characteristics and research interests of different objects [2].

In a word, the reality need of colleges and universities innovative entrepreneurial talent training and the great changes in media such as network, information, knowledge, etc. objectively require university library to give full play to their own network resources, and construct students innovative entrepreneurial science and technology information service platform, which is suitable to the characteristics of subjects and talents demand and based on the knowledge service, to provide a more powerful service and support of university innovative entrepreneurial talent training.

The Planning and Design of University Students' Innovative Entrepreneurial Science and Technology Information Service Platform under the Network Environment

According to the above contents and requirements of university students' innovative entrepreneurial work science and technology information service platform, we should give full play to and use of university library functional advantages in the internal and external network resources, knowledge and information collection and sorting, storage, processing and integration, reference consultation, contact and cooperation, etc, ,while build colleges and universities students' innovative entrepreneurial science and technology information service platform system based on the knowledge service of library(Figure2). This system includes the following five parts: (1) the service object system. According to the school discipline, R&D field and direction, R&D topic, content, team and individual class relations, determine the main service object of different levels. In term of the general characteristics of scientific and technological information service platform planning and design service object, overall, the service object is the colleges and universities innovative entrepreneurial talents training work, but the object can be further divided into the research objects(includes: specific discipline, research field and direction, research topic and content) and designers(includes: R&D echelon, discipline leader, academic backbone and personnel participating in research and development). The planning and design of scientific and technological information service platform should regard the school specific disciplines research field as the main service object, on this basis take into account the overall and individual needs of researchers.(2)service center system. According to the functional requirements This center system are divided into knowledge service center, resource service center, query service center, personalized services and shared services center. The knowledge service center mainly provides all kinds of knowledge and finishing results needed in the R&D

process of specific fields; Resources service center is used to provide all kinds of related information, data and information resources of this R&D t field; Query service center mainly focuses on the novelty search and retrieval of related R&D achievements; Personalized service center can seen a R&D direction or the whole topic team as the object, also can provide strongly targeted personalized service for each specific designer; Sharing center can develop external science and technology information resources through the intercollegiate share.(3)service platform system. According to the above functional partition of the service center system, in turn, set up the knowledge organization platform, knowledge transfer platform, knowledge innovation platform, and digital resources retrieval platform, novelty search platform of scientific and technological achievements, science and technology literature retrieval platform, MY Library platform, academic discussion and intercollegiate shared service platform. Through these platforms can make the content and function of science and technology information service modular; (4) science and technology information system base. Set up specialized system bases respectively according to knowledge representation and editing, knowledge reorganization and clustering, knowledge integration and proliferation, network information resources system, the latest R&D achievements search system, online consulting system, personalized information push system, academic discussion hall, intercollegiate science and technology information system links, etc, in order to meet the realization of the different aspects functions. Of course, we can add corresponding system bases according to different universities, different disciplines, and the practical needs of professional research and development work; (5) Library knowledge service protection system. This contains the functions of service requirement analysis, service and operation layer construction, knowledge base construction, system maintenance and update, etc, so as to give full play to libraries network information advantage, protect the service demand position, system analysis and design, database construction, system link, system maintenance and update, etc. of the science and technology information service platform [3][4][5].

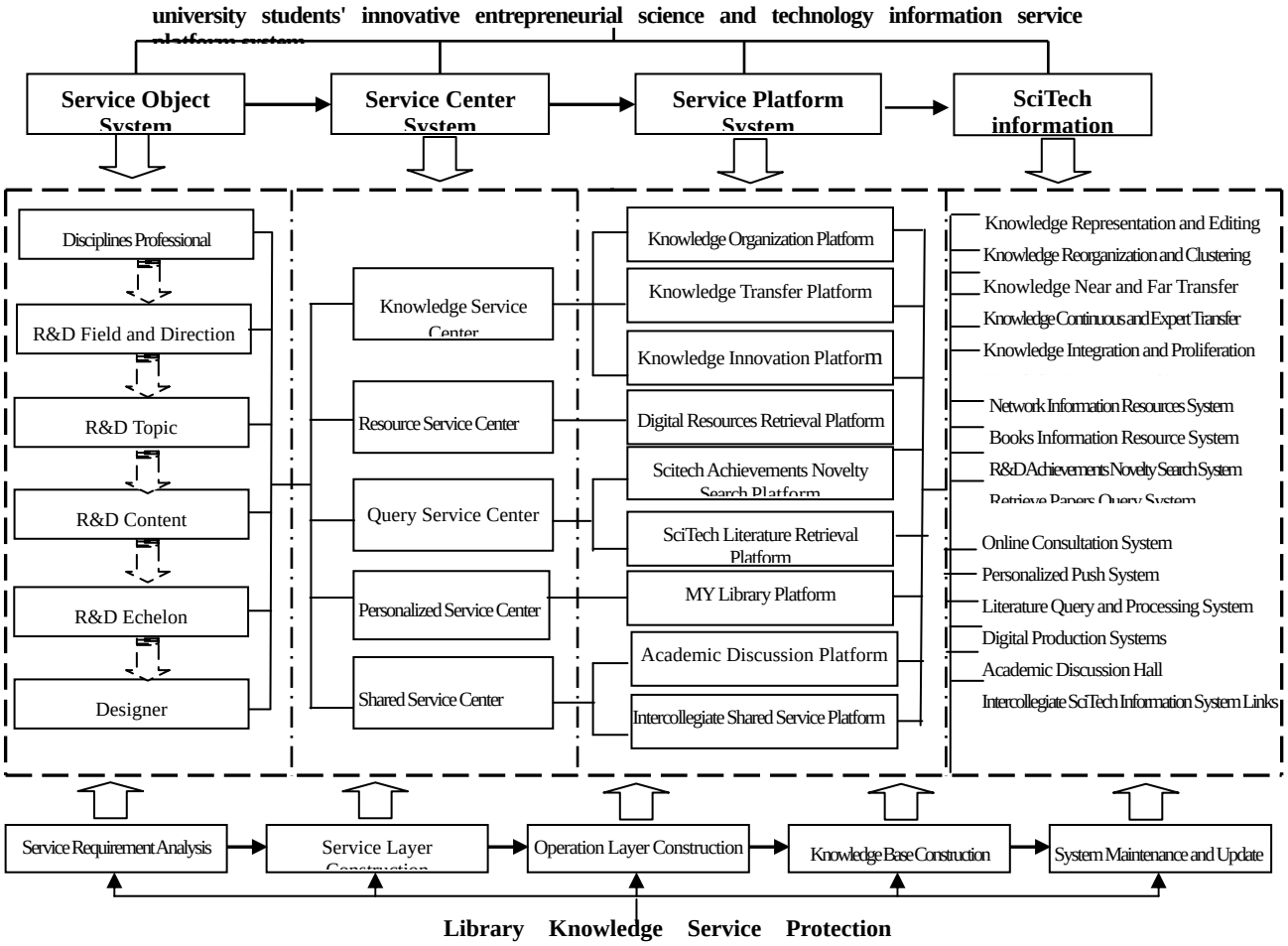

Figure2 Students' Innovative Entrepreneurial Science and Technology Information Service Platform System Design Frame

The Related Problems in Science and Technology Information Service Platform Implementation Process

First, universities should give priority and emphasis to the scientific and technical information service platform development of the school advantages and characteristic disciplines. Colleges and universities set up numerous disciplines, while research, design and development of SciTech information service platform are impossible to carry out comprehensively in all characteristic disciplines, so it must be combined with the school discipline advantages and characteristics, and make priority and key selection of advantage discipline, strong research field and characteristic research direction to do construction and operation;

Second, the construction and operation of science and technology information service platform, must be equipped with the perfect interactive management model established between the service object and service system. The adaptability and effectiveness of the service platform system depend on its demand analysis and professional service level. This needs we to achieve the effective communication, communication and fusion between the research students and system analysis, design and service personnel with the perfect Scientific and perfect interactive management model, to timely understand the development needs, constantly enrich and improve the system function;

Third, through the intercollegiate alliance, realize resources sharing. Each school should give emphasis and selection to develop and construct the science and technology information service platform, in this basis, through the intercollegiate alliance and network link achieve advantage resources sharing, expand the scale and scope of their information service platform and improve the utilization rate and use effect;

Fourth, make efforts to improve professional quality of the library service personnel. Developing students innovation and entrepreneurship science and technology information service platform of school specific disciplines, Objectively needs to have library service personnel with higher professional ability and level, and these personnel's professional quality and ability will directly related to the construction level and implementation effect of the platform system, thus, it requires that we must strengthen the library's introduction and training of professional talents;

Fifth, pay attention to the division of labor and cooperation among various departments. It is a complex system engineering to plan, design, developed, construct and operate the science and technology information service platform, so it needs the related departments and personnel joint action such as school library, professional departments, research and development team, modern education technical center and so on, meanwhile we should make the close division of labor and cooperation from system planning, analysis and design, network information resources collection and integration, professional research field and direction planning, R&D demand content and requirements ,and technical support of system design and develop, etc., just can guarantee the successful implement of platform construction and operation;

Sixth, pay attention to the enrichment, update and improve of the system information data. It is a dynamic process to implement and operate the science and technology information service platform, so it needs to continuously revise, enrich, update and improve the related structures and contents over time, as the change of the objective situation and the development work needs, to ensure the applicability and sustainability of the system, and achieve the constant update and upgrade, in order to meet the needs of students innovative entrepreneurship developing and changing continuously.

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