

Mode Transformation and Strategy Optimization of Subject Navigation Construction in University Libraries

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Abstract: The rapid development and popularity of the World Wide Web has placed high expectations on the release and demand of information. According to the survey, most university libraries use the network resources as the main navigation. As far as the existing management system is concerned, only the Shanghai Jiaotong University Library has applied the LibGuides system for subject resource management. In order to achieve the goal of providing high-quality online academic information resource services for teaching and research personnel, the model and strategy of subject navigation construction in university libraries must be transformed and optimized. This paper combines the problems arising in the construction of subject navigation database, analyzes and discusses the construction mode of the subject navigation library, and puts forward the idea of a virtuous cycle and sustainable development of the subject navigation library.

1. Introduction

Due to the lack of layers and methods of communication between subject librarians and users, in communication and interaction, librarians and readers only communicate by telephone or E-mail, and rarely communicate directly with readers, leading to the deepening of subject services as insufficient targeting. According to statistics, few libraries are able to establish subject blogs, which means that users are less involved in subject services and less enthusiastic about services. The reason is mainly that the subject service and the university's teaching and research activities are not closely integrated. They do not go deep into the teaching and research activities of colleges and universities, and the subject services do not have strong professionalism, which leads to the inability of users to increase their enthusiasm.

The huge amount of network information resources, frequent changes, timely and accurate information to find the information is a concern of network users. Therefore, there is an urgent need for a Web information discovery service system that automatically discovers new information within a short period of time and within a specified range, and automatically updates the data it covers to provide users with retrieval services. In order to ensure the performance of the retrieval function provided by the information discovery service system, the data must be processed according to the service retrieval rules and the types of data obtained from the server, and the index is locally established to optimize the retrieval work.

In the analysis of user needs, subject librarians should have an in-depth understanding of the user's ideas. This link seems to be very passive, but subject librarians still dominate. Since the goal of the initial user is not very clear, this indicates that the user's needs are still in a recessive state. In view of this situation, the librarians should have in-depth communication and communication about the environment in which the user is located, the development goals of the project, and especially the purpose of the consultation, which leads to the user to think deeply. Only by doing so can the subject librarians that be able to understand the user's real goals and develop a reasonable and feasible optimization strategy.

The information resources on the Internet are extremely rich, and there are a large number of academic information that has reference value for teaching and research in universities. However, the large amount of network resources, the variety of types, and the wide distribution make a large amount of information of general academic value annihilated in the online world, which brings

inconvenience to the use of readers. For this reason, people continue to research and explore, so the network search engine came into being, which brought great convenience to people to effectively use network resources. However, the search engine accuracy rate is low, and the reader also needs to spend a lot of time to choose the information resources that he really needs, and cannot solve the problem fundamentally. As a bridge between information resources and readers, university libraries can organize and integrate information resources in an organized way according to the characteristics of network resources to maximize the reader's retrieval time. It is based on this kind of thinking that subject navigation came into being.

2. The Proposed Methodology

2.1 Mode Change of Discipline Navigation Construction

Aiming at the resource selection problem existing in the resource ontology model, relevant scholars put forward the selection criteria of objectivity and practicability, normativeness and standardization, frontier and general persistence, dynamicity and stability but because non-disciplinary professionals such as librarians collect and select resources. These standards are not guaranteed in the resource ontology mode and are difficult to implement. Resource selection is an important link that cannot be skipped in the construction of subject navigation. It plays a very important role in the construction of subject navigation and must be given enough attention and fully reflected. Some scholars have proposed to develop mechanisms and tools for establishing user-recommended resources. Some scholars have proposed to absorb subject professionals to participate in resource selection, from resource ontology to user-centered mode. This is the theoretical starting point of the user center model in the process of subject navigation exploration.

The network search engine enables the Internet resource discovery service to be automated, improving retrieval efficiency and, to a certain extent, providing the necessary retrieval "portal" for users to use massive amounts of Internet resources. However, due to the unstructured, rapid growth and frequent changes of Internet resources, given the limitations of current search engine technology, it is difficult to achieve user-specific, personalized and accurate search requirements. In the actual use process, people often do not have satisfactory search results for the retrieval of certain professional subject resources.

At present, whether it is a national unified co-construction model, an autonomous construction model, or a business construction model, most of the subject navigation is built by the library unilaterally or in cooperation with commercial companies. There is no interaction between the builder and the user to communicate with. This kind of discipline navigation built with the "resource center model" is more reflected in the speculation and understanding of the information by the processors, the collection, organization, processing and ordering of information. This kind of subject navigation, which is selected and organized by non-disciplinary professionals, has a certain gap with the unique information psychology and needs of users.

"Library is a growing organism". The development of traditional disciplines, emerging disciplines and cross-disciplines is changing with each passing day. New information is constantly emerging, which requires staff to update the information content in a timely manner. At present, the subject navigation of many colleges and universities will no longer have new resources to join after the initial completion, and the information content is lagging. In addition, the dynamic nature of network resources also determines the need to update information in a timely manner. Only timely maintenance and update of information can ensure the timeliness of navigation resources and better serve users. The user interface is the most intuitive external manifestation of the subject navigation system and is essential for the effective use of the user. At present, the subject navigation system of university libraries is mostly simple in function, the interface is easy to use, some search functions are imperfect, and the rate of false detection and missed detection is high, which will inevitably affect the reader's effective use of the subject navigation system.

2.2 Construction of Subject Navigation Library

The construction of the subject navigation library must reflect the professional background of the discipline. Therefore, the builder of the navigation library must rely on the researchers in the professional field to complete the standardization, function planning, and data collection of the navigation library. In the history of various universities in China, traditional key disciplines with different characteristics have been formed, which have relatively high level of scientific research. Therefore, the construction of China's subject navigation library through the full cooperation of university libraries and key discipline bases reflects the optimal allocation of resources and is one of the practical and efficient solutions.

In the formulation of service strategy, subject librarians should make choices about service tools and service strategies before the user needs are clearly defined. Considering that the user is the center, the subject librarian can solve the problem directly through the collaborator or his own reserve knowledge according to the actual problem, or through the knowledge base. After the selection, analysis, organization and sublimation of information resources, new products are formed and provided to customers for reference. When receiving a large-scale research project search from a teacher, several disciplines may be involved. This requires the library to set up a disciplinary service team to allow members of the group to jointly analyze the problem, develop a reasonable service strategy, and clear the obstacles for the research project.

Through comprehensive research on the needs of first-class subject literature, it can be known that the current readers' preferences and needs for digital resources far exceed the paper resources, and the requirements for subject service content are increasingly personalized and professional. The traditional library based on OPAC's method of revealing only paper resources or using the discovery system for large-scale discovery cannot meet the needs of current readers' learning and research. The extensive description of digital resources in the database platform or sub-library makes it impossible to break the database barriers for more professional resource clustering and push. This not only brings troubles to the resource construction work, but also fails to meet the needs of university discipline construction.

The Smart Resource Portal seamlessly links all paper and digital resources in the platform, including one-box search and advanced search, reading records, document subscription, library shelves, and search files. Readers can retrieve more than 129 million paper and electronic full-text resources in a single search interface, and can also track subscriptions to the frontiers of the discipline by saving the search.

The dimension of the library's first-class discipline construction to serve the school can be divided into teaching, scientific research, discipline planning and development. Clients are undergraduates, graduate students and teachers. Around teaching, research, subject planning and development, libraries must create a comprehensive disciplinary service system, including curriculum libraries, special libraries, institutional libraries, thematic information literacy training and the construction of scholars' libraries. In order to ensure the smooth development of subject services, libraries need to fully implement the subject librarian system and formulate a paradigm service paradigm.

First, the library needs to improve the ease of use of the subject navigation interface and update the information in a timely manner. The library should constantly check the operation of the site, supplement and correct it in time, and eliminate invalid information to ensure effective linking. Secondly, the library should enhance the retrieval function of the subject navigation system. The strength of the retrieval function is an important criterion for measuring the quality of the subject navigation. In addition to providing simple retrieval, the subject navigation system should also provide advanced search, cross-database search, etc., to make the search function more complete and flexible. In addition, for the processing of the search results, the database is also best to provide a variety of options. Third, system construction should be standardized and standardized, including selection criteria for information resources, processing standards, and bibliographic standards. Standardization is conducive to changing the chaos of current subject navigation and is conducive to the reader's retrieval.

Due to the poor publicity of many university libraries, many teachers and students do not know that the school has a science navigation service or is not familiar with the resource structure and retrieval methods of subject navigation. The utilization rate of subject navigation is very low, resulting in great waste of resources. In order to enable readers to make full use of subject navigation to serve their own research and learning, libraries should strengthen the promotion of subject navigation and carry out targeted training activities. In addition, the latest information on the subject navigation resources should be updated on the main page of the library and improved in a timely manner based on the reader's feedback.

2.3 Analysis on Optimization Strategy of Subject Navigation Construction

Since the rise of subject navigation, intellectual property issues related to it have been the subject of concern and debate. At present, there are two main aspects of intellectual property issues that are likely to be involved in the construction of academic library navigation. The first is intellectual property issues in software. Currently, there are a variety of academic navigation software platforms, some of which are developed independently, or use free open source software online, while others purchase commercial software. The second is the issue of intellectual property rights in resource construction. The content involves various information work links such as collection, organization, classification and integration of resources.

Therefore, in the construction of subject navigation, we should fully understand the provisions of the law on intellectual property protection, and actively participate in the study of new intellectual property rules to seek for their own development. Specific practices: 1 Make full use of the “reasonable use of reproduction” of the library as stipulated in the Copyright Law, and collect and use the results of academic resources under the legal premise to avoid copyright risks. 2 Using relevant access control technologies, such as password access, IP address setting, and restriction of access by users in the IP segment, to achieve control over the use of “reasonable users” of subject navigation, and to ensure that subject navigation is applied to the teaching and research of the school. 3 Actively refer to and learn from foreign definitions of reasonable use scope and methods, and strive to obtain legal use authorization for subject navigation resources to avoid unnecessary copyright disputes when resources are used.

Although the university library provides literature support for the teaching work of the school, this kind of literature support is only a wide range of services, and there is no in-depth service for the specific courses of the subject. Teachers and students are not clear what the library provides for a certain course as the targeted resources and services. The course library service is provided for the first-class subject teaching, which enables the library service to go deep into the specific course and play a role as a bridge and hub between the library's literature resources and the course teaching. The course library is built around the specific curriculum of the first-class disciplines. The goal is to establish a direct link between the library's resources and services and the curriculum, and to integrate the subject services into the teaching process. The construction of the curriculum library should ensure that each course set up in the key disciplines has a special curriculum library to provide literature resources and communication services, which will greatly improve the teaching efficiency of teachers and students, and will greatly enhance the use of library resources. Efficiency also makes the library truly integrate into the teaching process of first-class disciplines, and promotes in-depth communication and communication between subject librarians and key subject teachers.

After obtaining the information provided by the subject librarian, the subject information user can also give feedback on their opinions. If the user is satisfied, the service can be declared closed. If you are not satisfied, the subject librarian needs to communicate and ask questions and make adjustments. For the quality evaluation of subject services, user feedback is the most important indicator. Moreover, the subject service system is becoming more and more perfect, and it is impossible to leave the feedback of the service target. It is inseparable from the evaluation of the service result and the work of modification, adjustment and reconstruction.

3. Conclusion

The subject navigation library should be a long-term construction project. Therefore, there must be a long-term construction mechanism to support and maintain. There is still a long way to go in the future of academic services in university libraries. Therefore, relevant personnel engaged in subject service work need to continue their efforts to continuously improve the subject services, so that the academic services of university libraries can be more perfect.

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