Original Paper

Exploration on Classification Management of Digital Books in

University Libraries

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Abstract

With the rapid development of information technology, the digital book resources of university libraries are increasingly abundant, and it is urgent to carry out scientific and effective classification management. This paper deeply explores the classification management of digital books in university libraries. Firstly, it expounds the importance of classification management of digital books, including improving the efficiency of book retrieval, optimizing the allocation of book resources and promoting knowledge sharing and academic exchange. Then, it analyzes the current situation and problems of digital book classification management in university libraries, mainly including inconsistent classification standards, single classification methods and insufficient technical support. Aiming at these problems, corresponding strategies are put forward, such as formulating a unified classification standard and establishing a dynamic update mechanism; Comprehensive use of a variety of classification methods, including classification based on user needs and knowledge graphs; Strengthen technical support, increase technical investment and train professional and technical personnel; Increase user engagement, encourage reader feedback and conduct user training activities. Through these explorations, it aims to provide a useful reference for the classification management of digital books in university libraries, so as to better meet the needs of college teachers and students for information resources.

Keywords

library digital resources book classification management

1. Introduction

In todays era of digitalization sweeping the world, university libraries are facing unprecedented challenges and opportunities in book classification management. With the rapid development of information technology, especially the wide application of Internet and artificial intelligence technology,

the number of digital book resources shows an explosive growth trend. These resources include not only traditional forms such as e-books, online journals and databases, but also multimedia materials, open access resources and various interactive learning platforms. Faced with such huge and diverse information resources, traditional book classification management methods, such as physical book management methods based on Dewey Decimal System or Library of Congress Classification, are obviously difficult to meet the needs of college teachers and students for rapid retrieval and efficient utilization of information.

The exploration of digital book classification management is not only to cope with the surge of resources, but also to improve the quality and efficiency of library services. By adopting advanced information technologies, such as natural language processing, machine learning and big data analysis, university libraries can realize intelligent classification, accurate retrieval and personalized recommendation of massive digital resources. This can not only help teachers and students find the required information faster, but also provide more personalized learning and research support by analyzing user behaviors and preferences.

In addition, digital book classification management can also promote the open sharing of library resources, break the limitation of traditional library physical space, and make the dissemination of knowledge and information more extensive and convenient. By constructing a unified digital resource management platform, university libraries can realize resource sharing across campuses and institutions, and provide an interconnected knowledge network for scholars all over the world. Therefore, the classification management of digital books in university libraries in Suo is not only an innovation of traditional management methods, but also a profound influence on future educational models and learning methods. It has important practical significance and far-reaching strategic value for improving the service ability of university libraries, meeting the information needs of teachers and students, and promoting the innovative dissemination of knowledge.

2. Importance of Classification Management of Digital Books in University Libraries

1) In order to significantly improve the efficiency of book retrieval, the implementation of digital book classification management is very important. By constructing a scientific and reasonable classification system, readers can locate the book resources they need more conveniently and accurately. For example, using the topic classification method, books with related content or similar topics can be clustered together to form a centralized topic group, which not only facilitates readers search, but also helps them discover more books that may be of interest. In addition, the use of advanced information technology, such as powerful database management system and efficient search engine, can greatly speed up the speed and accuracy of book retrieval, thus improving the utilization rate of books. The application of these technologies enables readers to quickly find the required books and materials through various retrieval methods such as keyword search, author index, publication year, etc., which greatly saves the search time and optimizes the resource management and service quality of the library.

- 2) In order to improve the allocation efficiency of book resources, libraries can more accurately grasp the distribution of various book resources and their use frequency by implementing refined digital book classification management strategies. This kind of classified management not only helps libraries to make more informed decisions when purchasing new books and constructing resource system, but also effectively prevents the repeated purchase of book resources and ensures that every input can give full play to the maximum benefits. Through scientific classification management, the library can optimize the allocation of existing resources and improve the efficiency of resource use, so as to meet the needs of readers, reduce the daily operating cost of the library and realize the sustainable development of resources.
- 3) Digital book classification management not only provides teachers and students with rich interdisciplinary learning and research resources, but also greatly promotes knowledge sharing and academic exchange by carefully sorting and sorting out books in different disciplines. This management method enables readers to access and utilize various academic materials more conveniently, thus facilitating knowledge sharing and academic discussion among them. In addition, it also provides a platform for the cross-integration of disciplines, helps to promote the innovation and development of academic fields, and injects new vitality into academic research. Through digital means, book resources have been used more effectively, and the threshold of academic communication has been lowered, thus helping to form a more open and diverse academic environment.

3. Current Situation and Problems of Digital Book Classification Management in University Libraries

- 1) University libraries are faced with the problem of inconsistent standards in the classification management of digital books, which leads to the difficulty of compatibility among different libraries and affects the retrieval and sharing of resources. For example, when searching for information across schools, it is necessary to adapt to different classification systems, which increases the difficulty. In addition, the classification system often lags behind the development of disciplines, and it is difficult to classify new research results in time. In order to improve, it is necessary to establish unified standards, improve resource utilization efficiency and promote academic exchanges. Library administrators should regularly update the classification system to reflect the latest trends in the discipline and better serve readers and academia.
- 2) The traditional book classification method relies on subject and subject classification, which was the key of book management and retrieval. But with the proliferation of digital resources, the limitations of these methods appear and cannot meet modern needs. In order to effectively manage and retrieve digital books, diversified and intelligent classification methods should be adopted. For example, the classification based on user needs can accurately meet the personalized needs, and improve the retrieval efficiency and satisfaction by analyzing the recommended books of users reading history and search habits. Classification based on knowledge graph uses modern information technology to build a

knowledge correlation network, realize deep understanding and classification, reveal the connection between knowledge fields, and help to discover new knowledge. Therefore, it is necessary to continuously innovate and improve the classification method, combine the traditional advantages and the characteristics of emerging technologies, and build an efficient, intelligent and user-friendly book classification management system.

3) Insufficient technical support, digital book classification management needs advanced information technology support, such as database management system, search engine, knowledge graph, etc. However, some university libraries have insufficient investment in technology, which leads to the imperfect function of the classification management system and fails to meet the needs of readers. The lack of professional technical personnel to conduct system maintenance and update also affects the effect of digital book classification management.

4. Strategies of Classification Management of Digital Books in University Libraries

- 1) Unify classification standards, formulate unified classification standards for digital books, and standardize the classification system among libraries. In order to improve the efficiency and accuracy of library management, it is necessary to unify the classification standards of digital books and standardize the classification system among libraries. This not only helps to improve the convenience of book retrieval, but also promotes resource sharing and academic exchanges. Therefore, we should refer to internationally recognized classification standards, such as the Dewey Decimal Classification and the Library of Congress Classification, and combine relevant domestic standards and norms, such as "Chinese Library Classification". On this basis, combined with the specific needs and actual situation of university libraries, a set of scientific, reasonable and operational classification standards of digital books are worked out.
- 2) Moreover, in order to ensure that the classification system can timely reflect the latest developments and changes in the subject field, it is crucial to establish a dynamic update mechanism. This means that the classification standard should not be unchanged, but should be adjusted and updated with the evolution of the knowledge system and the progress of technology. Through the regular review and revision of the classification standards, the timeliness and accuracy of the classification system can be ensured, which can better serve the academic research and educational work. Such a dynamic update mechanism could include regular expert review meetings, online feedback systems, and collaboration with academic institutions to collect updated information on discipline development and user feedback, ensuring that classification standards are always consistent with The Times.
- 3) Diversified classification methods, in order to better meet the diverse needs of different reader groups, we can adopt a variety of book classification methods. In addition to the traditional classification according to subject areas and topic content, we can also classify according to the individual needs of users and the relevance of knowledge graphs. By using big data analysis technology, we can dig deep into readers search behaviors and reading habits, so as to more accurately understand

their preferences and needs. At the same time, combined with artificial intelligence technology, we can intelligently analyze massive user data, identify potential classification patterns and trends, and further optimize book classification management. This comprehensive classification method can not only improve the efficiency of book retrieval, but also enhance readers reading experience, making the allocation and recommendation of book resources more intelligent and personalized.

- 4) Strengthen technical support, in order to improve the efficiency and accuracy of digital book classification management, we will increase the investment in related technologies, and actively introduce and apply advanced information technology and equipment. This includes, but is not limited to, building a powerful and user-friendly database management system, an efficient and accurate search engine, and an intelligent knowledge graph system, which will significantly improve the overall functionality and performance of the classification management system. In addition, we will focus on the development of technical personnel, through regular training and skill upgrading activities to ensure that they can master the latest technical dynamics and maintenance skills. At the same time, we will strengthen the daily maintenance and regular update of the classification management system to ensure the stability and reliability of the system, so as to provide users with a continuous and efficient service experience. Through these measures, we aim to build a more intelligent and efficient digital book classification management system, to meet the growing demand of information management.
- 5) In order to improve user participation, we encourage readers to actively participate in the classification management of digital books. By collecting feedback and evaluation information from users, we can continuously optimize and improve the existing classification system, and at the same time adjust and upgrade our management methods. In addition, we will regularly carry out a series of user training and education activities aimed at improving readers information literacy and retrieval ability. Through these activities, we hope that readers can master the skills of using digital book resources more skillfully, so as to obtain the required information more efficiently and enhance their reading experience and learning effect.

5. Conclusion

In the digital age, the classification and management of digital books in university libraries is very important. To ensure the efficient use of resources and knowledge dissemination, comprehensive strategies should be adopted. The establishment of a unified classification standard is the foundation, which helps in the systematic organization and retrieval of books. Diversified classification methods, such as by subject, year of publication or authors. Strengthen technical support, introduce artificial intelligence and big data analysis, realize intelligent classification and recommendation, and improve the accuracy and convenience of retrieval. Improve user engagement, optimize the classification system through feedback to meet actual needs. University libraries should actively explore and innovate, promote the in-depth development of classified management, optimize the allocation of resources, promote knowledge sharing and academic exchange, and provide efficient information services for

teachers and students. These efforts will make the library become an important base for knowledge dissemination and academic research, and play a key role in cultivating innovative talents and promoting academic progress.

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