Method of Constructing the Innovation Service Platform of Colleges and Universities based on Artificial Intelligence

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Abstract. With the promotion of AI to national strategy, it will have a profound impact on various industries in China. Colleges and universities should follow the trend of the times, seize the pace of the “Ai” era, and apply “Ai” to the service platform of colleges and universities. The purpose of this paper is to study the application of artificial intelligence in service platform. First, the paper analyzes the technology of artificial intelligence, puts forward the way that artificial intelligence can build university innovation service platform, and defines the construction method of University wechat innovation service platform. Using the method of questionnaire, based on the theoretical analysis and network survey, the questionnaire is designed. The users of the regional university library are selected as the survey objects, and the questionnaire is distributed within the scope of the University. The experimental results show that in the investigation of the reasons for the readers' infrequent use of the library's personalized services, according to the investigation of all the problems that may lead to the readers' infrequent use of the library's services, 48.2% of the readers expressed that they did not understand the library's information resources; 38.85% of the readers thought that the library's services were lack of personalization and pertinence and were open Communication with new media platform is also the inevitable direction of the development of University Libraries and service systems in China.

Keywords: Artificial intelligence, University service platform, Construction method, University Library

1. Introduction

In recent years, with the rapid development of artificial intelligence, deep learning, mobile Internet and other technologies, products related to artificial intelligence have been applied to our work, life, learning and many other places, making our work, learning and life more convenient and convenient [1-3]. In this era of rapid development of “artificial intelligence”, in order to realize the development of university library with the times, service is one of the contents that university library should strive to explore [4-6]. The university library is an important part of our country's library circle, the main distributing center and important information service organization of literature information. Its development level represents the frontier level of the library industry in China, and its development trend guides the development trend and direction of the library industry [7]. “Artificial intelligence” brings new ideas and technologies for information service, and provides support and guarantee for personalized service mode of University Library [8]. Research on the current situation of the use of Library mobile services
can enhance the core competitiveness of the library in the future service field, and improve the mobile service level and service image of the library [9]. The research on WeChat service can not only reflect the advantages and disadvantages of library information service, but also reflect the efficiency of the whole library information service system, which will ultimately promote the improvement of information service quality.

Ningning Kong adopts the method of action research to develop and perfect our service model. The results show that the GIS services of library can provide support for Humanities and social sciences from the perspectives of research collaboration, learning support and outreach, and have different emphases according to different stages of learning and research. The research framework adopted can not only be used as an effective tool for the development of GIS services, but also be extended to other library services [10]. Lesley S. focuses on the unique factors of online electronic resources. School library setting is related to professional issues such as planning and management, selection and access, organization, guidance and proper use. In the examples of solving these factors and best practices, we provide some basic considerations to help librarians use these materials to provide effective services [11].

The innovation of this paper mainly includes the following two aspects: (1) Propose to reform the service platform of colleges and universities with artificial intelligence technology, and analyze the current situation of colleges and universities in detail. At present, there are few researches on the application of AI technology in university service platform. Most scholars mainly focus on the change of AI to education and the impact of AI on teaching. No scholars have conducted in-depth research from the perspective of service platform. Based on the background of the development of AI, this paper systematically discusses how to apply AI technology to service platform and how to use it. (2) Through this study, more thoughts can be aroused. Through literature analysis and case analysis, this study analyzes the application of artificial intelligence technology in the university service platform, which plays an enlightening role in the innovation and reform of the university service platform of artificial intelligence.

2. Proposed Method

2.1 Main Features of Artificial Intelligence

(1) Designed by human beings to serve human beings. In fact, artificial intelligence is a system based on computer hardware, according to human program, according to certain logic and algorithm. Artificial intelligence is designed and manufactured by human beings. It must serve human beings. (2) According to human design, it can identify the surrounding environment and generate corresponding emergency behaviors, and it can interact with human beings. Artificial intelligence system should be designed to be able to feel the information of nature through five kinds of tactile senses, such as watching, listening, smelling, touching and tasting, and then respond to the external world through language, text, expression, action and other behaviors. (3) It has adaptability, learning ability, evolutionary iteration and connection extension. Artificial intelligence system should have the ability to adapt to the environment and be able to learn independently. It is the ability to adjust the corresponding parameters, data and tasks in real time according to the changes of the environment.
2.2 Construction of Innovative Service Platform of University Library from the Perspective of "Artificial Intelligence"

The WeChat service platform, the WeChat public address, provides a platform for service functions. As an open platform, any organization or individual can apply for registration and have corresponding service accounts. In the development technology of the platform, the API port of the service platform is open to the outside world. The university library can develop and build a third-party service platform based on the open interface to realize the seamless docking with other departments of the University, and to ensure the diversification and individuality of the function of the service platform. Wechat official provides developers with detailed development documents and code samples, which ensures that the service platform is convenient for innovation and customization. In the construction of the third-party service platform, the basic platform that can be used for free is provided as the template platform for users, and the project database that meets their own service needs is built by users according to their own needs. In addition, the operators of wechat service platform also need to prepare for the third-party interface: set up and connect for the basic network, have a separate domain name IP address, deploy the web server, design the user-defined interface and menu of the third-party message interface, design the third-party business service scheme, optimize the third-party message interface and the information interaction of the business system and other specific service principles: users in wechat The mobile client sends a message to the wechat service platform, which will arrive at the wechat background through the network. After the background receives the message, it forwards it to the server of the service platform. After the server receives the request, it parses the message format, analyzes the interface to match according to the user's content and its own server logic, and transmits the information to the corresponding third-party service Interface, the third-party interface parses the information type and delivers it to the corresponding third-party service department. The third-party service department calculates the message to be returned to the user, then encapsulates the message and returns it to the service platform. Finally, the wechat service platform forwards the returned message to the user's client.

3. Experiments

3.1 Investigation Purpose and Contents

This questionnaire survey aims to understand the status quo of the development of personalized services based on the “artificial intelligence” perspective of regional college libraries. It focuses on the use of the service platform technology of college libraries to investigate the personalized services in college libraries. The development of the work and the acceptance of this new service model by college users, and the development of the library service in the future are determined according to the individual needs of the readers. The purpose of this survey is to analyze the readers' personalization through surveys on the satisfaction of current library, daily life information, and user feedback provided by university libraries from the perspective of “artificial intelligence”. Requirements, discuss the problems existing in the development of personalized service in college libraries, and provide suggestions for the improvement of college library services.

3.2 Sample Selection

This questionnaire survey selected several representative college library user groups to comprehensively understand the satisfaction of users of different levels with the daily learning, living information, and user feedback provided by the current college library. Understanding and cognition of personalized
service construction from the perspective, through a comparative analysis of each user group's needs for personalized services, exploring the problems existing in the development of personalized services in college libraries, and contributing to the improvement of college library services. The role of advice.

3.3 Questionnaire Issuance and Recycling

The questionnaire survey was conducted from March 2019 to October 2019. The survey participants selected college undergraduates, graduate students, teachers, and scientific research personnel as the main body. The survey areas mainly selected regional colleges, of which five are representative universities include University A, University B, University C, University D and University E. A total of 154 questionnaires were distributed. After careful inspection, 15 unqualified questionnaires were eliminated, and 139 valid questionnaires were recovered, with a recovery rate of 90.25%.

4. Discussion

4.1 Analysis of the Causes of Infrequent Use of Library Services

In the survey of readers' infrequent use of library services, according to a multi-choice survey of all issues that may lead to readers' infrequent use of library services, 48.2% of readers expressed information on library resources are not understood; 38.85% of readers think that library services lack personalization and pertinence; 36.69% of readers think that library information services are not convenient; 34.53% of readers think that the content and form of library personalized services are single; 26.62% The reader indicates that there is no unified entry for database retrieval, and the operation is inconvenient as shown in Figure 1.
Judging from the selection results, readers at different levels and types chose similar reasons for not frequently using library personalized services. They mainly focused on readers’ lack of knowledge of library information resources, and library information services were not targeted and Personalization and the inconvenience of library information services. In the survey of readers' measures to improve the library from the perspective of “artificial intelligence”, readers who choose to provide interactive and personalized services, strengthen subject services and build a one-stop platform, have a high proportion of readers who integrate network information resources. Among them, it can be seen from the percentage of the voting results that many questions have been raised about the options of “increasing linkage services between various functional departments in universities” and “increasing the content and frequency of information literacy training”. The attention of people also shows that the personalized service of our university library can no longer fully adhere to the rules to provide services, but also must keep pace with the times, use new technologies and new concepts to serve and meet the potential needs of all readers and Cries to open up a new path.

4.2 Measures for Improving Library Personalized Services from the Perspective of "Artificial Intelligence"

According to the research on the status of library personalized service usage, it is found that in the current context of “artificial intelligence”, libraries have strengthened the promotion of usage and coverage. Due to the continuous updating and iteration of current Internet technologies, and the new mobile terminal with the continuous emergence of functions, college student readers and young teacher readers have a
strong impetus for the new generation of the Internet. New media platforms have been generally welcomed by readers in terms of their functions and content. At present, the opening of new media platforms for libraries in some regions is mainly aimed at young people. With the continuous updating of smart mobile devices and new information dissemination technologies, opening new media platforms is also an inevitable direction for the development of China's college libraries and various service systems.

**Table 1. Measures to improve the personalized service of the library from the perspective of “artificial intelligence”**

| Suggested improvement measures | Percentage  |
|-------------------------------|-------------|
| Provide interactive and personalized services and strengthen discipline services | 76.98%       |
| Increase the linkage service between the functional departments in the campus | 42.45%       |
| Increase training contents and times of information literacy | 41.73%       |
| Build one-stop platform and integrate network information resources | 69.78%       |

5. Conclusions

This article mainly investigates the personalized service of the existing platform of the university library. It mainly introduces the service mode of the university library using the new media platform network in the university. Based on the results of theoretical analysis and questionnaires, and based on the content analysis method, it finds that the university at the current stage. The shortcomings of library personalized services are combined with “artificial intelligence” technical means and traditional library personalized services to propose a new personalized service framework for college libraries.

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