

Analysis of Path for Intelligent Service of University Libraries

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Abstract: This paper analyzes the path for intelligent service of university libraries. It examines the current status and challenges of university library services, explores the potential of intelligent technologies in enhancing library services, and proposes specific strategies and measures for implementing intelligent service. The aim is to provide valuable insights and practical guidance for university libraries to improve their service quality and meet the evolving needs of users in the digital age.

Keywords: university libraries; intelligent service; path analysis; digital age

I. Introduction

In the era of rapid development of information technology, university libraries are facing new opportunities and challenges. The application of intelligent technologies has brought new possibilities for improving library services. This paper analyzes the path for intelligent service of university libraries, aiming to explore how university libraries can leverage intelligent technologies to provide more efficient, personalized, and intelligent services.

II. Current Status and Challenges of University Library Services

A. Current Status

1. Traditional services: University libraries still mainly provide traditional services such as book lending, reference consultation, and reading room services.

2. Digital resources: With the development of digital technology, university libraries have increasingly rich digital resources, but the utilization rate and integration degree of these resources still need to be improved.

3. User needs: Users' demands for library services are becoming more diverse and personalized, requiring libraries to provide more targeted and efficient services.

B. Challenges

1. Information overload: The rapid growth of information makes it difficult for users to find the information they need quickly and accurately.

2. Service innovation: The traditional service model is difficult to meet the needs of users in the digital age, and libraries need to continuously innovate service models and methods.

3. Technical support: The implementation of intelligent service requires strong technical support, including hardware and software facilities, data management, and security protection.

III. Potential of Intelligent Technologies in Enhancing Library Services

A. Big Data Analytics

1. User behavior analysis: By analyzing user borrowing records, search histories, and reading preferences, libraries can understand users' needs more accurately and provide personalized service recommendations.

2. Resource optimization: Big data analytics can help libraries optimize the allocation of resources, improve the utilization rate of collections, and better meet the needs of users.

B. Artificial Intelligence

1. Intelligent reference consultation: Chatbots and virtual assistants can provide 24/7 online reference consultation services, answering users' questions quickly and accurately.

2. Automatic classification and indexing: AI algorithms can automatically classify and index library resources, improving the efficiency of resource management and retrieval.

C. Internet of Things

1. Smart library environment: The Internet of Things can be used to create a smart library environment, such as intelligent lighting, temperature control, and security systems, providing a more comfortable and convenient reading experience for users.

2. Asset management: IoT technology can be applied to asset management in libraries, realizing real-time monitoring and location tracking of books and equipment.

IV. Strategies and Measures for Implementing Intelligent Service

A. Strengthening Technological Infrastructure

1. Upgrade hardware and software facilities: Invest in advanced servers, storage devices, and network equipment to ensure the stable operation of intelligent service systems.

2. Develop and integrate intelligent software: Develop or integrate intelligent software such as library management systems, data analytics platforms, and virtual assistants to improve service efficiency and quality.

B. Cultivating Professional Talents

1. Training existing staff: Provide training opportunities for library staff to improve their understanding and application of intelligent technologies.

2. Recruiting new talents: Recruit professionals with backgrounds in computer science, data science, and library science to strengthen the technical support team.

C. Promoting User Participation

1. User education: Conduct user education activities to help users understand and use intelligent services, improve their information literacy and digital skills.

2. User feedback: Establish channels for user feedback, listen to users' opinions and suggestions, and continuously improve intelligent services based on user needs.

D. Establishing Partnerships

1. Collaborate with technology companies: Establish partnerships with technology companies to jointly develop and implement intelligent service solutions.

2. Cooperate with other institutions: Cooperate with other universities, research institutions, and libraries to share resources and experiences, and promote the development of intelligent services in the field of libraries.

V. Conclusion

The intelligent service of university libraries is an inevitable trend in the digital age. By analyzing the current status and challenges of university library services, exploring the potential of intelligent technologies, and proposing specific strategies and measures, this paper provides a reference for university libraries to implement intelligent service. In the future, university libraries should continue to strengthen technological innovation, cultivate professional talents, promote user participation, and establish partnerships to provide more efficient, personalized, and intelligent services for users.

Reference

- [1] Dosanjh Matthew G.F., Worley Andrew, Schafer Derek et al. Implementation and evaluation of MPI 4.0 partitioned communication libraries[J] Parallel Computing, 2021(prepublish).
- [2] Lotfy Mirna W., Kamel Shaimaa, Hassan Doaa K. et al. Academic libraries as

informal learning spaces in architectural educational environment[J] Ain Shams Engineering Journal, 2022, 13(6).

[3] Verticchio Elena, Frasca Francesca, Bertolin Chiara et al. Climate-induced risk for the preservation of paper collections: Comparative study among three historic libraries in Italy[J] Building and Environment, 2021, 206.

[4] Alsudais Abdulkareem In-code citation practices in open research software libraries[J] Journal of Informetrics, 2021, 15(2).

[5] Calogero Guccio, Anna Mignosa, Ilde Rizzo Are public state libraries efficient? An empirical assessment using network Data Envelopment Analysis[J] Socio-Economic Planning Sciences, 2018, 64.

[6] Hannah Weigand, Arne J. Beermann, Fedor Čiampor et al. DNA barcode reference libraries for the monitoring of aquatic biota in Europe: Gap-analysis and recommendations for future work[J] Science of the Total Environment, 2019, 678.

[7] Midha Mukul K., Campbell David S., Kapil Charu et al. DIALib-QC an assessment tool for spectral libraries in data-independent acquisition proteomics[J] Nature Communications, 2020, 11(1).

[8] Colin Barnes, Shankar Balasubramanian Recent developments in the encoding and deconvolution of combinatorial libraries[J] Current Opinion in Chemical Biology, 2000, 4(3).

[9] Anonymous ALA Expresses Outrage Over Proposed IMLS Cut[J] American Libraries, 2015, 46(5).

[10] Schmidt, Aaron Positive Signs[J] Library Journal, 2015, 140(14).

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