Research on Library Information Work based on Internet Big Data

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Abstract. With the gradual formation of big data environment and Internet + social environment, the library and information work has undergone tremendous changes. Big data work has become the main body of Library and information work. This paper focuses on the analysis of the content of Library and information work and the responsibilities of librarians, and studies the working methods and personal development mode of Librarians in the big data environment. In the near future, library and information major will be in front of us with a new face. Library and information management personnel should constantly enrich themselves, constantly accept challenges, and actively adapt to the change of work content and work methods.

Keywords: Library Information Work, Librarians; Working Methods, Personal Development Mode

1. Introduction

Information science is the discipline of information and information; the two majors are all information management and information system, that is, information management, mainly related knowledge disciplines such as document information organization, storage, retrieval, consultation, analysis and reader service. Literature classification retrieval is to search for literature according to the discipline classification system. Because after the title is selected, it can be carried out according to the determined subject range of literature search. Through the title of journal paper, it is easy to understand the history and current situation of the subject research [1]. After the scope of literature classified retrieval is determined, the second step is to select the retrieval tools used, i.e. book catalog, index, abstract, etc. The librarian who is engaged in the library information work is responsible for the collection and arrangement of the library information, providing the library with relevant suggestions on the library, participating in the discussion of the existing problems in the library, and providing suggestions for the development of the library. In addition, he also needs to be responsible for the
With the rapid development of scientific research in China, the amount of papers and other documents published each year is growing rapidly, and the pressure of Library and information work is increasing gradually. At present, the library and information science has set up graduate major in many colleges and universities, aiming to train high-quality librarians. This is an industry opportunity as well as an era requirement. At present, the work of librarians is relatively stable and the labor remuneration is relatively low, but with the gradual acceptance of their "information" and "management" attributes by the society, the work content of librarians will also change in essence, especially with the rapid development of E-journal business based on big data today, the work of Library and information has been fully combined with the work of academic big data, and the future situation of Library Newspaper work will have a very broad development space, this paper is to study the breakthrough of Library and information work in the big data environment [3].

2. Composition of Library and Information Work

![Figure 1. Structure of Library and Information Work](image)

2.1. Data retrieval
Data retrieval is to extract the data stored in the database according to the needs of users. The result of data retrieval will generate a data table, which can be put back into the database or used as the object for further processing. Data retrieval includes two operations: data sorting and data filtering.

1) Data sorting
When viewing data, it is often necessary to display the data in a certain order according to the actual needs. This process is called data sorting.

2) Data filtering
The so-called "filter" refers to finding and displaying the records that meet the conditions from the table according to the given conditions. The records that do not meet the conditions are hidden. These conditions are called filter conditions.

2.2. Data classification
The partial ordering of attributes is explicitly explained by users or experts at the schema level: generally, the conceptual hierarchy of classified attributes or dimensions involves a set of attributes. At the pattern level, users or experts can easily define concept hierarchy by explaining partial or full order of attributes. Explain part of the hierarchy by explicit data grouping: This is basically part of
manually defining the conceptual hierarchy. In a large database, it is unrealistic to define the whole concept hierarchy by explicit value enumeration [4]. However, for a small part of the middle tier data, we can easily explicitly explain the grouping.

2.3. Data value analysis
Value engineering quotation, also known as value analysis, is a new management technology and an effective way to reduce costs and improve economic efficiency. It originated in the United States in the 1940s, and miles was the founder of value engineering. Miles gradually summed up a set of effective methods to solve the procurement problem, and the idea and application of this method were extended to other fields. The application of value engineering theory to data field is data value analysis.

3. Difficulties and Development of Library and Information Science

3.1. Discover value data in a sea of big data
In the era of big data, every natural person and every institutional legal person produces a lot of data at every moment. Although these data are not all library and information data, they have a great interference on the daily management of Library and information data. Even according to the data of 487400 papers published by China in 2018 (731500 in the United States, 233700 in the United Kingdom and 171600 in Germany in the same year), the data volume is quite amazing. It will take a lot of work to extract value data from these data. Even if machine learning neural network is used to assist processing, a large amount of programming is needed.

3.2. Make data more valuable
Looking at a piece of data alone does not reflect the value of data. Data can only reflect its substantive value through deep learning and deep mining, and the value of data comes from the process of deep mining of data. The work value of Library and information science lies in the deep mining of data by its work load itself and the full stimulation of data value. Today's Library and information science has focused on the field of data mining technology, including data acquisition technology and data collation technology, as well as subsequent data visualization technology.

3.3. Complete comparison of intelligence data
In the daily work of librarian, data novelty search and data retrieval are important service content. All these work involve the complete comparison of Library and information data. The premise of data integrity comparison is to build a complete basic database as much as possible, and to classify the data in the database in enough detail and scientific. This is the biggest difficulty of Library and information management.

To sum up, the essential driving force of the development of Library and information technology from the initial requirements of college education to the requirements of undergraduate or above, and then to the requirements of today's master's degree is the increasing difficulty of Library and information management, which is closely related to the big data work attribute of Library and information management.

4. Summary
Library and information work is a work set completely wrapped in big data work, and its core content is to complete the work of data value promotion in massive library and information work. Its work value lies in the promotion of data value, that is, its work is to create social value. Through data collection, data collation, data governance, data mining, data visualization and other big data technologies, to achieve the retrieval and comparison of Library and information, and finally constitute the data novelty search report and literature review report, which is the core content of
Library and information work. With the gradual penetration of big data work in the library and information work and the gradual formation of the main body of Library and information work, the difficulty of Library and information work is gradually increasing, and the requirements for Library and information administrators are also gradually increasing. In the near future, library and information major will be in front of us with a new face. Library and information management personnel should constantly enrich themselves, constantly accept challenges, and actively adapt to the change of work content and work methods.

References
[1] Wenjun Cai, Huiyu Guo. Requirements of the Diversification of Media Forms for Library and Information Work in the New Era[P], 2019.
[2] Science - Library Science; Research Conducted by S.C. Serrano and Co-Researchers Has Updated Our Knowledge about Library Science (Orphan Works At Theatre Library and Information Centres: Assessing Librarians' Perceptions and Management In Spain)[J]. Computers, Networks & Communications, 2019.
[3] Information Technology - Information and Data Science; New Findings from University of Zagreb in Information and Data Science Provides New Insights (Choice of career in library and information science and past work experience)[J]. Computers, Networks & Communications, 2019.
[4] Library Science; Researchers at Rutgers State University Target Library Science (Library research as collaborative information seeking)[J]. Computers, Networks & Communications, 2016.