

The Development Opportunities and Reform Trends of Libraries in the Age of Artificial Intelligence

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Abstract: With the rapid development of society and the rapid development of science and technology, the era of artificial intelligence has arrived. In such a large environment, the library faces development opportunities on the one hand and enormous challenges on the other, which gives the library a broader space for development. Therefore, libraries should adapt to the actual development of the era of artificial intelligence and build intelligent libraries. Based on this, this paper analyzes the development opportunities of libraries in the era of artificial intelligence, explores the challenges faced by libraries, and finally proposes the trend of library changes in the era of artificial intelligence. It is expected that this study will provide a reference for future research.

1. Introduction

With the rapid development of science and technology, the era of artificial intelligence has arrived, which has enabled China's libraries to develop healthily and steadily. Under such circumstances, the library should fully utilize advanced artificial intelligence technology in the actual construction process, which can ensure the reliability and efficiency of library construction, and let the library face more development opportunities and challenges. Only by grasping such development opportunities can the library promote its healthy and sustainable development.

2. Analysis of the Development Opportunities of Libraries in the Era of Artificial Intelligence

2.1 Enhancing the Efficiency of Resource Construction

In the current era of artificial intelligence, more and more digital resources are being distributed, which makes a large amount of information show an upward trend, which adds more difficulties to the library's various information processing work. Advanced artificial intelligence technology has the skills of integrating, processing and calculating massive information. It can find out the inherent laws of different resources, ensure the quantification of the actual processing of data information, and ensure the quality and effectiveness of the actual construction of various resources of the library. . For artificial intelligence technology, intelligent computing methods occupy a very important position, relying on neural networks to improve their learning level and ability, and constantly transforming diverse resources into relevant information content that machines can understand, and ensuring the actual retrieval of these information contents. Reliability and accuracy. In the actual construction process of the library, the advanced cloud computing technology is widely used. On the one hand, it can ensure the quality and efficiency of processing a large amount of information. On the other hand, the diversity resources are reasonably and effectively integrated to enhance the actual collection of the library. In reality, the library collection of Hulunbeier College is worrying. Up to now, there are more than 1 million books in the collection. This also includes books purchased in large quantities in 2011, and 39,489 new books have been purchased since 2018. The construction of artificial intelligence and our library The construction of collections needs to be improved.

2.2 Changing the Face of Information Services

The artificial intelligence technology is mainly based on the simulation of the human brain thinking form. With the level and management of the information content of the computer, the human wisdom is broadened, so that the related work that humans can't accomplish is realized. Using computer equipment and intelligent facilities, artificial intelligence technology can ensure the good integration of information content, improve its integration quality and actual results, and integrate artificial intelligence technology into every step of the information service chain to ensure the actual matching of multiple resources. Reliability and autonomy make the actual service dimension of information content expand effectively, ensuring a good connection between diverse information content and people's actual needs. Under such circumstances, libraries should apply intelligent computing methods widely, build a sound and sound monitoring system, fully grasp the actual changes in information content, clarify the specific needs of dynamics, and improve the relevant personnel to control and control information content. Ability and level. The library can set up a corresponding recommendation system. This system should display the characteristics of individuality and diversity, and use the machine to deeply understand the specific information of the search. Nie Rong, according to the actual needs of people, shows that the key words are filtered and then People provide diverse services to ensure their service capabilities and levels.

2.3 Promoting the Transformation and Upgrading of Libraries

Artificial intelligence technology has been developed for decades, and interacts with big data technology and Internet of Things technology to form a new form of computer technology, which fully displays the functions of processing images and recognizing voice. At this stage, The Hulunbeier College Library is now working on the electronicization of books and books, and the collection of books is intelligent. In 2018, an intelligent and intensive bookstore was built. The total capacity of the dense bookshelves is 560 cubic meters, which can accommodate about 260,000 books. Due to the actual demand for knowledge innovation in China, it is necessary to construct a complete and sound library artificial intelligence system. On the one hand, it realizes the widespread dissemination of artificial intelligence technology, and on the other hand promotes the integration of economy, technology and culture. The library should launch a new management mode under the premise of the artificial intelligence era, enhance the actual connection between various resources and people, expand the information content, and also involve the communication category, realize knowledge sharing, so that the library can get intelligent education. Rapid development in many areas, such as search and retrieval.

3. The Analysis of the Challenges Faced by Libraries in the Era of Artificial Intelligence

In the current process of the actual development of China's libraries, while facing the development opportunities, it also faces many challenges. The research investment in artificial intelligence is not sufficient. The lack of high-quality professional talents team is collecting big data information. There are many obstacles at the time. The existence of these challenges has a very serious impact on the healthy and sustainable development of Chinese libraries in the current artificial intelligence environment. In response to such a phenomenon, it is necessary to take scientific and reasonable measures for handling. Only in this way can we ensure the quality and practical results of library construction and promote the continuous development of the library in China.

3.1 Insufficient Investment in Artificial Intelligence Research

Incorporating advanced artificial intelligence technology into Chinese libraries, it is necessary to purchase scientific and reasonable facilities and equipment, and invest more funds in services, research and management, so that the role of artificial intelligence technology can be fully exerted. Because the library, as a public service institution in China, relies mainly on the allocation of funds from the government's financial department and restricts the actual use of resources. Because the

library's many funds are used in the interview literature, or the staff's remuneration, it is rarely used in the procurement of smart facilities equipment. In addition, the widespread use of artificial intelligence technology in libraries lacks consistent and uniform standards. Most libraries are in the process of starting to explore and explore, and it is difficult to use advanced artificial intelligence technology to obtain more economic benefits. Social benefits are hard to get financial support from local government departments. In addition, artificial intelligence technology as a social science research category in China, the scientific research costs invested by the library in this area are very small, resulting in a large gap in the research and analysis of artificial intelligence technology, and further the construction of libraries in China. Has played a large part.

3.2 Lack of Professional Talents

According to the analysis of the specific situation of the application of artificial intelligence technology in Chinese libraries, most of the facilities and equipment used by the library are directly purchased, or the research and development work between the high-tech enterprises and the library is strengthened. Exploring the reasons shows that the research and development of artificial intelligence requires more professional scientific and technological talents. In the current environment where the talents of artificial intelligence technology are scarce, the library introduces excellent talents and lacks a certain degree of superiority, which leads to many obstacles in the research and development of library artificial intelligence. At the same time, most libraries do not clarify the actual development of artificial intelligence technology, lacking a broad vision and creative thinking. Artificial intelligence technology can only be used in a relatively passive position, and there is no way to select the corresponding science and technology and intelligent tools according to their actual needs. The actual construction of the library is not done overnight. The library needs to strengthen the good cooperation between itself and the enterprise, and better fill its own defects and disadvantages in science and technology and excellent talents.

3.3 Obstacles to the Use of Big Data Collection and Utilization

In the current social development process, it is essential that the library fully utilize advanced artificial intelligence technology. Its purpose is to better handle many information and resources to ensure the quality and concrete results of library resource construction. Due to the increasing number of modern digital resources and the more complicated sources, the practical difficulty of collecting and processing information by libraries has been greatly improved, which has continuously increased the requirements for the use of advanced science and technology in libraries. If the processing methods used by library staff are not scientific and unreasonable, there is no way to master the appropriate artificial intelligence calculation methods, and it is difficult to ensure the reliability and efficiency of data information collection and processing. In addition, when the big data is actually collected, the library should cooperate with the operators and the publishers to obtain support and ensure the perfection and richness of the actual construction of the library's diverse resources. In order to ensure the legitimate rights and interests of people, when the library digs deeper into the data, it should construct relevant regulations on the protection of copyright and privacy to prevent legal disputes.

4. Trend of Library Reform in the Era of Artificial Intelligence

In the current environment of artificial intelligence, libraries are developing in the direction of intelligence. In such cases, artificial intelligence technology plays a crucial role in promoting. Library construction is a long-term and systematic project. To ensure the integrity and comprehensiveness of library services and to ensure the diversity of its functions, it is necessary to start with innovative thinking forms and cultivate more high-quality outstanding artificial intelligence service teams. To realize the incubation of science and technology, better handle the difficulties in the actual construction of the library, and ensure the ecological construction of the library. For example, in the library of Hulunbeier College, the access control system used can only count and identify the number

of people entering and leaving the library. At the same time, the facilities and equipment used in the library are relatively old and aging. The access control systems used by other departments also have some degree of damage or no way to open them, and the systems of various departments are not integrated. In response to such a situation, in the context of the current era of artificial intelligence, China's libraries should continue to develop in the direction of intelligence.

4.1 Establishing a Smart Library with Innovative Thinking

With the advent of the artificial intelligence era, in the current relatively open information environment, users have a wide variety of ways to obtain a large amount of information content, which in turn enables the library's service capabilities and levels to be gradually improved, and provides diverse services for people. In the current environment, the library uses artificial intelligence technology in the actual construction, and can build an innovative intelligent library. In order to ensure the scientific and rational construction of such libraries, and to improve the intelligence and intelligence of libraries, libraries must constantly innovate their own thinking, fully grasp the progress of new scientific research, and adopt new concepts, facilities and equipment as well as science. Technology penetration, ensuring the rational optimization of the construction of diverse resources, and enabling the innovation and transformation of the library's service methods. The library should effectively integrate artificial intelligence technology and Internet technology, broaden the practical application of artificial intelligence technology, and apply artificial intelligence technology to subway stations and other places, so that more and more readers can experience advanced artificial intelligence technology. Brought a lot of convenience. At the same time, with the corresponding platform of artificial intelligence, strengthen the research and development of theoretical knowledge, improve the innovation level of the library, integrate the diversified theoretical knowledge, and form a more fixed subject knowledge system, which lays a good foundation for readers' reading and decision-making. condition. Therefore, in the context of artificial intelligence, libraries are constantly evolving toward the intelligent aspects of innovative thinking.

4.2 Cultivate a Service Team That Masters Artificial Intelligence Technology

With the rapid development of advanced technology, artificial intelligence technology has been continuously developed. Under such circumstances, the library should fully utilize artificial intelligence technology in the actual construction process. On the one hand, it provides more convenience for the library, on the other hand, the requirements for library management personnel are gradually improved. Under such a large environment, libraries should use artificial intelligence technology to formulate corresponding talent training programs according to their actual conditions, so that these outstanding talents can learn and master more new skills, and master the practicalities of diverse intelligent facilities. Operational skills, and allow them to enhance their creative level through their own active learning, so that the diverse service needs of library users can be met. In view of the extensive use of artificial intelligence technology in Chinese libraries, managers should also enhance relevant research on artificial intelligence, clarify the actual development direction of artificial intelligence technology, learn and master more knowledge about artificial intelligence technology, and then cultivate more High-quality and comprehensive talents. The library should create a good and relaxed working atmosphere and environment, let the staff work in such an environment and atmosphere, and use regular assessment methods, and regularly invite experts to the library to give lectures, which can mobilize the staff Participation in enthusiasm and initiative, improve the staff's learning ability, cultivate professional knowledge and comprehensive quality of staff.

4.3 Enhancing Library Science and Technology Innovation and Incubation Ability

In today's society, artificial intelligence technology has developed rapidly. This technology has become the focus and key to competition among countries, and the value of its related tools, calculation methods and hardware is gradually increasing. To a large extent, there are financial pressures on the actual construction of libraries in China. In order to better solve this problem, the

library should broaden its own source of construction funds, strengthen cooperation with social enterprises and industry associations, set up special foundations, and raise more according to scientific research projects. Funds to enhance the library's actual investment in artificial intelligence technology. On the other hand, libraries should strengthen good cooperation with high-tech enterprises, increase investment, and fully integrate diverse innovation resources. Under the premise of complementing talents and diverse resources, build a corresponding science and technology incubation project. , build relevant software and hardware research and development platforms, let its research hotspots get more progress, and then create more social value and service value for the library. In the modern society, in the process of library construction, it is necessary to strengthen the exploration of creative innovation, improve the level of library research and development, and finally build a sound and sound library service system. Therefore, in today's society, it is necessary to improve the level of scientific and technological innovation in our libraries.

5. Conclusion

In China's modern society, artificial intelligence technology has developed rapidly, which makes the era of artificial intelligence come in time. In this context, libraries face enormous challenges and opportunities for development. On this basis, China's libraries should make full use of advanced artificial intelligence technology, and fully exert the advantages and advantages of this science and technology, which plays an important role in the normal construction of the library, and also promotes the books in China. The healthy and sustainable development of the museum business is crucial. Therefore, it is of practical significance to strengthen the development opportunities and reform trends of libraries in the era of artificial intelligence.

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