

Exploration of the Innovation Path of Enterprise Archive Management Mode in the Context of Big Data

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Abstract

Archives, as the materials for all kinds of work assessments, are the imprints of the past and the basis for guiding the future. Compared with traditional archive management methods, informatized archive management is more efficient and of better quality. The efficiency of various departments of society has made a qualitative leap and improvement under the background of the information age. To develop archive management business and make archive management more efficient and safe, it is necessary to explore a scientific and efficient informatized archive management work mode on the practical road of the new era. The advent of the big data era has brought fundamental changes to data mining technology. It can analyze and intelligently mine massive data, making it possible to mine data at a deeper level. Therefore, it is necessary to actively explore archive data mining technology, so that data mining technology can be widely applied to archive management work, as far as possible to mine and transmit potential archive information, play its due role, and maximize the economic and social benefits of archive data. This article, through the analysis of the characteristics of archive management under the big data environment, points out the problems existing in the current archive management work and the challenges and necessity of innovation in the archive management mode under the big data background, and discusses how to improve the innovation of the archive management work mode from practice

Keywords

Big Data, Archive Management, Mode Innovation.

1. Introduction

Archives play a pivotal role in social and economic development. The advent of the big data era has led to the widespread application of big data technology in social life, which can not only effectively promote archive management, but also promote the innovation of archive work methods. This has further improved the preservation quality and usage efficiency of archives. Looking at the current archive management work, although big data technology has been initially applied, there are still many problems in actual work, such as still using the traditional archive management work mode, resulting in low efficiency of archive management; outdated archive management concepts; imperfect archive management system; insufficient archive management facilities and weak awareness of archive management security. In the big data era, archive management work can no longer meet the demand. Replacing the traditional file management method with data storage has greatly expanded the scope and space of original file management. Therefore, it is necessary to innovate the service mode of library archive management, which can not only give full play to the value of library archive management, but also play a guiding and educational role. Using technological means to reform archive management services can effectively spread Chinese culture. Due to the lack of supporting archive materials, the collection, sorting, classification, and filing of archive materials have been caused, making it difficult for archive materials to be used by users. In general, due to the lack of sound infrastructure, the integration of archive materials and big data cannot be fully

combined, hindering the improvement of the level of archive management work. Therefore, this article combines the problems and opportunities of enterprise archive management mode in the context of big data, and proposes four main innovative measures. First, take the safety of archive information data as the primary consideration, and use scientific technical means to ensure the safety of archive materials; second, establish the innovative consciousness of big data management, and strengthen the application of big data technology in daily work; third, strengthen the importance of electronic file archive management and improve the level of archive management; finally, pay attention to the systematic innovation of archive management mode and optimize the workflow of archive management. Finally, it emphasizes the importance of fully utilizing big data technology and deeply mining archive information to promote social progress and development in the context of the big data era.

2. Problems in Archive Management under the Background of Big Data

2.1. Outdated Archive Management Concepts

In the current practice of archive management, some archive management institutions and managers still use traditional archive management methods, and their archive management concepts are relatively backward, especially the backward application skills of big data technology, which makes it difficult for archive management to effectively meet the real needs of archive users. It is not conducive to the realization of the modernization goal of archive management. Although many departments have implemented automated office work and have a large number of electronic documents, due to the low emphasis on archive management work by the leaders of various departments, no corresponding policies have been formulated, which affects the normal operation of the entire system. In addition, in actual surveys, many department leaders do not pay enough attention to the management of electronic archives and lack necessary materials, resulting in many work cannot be carried out normally, which seriously restricts the management of electronic archives.

2.2. Imperfect Archive Management System

In practice, many departments' electronic document management systems are not perfect, which seriously restricts the normal operation of electronic documents. For example, many schools have not established a management responsibility system for electronic documents, and the responsibilities of each person are not clear, resulting in a lot of randomness in the management of electronic documents, which seriously affects the management level of electronic archives. In addition, although some schools have established electronic document archive management systems, due to the lack of specific management mechanisms, they are in a formalized state and cannot really play their binding role, which has a certain impact on their work quality. Secondly, the storage format is not clear. The storage of electronic files occupies a large proportion in the archiving and management of electronic files. In the storage of electronic files, the storage method of the file is very important. Only by choosing the appropriate storage method can the long-term use of electronic files be guaranteed. But in reality, many schools do not have strict requirements for their storage formats, often causing them to be unable to fully save, causing file disorder or damage, resulting in electronic files that cannot be reset.

2.3. Insufficient Archive Management Facilities

The archive management equipment is not perfect, and the archive user wants to get high-quality archive services, it must establish a sound archive data system. In the big data era, archive managers need to rely on basic service platforms such as cloud computing to better realize the storage and use of archive data. However, because some units have not established supporting archive management facilities, the archive management work lacks basic support,

and it can neither carry out the collection, sorting, classification, and archiving of archive data, nor can it provide remote archive data for users. In general, due to the lack of a sound infrastructure, the integration of archive data and big data has become a bottleneck restricting archive management work.

2.4. Weak Awareness of Archive Management Safety

In management work, the safety awareness is not strong, and the safety of archive data is its main purpose. In the big data environment, various advanced information technologies are used for archive management. In this process, the safety of archive data should be the first priority, strengthen the safety management of data, ensure the safety of archive data, avoid data leakage and tampering. However, due to the lack of relevant technical means, some archive management units are backward in archive information data safety management technology, and some archive managers lack the corresponding archive information data safety management awareness, and it is difficult to provide safe archive information services for archive users. In addition, there is a lack of document detection in the practice of archive management work. In the storage and management of electronic files, it is necessary to carry out corresponding inspections on them to meet the corresponding standards and improve their application value. However, due to the lack of corresponding detection standards in many domestic enterprises, it has caused the management of electronic files to be not in place, and it is impossible to guarantee its authenticity, integrity, safety and availability, which brings great difficulties to the reuse of electronic files.

3. The Necessity of Archive Management Mode Innovation under the Background of Big Data

In today's information technology, data storage has replaced the traditional file management method, greatly expanding the original file management scope and space. Because the storage of archive data does not occupy too much storage space, the collection and sorting of data are no longer restricted by time and space. In theory, the storage, sorting, and storage of archive data can be realized. For example, in personnel file management, during the process of personnel recruitment, interviews, entry and exit, it is necessary to collect, sort, and store a large amount of dynamic data. However, under the traditional archive management mode, due to space reasons, only a small amount of important data can be recorded. But in the big data environment, it can collect and record these data as much as possible, enhance the dynamic characteristics of archive information, and realize the comprehensive and real archive management. With the rapid growth of archive information in our country, the complexity of archive management work is getting higher and higher, and the types of archive data are becoming more and more abundant, which can better adapt to the needs of various industries, but at the same time, it also brings certain difficulties to the classification of archive data. If the accuracy of the data cannot be ensured, it will cause confusion of the data, making the data more complex. Due to the lack of effective data analysis means, some data in the archive data are valuable, some data are useless, and some are useless, causing a large amount of useless data in the archive data, which will inevitably bring difficulties to the processing of archive data. On the other hand, due to the application of big data technology, the traditional methods of data collection and sorting have undergone tremendous changes, and the sources of data have become diverse and varied, both structured and unstructured. Compared with traditional paper files, its biggest difference is that through big data technology, it can not only save the original files, but also save the audio and video information in the files, breaking the traditional paper file management method. At the same time, all kinds of archive data are classified, and according to the needs of archive management, the classified archive data are further mined to find the most suitable data for convenient archive management. In the information age, it is

necessary to vigorously promote the innovation of archive management services, so that the importance of history and humanities in social development is increasingly prominent. And archive management contains a variety of traditional historical materials, including history, humanities, folklore, archive management is an important way of wireless communication and mobile computing storage data in the development of the times, which is of great benefit to the inheritance and development of Chinese culture. At the same time, the library archive management hides rich collection information, which is precious original data and has very precious collection value. The library covers a wealth of knowledge and culture, is the main place to cultivate talents and inherit cultural science, the library should pay attention to innovation, build a library information office mode, innovate retrieval function, scientifically obtain subject resources, optimize the archive management service system, conducive to social innovation and development. With the continuous development of society, the content of library archive management work is gradually increasing, science and technology are constantly developing and applying, in this environment, the items and content of library archive management work are constantly expanding, and the service form is also constantly expanding. Therefore, it is necessary to innovate the library archive management service mode, which can not only give full play to the value of library archive management, but also play a guiding and educational role. Using scientific and technological means to reform archive management services can effectively spread Chinese culture. Due to the lack of supporting archive data, the collection, sorting, classification, and archiving of archive data make it difficult for archive data to be used by users. In general, due to the lack of sound infrastructure, the integration of archive data and big data cannot be fully combined, hindering the improvement of the level of archive management work.

4. Measures for Archive Management Mode Innovation under the Background of Big Data

4.1. Take archive information data security as the primary consideration

Therefore, it is necessary to strengthen the security management of archive data, ensure the safety of archive data, and avoid data leakage and tampering. However, due to the lack of relevant data security protection technology, electronic files are easy to be tampered with and destroyed, some archive management departments' archive information security management technology level is relatively backward, some archive managers lack the corresponding archive information data security management awareness, it is difficult to provide safe archive information services for archive users. Therefore, to ensure the integrity and safety of electronic archives, it is necessary to use scientific technical means, such as access control, network security monitoring, network antivirus, identity authentication, encryption backup, etc. Based on this, we suggest using encrypted electronic archives, using identity authentication and other methods to control files, only those who have been authenticated can operate. In addition, firewall technology can also be used to prevent the uncertainty of viruses, guests, etc. from threatening electronic archives, and realize the safe storage of electronic archives.

4.2. Establish a sense of innovation in big data management

To make big data technology and archive management closely combined, it is necessary to establish a management concept based on big data. We need to change our ideas and change our ideas about archive work. The development of archive management work is directly related to the quality of archive management work. Applying big data technology to archive management, combined with the actual needs of users, enhances the big data thinking and service awareness of archive workers, builds and establishes a modern archive management mode, especially needs to consciously change their own archive service awareness, from

traditional archive management awareness to big data archive management awareness, strengthens the application of big data technology in daily work, and consciously improves archive services. Strengthen the consciousness of archive work. We should strengthen the remote service of archive data. Archive management departments should strengthen the management of archive information, use modern information technology, use network technology, intelligent information technology, GIS technology and other technologies to improve the accuracy of archive information retrieval, and use network information technology to realize the informatization of archive information management.

4.3. Pay more attention to the management of electronic file archives

Under the current situation of the increasing popularity of electronic documents, leaders of all departments should pay more attention. To make the leaders and staff of all departments pay more attention to the management significance of electronic documents, formulate corresponding policies, so as to better manage. As a leader of a department, it is necessary to provide necessary resource support to ensure its normal operation. Secondly, we should strengthen the quality of archive managers. To improve the level of archive management and the quality of archive work, we must strengthen the quality of the archive management team. (1) Recruit electronic document administrators through campus recruitment, social recruitment and other ways, strengthen the recruitment of compound electronic document administrators, to meet the needs of modern electronic document management, so as to effectively improve the level of electronic document archive management. (2) We should establish and improve the archive management system, carry out archive management regularly and irregularly, strengthen the professional technical training of archive managers, cultivate their professional ethics, establish a correct working attitude, pay attention to the management of archives, and improve the quality of archive work.

4.4. Pay attention to the systematicness of innovative archive management mode

Archive management is an important part of enterprise work. Innovating the way of archive management and optimizing the workflow of archives is conducive to the healthy development of enterprises. Therefore, to strengthen the research on archive management, it is necessary to use information technology in archive work, to meet the needs of the development of the times, create an information office environment, and promote the innovation of archive work. First, cognition. Analyze the current situation of the archive management mode based on the enterprise or unit, and study the strategic deployment of the national archive field and the enterprise strategy, so as to have a more objective understanding of archive management and carry out archive management activities according to the actual situation of the enterprise. Second, planning. Relying on the concept of archive management and the actual situation of enterprise development, we should formulate the plan of archive management, pay attention to the top-level design, regard the innovation of archive management mode as a systematic project, clarify the development requirements of archive management mode, give support to the enterprise or unit to invest in this field in terms of personnel, materials and money, analyze the key points of the innovation of archive management mode, and make reasonable planning in combination with business process, competitive strength and data development law. Fourth, evaluation. Evaluate the new mode of archive management based on big data, use the evaluation conclusion to further adjust the content of archive management concept, requirements, standards, key points, etc., so that the archive management mode can be continuously optimized and upgraded.

5. Conclusion

In the context of the big data era, the competition for data resources is becoming increasingly fierce, and it is crucial to fully recognize the significant driving force of data on the development of human society. Archive work needs to fully utilize big data technology, deeply mine archive information, and make it play its role better in the big data era, promoting social progress and development. The advent of electronic files has greatly improved the efficiency of archive management work and effectively solved the improper use of archive materials, playing a certain role in promoting the development of enterprises. However, current archive management work faces many challenges, such as the use of traditional archive management modes, outdated archive management concepts, and insufficient archive management facilities. To address these challenges, we must innovate the archive management model, fully utilize big data technology, reform archive management services, and improve the preservation quality and usage efficiency of archives. This article proposes four main innovative measures: firstly, taking the security of archive information data as the primary consideration; secondly, establishing the innovative consciousness of big data management; thirdly, strengthening the importance of electronic file archive management; and finally, paying attention to the systematic innovation of the archive management model. These measures aim to promote the deep excavation of archive information and promote social progress and development. In general, we must fully recognize the importance of big data technology in archive management and take active measures to adapt to the needs of the big data era.

In general, we must fully recognize the importance of big data technology in archive management and take active measures to adapt to the needs of the big data era. In general, the integration of big data technology and archive management is not only a trend but also a necessity in the current era. Solving the existing problems in archive management, innovating and improving the archive management system is crucial. The measures proposed in this article provide a feasible path for the innovation of archive management in the big data era. However, the implementation of these measures requires the joint efforts of archive management personnel, the support of advanced technology, and the improvement of relevant policies and regulations. Looking forward to the future, with the continuous advancement of technology and the deepening of the concept of big data, archive management will surely achieve greater development and make greater contributions to social progress and development. In future management work, we need to effectively manage from the aspects of management concepts, service content, and team building. With the widespread application of information technology in archive work, new requirements have been put forward for archive management work in the new period. In order to adapt to the archive management work in the big data era, we must fully play the management concept of big data, continuously innovate and improve the new system of archive management, build an intelligent archive management platform, realize the two-way data management of archive information, and comprehensively improve the level of archive management. As part of future research, we can consider using explainable artificial intelligence technology to achieve the same goals and achieve higher confidence in the results generated.

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References

- [1] H.Zhang,Y.Y.Wu,H,Fu, et al.Research on the Innovation of Archives Management Mode of Local Universities in the Era of Big Data, Journal of Science & Technology Informationvol. 20 (2022), 232-235.
- [2] J.Liu.Innovation of the Electronic Archives Management in the Era of Big Data,Journal of Office Informatization.27 (2022), 50-52.
- [3] Analysis of the Data Transformation of Archive Management in the Context of Big Data,Journal of China Archives.10(2021),04-25.
- [4] Z.Y.Chen.A Discussion on the Path of Hospital Archives Management in the Office Automation Environment,Journal of Money China.32(2021),24-25.
- [5] Y.L.Li.Innovative Issues of Archival Management Mode in the Big Data Era,Journal of Culture Industry.02(2021),90-91.
- [6] Y.Zhao.The transformation of the university infrastructure archives management model under the big data background,Journal of Future City Studies.11(2020),89-90.
- [7] Data Governance:New Perspective and Function for Archives Management in Big Data Era,Journal of Archives Science Study.05(2020),50-57.