Analysis of the Management of Office Administrative Archives Based on Big Data

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Abstract: In the era of big data, the development of each organization should keep pace with the times, especially in the management of office administrative archives, which is an important part of an organization's management. Due to the extensive storage of administrative archives and the complexity of their content, daily management poses significant challenges. To enhance the efficiency and security of archive management, institutions should focus on implementing big data technology. The paper starts with an analysis of the significance of big data on the management of office administrative archives, followed by a discussion of the current status of archives management. This paper ends with a few strategies for applying big data technology in managing office administrative archives.

Keywords: Big data; Institutional units; Office; Administrative archives; Archives management

1. Introduction

Office administrative archive plays an important role in preserving the information of an enterprise. It encompasses not only the records of the staff and relevant projects but also stands as a witness to the organization's development over the years. Additionally, some files may contain confidential information. In the era of big data, it is imperative to employ big data technology to prevent file loss, leaks, and other related issues in administrative archive management. Currently, influenced by various factors, certain concepts related to the management of office administrative archives within organizations require innovation. There is a need to enhance the quality of personnel, improve management methods, and address the existing status quo. It is crucial for organizations to pay attention to these aspects.

2. The significance of big data in the management of the office administrative archives

2.1. Convenient archive retrieval

The importance of office administrative archives is self-evident. However, traditional paper-based archives

come with many shortcomings, such as longer search time as well and paper documents are more susceptible to damages like wear and tear, etc. In the context of archival queries, the extensive reserves of administrative archives contribute to a need for significant manpower and time to locate specific materials. This situation hampers the efficiency of archive management. Furthermore, the repetitive handling and flipping through paper versions during the query process may lead to damage, diminishing the overall value of paper archives. The application of big data technology in administrative archives management brings about several advantages. It not only streamlines the retrieval process of administrative archives but also minimizes the labor and time required for file searches. Additionally, it enhances the efficiency of file retrieval, transmission, and access [1]. In addition, with big data, files can be reviewed online. Besides, security measures in databases protect the files from being damaged, which will help extend the preservation time of the files.

2.2. Improving the efficiency of archiving

Many of China's institutions have been established for a long time, before the emergence of big data, the administrative archives of offices are mostly paper-based, which resulted in the need to create an archive management room. Managing paper versions of files entails not only a larger workload but also occupies more storage space. Moreover, the long-term preservation of paper archives is susceptible to various external factors, leading to potential issues such as damage or unclear handwriting. These factors accelerate the attrition rate of paper archives. Without proper archival management, there is also a risk of archival loss. The implementation of big data technology not only addresses numerous drawbacks associated with traditional paper archives management, such as the consumption of significant storage space, massive workload in archive management, and susceptibility to damage but also enhances the efficiency of administrative archives archiving. Big data and computer technology allow the conversion of paper documents into electronic copies. When combined with cloud computing technology, it facilitates the automation of administrative archives operations, which in turn reduces the workload associated with file management [2].

2.3. Saving storage space

Administrative archives encompass a vast amount of content, leading to a considerable volume of records. Traditional paper-based file management demands extensive storage space, prompting many institutional units to allocate a dedicated archives management room. These rooms are responsible for overseeing the organization and maintenance of archives. As the quantity of files grows over time, there is a need for increased storage space. Consequently, institutions may find it necessary to expand the area allocated for the archive management room if the number of administrative archives continues to rise. With the application of big data technology and computer networks, electronic databases that can store massive amounts of information can be established. The paper documents can then be converted into electronic versions and stored in the database [3]. The information can also be stored in cloud disks or mobile hard disks to save space.

3. The status quo of the management of the office administrative archives under the background of big data

3.1. Innovative management methods

There is a big difference between the management of administrative archives with big data compared to traditional file management. To improve office administrative archives management under big data, organizations need to focus on applying innovative management concepts. In traditional file management, file classification is emphasized. In traditional file management, the emphasis is on file classification, where files

are labeled based on categories to facilitate searching. This involves categorizing files by type and arranging them based on periods, resulting in a large management workload and low efficiency. Poor management may lead to the risk of archive damage or loss. with the advanced and informatized management of administrative archives in the era of big data, it is necessary for the authorities to focus on innovating management concepts and applying advanced technology and big data technology.

Personnel involved in archive management must enhance their management awareness, embrace innovative management concepts, and proactively acquire knowledge of advanced archive management ideas and methods. In this way, administrative archives management can then move towards the direction of big data [4].

3.2. Management needs to be improved

Traditional paper-based file management is highly dependent on the file manager In contrast, with the introduction of big data in administrative archives management, there has been an improvement in the management structure. Daily administrative archives management now requires not only file managers but also collaborative efforts from other staff members. In traditional paper-based archives management, although files are categorized, the process of retrieval and access is time-consuming. This type of management not only consumes time but also elevates the risk of losing archival materials. The management of administrative archives under big data can not only save time in archive material retrieval but also avoid damaging archival materials during searches. The utilization of big data technology helps improve the overall workflow and also the standard of archive management [5]. Managing electronic archive materials is much more convenient than handling paper documents. Managers need to learn to utilize advanced archive management systems to complete their tasks in order to improve the efficiency of management and ensure the security of the archival materials.

3.3. Improving the quality of archive management personnel

In traditional paper-based administrative archives management, managers need to be well-versed in archive management regulations and mechanisms, exercising due diligence in day-to-day operations. However, the management of office administrative archives under big data differs significantly. Managers in this context are required to possess skills in advanced technology and software operations, including computer technology. The electronic version of administrative archives under big data necessitates the use of computer technology and big data tools for storage, retrieval, and transmission. Managers lacking the corresponding technical skills and professionalism will hamper the development of administrative archives. As of now, there is a need for further improvement in the quality of the organization's archives management personnel. While administrative archives management under big data requires the application of information technology, the operation of this technology must be carried out by professionals. It is evident that the professionalism of archive management personnel is crucial. Authorities should prioritize efforts to enhance the professionalism and comprehensive abilities of management staff [6]. Moreover, the organization should also focus on providing training for its staff in computer software and information technology management. This is essential to ensure that the management team is proficient in operating the archive database system.

4. Strategies for applying big data technology in the management of office administrative archives

4.1. Establishing the concept of big data

As big data technology is gradually introduced into office administrative archives management of the

archive managers need to prioritize establishing the concept of big data, so as to promote the digitalization of administrative archives management. Additionally, they should cultivate the concept of a vast information database, giving specific attention to the diverse data sources present in paper archives and ensuring targeted data storage and utilization. Furthermore, archive managers need to possess a certain level of data discrimination and retrieval capabilities, understanding the relevant knowledge of archive system management and technical operations. By incorporating the concept of big data, managers can not only enhance the quality of the organization's archive management but also elevate the standard of archive services within the organization. This improvement extends to the format of archive services, facilitating the progression of office administrative archives management towards informatization and intelligent development [7]. In short, the office administrative archives management under big data necessitates a strengthening of the big data concept for managers. This reinforcement can offer guidance for daily file management tasks and facilitate the effective application of big data technology, allowing it to fully realize its potential and contribute to the overall efficiency of the management process.

4.2. Construction of informatization platform

The application of big data technology not only facilitates the searching, transmission, and storage of administrative archives, but also further improves the informatization level of the management of administrative archives in the office of the organization, and the informatization platform is an important manifestation of the development of the big data era. Therefore, organizations will need to focus on the construction of the informatization platform. Managers engage in daily tasks that involve utilizing computer technology to process collected file information. Subsequently, they are required to summarize information from similar files, and ultimately, generate paper documents. During this process, file information is saved in two formats: a paper version and an electronic version. As the organization continues to develop, the volume of paper archives steadily increases. To facilitate the transmission and retrieval of electronic versions of the archives, the organization must create conditions through the construction of an information technology platform. This approach not only enhances the efficiency of archiving but also ensures the security of the archives [8]. In addition, the construction of the information technology platform lays the foundation for building an archive database. This facilitates the efficient utilization of archival materials. Alongside archival data retrieval and database access rights settings, it can further enhance the security of paper archives management under the umbrella of big data.

4.3. Staff training

Document file management is an important part of organizational management, and the advent of the big data era has heightened the requirements for effective document file management. Therefore, organizations should pay attention to the cultivation of professional archive management personnel. Regular training activities are one of the effective ways to improve the quality of personnel. On one hand, there is a need to emphasize theoretical knowledge training. Given the specialized nature of document file management, managers require extensive theoretical knowledge, an understanding of relevant laws and regulations, and proficiency in advanced information technology software and network knowledge. On the other hand, the development of professional skills is equally important. Document file management in the context of big data involves the application of various advanced information technologies, including computer technology, cloud computing, and big data computing. Managers need to grasp the technical intricacies, understand operational points, and be proficient in the use of modern information tools. This comprehensive training approach aims to enhance the

informatization of office document file management [9]. In short, the implementation of training activities can not only cultivate the professionalism of personnel but also their skill level.

4.4. Improve management security

In the era of big data, the management of office documents and files is susceptible to security risks such as computer hacking and network viruses. To mitigate the potential loss or leakage of documents and files, every organization should prioritize enhancing the security of file management. Throughout the information technology infrastructure development within the organization, archive management personnel need to heighten their awareness of security protection. Furthermore, technical personnel responsible for information technology should consistently reinforce protection measures for the archive database and proactively work on risk prevention. This approach aims to prevent potential hacking incidents or virus damage to the archive database. Implementing a backup system for archives is essential, but it is equally important to strengthen database protection, and the firewalls should be upgraded regularly. The comprehensive application of password technology and authentication methods for setting access rights helps fortify file protection. By implementing these measures, the management of archives not only becomes more convenient within the paperwork file management but also significantly improves the overall security of archive management. Moreover, the organization should prioritize the monitoring of archive management, conducting regular checks, and maintenance of the file data system. Addressing system vulnerabilities and optimizing system upgrades are essential measures to continually enhance the security of administrative archives information management [10].

5. Conclusion

With the continuous development of science and technology, our country has now entered the era of big data. To improve the overall management and service level of an organization, the management of office documents and files needs to be prioritized. Office documents and files are an important part of the administrative management of the organization, which is related to the development of the unit and the management of related matters, etc. The application of big data technology can enhance the efficiency of filing documents and retrieval processes, leading to savings in storage space. In light of this, institutional units should focus on strengthening the management of office documents and files within the realm of big data. This involves building an informatization platform and improving management security to optimize the benefits of big data technology in document and file management.

Disclosure statement

The author declares no conflict of interest.

References

[1] Cui W, 2023, Research on the Reform of Management and Application Mode of Document Archives Under the Background of Big Data. Heilongjiang Archives, 2023(04): 129–131.

[2] Zhang Z, 2023, Analysis of the Management of Institutional Office Administrative Archives Based on Big Data. Inside and Outside Lantai, 2023(22): 31–33.

[3] Chen F, 2023, Measures to Optimize the Management of Institutional Office Documents and Files Under the Background of Big Data. Sichuan Labor Security, 2023(06): 23–24.

[4] Li J, 2023, Analysis on the Management of Office Documents and Files of Institutions Based on Big Data. Office Business, 2023(02): 148–149 + 192.

[5] Liu H, 2022, Optimization of "Two-Track" Management of Medical Administrative Archives Under the Background of Big Data. Office Business, 2022(24): 143–145.

[6] Wu P, 2022, Research on the Compilation and Development and Utilization of Forestry Archives in the Era of Big Data: Taking Jiangmen Shishan Forestry Farm as an Example. Office Business, 2022(20): 144–146.

[7] Wang L, 2022, Innovation of Office Administrative Archives Management Under the Background of Information Society. Heilongjiang Archives, 2022(01): 75–77.

[8] Dong L, 2022, The New Path of Office Paper Archive Work Under the Standardized Management Perspective. Popular Standardization, 2022(03): 153–155.

[9] Tang M, 2021, Exploration of Innovative Ideas of Office Administrative Archives Management Under the Perspective of Big Data. Heilongjiang Human Resources and Social Security, 2021(18): 61–63.

[10] Li M, 2021, Research on the Reform and Innovation of Office Document File Management in the Background of Information Society. Office Business, 2021(05): 142–143.