Scientific and Social Research

Research Article



Strategies for the Application of Computer Software Technology in Big Data

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Abstract: The rapid development of computer software technology has a significant impact on China. However, compared with developed countries, the development of computer software technology in China is still quite different, and it is necessary to explore and research computer technology continuously. This paper analyzes the current situation of computer software technology and the development trend of big data, explains the related techniques of computing and big data, and how to apply computer technology to big data.

Keywords: Computer; Software technology; Big data; Application strategy

Publication date: September, 2020 Publication online: 30 September, 2020

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1 Introduction

With the rapid development of the modern information age, big data is becoming more and more widely used in people's daily lives, and almost all industries are inseparable from significant data support. Its scope covers many aspects and affects people's lives and real social development. If computer software technology can be well integrated with the current mainstream big data, the advantages of big data can be fully utilized in various industries. So scientific and reasonable use of computer software technology to deal with big data can not only effectively combine the two, but also can achieve reform, innovation and development in many fields. Technology is one of the most important driving forces, and computer software technology applied to

big data can be better integrated with people's real-life and better adapted to the needs of social development^[1]. For companies involved in big data applications, constant optimization of computer software technology is essential for self-development, and this paper will briefly introduce computer software technology and discuss how computer software can be applied to big data strategies.

2 Status of the development of computer software technology

With the continuous progress and rapid development of science and technology, computer software technology can be reasonably applied in many areas, and the technology is better in its overall application. In the analysis of computer software technology, the main content of the technology related to the two main aspects: system software and application software, and system software in the configuration of computer systems and specific applications (such as daily use of the system) is extensive range. The Windows Media Player, Windows Text, etc. are more common.

Although China is not the first country to apply computer technology, the introduction of computer technology into our country has achieved effective results within a few years, and the theory of computer development has been gradually improved according to the actual situation, and the technical level is constantly improving. Current society is concerned about the prospects of big data, plus Internet applications are steadily growing every year and applying Internet computer technology such as work and entertainment. However, due to the increasing number of users and improving functionality, the amount of data is also

increasing^[2]. According to studies and observations in recent years, China needs to use ten computer technologies to process more than 1.5 billion terabytes of data every year, so in the era of big data development, there is a need to use information technology more appropriately to make it faster and more efficient. Since data stored in computer software cannot be collected and managed within a specified period, new processing models and optimized data usage can be achieved by efficiently processing large amounts of data. Facilitating the effective processing and storage of all kinds of information is also convenient in the wake of the significant data era, which requires rational applications to improve the considerable data era.

At this stage, it makes the basic requirements put forth in the development of computer software and specific applications need to be contextualized to create reasonable settings for various links (e.g., software login sections and function ports) with the basic purpose of the processing as many types of network transaction pieces as possible. At the same time, the timeliness and efficiency of processing can be ensured, and it can be seen that big data computing technology can be applied to data processing processes or software feature development processes, depending on the various requirements of the situation. It can also be used directly in the daily data collection and processing links of companies and organizations so that the content of the computer software can be used scientifically and rationally set up to meet the individual needs of users.

3 Computer software technology in big data

3.1 Storage of data

In the current scenario, storing various data online through computer software technology has become very common. If big data is used, the relevant information stored in the cloud can be viewed and downloaded online merely by connecting to an Internet terminal, and it is less likely to be lost and more convenient than traditional data storage methods^[3]. From this point of view, the application of computer software technology to data storage in the current context of big data can significantly improve the user experience, and make data more organized and more transparent.

3.2 Information security

Due to the rapid development of science and technology and the support of big data in China in recent years, links will inevitably be formed in the process of storing and manipulating relevant data. The Internet is an open and universal technology. Although it can provide convenience, it may be subject to certain risks from illegal attacks such as Trojan horses and cyber viruses. To improve security in the development process, the current information technology needs to be improved. The security techniques under big data can avoid many inconveniences during the application of Internet technology. In big data applications, there are specific connections within each big data, and this connection may pose a security risk to the data to some extent. Therefore it's used in companies related to big data; employees must build data network systems through computer software technology, which can ensure the security of all kinds of data. And the computer platform is open, and once there is a virus, it can be easily compromised. And big data through computer software technology can significantly reduce the possibility of virus attacks on the data system.

3.3 Virtualization technology

In the process of implementing virtualization technology, we mainly use virtual resource management to implement the technology and optimize and manage team members based on big data to handle information and users using big data effectively^[4]. At the same time, not only can virtualization technology be effectively implemented on computers, but people can apply it to their daily lives.

4 Application of Computer Software Technology to Big Data

In the context of the significant data era, computer software technology can be applied to various industries or fields, and then advanced techniques and roles can be used, in practice, computer software technology is used in the following areas.

4.1 Information communication.

As we all know, China has wholly entered the era of big data. At the same time, the continuous research, update and development of computer software technology has a significant impact on the stable operation of big data. The scientific and rational use of IBM SPSS predictive analytics software can help avoid severe customer loss, and the application of XO technology to objectively evaluate and judge the behaviour of different types of customer groups. The correct handling of business

operations and customer retention issues in the actual process can fundamentally facilitate the construction and implementation of scientific, rational and reliable business policies.

In the course of the ongoing research, IBM has developed Netizen, a network information accelerator. Also, because of the enormous database involving the entire industrial development process in the current telecommunication industry, it is necessary to recognize the importance of computer software technology to achieve the proper storage and utilization of this data. Many of the customer bases select useful information and then sells it directly to the companies they need it from. In combination with current developments, it can be seen that in big data, the overall development of communication companies and specific applications are better. Not only can communications companies effectively monitor various customer behaviors during the event, but they can also enable early warning, tracking, and processing^[5]. At the same time, computer software technology has been widely used throughout business operations and applications based on customer information.

4.2 Enterprise information solutions

With the advent of the significant data era, the need for computer software technology is growing. Often, computer technology is the primary focus of companies developing and applying various types of software. The development of the company itself must also be integrated with it. Under the influence of the current significant data era, the effective combination of computer technology and big data has a substantial impact on the future development of big data and the

continuous development and innovation of computer software technology. When applying computer technology, this is mainly reflected in its ability to maximize customer privacy and effectively address the risks associated with online sales.

5 Conclusion

In short, in a fast-paced society, computer technology software must take into account many aspects of big data applications and continually improve its shortcomings and increase its skill level. Only by adapting to the development of the times and satisfying people's widely used applications can user needs be sustained and steadily developed to develop computer technology software further and promote the rapid growth of the national economy. Therefore, the industry must explore computer software technology in-depth and must tightly integrate the technology with significant data operations to make full use of the advantages of both for proper development.

References

- [1] Hu JW. Research on the application of computer software technology in big data[J]. Computer Programming, *Skills and Maintenance*, 2019(10): 97-99.
- [2]Zhang Y. Application of computer software technology in big data[J]. *Industry and Technology Forum*,2019, 18(20): 68-69.
- [3]Zheng ZC. Application of computer software technology in big data[J]. *Electronic Technology and Software Engineering*, 2019(17): 129-130.
- [4]Fang MC, Zhang Y. Application of computer software technology in big data[J]. *Electronic Technology and Software Engineering*, 2019(14): 66.