

# Research on Enterprise Computer Network Information Management and Security Protection Strategy

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**Abstract:** The high and new technology, such as information technology and network technology, has been popularized and applied effectively in China, so that China has entered a new era of information development. And in the development of new environment, enterprises also encounter opportunities and challenges. Though using computer network information management to improve information processing ability, it should also accept the challenges posed by information security and network risks. Therefore, this paper studies computer network information management and security protection strategy.

**Keywords:** Computer network; information management; safety protection

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## Introduction

At present, enterprises actively use computer network technology in the process of development, carry out digital information management, and improve the efficiency of information management. In order to ensure the security and effectiveness of the application of information, the author will study the information management and security protection strategy of enterprise computer network.

## 1. The significance of using information technology in enterprise development

With the rapid development of global economic integration, the scope of development of enterprises in various industries in China is constantly expanding. In the face of the new demands of the audience, more and more attention has been paid to how to improve the efficiency of enterprises' work. In the face of fierce market competition, in order to obtain wider development space and higher social and economic benefits, enterprises must introduce information technology and related means to optimize the working ability of various departments within the enterprise. Improve the efficiency of each link, thus promoting the enterprise to achieve the goal of sustainable and healthy development. At the same time, the use of information technology can help alleviate the low efficiency of manual work. The phenomenon of high error is of great significance to the improvement of enterprise data batch processing ability.

In addition, the application of network technology in information technology is helpful to improve the working efficiency of enterprises, but there are some negative problems in the process. On the one hand, it is the problem of data management, on the other hand, it is the problem of network security. If an enterprise does not have forward-looking thinking and does not think ahead of time about the negative effects of these problems, then the advantages of information technology will naturally fail to materialize. It will not only fail to improve the efficiency of the enterprise, but will also require more expenditure.

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Time to restore order of work. Therefore, enterprises should actively explore problems in the process of using information technology, formulate countermeasures to ensure that the value of information technology utilization is not affected.

## **2. The management and security of computer network information in enterprises**

### **2.1 Problems in Enterprise Network Information Management**

Under the influence of network technology and information technology, the development of network data has become the inevitable trend of the development of computer network in the new era. The mailbox and disk used by enterprises in their daily work are all platforms for big data technology to run. These flat platforms support data upload, storage and download, and effectively improve the speed of information transmission. At the same time, big data's platform can store more virtual digital data information, which is difficult to achieve in real life. So data management is very difficult, and it will consume a lot in data retrieval. More time, this instead reduces big data platform data exchange, use efficiency.

Therefore, in the development of an enterprise, if the internal staff cannot reasonably divide the types and functions of data information, or fail to establish a fast search channel in time, they may be in urgent need of information. Waste a lot of time searching for information. Although some big data platforms in China have developed the function of rapid data search, the overall application effect is not satisfactory; therefore, enterprises should continue to improve their data management and query ability from their own needs.

### **2.2 Analysis of Network Information Security in Enterprise computer Network Information Management**

The so-called big data platform, a "network platform for uploading, storing and downloading data," has a wide variety of platforms in the Internet environment. Although it makes it convenient for enterprises to store and use information, but because of its openness of information, Therefore, it is easy to retain the customer name and personal information, which adds obstacles to the protection of information. Because this kind of network platform is open to a certain extent, the information memory stored inside is easy to be stolen and tampered with<sup>[4]</sup>. At the same time, because of the influence of network virus and other technologies, if the virus can not be checked and killed properly, Information can also be distorted or misappropriated. In addition, if the enterprise The failure of information managers to remove computer software passwords in time or make regular changes in their accounts and passwords, as well as network environment checks, will further increase the level of network security threats to information. Moreover, whether the security protection program is formal or not, whether the selected network antivirus detection and killing procedures are officially designated software will have an impact on the information management workers in the enterprise<sup>[5-7]</sup>. If there is a problem, it may lead to the loss of confidential information, theft and other phenomena, which will seriously threaten the interests of enterprises and related partners.

## **3. Analysis of the strategy of computer network information management and security protection in enterprises**

### **3.1 Make good use of safety certification technology**

In order to improve the security and confidentiality of enterprise computer information management, digital envelope technology can be introduced into enterprise information management. For example, digital summary technology based on Hash can be used to protect the integrity of electronic information in business cooperation, and digital time can be used to protect the validity of electronic commerce information. Digital signature technology is used to protect the security and integrity of enterprise information exchange, and electronic CA authentication technology is used to determine the reliability of the identity of enterprise computer electronic transaction information object<sup>[8]</sup>.

### **3.2 Scientific use of firewalls**

In the management of computer network information, the enterprise can install a layer of isolation layer between the inside and outside network of the enterprise, that is, firewall<sup>[9-11]</sup>. Through the use of firewall technology to check and control the internal and external interaction information, and use security measures to check the information between the Internet, and determine whether the process of information exchange is safe, In order to avoid the network information in the enterprise network by the outside damage or threat. Therefore, enterprises should actively set up firewalls in computer networks and use firewall technology<sup>[12]</sup>. In addition, some reasonable monitoring should be carried out on the access scale of network communication, so as to strengthen the performance of network communication. The control of computer network is very important. Only the number of people visited and the computer data management can enter into the network system, and the users or those who are not allowed are some other illegal elements. At the same time, firewall technology can also be used to intercept foreign malicious attack programs and virus information, so as to protect computer networks and deter hackers from invading<sup>[2]</sup>. At present, the application of firewall technology in the computer network has become one of the important means to construct the network information security mechanism of the enterprise computing machine, which can improve the information management and security protection ability of the enterprise. Force has a positive effect.

### **3.3 Enterprises should take the initiative to improve computer network information management and security technology**

Introducing big data technology actively and using big data information platform will improve the efficiency of enterprise processing digital information. However, in the use of big data information platform in the process, enterprises must also assume greater network risks. Because big data Ping Station is the source of information risk, if the computer network information managers in the enterprise have wrong network application habits, they fail to update the security software in time and do not operate the security procedures reasonably according to the procedures. Will cause the network information security risk. The existence of these hidden dangers will increase the risk of enterprise network information security management, which must be paid attention to.

First, enterprises should help personnel engaged in computer network information management to understand the differences in the needs of enterprise networks and home networks. For example, enterprise information management work is very cumbersome, and there are a large number of confidential core contents in internal documents. Information security management and confidentiality procedures more professional, rigorous and so on<sup>[13]</sup>. At the same time, enterprises should purchase authentic network security procedures from legitimate and compliant manufacturers, so as to improve the virus and risk factors of enterprise computer network information management, prevent the level of prevention, and further improve the efficiency of enterprises in dealing with security issues; In addition, enterprises should identify other content and streams involved during information protection Cheng, such as how to find documents, restore documents and so on; through the improvement of the work, further improve the level of enterprise management information.

Second, ensure information security. In the course of development, enterprises should invest appropriate funds to support all departments in carrying out computer network information management and security protection, and urge departments concerned with computer information to pay more attention to the hidden dangers of network information security, For the popular, new virus and information theft methods, the emergency meeting should be held in time, scientific prevention strategies should be formulated to prevent the occurrence of related risks and hidden dangers<sup>[14]</sup>.

Third, enterprises should correct the bad usage habits of the staff concerned with the computer network information management in time, and avoid the negative security effects caused by the bad habits on the information management and use of the enterprises. Enterprises should popularize the concept of computer network security and management for staff and workers, carry out technical guidance and supervise the work, and help the whole staff to master the correct use procedures and methods of the internal information management platform of the enterprise. The account number and password of big data information management platform used in the enterprise should be changed regularly, and the password and account information should be eliminated promptly after the user of the account and password manager completes the login of the platform. At the same time, the employee should be instructed to set up a separate

password for the personal computer equipment, so as to avoid using the employee computer to steal the enterprise information by the lawbreakers or those with bad intentions; before each use of the computer equipment, the employee, To check the computer virus, eliminate the risk factors, use the computer and account number, password according to the relevant requirements. As for the phenomenon that the failure to manage and operate computer network information in accordance with the internal requirements of an enterprise results in a major leak incident, in addition to the punishment of dismissal, the parties concerned may also be investigated for legal responsibility according to the loss situation of the enterprise.

### 3.4 Optimize the hierarchical classification of enterprise information

In the process of developing computer network information management and security protection, enterprises need to rely on big data platform to manage their huge digital information, so as to make use of and security protection. However, because the amount of information is too large, it is difficult to quickly search and lock in the use of information. Therefore, the enterprise internal information management staff, in the use of big data platform to manage network information, to do a good job of information classification and stratification work; at the same time, enterprises should urge employees to actively learn network information classification management skills. For example, to divide the enterprise information based on the work function of each department of the enterprise; or to divide the enterprise information according to the enterprise On the other hand, in addition to classifying and processing information, enterprises should also select classifications that are consistent with their own computer network information management and security protection based on their own development needs. If the enterprise is rich in economic capital, it can also independently carry out the research and development of enterprise proprietary data information management platform, construction activities, during the research and development period, make clear the various branches of information management content, so as to ensure that in information search, can quickly lock in the source of information, screening out the required. Related information, at the same time should pay attention to the improvement of batch processing function, batch search, batch management (batch deletion, batch transmission and batch download, etc.) to ensure information search, the process of management as simple as possible, To achieve the goal of improving work efficiency<sup>[3]</sup>.

In the face of the domestic network, the rapid spread of information technology, spread, application of the impact, if enterprises in the new environment can not quickly improve the efficiency, will be eliminated in the fierce market competition. Therefore, while constantly improving information management and security protection, enterprises should actively introduce new technologies, new scientific and technological talents and comprehensive talents, and inject fresh blood and power into the development of enterprises. In order to ensure that the information management work can be carried out effectively, relevant issues can be dealt with in time.

## 4. Conclusion theory

In a word, enterprises in various industries actively introduce information technology into the development of computer network security management and safety protection strategy, which will help to improve the management efficiency, application effect and security of computer network information.

The level of protection has a positive impact on the sustainable and healthy development of enterprises.

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