

Update Orientation of Computer Information Management Technology based on Security Perspective

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Abstract

With the continuous acceleration of the development of computer technology in my country, a series of new breakthroughs have been made in the research and development of new technologies, and information-based office has become the most important office mode in all walks of life and fields. Based on this, the security of computer information management technology has become the key in the key. For this reason, on the basis of in-depth analysis of the current development status of computer information management technology in my country, and the significance of computer information management technology update and upgrade in improving information security, this paper clarifies the update side of computer information management technology from the perspective of security. Focus, and finally focus on continuously deepening the functionality of information capture and processing, strengthening the perfection and standardization of the operation of the "big data" module, enhancing the confidentiality of information management by automatically updating the system login gateway, and comprehensively upgrading computer information circulation" The security of the "transfer station" program and the deepening of the automatic maintenance function of the computer information management system are five aspects, and the update orientation of computer information management technology based on the perspective of security is established.

Keywords

Computer Information Management; Security; Technology Update; Status Quo and Significance; Focus and New Orientation.

1. Introduction

The current era has entered the stage of information explosion, the development process of the computer industry is accelerating all over the world, and the pace of various technological innovations is also constantly following up. Correspondingly, information security has also become the focus of technological innovation in this field. However, judging from the current status of the development of computer information management technology in my country, there are still certain deficiencies in the research and development and upgrading of cutting-edge technologies, and the perspective of technological updating still needs to be broken through. For this reason, this paper studies from the perspective of security, hoping that the majority of relevant staff can get some inspiration from it.

2. The Current Status of the Development of Computer Information Management Technology in China

From the perspective of equipment, the emergence of computer information management technology in my country can be traced back to the early 1980s. Although this computer technology entered our country relatively late, in recent years, the technology research has achieved satisfactory research and practical results. However, from the current point of view,

in the introduction and application of computer management technology in all walks of life in our country, there is an obvious problem of backward equipment. Whether it is in terms of hardware or software, hardware that is eliminated and on the verge of being eliminated Systems and software systems are still widely used, which obviously poses a threat to the security of computer information management technology [1].

From the perspective of technical personnel's professional ability, due to the relatively late start of computer management technology in my country, it has always been in a state of catching up in the training of professional talents, and has not yet been able to lead the development of this technology. Therefore, there are still some deficiencies in technology research and development and tackling key problems. In foreign countries, a series of breakthroughs have been made in this field, which also points out the direction for the continuous updating of the development of computer information management technology in my country, and provides a strong support for its innovative development.

From the perspective of relevant laws and regulations, my country has not formed a systematic legal and regulatory system in terms of network information security protection, which also means that the path of illegal intrusion into the computer information management system cannot be effectively curbed. Obviously, this is not only for computer information management [2]. The development of technology has presented severe challenges, and it has played a great spurring role in improving its security more comprehensively.

Based on the above analysis of the current situation, it can be seen that the development of computer information management technology in China still needs to look at the development environment of the times, and there must be clear goals in technology updating.

3. The Significance of Computer Information Management Technology Update and Upgrade in Improving Information Security

3.1. It is an Important Guarantee to Comprehensively Improve the Efficiency of Informationized Office

From the perspective of office models in all walks of life in today's era, information-based office has become a commonly pursued way, and has become a reality in many fields, which makes the demand for computer information management technology also increasing. However, judging from the actual situation of information-based offices in all walks of life today, the capture, processing, storage, processing, and flow of information have obviously failed to achieve an ideal state[3]. Among them, the ability to capture effective information is generally not strong, the information processing ability still needs to be improved, and the information storage, processing, and flow are still subject to many technical constraints. higher main factor. However, effective updating of computer information management technology for these aspects will inevitably reduce information security risks, thereby providing an important guarantee for improving the efficiency of informationized office[4].

3.2. It is an Important Fulcrum to Ensure the Effective Flow of Information

From the analysis of the fundamental purpose of the application of computer information management technology, the information management work provides a good environment for the effective flow of information, and then forms a virtuous development cycle, which is undoubtedly the value of "information". However, in the operation of computer information management technology, if the identification ability of information capture is not high, the processing ability is not strong, the storage ability is insufficient, and the processing ability is insufficient, it will inevitably cause some extremely harmful information to enter the computer information management system[5]. The security of information flow is seriously threatened, and the consequences are unimaginable. To strengthen the effectiveness of computer

information flow in an all-round way is to focus on the above-mentioned aspects, deepen its capabilities and functions, and then form an ideal environment for information flow, which obviously plays a role in enhancing the security of computer information management. important support.

3.3. It is the Core Condition to Ensure the Confidentiality and Stability of Information

From the perspective of the basic process of computer information management, the confidentiality and stability of the computer information management system are undoubtedly crucial in terms of information acquisition, information processing, information storage, and information processing and flow. important. Weak confidentiality means that there may be a risk of information leakage, while weak stability means that there will be loopholes in the operation of one or some programs, which may bring opportunities for illegal operationsn [6]. Based on this, the continuous updating and upgrading of computer information management technology is to strengthen the confidentiality of the technology and enhance the stability of each program during the running process, which is obviously an intuitive manifestation of effectively improving the security of computer information management technology.

4. The Focus of Computer Information Management Technology Update from the Perspective of Security

4.1. Clarify the Important Supporting Conditions of Computer Information Management Technology

The update of computer information management technology is an extremely systematic project. The update of each link must be supported by a strong practical foundation. To this end, the majority of relevant staff should combine the practical needs of computer information management technology, and focus on the important supporting conditions of computer information management technology, and carry out reasonable and continuous deepening, in order to ensure that the technology update can meet the actual needs of society[7]. In this process, it must be clear that computer information management technology is composed of five important nodes: information capture, information processing, information storage, information flow and information processing. Each node plays a different role in computer information management technology, but Ensuring the continuous deepening of the functions and roles of each node is the key to comprehensively enhancing the security of computer information management technology. Therefore, this is the first focus of computer information management technology update from the perspective of security, and it is also an important supporting condition for comprehensively ensuring the efficiency of informationized office[8].

4.2. Accurately Grasp the Pulse of the Development of Computer Technology in the Current Era

Judging from the general trend of computer technology development, "humanization" and "all-round" are obviously the main pulses of the current era, which are embodied in two aspects: first, to meet the needs of various fields regarding the carrying capacity of data and information. Undoubtedly, "information" in today's era is an important evaluation index for the core competitiveness of various fields. The huge amount of information means that it can occupy the commanding heights in the development of this field, which is also an inevitable requirement to achieve sustainable development. Therefore, the development of information technology to meet the basic needs of all walks of life is an important mission. Second, provide a powerful carrier and platform for the flow of data and information. Facing the development of today's era, "information is king" is not reflected in the static aspect of information, but in the flow of

information. Therefore, powerful information capture, processing, storage, and processing functions have become the key point in the development of computer technology, and this also means that the update of computer information management technology must be based on this, and continue to deepen the function[9]. At the same time of the security of information management technology, a road of innovation and development is formed.

4.3. To Update Computer Information Management Technology from a Rational and Innovative Perspective

With the rapid development of science and technology in my country, the IT industry has also ushered in a "blowout" development situation. The pace of technological renewal and upgrading is accelerating, and many new technologies are emerging one after another, which not only makes the flow of information more transparent, but also brings serious challenges to computer information security. Based on the background of this era, the development of computer management technology should take information security as the main perspective, and in terms of technological innovation, it must meet the specific needs of the application of computer information management technology in today's society, and analyze how to achieve technological innovation from an objective and rational perspective. Good service to social development. Only by always adhering to this idea, can the updated perspective of computer information management technology have strong application value and can provide a strong core power for all walks of life to accelerate the pace of development. Therefore, updating computer information management technology from a rational and innovative perspective must be the most basic and critical focus, providing an important guarantee for comprehensively improving the efficiency of information-based office.

5. The Update Orientation of Computer Information Management Technology from the Perspective of Security

5.1. Emphasize the Continuous Deepening of the Functionality of Information Capture and Processing

From the work scope of computer information management technology, the capture and processing of information are the two most basic tasks, which are also the basic conditions to ensure efficient office work in various fields. For this reason, in the update road of computer information management technology from the perspective of security, the continuous deepening of the functionality of information capture and processing should be given top priority. During this period, the main operations should include two aspects:

First, integrate radio frequency identification (RFID) technology into the development and application of computer information management technology. Since RFID technology is a cutting-edge technology for information capture and processing, by using wireless communication combined with data access, information can be effectively captured and processed, thereby ensuring that complex information systems can be effectively classified and stored. Therefore, in computer information In the information capture and processing of management technology, radio frequency identification (RFID) technology should be scientifically and reasonably integrated, so as to ensure that various information capture and processing work can always be carried out efficiently and in a standardized manner, thereby improving the efficiency of computer information management. Security lays a solid foundation. Second, the information capture and processing functions of graphics and images are used as an important supplement. Undoubtedly, the information office of all walks of life and various fields will involve capturing information from graphics or images and processing the information effectively. The emergence of loopholes is obviously not conducive to the security in the process of information use. Therefore, in the road of computer information management

technology update, the function of deepening information capture and processing must be taken as an important entry point, and the information capture and processing functions of graphics and images must be continuously supplemented.

5.2. Strengthen the Perfection and Standardization of the Operation of the "Big Data" Module

With the rapid development of computer technology, "big data" has become synonymous with the times and an important support for computer information management technology today and even in the future. Therefore, it has become an important task to continuously deepen the perfection and standardization of the operation of the "big data" module in computer management technology, and it is also a key element to ensure the security of computer information. During this period, we should start from two aspects: First, improve the processing ability of massive information. "Big data", as the name implies, refers to the general term for the whole process of information collection, storage, processing and analysis. As mentioned above, the capture and processing functions of information are enhanced through radio frequency identification (RFID) technology, so the collection function of big data is bound to be effectively strengthened. The next job is to continuously improve the ability to store, process and analyze. Among them, storage and processing are obviously the foundation, and the method adopted is to strengthen cloud storage and virtualization, create a distributed database, and use it for the storage and processing of massive information to effectively ensure the effectiveness and systematicness of information. And this is also the key to computer information management always being in a safe state. Second, enhance the standardization of the data analysis process. The ability of data analysis determines whether the operation of the big data module is efficient, and it also reflects that the operation effect of computer information management technology can reach an ideal state, and it is also one of the important factors to ensure the security of computer information management. For this reason, in the update of computer information management technology, the distributed information analysis process should be taken as the main object to ensure that the variability information can be excluded to the greatest extent, and the effectiveness of the information in the database will be improved. Technological security adds weight.

5.3. Enhance the Confidentiality of Information Management by Automatically Updating the System Login Gate

As we all know, it is a systematic project to ensure the security of information through computer information management technology, and the confidentiality of information and the security of the system login gate are the key points, so many researchers will see how to realize the replacement of the system login gate. Keep striving for the main perspective of research. The author believes that realizing the automatic update of the system login gate is the key to enhancing the confidentiality of the current computer information management technology, and also the key to the update of information management technology. Undoubtedly, the system login gate is the first barrier to ensure that non-workers enter the information management system, and it is also the initial embodiment of the security of information management technology. Therefore, in today's rapid development of Internet information technology, the development of computer information management technology should give top priority to automatically upgrading the security level of login information settings, starting from various aspects such as login information encryption settings, security certificate settings, etc., emphasizing information management system The automatic upgrade of information technology ensures that information capture, processing, storage, analysis, circulation and other aspects can always be standardized and legalized, providing a safe environment for the information office. Second, automatically upgrade the verification function of user identity information. The identity verification procedure is the part of the system that confirms the

identity of the user during the login process. If the identity information is correct, it means that it can be included in the information management system for related operations; otherwise, it cannot be entered into the system. However, if the user information verification function is missing, or the function is lagging, it means that the information stored and running in the system will be stolen, and the information security function is naturally full of loopholes. To this end, the verification function of automatically updating user identity information is obviously also crucial, which can ensure that the primary node of computer management technology has strong security.

5.4. Comprehensively Upgrade the Security of the "Transit Station" Program for Computer Information Circulation

The so-called "transit station" for computer information circulation refers to the computer information storage program, which shoulders the transit task during information circulation and is the core link to ensure the accuracy of all information after transit, so it is also the future of computer information management technology. The core of improving security. To this end, the security of the comprehensive upgrade of the "transfer station" program for computer information circulation should be carried out from two aspects: First, comprehensively strengthen the firewall settings of the "transfer station". The so-called "firewall" refers to the software and hardware devices that screen and discriminate the internal and external information of the network, and has the function of information illegal intrusion alarm. The higher the firewall setting level, the stronger the ability to resist illegal intrusion, and vice versa, the worse the ability to resist, which obviously will bring serious security risks to computer information management, and the risk level of computer information management will also follow. improve. For this reason, in the future update of computer information management technology, the continuous improvement of the firewall level setting of "transit stations" should be regarded as the top priority, thereby providing a strong core power for comprehensively improving the level of computer information management technology. Second, highlight the "capacity of investigation and attack" of illegal operation paths of "transit stations". Illegal operation refers to engaging in information theft through unidentified operation paths, which is an important manifestation of the serious threat to information security directly caused by the operation of computer information management technology. For this reason, in the update road of computer information management technology, it is inevitable to comprehensively strengthen the "capacity of investigation and attack" of illegal operation paths of computer information "transfer stations". Among them, it is necessary not only to be able to identify the types of illegal operation paths, but also to have strong tracking and strike capabilities, thereby creating a hard shield for the efficient operation of computer information management.

5.5. Deepening the Automatic Maintenance Function of the Computer Information Management System

The system maintenance function is an important guarantee that the computer programs can be carried out in an orderly manner, and is also a key support point for creating a safe operating environment, while the automatic maintenance function is to ensure that the computer programs are always in a safe key in the operating environment. Therefore, from the perspective of security, the updating of computer information management technology is bound to take the deepening of the automatic maintenance function of the computer information management system as a long-term task. During this period, the specific operation should include two parts: First, strengthen the software update function of the computer information management system. From the perspective of the composition of computer information management system, software is the most important basic component. Timely software updates can not only improve the work efficiency of the information management system, but also ensure that system vulnerabilities within the software are repaired in a timely

manner and reduce security risks in information management. This also fully shows that in the update of computer information management technology, the automatic update system software should be regarded as the basis for automatic maintenance of the information management system, which is also an important part of continuously improving the security of computer information management technology. Second, the automatic execution of security updates and scans has been added. In the face of the accelerating pace of computer technology development today, the automatic maintenance function of the computer information management system should also be continuously enhanced and humanized. The function of automatically executing software security updates and scanning is a direct manifestation. Because software updates and scans are often in a passive state, they usually need to be done manually, which obviously cannot be timely, comprehensive and effective; and the addition of automation of this function can ensure that the computer information management system software is always at the highest version. , to ensure that each running program always maintains a strong defense force, thereby better improving the security of computer information management technology.

6. Conclusion

It is not difficult to find from the above viewpoints that under the background of the rapid development of computer information technology, comprehensive enhancement of computer information management technology is of great significance to comprehensively speed up the development of all walks of life, and the improvement of security is the fundamental where. However, it is not easy to update the computer information management technology from this perspective. It is not only necessary to make a correct analysis of its focus, but also to find the main path for the update based on the basic components of the computer information management system. Only in this way can the ideal goal be achieved. Therefore, how to continuously deepen the above aspects has become the main direction of future practice and scientific research for the majority of computer information management technology developers and computer information management personnel, and is also the decisive factor to comprehensively improve the security of computer information management technology.

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