

Exploration of Pan-Security Management Mode of Computer Room in University Data Center

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Abstract: The safety problem of computer room in colleges and universities has always been the object of key safety management. Generally speaking, college teaching includes many computer rooms, the equipment in the computer room is usually more calorific, so the environment requirements of the computer room are relatively high. In order to ensure the normal operation of the university data and medical equipment, colleges and universities need to adopt comprehensive and timely intelligent monitoring of the electronic equipment in the computer room, so as to ensure the safety of the computer room data center. There are still many safety problems in the computer room in the process of computer room. According to these problems, the paper summarizes the hidden dangers and risks of computer room safety in colleges and universities, and puts forward the risk solving methods of computer room in colleges and universities, which also brings effective guarantee to the safety problems of computer room in colleges and universities. This paper focuses on the exploration of the general security management mode of data center computer room in colleges and universities, hoping to put forward practical solutions.

1. Foreword

College majors include many specialties, among which computer majors have many types of computer rooms. Many dangerous goods are involved in the process of these machine rooms, but many of them are flammable and explosive[1]Some instruments and equipment need to be operated by plug-in heating, high voltage and high speed. This kind of machine room is generally very dangerous. If the preventive measures are not done well, it is very easy to have an accident, so we must pay attention to this aspect. Only by doing the corresponding safety measures can we guarantee the safety problems of the machine room.

2. Analysis of Potential Safety Hazards and Causes in Computer Rooms of Universities

2.1. Security Risks in Computer Rooms

In the computer room, it is possible that because of the negligence and omission of the personnel in the computer room, there are hidden safety problems in the radioactive machine room, such as: the personnel in the computer room did not use the safety protective equipment in the radioactive machine room correctly, the electronic equipment in the radioactive machine room was not put in accordance with the original position, and a series of hidden safety problems were not correctly identified or correctly posted safety signs, etc.[2]This is really a failure to comply with the rules and regulations of the use of goods and caused unnecessary safety problems.

2.2. Security Risks in the Process of Computer Room

In the process of computer room, because the personnel of computer room are not familiar with the principle of computer room, they are not clear about the concrete operation steps and the hidden danger of safety brought by the phenomenon of computer room; nor do they strictly abide by the system of operation rules of computer room, and do not do well the hidden danger of safety caused by preventive and protective measures.



Figure 1 Computer room of university data center

2.3. Safety Risks of Equipment in the Computer Room

In the process of computer room, because the personnel of the computer room do not understand the principle and operation mode of the equipment in the computer room, and do not operate according to the correct operation flow, the hidden danger of safety is caused. Also did not strictly abide by the use of equipment rules and regulations caused by the safety risks.

2.4. Security Risks Prone to Emergency Contingency Plans

Before the danger occurred in the computer room, there was no accident warning exercise, so that in the process of the computer room personnel encountered an emergency can not do a correct and effective treatment, and may cause a new safety accident due to panic and disturbance[3]In the event of an accident can not quickly make a judgment and the correct escape evacuation, resulting in safety problems.

2.5. Security Risks in Security Facilities

In the process of computer room, the personnel of computer room do not know the use method and placement position of safety facilities such as fire fighting equipment, alarm system, ventilation system and so on, which causes the hidden trouble of safety.

3. Approach to the Safety Hidden Trouble of Pharmacy Machine Room

3.1. Establishment of Safety Response Measures and Development of Accident Response Capacity

We should attach great importance to the construction of emergency plans for accidents, formulate safety management measures and crisis prevention plans for computer rooms in colleges and universities, and do not talk on paper, and conduct practical operation exercises so as to cultivate the ability of computer room personnel to deal with emergencies.



Figure 2 Computer room of university data center

3.2. Posting of Virtual Security Signs to Enhance Safety Awareness

All kinds of safety signs must be posted in the computer room, the safety signs must be placed in a conspicuous position, the font should be large and the color should be bright, it is best to let others see at a glance, especially the property nature, storage mode, leakage treatment mode and operation flow of the equipment in the computer room.

3.3. Improved Safety Management System and Clear Implementation of Safety Responsibilities

According to these problems, colleges and universities should formulate corresponding management systems for the safety of computer rooms in colleges and universities. In this process, they should organize and discipline to do a good job of safety prevention, increase the publicity of computer room safety prevention, and let everyone improve their awareness of safety prevention. Make a detailed division of responsibility for security prevention, the computer room security prevention work specific to the head of specific individuals, so that through the implementation of personal responsibility, can effectively improve the computer room security prevention of a large number of hidden problems.

3.4. Construction of Safety Education Platform and Training on Safety Education

While strengthening the oral propaganda of computer room safety education, we should also carry out the construction of computer room safety network education platform to strengthen propaganda and education, and include computer room safety instructions in computer room teaching through the form of network security education. To strengthen the computer room safety training for computer room personnel, we can regularly organize computer room personnel to operate in person in the computer room to carry out computer room safety training, so as to improve the safety concept of computer room personnel and make them form correct safety awareness, so as to avoid unnecessary hidden safety problems.

4. Application of Intelligent Security in Computer Room of the significance of Education Big Data

4.1. University Data Center

As our technology is developing better and better, we can see that everything around us is developing in the direction of intelligent technology. It can be said that this development is an

inevitable trend in today's information technology. For example, the security system uses the video surveillance method to carry on the 360-degree omni-directional monitoring to the place that people do not pay attention to. However, due to the expansion of urban area, the scope of monitoring is becoming more and more extensive, so we can not only rely on manual prediction and analysis of monitoring pictures[4]Therefore, it is very necessary to put intelligent information into the monitoring system. Through the way of intelligent information, the monitoring equipment can find unsafe factors and track them, which greatly improves the security and scientific nature of the security system.



Figure 3 Computer room of university data center

4.2. Intelligent Monitoring

Intelligent monitoring can be installed in the computer room, in the intelligent monitoring network there will be many cameras and alarms at the same time to work processing, usually these machines and equipment are not protected by external packaging, so it is also very likely to be external damage with, but this kind of equipment life is very high, so do not worry about this. Intelligent monitoring 24 hours a day uninterrupted work to the computer room coverage full monitoring, can effectively protect the monitoring range of items, but because the number of monitoring equipment is too large, the maintenance of equipment is very difficult, because it is impossible to check one by one, so it is necessary to introduce manual automatic intelligent monitoring system. Regardless of any situation, maintenance personnel can find the right place to issue the alarm in time, timely maintenance of equipment, thus improving the timeliness and safety of the whole system.

4.3. Dynamic Storage

The monitoring data stored through this monitoring system is completely free from fear of loss or leakage. In case of any emergency, the monitoring data in this system is the best evidence to investigate the responsibility at the scene of the incident. It can reflect the importance of effective storage of monitoring data and clear dynamic picture. If the old methods used to store data, the picture is very vague, can not see clearly what things are, and storage space is small, high cost[5]. It often leads to the deletion of old surveillance data in order to capture new surveillance images. It is very non-retroactive and has no historical significance and sometimes makes it more difficult to solve cases. But in the intelligent Internet of things today, these problems will no longer be problems, can be effectively solved, whether for public security organs or students have brought a lot of benefits, this new dynamic storage space is very large, without deleting forgotten data can also run normally, the cost is also relatively low, image quality is also very clear, which greatly improves the data utilization rate, save costs and time.

5. Conclusion

The safety management of computer room in colleges and universities is not only related to the

safety of the articles in the computer room, but also to the personal safety of the personnel in the computer room, so we must not take it lightly on the safety management problem, we should pay more attention to this aspect. How to do specifically, above is to be able to effectively prevent college computer room safety problems and methods. The use of intelligent monitoring and other technologies plays a great role in the modern intelligent transportation security system in colleges and universities. It can not only realize all aspects of monitoring, all-round coverage of 24 hours of continuous monitoring operation, but also improve the personal security and property security of students. So to live a healthy and secure life, colleges and universities should increase investment in intelligent monitoring technology, whether it is human investment or financial investment, which has positive benefits for college students. Through this article, we also understand the close relationship between the computer room of the university data center and the intelligent transportation security system, which is also of great significance to our campus security.

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