Application of Computer Database Technology in Information Management

Jing Cai\textsuperscript{1,a}, WenFeng Chen\textsuperscript{2}

\textsuperscript{1,2} Nanchang Institute of Science and Technology, 330108
acaijingjx@126.com

Keywords: Computer database; Information Management; Application

Abstract. Application of computer database technology in information management is growing widely along with the rapid development of society. This development can not only efficiently improve the computer database running performance, but also clear out the whole information management system. This paper conducts relevant analysis of this application and put forward some optimization measures.

For now, there are two circumstances of database technology application in information management. First, computer is growing into an increasing and expanding part in database technology thanks to the closer relationship between database technology and computer science. Second, numerous database have been divided into different fields according to their functions. Normally speaking, there is local history database, Hai River basin database, geological database system and among others. As the computer database technology has already been widely used in information management, the informational management of computer database appears an important issue.

Features for Computer Database Technology

Main features are the sense of organizing, sharing, independence, controllable redundancy and flexibility.

\textbf{Sense of organizing}
There lays an organized structure building on some special links among stats rather than putting together without rules. On the whole vision, the stats form as an organized structure especially those stats in one set.

\textbf{Sense of sharing}
The sharing sense is an important purpose in the database building process also is meaningful in the real practice. Without any sharing sense, the database will means less in the information management. The sharable database can provide service to each department and individuals inside one firm also to different countries, regions, companies and even personal users around the world.

\textbf{Sense of independence}
The independency shows in three aspects. First, it is about the logical and physical aspects. Second, the logical independence refers to the always changing overall logical structure in aspects like modification of data definition, variation of data category and relation among stats. Thirdly, the physical independence means the data’s storage location when the physical storage equipment changes, or the physical storage location and method changes. Generally speaking, changes in physical structure can not produce any influence on database’s logical structure, not even the application.

\textbf{Sense of controllable redundancy}
There are four aspects in redundancy term. First, it is about the mutual repeating symptom among the numbers. Second, each private user employs their own data in the special-purpose database. Thirdly, when it comes to the data sharing, the database should be able to eliminate the repeating data by the designer’s instruction. Fourth, improving the efficiency is necessary in data searching process, which is why designers will reserve a few repeating data and controllable...
Practical Use of Computer Database Technology

Wider adoptions in the market

First, computer and database technology is thriving fast in the information management field, expecting a bright future. Second, the employment of database has expanded quickly. For now, this technology has been put into use in every field in China, which continuously upgrades the information management methods and offers an enabling environment for information management proficiency. Thirdly, computer database technology guarantees the industry information safety and prompts the managing abilities and productivity development. Fourthly, with a powerful safe-guarding ability and compatibility, this technology has gained consistent approval in many fields. Owning such great opportunity, this technology secures itself a strong foundation to further develop its theories and online practice.

Promising development space in market

First, there is a superior or not performance in the existing computer database technology, which can be reflected in the actual application. It will have a great impact in the application process. Second, there is a great relationship of development and application of database technology in information management. Up to now, for decades the history of the development of the database can be divided into four stages: the beginning of the network database, followed by a hierarchical database, then is the relational database, and finally the object database. Thirdly, through continuous examination, database in constant development has become more and more mature, applicability and operability becoming very strong, provides powerful support and great development space for development. Fourth, in the current view, the application of database technology is very extensive. The relational database and the object data library is the most widely used. Fifth, with the progress of society, the development of multimedia technology, the application of database system will be adopted more and more widely and be in increasingly high demands from the previous simple data storage and editing to more complex operations and requirements, so we must strengthen computer database technology and the object of cooperation to create a new direction of development making the application of database technology more extensive and attracting.

Application of Computer Database Technology

Raise the safety-guarding performance by exploring

Protecting database from illegal intrusion, theft, use and tampering with information are the safety performance of database technology. One of the important indicators to measure the quality of the database system is the safety performance of database technology. The technology also has the sense of database sharing which is a good advantage. But the sharing process of data will produce a series of security problems. In fact not all data can be shared. Data such as state secrets, important personal files, medical records is not shared. On the contrary, they are meant to be protected secretly and to be strengthened their security measures to prevent leakage. Therefore, data in the sharing process still needs security measures. For example: DBMS access is with the strictest control, only those with legitimate access can get into and conduct operation.

Strengthen the computer database system security

In the continuous development of database technology, we need to strengthen the security of database system constantly. Little attention, a lack of safety awareness and safety management measures of managers are the main causes to the network security problem. To avoid security problems, we should do a good job of work safety. The database security can be that is the life of the database system. Information in database system can be safe as long as the database system remains safe. Database safety determines the storage usability and stability. Now, being employed in many fields, application of the database technology is more and more widely involved in the commercial interests and thus requires a more secure database. As an important part of computer security, the security of the database is a remaining question in the process of sharing data.
Further integration of computer database theory and practice

With the computer technology developing fast, the computer database system theory is on a constant development. At the same time, we will get the latest achievements of theoretical research and practice of the computer database system. Given the fact that the application and practice of the computer database system is built on its theory, these practice are in return to strengthen the theoretical research on computer database system. In short, we must continue to develop and update the system optimization computer database system to create a good development prospects. At the same time, we must continue to study and practice and realize the rapid growth of the computer data system to achieve better and more secure environment in the information management.

Conclusion

For the extensive use of computer technology in our daily life, there is a need for us to store information systematically and analyze the data accordingly to get a whole picture of data and avoid an overflow of information. Last but not the least, it is crucial to optimize the overall system to realize a comprehensive application in information management of database technology.

Reference

[1] Chao Qiu. Application Research of Computer Database Technology in Information Management [J]. Telecom World. 2016(17);
[2] Xian Mu. Application Research in College Information Managing System [J]. Tong Xing. 2016(09);
[3] Yingjie Hou. Application of Computer Database Technology in Information Management [J]. Informatization Construction. 2016(01);
[4] Cuihui Ye. Computer Information Management System and Its Application Research [J]. Digital Technology and Application. 2016(02)