THE IMPORTANCE OF DATABASE MANAGEMENT SYSTEMS

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Annotatsiya: Ma'lumotlar bazalarini boshqarish tizimlari zamonaviy axborot texnologiyalarining muhim qismini tashkil etadi. Turli sohalarda faoliyat yurituvchi tashkilotlar, muassasalar, korxonalar hamda ishchilar va rahbarlar uchun axborotni uzluksiz va samarali boshqarish zamon talabiga aylandi. Ma'lumotlarning doimiy ravishda ortib borayotgani va ahamiyatining oshib borishi tashkilotlarda tegishli tizimlarni joriy etishni taqozo etmoqda. Ma'lumotlar bazalarini boshqarish tizimlari bunday ehtiyojni qamrab oluvchi, ishonchli va zamonaviy dasturiy vositalardan hisoblanadi.

Kalit so'zlar: ma'lumotlar bazasi, tashkilot, davlat idoralari, kompaniyalar, boshqaruv tizimi, dasturlash, dasturlar, axborot, faoliyat.

Аннотация: Системы управления базами данных являются важной частью современных информационных технологий. Непрерывное и эффективное управление информацией стало необходимостью для организаций, учреждений, предприятий, а также для сотрудников и руководителей, работающих в различных областях. Постоянный рост и повышение значимости информации требуют внедрения соответствующих систем в организациях. Системы управления базами данных – это надежные и современные программные инструменты, отвечающие этой потребности.

Ключевые слова: база данных, организация, государственные учреждения, компании, система управления, программирование, программы, информация, деятельность.

Abstract: Database management systems are an important part of modern information technology. Continuous and effective information management has become a necessity for organizations, institutions, enterprises, as well as employees and managers operating in various fields. The constant growth and increasing importance of information requires the introduction of appropriate systems in organizations. Database management systems are reliable and modern software tools that meet this need.

Keywords: database, organization, government agencies, companies, management system, programming, programs, information, activity.

INTRODUCTION

The need for a database is of great importance both in everyday life and in the activities of large companies, and in the Proceedings of government agencies. Modern organizations at all stages of their activities face the issue of working with information, keeping it in a clear and systematic state, finding and being able to use it in a quick way if necessary. Database management systems, in the English term Database Management System (DBMS), facilitate the concentration and use of information in a centralized, orderly and secure manner. Calculations carried out in organizations, statistical indicators, all information about customers or employees, various reports and documents are accurately and reliably concentrated in one center are carried out simply and quickly by introducing a database. With the help of a database, any information is stored in the desired place, alternately, without any confusion or loss of information. Such a structure is disorganized, fundamentally different from the conduct of improvised information and significantly increases productivity.

MATERIALS AND METHODS

Information security is also an urgent issue today, and each organization wants to keep its data reliable. Database management systems are distinguished by many of their advantages in this regard. It is possible to give different levels of permissions through these systems, ensuring that the user can only see the information that belongs to him. The data is highly protected by having access to the database only by a certain range of personnel, control of all actions, and, if necessary, backtracking. With database management systems, it is possible to search for large amounts of information in a short time. As a result of the development of digital technologies, the flow of information increases, creating the need to automate the processes of clearing, Editing, searching and collecting databases. Modern database management systems mean that they automate all operations, make it possible to work information with several users at the same time, the operation of each is controlled, and there will be an opportunity to update information on the spot. Such systems are important not only in production, management and statistical activities in the organization, but also in scientific research, medicine, education. Collecting ideas and processing them in an orderly manner allows you to quickly find and use them at the right time. These systems are invaluable for avoiding waste of human resources and effectively directing technical and software capabilities. [1]

RESULTS AND DISCUSSION

Through database management systems, a solid foundation is created in the organization to analyze information, produce results and make the right decisions. The reason why the system is high in memory, speed and reliability is that it will be easy to enter new information, update existing information, or just get odd numbers for analysis. The fact that employees take and analyze information about their field in real

time also points to the superiority of these systems. Database management systems provide reliability and stability by concentrating data in one center. First, the types of information stored in different sections, in separate memory, are concentrated in one center, in a single system. This guarantees, on the one hand, the integrity of the work processes, the correct and fast circulation of information, and on the other hand, the comprehensive protection of information as well. With the help of such systems, it will be possible to effectively automate various tasks, prepare reports, conduct statistics, analyze interconnected information and other important work. [2]

Information Management in organizations, institutions and companies–up to the activity of the heart is important. Because in the current information age, the question of understanding the value of time and being able to use it sparingly has become more relevant than ever. Database management systems provide a wide range of opportunities not only to collect, manage, store, analyze information, but also to plan it strategically, make effective and quick decisions. Through automated information management, it is possible to avoid errors, get rid of excessive attempts, achieve qualified and accurate results. With these modern systems, achieve statistical aspects and conclusions that are relevant. Otherwise, storing data in ordinary files or leaflets can cause serious errors, lead to loss of important information, undermine the image of the organization. Database management systems serve centralized, organizational, and specific business and produce fewer errors than the human factor. Database management systems are necessary for both children and adults to ensure the effectiveness of Management in each area of activity, the type of work productivity, the development of the organization, the protection of official documents and easy circulation. A well-organized database system serves as a reliable source of information in all organizations and enterprises. On the basis of software products, it creates conditions for collecting information, controlling it and conducting responsible decisions, analysis and monitoring, conducting more effective work with the aim of developing the industry. In the conditions of modern competition, not every organization can develop without innovative technologies. And database management systems are one of the main drivers of innovation. [3]

In management processes, however, systematized data helps to make heavy and complex decisions easily and quickly. Leaders can summarize and analyze information in all areas on one technological platform. The activities of the office are significantly improved by the presence of interconnected information, namely, Statistics, Financial Statements, Information about personal qualifications and other parameters in a systematic view in one place. Even with the help of database management systems, the ability to process a large amount of data, exclude malfunctions in them, count secrets and protect important information inherent in the organization from unauthorized access is also powerful. With this, it is possible to eliminate any indecent, false and

unjustified information, to always keep the accuracy of the information at a high level. In its activities, the organization is able to effectively organize internal control and monitoring, external cooperation, accounting and reporting, analysis and strategic development if it correctly uses modern database technologies. Access to the database can also be facilitated with the support of intellectual user interfaces. Everyone will be able to independently receive and update the most important information about their field. In this activity, it is clear that it will serve as a solid support in the construction of archives for the future generation, the preservation of significant historical and statistical potential, scientific and technical development and the creation of new software projects. As a result of the rapid development of new technologies, the ability to collect and use large amounts of data is also setting more large-scale tasks in front of modern organizations. The results of the use of modern systems are effective not only in collecting data, but also in establishing analytical work, monitoring and forecasting on them. With such systems, it is possible to automatically update the program, objectively control the movement of users, and quickly and efficiently control new processes. A special place in the formation of information infrastructure is occupied by the database. These systems are also of universal importance for economic sectors, social life, public administration, education, transportation, health and many other sectors. A database set up for an organization or institution eliminates many technical and organizational problems. It can be the basis for conducting rapid analysis and monitoring in all areas of activity. [4]

CONCLUSION

In conclusion, database management systems occupy a very important place in modern society for the reliable concentration, storage, analysis and protection of information. They allow to improve management efficiency, save human resources, operate at high speed and continuously, and receive reliable and accurate information. In the age of knowledge, the centralization of information and the effective organization of power depends on the rational use of modern software tools of the database. Therefore, each organization, enterprise or institution should make good use of modern database management systems, collect information and develop it step by step. Only then will it be possible to achieve sustainable progress on the path of competitive, innovative and high-tech progress.

REFERENCES

1. Rahimov, J. (2017). "Database management systems and prospects for their development". Information Technologies, 1(2), 15-22.

2. Latipov, O. (2018). "Fundamentals of database design and management". Journal of Information Technology of Uzbekistan, 3 (5), 44-50.

3. Karimova, M. R. (2019). "Database management systems: theoretical and practical aspects". Scientific Bulletin Of The National University Of Uzbekistan, 4 (2),

60-65.

4. Zhurakulov, F. (2020). "Database management and security assurance", innovative technologies, 2(4), 105-111.

5. Abdukodirov, I. (2021). "Databases and Information Security: Important Issues". Informatics and Modern Technologies, 6(1), 73-78.

6. Islamova, Z. (2021). "Information systems and database technologies", scientific journal of Tashkent University of Information Technology, 5(2), 29-36.

7. Norkobilov, D. (2022). "Relevance and development trends in database management systems". Modern Informatics, 11 (2), 117-123.