POSSIBILITIES OF CLOUD TECHNOLOGIES

Mirzahmedova Nargiza Dilmurodovna
TSPU after named Nizami, teacher

Many modern computer users and mobile devices can no longer imagine life without the Internet, which is firmly entrenched in our daily lives. Recently, new cloud technologies, they are quite different from the classic models of computer systems, although they work on similar principles in some respects. However, even though the concept of "cloud" is familiar to many, it still remains unclear.

Cloud technologies are data processing technologies that provide computer resources to an Internet user as an online service. The word "cloud" exists here as a metaphor for a complex infrastructure that hides all technical details. Cloud computing (also known as cloud computing) is a type of data processing technology that provides the user with resources and applications in the form of services and personal cabinets for different categories of users over the Internet. The user has access to his data but cannot control it and should not worry about the infrastructure, operating system and the software he is running. The term "cloud" is used as a metaphor based on an Internet image in a computer network diagram, or as an image of a complex infrastructure in which all technical details are hidden.

In general, negotiations on the introduction of such models have been going on since the late 60s of last century. Then came the concept of using the computing power of computer systems around the world with an organization in the form of public support, whose authors were Joseph Liklider and John McCarthy. The next step was the introduction in 1999 of CRM systems in the form of websites provided by subscription, which provided access to computing resources via the Internet, which in 2002 began to actively use the Amazon online bookstore, which later became the Internet. Large IT corporation. And only in 2006, with the advent of the Elastic Compute Cloud project, did they start talking seriously about the full-scale introduction of cloud technologies and services. Of course, the launch of the familiar Google Apps service in 2009 also played an important role in providing computing resources.

Information technology has always been one of the main problems of corporate organizations in terms of costs and management. However, there have been significant (or major) developments in the information technology sector over the past decade, including factors such as commercialization, open source software, virtualization, workforce globalization, and flexible IT processes. led to the development of models.

Cloud computing is now creating great opportunities for organizations to manage infrastructure, save costs, and meet the obligations of suppliers. It has become an integral part of business models and technologies and has forced businesses to adapt to new technology strategies.

Cloud computing features:

• Access personal information from any computer connected to the Internet
• You can work with data from different devices (computers, tablets, phones, etc.).
• Web services work in any OS browser, regardless of which operating system you want to work with
• The same information, you and others can view and edit on different devices at the same timeKo'p pullik dasturlar bepul (yoki arzonroq) veb-ilovalarga aylandi
• If something happens to your device (computer, tablet, phone), then you will not lose important information because it is not currently stored in the device memory
• Always at your fingertips with new and updated information.
• You always use the latest version of the software and do not have to monitor the release of updates
• You can share your data with other users
• You can easily share information with your loved ones or with people from all over the world.

The visual model of cloud computing detection is defined as follows:

• Five key characteristics
• Three cloud computing service models
• Four cloud distribution model

Here are five key features that make up the difference between cloud computing and traditional computing:

1. Self-service on demand.

If necessary, the consumer may provide or cancel the specified service without the involvement of an employee of the organization providing the service.
2. Ability to use the network extensively. It has network capabilities and works through a standard mechanism.
3. Combining resources. The provider's computing resources are combined to serve multiple customers based on the needs of customers using a multitenant (multi-tenant) model with different physical and virtual resources with dynamic performance.
4. Rapid elasticity. Services can be provided quickly and flexibly.
5. Dimensional service. Cloud computing systems automatically control and optimize resource usage by measuring the types of services (e.g., storage, processing, bandwidth, or the number of currently active users). There are 3 cloud service models, and these 3 basic classifications are often referred to as the "SPI model", i.e. software, platform, or infrastructure as a service [6]. 1. SaaS - software as a service. This is a feature that the consumer can use in the provider's cloud-based applications. 2. PaaS is a platform as a service. In this type of service, the consumer can install cloud-based or user-created applications on the cloud infrastructure using programming languages or tools provided by the provider. 3. IaaS - as an infrastructure service This is an ability provided to the consumer that can provide processing, storage, networking and other basic computing resources where users can deploy and run the software.
Cloud distribution models
• Mass cloud - designed for public use of cloud infrastructure. the public cloud can be owned, managed, and managed by commercial, scientific, and governmental organizations (or any combination thereof). The public cloud is at the disposal of the physical owner-service provider.
• A private cloud is a type of cloud that only exists for one organization. Including multiple consumers (e.g., units of a single organization). A private cloud can be owned, managed, and managed by the organization itself, as well as a third party (or a combination of them).
• Community cloud - In this type of cloud deployment model, the cloud infrastructure is shared by several organizations and supports a specific community that has common problems.
• A hybrid cloud is a cloud infrastructure consisting of two or more clouds, i.e., a combination of private, public, which are standardized or interconnected with personal data and application data transfer technologies (e.g., for balance from cloud resources). short - term use).

References

1. Mirzahmedova, N. D. (2022). Working with digital information on a computer. World Bulletin of Social Sciences, 6, 88-89.
2. Bagbekova, L. (2020). Distance education system as a new form of teaching. Theoretical & Applied Science, (9), 12-14.
3. Kadirbergenovna, B. L. (2022, February). Massive open online course basic requirements for digital educational resources. In Conference Zone (pp. 187-190).
4. Хасанов, А. А., & Ўроқова, Ш. Б. Қ. (2021). Цифровизация образования на современном этапе развития информатизированного общества. Scientific progress, 2(1), 300-308.
5. Qizi, U. S. B. (2021). Digitization Of Education At The Present Stage Of Modern Development Of Information Society. The American Journal of Social Science and Education Innovations, 3(05), 95-103.
6. Kadirbergenovna, B. L. (2019). The importance of independent education in education system. *Педагогика ва психологияда инновациялар*, (5).
7. Otaboevich, K. M. (2021). Model of Developing Ideological Competence in Students. *Annals of the Romanian Society for Cell Biology*, 1284-1292.
8. Kadirbergenovna, B. L. (2022, February). Create 3d graphics with the hand of 3d max software. In Conference Zone (pp. 206-208).
9. Абдурахманова, Ш. А. (2017). Развитие педагогической науки в Республике Узбекистан. Молодой ученый, (1), 428-430.

10. Sh.A.Abduraxmanova, & X. Jo‘rayev. (2022). Modern web technologies used in professional education. Conference Zone, 178–179. Retrieved from
11. Shahnoza, A. (2019). About one aspect of the development of students’intellectual skills using multimedia interactive tests. European Journal of Research and Reflection in Educational Sciences Vol, 7(12).
12. Bagbekova Laylo Kadirbergenovna. (2022). Teaching computer graphics as a pedagogical problem on the basis of massive open online courses in information conditions. *World Bulletin of Social Sciences*, *8*, 71-74.
13. Shaxnoza Abduhakimovna Abduraxmanova. (2022). Individualization of professional education process on the basis of digital technologies. World Bulletin of Social Sciences, 8, 65-67.
14. Mamarajabov Odil Elmurzaevich. (2022). Formation of students’ competence in the use of cloud technologies in the information educational environment. World Bulletin of Social Sciences, 8, 79-80.
15. Mamarajabov O.E. Benefits of Using Information Technology in the Education System // Vocational Education. Tashkent, 2019. No.1. P. 55-59.
16. Bahadirovna, S. D. (2022, February). Enrich educational content through multimedia resources using digital technologies. In Conference Zone (pp. 220-221).
17. Urokova, S. B. (2020). Advantages and disadvantages of online education. ISJ Theoretical & Applied Science, 9(89), 34-37.
18. Khojaev Munis Otaboevich. (2022). Legal fundamentals of developing ideological and ideological competence in students. World Bulletin of Social Sciences, 8, 96-100.