

UDC 004

ADVANTAGES AND DISADVANTAGES OF CLOUD TECHNOLOGIES

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In the modern digital world, cloud technologies play an essential role in the development of information systems. Many organizations, companies, and educational institutions use cloud computing to store, process, and share information more easily. This topic is important because cloud technologies make work faster and more flexible, but they also have some risks and limitations that should be considered.

The main goal of this report is to study the advantages and disadvantages of cloud technologies and to understand their impact on data management and business processes. The study is based on recent publications and real examples of using cloud platforms in education and business.



Figure 1 - General image of cloud technology

Cloud computing means providing computing services such as servers, databases, software, and data storage through the Internet (figure 1). It allows users to work with programs and data online without installing them on local computers.

There are many advantages of using cloud technologies. First, they help reduce costs because users pay only for the services they use. Second, cloud systems give access to information from any device with Internet access. Third, cloud platforms are easy to scale and allow organizations to quickly adapt to changing needs. Fourth, many providers guarantee data protection, backup, and fast recovery after system errors. Finally, cloud tools improve collaboration and simplify teamwork, especially in distance education.

However, cloud technologies also have some disadvantages. The first one is dependence on a stable Internet connection. If the connection is lost, it becomes impossible to reach files or applications. Another serious problem is data privacy and security. Because the information is stored on external servers, there is always a risk of unauthorized access or data leakage. Users also have limited control over their stored data, as it is managed by the provider. In addition, technical failures or service interruptions may cause temporary loss of access to resources or data corruption.

To reduce these risks, organizations need to carefully select reliable providers that follow international data protection standards. It is also important to develop internal policies for safe use of cloud resources and to train employees in cybersecurity basics. When used responsibly, cloud technologies can significantly improve business efficiency and educational quality.

In conclusion, cloud computing is one of the key directions of digital transformation. It helps save time and financial resources, supports innovation, and makes cooperation more effective. At the same time, data protection and system reliability remain the main challenges. With further technological development, cloud technologies will continue to expand and provide new opportunities for both companies and individuals.

Literature:

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