

## **OPTIMIZATION OF THE COMPANY'S BUSINESS PROCESSES AND ECONOMIC INDICATORS USING CLOUD COMPUTING**

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Modern enterprises are in a state of constant change and adaptation to new technological and market challenges. To function successfully in this dynamic environment, companies need to use technologies that provide them with competitive advantages and business efficiency.

Cloud computing is quickly becoming one of the most important technologies in business today, and researchers have been saying for years that the transition to cloud computing is inevitable. Based on the principles of flexibility, scalability and availability, cloud technologies play a significant role in providing enterprises with the means to manage resources, increase efficiency and facilitate the adoption of innovative decisions. Most organizations have already started using cloud solutions in their operations because they allow storing and processing large amounts of data, which is important in the age of digital technologies.

- The National Institute of Standards and Technology (NIST) defines cloud computing as a model that provides broad, convenient, and continuous access to a shared pool of configurable computing resources such as networks, servers, storage, applications, and services. These resources can be quickly provisioned and released with minimal administrator effort or service provider interaction. Cloud computing architecture consists of four key layers. The first is structural, including physical hardware, computing devices, and hardware resources such as network bandwidth and storage systems.

- The second level - unified resources, uses virtualization to combine resources.

- The third level - the platform, contains new resources, including specialized tools and middleware. Its main goal is to reduce the load on the deployment of applications in virtual machines.

- The upper layer is applications that run and run in the cloud, allowing users to use the services of cloud providers without special knowledge or equipment.

One of the key advantages of cloud computing is the ability to reduce costs for IT infrastructure and its support, which stimulates the optimization of capital investments (CAPEX) and operational costs (OPEX) of enterprises. According to studies, switching to cloud services allows companies to optimize financial resources by switching to paying only for services actually used, which contributes to effective cash flow management and lower overall costs. For example, in the past, companies were required to invest significant amounts of money in purchasing hardware, software, and maintaining their own IT systems. Cloud computing also reduces costs by achieving faster computing for the same price. This means that the cost can be more efficient, for example using 1000 computers for one year can cost the same as using one computer for 1000 hours. This model allows organizations to optimize their resources and obtain a more cost-effective increase.

Cloud computing tools also increase the efficiency of business processes. One of the models for providing cloud computing Platform as a Service (PaaS) allows you to speed up the execution of technical operations, reduce the time of system deployment, and implement the automation of business processes. One consequence of this is that the focus is shifting from operational service to improving service delivery. It also allows businesses to respond quickly to market changes and introduce new products or services more quickly. For example, cloud computing in healthcare can significantly reduce data processing time and streamline healthcare delivery processes.

In addition to the already mentioned advantages, there is one that can undoubtedly be called one of the most important in recent years in Ukraine. It is that the integration of cloud computing allows companies to ensure the flexibility of the work process. Employees get access to the necessary information from any device with an Internet connection, which ensures work outside the office. This helps to increase the productivity of employees, quick data exchange and allows for faster decision-making, which contributes to increasing the efficiency of business processes. At the same time, it is extremely easy to use, meaning employees can use cloud services without having any operational knowledge. Users do not need any special requirements or devices to access these services. And the services provided by the cloud work around the clock.

The integration of cloud computing is not just a technological movement, it is a new business management paradigm that can become a driver of significant positive changes in the functioning of the company and the achievement of strategic goals. Smart use of this technology can open up new opportunities, allowing businesses to move beyond traditional business models and gain a true innovation edge.

#### **References:**

1. Xue C. T. S., Xin F. T. W. Benefits and Challenges of the Adoption of Cloud Computing in Business. International Journal on Cloud Computing: Services and Architecture (IJCCSA) Vol. 6, No. 6, December 2016, pp. 01–15. DOI:10.5121/ijccsa.2016.6601
2. Müller S. D., Holm S. R., Sondergaard J. Benefits of Cloud Computing: Literature Review in a Maturity Model Perspective. Communications of the Association for Information Systems Vol. 37, Art. 42. November 2015. pp. 851 – 878.
3. DOI:10.17705/1CAIS.03742

## **МЕТОДИЧНИЙ ПІДХІД ДО ІНТЕГРАЛЬНОЇ ОЦІНКИ ФІНАНСОВОГО СТАНУ КОМУНАЛЬНИХ ПІДПРИЄМСТВ ТЕПЛОПОСТАЧАННЯ**

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Ефективне управління фінансово-економічної безпекою суб'єктів господарювання цілком залежить від розумної стратегії розвитку, яка, у том числі, формується на основі комплексу порівняльних інтегральних оцінок