

**SOFTWARE AS A SERVICE:
THE FUTURE OF CLOUD COMPUTING**

Черкасова Е.С.

Науковий керівник – к.т.н., доцент, Золотухін О.В.
Харківський національний університет радіоелектроніки
61166, Харків, пр. Науки, 14, каф. III
м. Харків, Україна

тел.: +38(098) 928-18-89, e-mail: elina.cherkasova@nure.ua

This article provides an overview of Software-as-a-Service (SaaS), a cloud computing model that allows users to access software applications over the internet. It discusses the pros of SaaS, including cost-effectiveness, scalability, accessibility, and maintenance-free operation. It also highlights the cons, such as dependency on internet connectivity, data security concerns, customization limitations, and cumulative subscription costs over time. The article emphasizes the importance of careful evaluation and selection of a reputable SaaS provider based on specific business needs, budget, and data security requirements.

In today's digital world, cloud computing has revolutionized the way software is delivered and accessed. One of the most prominent models of cloud computing is Software-as-a-Service (SaaS), which has gained significant popularity among businesses and consumers alike. But what exactly is SaaS, and what are its pros and cons [1]?

What is SaaS? SaaS stands for Software-as-a-Service, which is a cloud computing model that allows users to access software applications via the internet without the need for installing and maintaining the software locally on their own computers or servers. In a SaaS model, the software is hosted and maintained by a service provider who makes it available to users over the internet on a subscription basis [2].

Pros of SaaS:

Cost-effective: One of the main benefits of SaaS is its cost-effectiveness. Instead of purchasing expensive software licenses and investing in hardware infrastructure to host the software, users can simply subscribe to a SaaS solution and access it via the internet.

Scalability and flexibility: SaaS solutions are highly scalable and flexible, allowing users to easily adjust their subscription plans based on their needs. Users can typically upgrade or downgrade their plans, add or remove features, and increase or decrease the number of users as their requirements change.

Accessibility and ease of use: SaaS applications are accessible from anywhere with an internet connection, making it convenient for users to access their software and data from different devices and locations.

Maintenance and updates: With SaaS, users do not have to worry about software maintenance and updates. The service provider is responsible for

hosting, securing, and maintaining the software, including regular updates, patches, and backups. This frees up users' time and resources, allowing them to focus on their core business activities without the hassle of managing software infrastructure [3].

Cons of SaaS:

Dependency on internet connectivity: Since SaaS applications are accessed over the internet, a stable and reliable internet connection is essential for uninterrupted access to the software. Users may face challenges if they have poor or unreliable internet connectivity, which can result in disruptions in their workflow and productivity.

Data security concerns: Storing data in the cloud raises concerns about data security and privacy. Users need to trust the SaaS provider with their data, and there may be concerns about data breaches, unauthorized access, or data loss. It's crucial for users to thoroughly vet the security measures implemented by the SaaS provider and ensure that appropriate data protection protocols are in place.

Customization limitations: SaaS applications are typically designed to serve a broad range of users, which may limit the level of customization available to individual users. Users may face limitations in tailoring the software to their specific business processes or requirements, which can be a drawback for businesses with unique or complex workflows.

Subscription costs over time: While SaaS can be cost-effective in the short term, the cumulative subscription costs over time can add up. Users need to carefully evaluate the long-term costs of using a SaaS solution compared to the cost of purchasing and maintaining on-premises software.

In conclusion, SaaS offers numerous benefits such as cost-effectiveness, scalability, accessibility, and maintenance-free operation. It allows businesses to access software applications via the internet without the need for local installations and hardware infrastructure. However, it also has some drawbacks, including dependency on internet connectivity, data security concerns, customization limitations, and cumulative subscription costs over time.

References:

1. What is SaaS? <https://www.comptia.org/content/articles/what-is-saas>. (Access date: 12.03.2023)
2. What is SaaS? Software as a service defined. <https://www.infoworld.com/article/3226386/what-is-saas-software-as-a-service-defined.html> (Access date: 12.03.2023)
3. Using SaaS applications. <https://www.netcov.com/pros-and-cons-of-using-saas-applications/>. (Access date: 12.03.2023)