

THE SPECIFICS OF THE IMPLEMENTATION OF THE CLOUD INFORMATION SYSTEM SKYSERVICE AT THE ENTERPRISE

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Abstract. *The article considers the peculiarities of the introduction of cloud technologies at the retail enterprise, in particular, with the help of the SkyService cloud cash register. The advantages of introduction of the SkyService information system for the enterprise are investigated: absence of expenses for creation of a local network of the enterprise and its service; no need for a system administrator to ensure the operation of additional equipment; no need to buy and maintain technical equipment; ability to scale the information system of the enterprise without additional costs; reduction of wage costs; the ability to control the work of the enterprise and manage major business processes from anywhere in the world. The specifics of building a cloud information system at the enterprise are considered and the stages of implementation of the cloud information system at the enterprise are substantiated, taking into account the capabilities of the SkyService cloud cash register.*

Keywords: *automation, cloud technologies, cloud information systems, cloud cash register, SkyService.*

The use of cloud technologies provides excellent opportunities for quality business organization. In conditions of fierce competition and struggle for the market, an important factor for successful activity is to reduce the cost of products and services. In addition, the efficiency of business decision-making and timely response to problems that arise during the operation of the enterprise is crucial in organizing the business. In modern conditions, the solution of these problems is impossible without the use of information technology and automation of production processes, in particular: inventory management, demand study, replenishment of inventories based on their sales over a period of time, detection of errors in decision making and more. Of course, such a systematic approach to business organization involves the availability of human, material, financial, warehousing, office and software resources, which creates the need for large start-up capital. It should be noted that in the structure of start-up investments a large share is the cost of information technology and systems. Since cloud information technologies allow the use of powerful technical resources of large data centers, the use of universal software products and the placement of unique software products of the enterprise, it allows very significant savings in addressing the information support of the enterprise [2]. The advantages of implementing cloud technologies in production in this article will be presented on the example of using the SkyService software product as an application, fully hosted on the Internet and able to work in isolation with many corporate clients simultaneously.

SkyService is developed in Estonia and is a system of accounting and automation of cafes, shops, restaurants or any other enterprise [3]. The set of software tools and services offered in the SkyService cloud box environment is similar to many software products used in the business structures of trade and services. The only significant difference is that the main parts of the information system are located on the cloud resources of the software developer. And this difference gives significant advantages when choosing a method of information support of the enterprise, because the achievement of efficient operation of the enterprise with the use of information technology occurs at the cost of only a subscription fee for the use of the software product [4]. It is worth focusing on the economic benefits and advantages that the SkyService user receives.

The most significant advantage is the lack of investment in the creation of a local area network at the enterprise and the corresponding software with its subsequent support. There is no need to purchase network equipment, to establish communication between all network

participants, in the cost of servicing the equipment. The use of cloud information technology solves the problem of creating an enterprise network only for a subscription fee for the use of the program. These costs are hundreds of times less than the funds needed to create its own information network. The enterprise uses the Internet to communicate between computer devices. The computer devices of the network can be smartphones of employees of the enterprise on which the software is installed. It should also be noted that the quality and capabilities of the cloud network are much higher than in the local network of the enterprise. Since the Internet is a link that connects the structural units of the company into a single information body, the ability to remotely accommodate network participants from each other is limited to the coverage of the global network. That is, from anywhere in the world where there is access to the Internet, it is possible to conduct business activities that will be simultaneously displayed through the SkyService program in all other devices of the enterprise involved in the use of this program. The advantage of creating an information network of the enterprise using the capabilities of cloud technologies causes a chain of other economic benefits.

The second important component of the use of cloud technologies is the absence of the need to retain skilled workers in the enterprise, or the conclusion of contracts with relevant companies to maintain equipment and network in a state that meets the growing demands of production development. In addition, with the planned long-term expansion of the range of goods or services in the company's activities there is no need to purchase or create its own software product, which is laid in advance the desired prospects for business. In cloud information networks, all software updates and support are performed by the developer and provided to users without any delay. All comments on the operation of the software are immediately passed to specialists and errors are corrected immediately and displayed on the devices of all network members.

You do not need to worry about installing and configuring software, or that the application takes up some space on your computer - the cloud provider will take care of all this. You can simply access the application on demand and work with files from any device. This provides significant time savings to restore failures in the information direction of the enterprise. With the expansion of the company SkyService offers a transition to a version of the software product that suits the company in the updated conditions of its activities. This solution increases the cost of the subscription fee for the use of software, but the user is ready for this, because he is aware of the terms of use of software versions and can switch to using the required version at the right time when all the conditions for such transition are created. Again, the use of cloud technology allows all members of the network to switch to the new version of the software without additional time to set up the program and the interconnection between network devices. This makes it possible to get another advantage, which is the ability to scale the information system of the enterprise.

Scaling the information direction of the company in the use of cloud technologies does not require significant investment with increasing data in the information environment of the enterprise [1]. By the time cloud technologies were used to scale the business to expand the range of products and services, and thus the amount of information, the firm had to take care of and incur the cost of purchasing additional storage services. On the other hand, with reduced production, for example in a crisis, the need for equipment is lost, it ceases to be used in the production process, but requires service to maintain devices in proper technical condition for further use, which leads to increased production costs and loss of competitive benefits. Using SkyService removes these problems from the user. Cloud applications give businesses the ability to be more flexible to expand or shrink infrastructure. During the expansion, the cloud service provider will ensure that the storage arrays are appropriate for the user-selected version of the software. When a firm downsizes, it moves to use a less resource-intensive program that allows the cloud service provider to transfer the vacated capacity to those who need to increase it. It is important to note that the use of SkyService makes it possible to automate business activities. If

a company uses the Internet in its business to promote and sell its products and services, customer orders on the company's websites can be automatically transferred to SkyService software, processed and executed immediately with minimal involvement of employees. This leads to a decrease in the share of wages in the cost of production. Particular attention should be paid to the benefits of cost savings for employees when using the SkyService cloud product.

It was noted above that the properties of the SkyService cloud program make it possible to refuse to retain professionals working in the field of information technology. It should be noted that these are the highest paid employees in Ukraine. Instant access of all devices of the firm to SkyService through a cloud network provides the big accuracy and efficiency of processing of the changes occurring in the course of production activity. If the company has an extensive system of sales of goods and services, where the points of activity are quite far from each other, even a few kilometers, then without a reliable information network will need employees to coordinate work between their points of activity, collect information, deliver it to data processing systems, communicated the decisions made from the management center to the points of activity. Spending time in the transfer of information requires the creation of inventories to avoid their shortage. This, in turn, requires the maintenance of warehouses and warehouse workers (storekeeper, loaders, drivers). SkyService's networking capabilities make it possible to reduce these costs to a minimum. The instant transfer of a sales event to the program at the same time reflects the changes on all devices involved in the program. With a critical reduction in inventory, which can be set to the program for each point, the program will automatically generate a request for the required quantity of goods and send it over the Internet to the supplier. Thus, reducing the share of wages in the cost of production will significantly increase the competitiveness of the enterprise.

Of course, the successful operation of the company in the information direction requires a reliable system of data storage and protection. In the conditions of use of local networks for the decision of this task the corresponding experts are involved, security programs, hardware resources for data duplication and their recovery are bought. SkyService provides everything you need to store and protect your data in terms of cloud service. Cloud service providers have hundreds and thousands of physical servers located in data centers around the world. So, at the simplest level, the cloud is a set of data centers that house servers and huge arrays of data warehouses. Optimal use of the capabilities of cloud technologies is the task of SkyService product specialists, taking into account the requirements of a specific user of the program. The subscription fee for the use of the program provides for the use of so-called public clouds to store data. Anyone who uses the public cloud rents part of the server space, so the public cloud can be seen as a shared environment like a large office, but everyone has their own secure workspace. If the user wants to have the highest level of data protection when using cloud technology software products, he can get the so-called Private Cloud for an additional fee. Private Cloud is very different, as the virtual machine and the entire cloud infrastructure will be allocated to only one client. You will still be hosting everything on the Internet, but the server hosting your data will be yours and yours alone. The private cloud can be imagined as a dedicated data center or as a separate server cabinet under lock and key. SkyService specialists will offer the best system for storing and protecting data, taking into account the wishes and requirements of the client. An important factor is the preservation of the SkyService program in the temporary absence of Internet access to one or more points of the enterprise network. In this case, the program accumulates all operations on the user's device and when you restore access to the WAN immediately transmits the accumulated data for processing in the core of the program.

Conclusions. The SkyService cloud program is the most economically competitive for the initial organization of the information direction in the system of accounting and automation of cafes, shops, restaurants, as it has significant advantages over traditional programs used using local networks. It significantly reduces the cost of production by saving investment on the purchase of network equipment, creating a system of data storage and protection, reducing the

cost of salaries of employees whose functions are performed by the services of the program. The use of SkyService contributes to the development of the enterprise and increase its competitiveness through instant processing of data entering the program at the same time as production operations and the ability to respond regardless of the user's location, provided access to the Internet. Working in the SkyService information system, businesses receive state-of-the-art data storage and protection technologies for a small fee.

All of these benefits are possible thanks to the large number of SkyService users around the world. The program has established itself as one of the most reliable, best-offered services and the best-priced among similar cloud and network information technology products.

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