НАПРЯМ 5. ПРОБЛЕМИ ТА ПЕРСПЕКТИВИ ВИКОРИСТАННЯ ІНФОРМАЦІЙНИХ СИСТЕМ І ТЕХНОЛОГІЙ В ОБЛІКУ, АНАЛІЗІ ТА АУДИТІ

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CLOUD TECHNOLOGIES IN ACCOUNTING: RISK ANALYSIS

Unstoppable evolution of modern information technologies results is a new forms of applicable software products. Among the main trends in the development of information technology should be highlighted one of the main – Cloud technology. In current thesis would be revelated the aspect of usability of such technology in the field of accounting. Cloud technology is currently developing rapidly and covering more and more spheres such as introduction of electronic document circulation of organizations, cloud processing of tax and banking operations, the social insurance system.

In the special literature [1] are being distinguish several types of cloud technologies, among which there are 3 main ones:

Platform as a service – PaaS, Infrastructure as a service – IaaS, Software as a service – SaaS.

For accounting automation process the highest popularity received a cloud technology - SaaS. In the accounting this technology is used, like a network of computers that provide the work of a certain software and provide the users with the opportunity to work with application form any station. The key advantages of this service are the reductions in costs for the deployment of software in the organization and the speed of implementation of application development, access to which is carried out through a regular browser or other client application.

SaaS services can be used immediately after payment, which can be extremely beneficial in a fast growing small and medium-sized businesses. In addition, organizations can easily predict and optimize costs, periodically paying only for the number of licenses that are real involved in the work process. The implementation of cloud technology at enterprises are carried out with some significant risks:

Legal:Transparency of all types of responsibilities in concluded contracts, financial guarantees, Bankruptcy or absorption of the cloud provider, irregular use of laws and regulations initiated from provider, one of the contract parties is located abroad.

Functional: Restrictions on usability of software configurations maintenance and loss of uniqueness of business processes specific to organization in contradiction with standard algorithms of data processing realized in the accounting the program.

Informational: Security and confidentiality of data, Authentication process can be hacked, Unauthorized access by third-parties to data (cloud administrators have full access to data stocks), cyberattacks on servers form outside.

Technical: Dependence from network speed and stable connection, Data center security, where servers are located, Quality of technical support.

Before using cloud technologies in accounting should be accomplished the phase of risks identifying, after follows the phase of analyzing and minimization of them. As a solution could be used the additive model analysis [2]. This approach in assessing the risks of using cloud technologies seems justified, however, in the case of the accounting software based on cloud services, the number of parameters of the assessments increases significantly, as well as some of them are difficult to quantify. The main type of risk assessment in this case should be an expert evaluation of the cloud provider, such type of work can be carried out in several stages: first at the stage of concluding an agreement with provider or at the testing period of software.

The majority of risks can be eliminated at the stage of concluding a contract by means of establishment of guarantees and penalties. The main point of contract is the availability of the so-called redemption payments, i.e., the amount which is levied from the consumer for the dissolution of agreement before the terms which is defined in the contract. If there is such a point, the organization may have difficulties when it switches to a different service provider. In the contract must be clear specified the amounts of fines that will be imposed on the supplier of cloud services if through his fault the client lose or damage the information stored in cloud. The next level of risk prevention is implementation of two-level protection: a) an automatic encryption of the data transmission channel using SSL certificates, which provide security of transmitted information and protection from unauthorized actions of intruder, b) it is a user-protected access to the program for any type of connection - via a published application or terminal access must pass through a firewall and antivirus system.

Finally, in the contract agreement with the employees must be specified the measure of responsibility for the transfer of passwords and confidential information to third parties. If all conditions specified earlier will be taken into account then the minimization of risks would be enough to transfer the accounting sector in to the cloud, especially in the environment of small and

medium business, which is associated with a lower cost of implementation and operation of software.

Literature

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ONLINE ANALYTICAL PROCESSING IN SYSTEMS OF ENTERPRISE`S INFORMATIONAL SUPPORT

Development of solutions for enterprise management falls into the category of the most difficultly supplied automation areas. However, today there is an opportunity to assist the leader in developing solutions and, most importantly, significantly accelerate the process of developing solutions, their selection and acceptance. In fact, managers of different ranks receive a fundamentally new tool for more effective decision-making and, most importantly, significantly accelerate the process of developing solutions, their selection and adoption.

Online analytical processing (OLAP) is a technology that uses multidimensional structures to provide rapid access to data for analysis. OLAPenables analysts, managers, and executives to gain insight into data through fast, consistent, interactive access to a wide variety of possible views of information; it also transforms raw data so that it reflects the real dimensionality of the enterprise as understood by the user [1].

Functionality of OLAP, as systems implementing data mining, consists in the dynamic multivariate analysis of consolidated enterprise data aimed at maintaining the following analytical and navigational activities of the user [2]: