

## Розділ 6

# БУХГАЛТЕРСЬКИЙ ОБЛІК І АУДИТ

DOI: [https://doi.org/10.24144/2409-6857.2024.1\(63\).246-251](https://doi.org/10.24144/2409-6857.2024.1(63).246-251)

УДК 657

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### ORGANIZATION OF THE IT PROJECT EFFICIENCY ANALYSIS FOR TAX PLANNING

*Taking into account the complex economic and political realities of today modern IT enterprises have to solve both tactical and strategic tasks. In these conditions, conducting business, solving accounting, taxation, resource and sales planning becomes impossible without prompt analysis of the results. IT-enterprises that develop, distribute, adapt, support the latest means of «intelligent» business in their daily work are faced with the need to implement analytical systems, monitoring systems, the need to notify about possible erroneous or effective management decisions when it is necessary to process large volumes of data. In turn, effective tax planning helps businesses avoid financial risks and optimize their taxable profits. It ensures the stability of financial indicators, contributes to increasing the competitiveness of business and to the development of the investment attractiveness of the IT industry in general. The article examines the peculiarities of the organization of the economic analysis of the IT project's efficiency and defines its role for tax planning, taking into account the digitization process. There are summarized the main stages and tasks of analyzing the efficiency of an IT project. There are described the properties of the results of the analysis of the activity of the IT enterprise. The result of the organization of the analysis of the efficiency of the IT project should be a defined sequence and system of indicators that will allow to compare the obtained result (effect) with the costs incurred during its implementation. Analyzing the efficiency of an IT project for tax planning requires a comprehensive approach that covers the financial, strategic and tax aspects of the project, as well as assesses risks and opportunities to optimize the tax burden.*

**Keywords:** analysis, tax planning, taxation, IT enterprise, IT project, efficiency, management

**Formulation of the problem.** Dynamic changes in the IT business occur at an incredible speed, and the powerful information flows passing through

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even small-scale companies are enormous. Today, it is almost impossible to ensure effective management of business processes without the use of efficiency analysis of the activities. This means that IT enterprises must not only monitor these changes, but also constantly adapt their approaches and use analysis data to improve their operations and ensure their efficiency.

Processes of regulation and optimization of taxation are an extremely urgent issue for the effective functioning of business entities and require the development of a management system for these processes. Planning (forecasting) occupies a special place in the management of taxation, i.e., activities related to the development and practical application of schemes that allow to reduce the tax pressure and by using certain methods and measures are aimed at increasing the funds that remain at the disposal of enterprises of various sectors of the economy (in particular, the IT) after payment of due taxes

The main tasks of tax planning are reduced to the following: knowing the amount of taxes in advance and planning financial flows; comparing planned

and actual tax payments; analyzing the tax burden and manage taxes [6].

For tax planning, a key role is played by the collection and processing of information about taxes and the current state of the company's finances in order to carry out further economic analysis and determine the optimal taxation strategy. This stage is important primarily for making management decisions. Analytical data on the amount of income, types of taxes, financial reports of enterprises and other factors allow you to get an objective picture of the situation and make informed decisions about optimizing taxation, defining development strategies and minimizing risks. Therefore, the analysis of the efficiency of the IT project is an important component of successful tax planning.

#### **Analysis of recent researches and publications.**

The following scientists dealt with the problematic issues of economic analysis indicators in the context of tax planning: Oliinyk O., Grytsyshen D., Kucher S., Vetsepura N. The scientific works of the following scientists were devoted to the study of optimization of taxation through financial analysis: Kononenko L., Yurchenko O., Poberezhets O., Gusiev A., Tkachyk L., Kalabukhova S., Oryshyn T. and others. However, paying tribute to the achievements of these authors, it should be noted that in the vast majority of publications, the attention of scientists is focused on the study of analytical indicators in the context of tax planning in general, less often – in the context of taxation of economic entities, taking into account the specifics of their activities. Therefore, the role of IT project efficiency analysis for tax planning, especially for enterprises in the IT industry, remains insufficiently defined, which justifies the relevance of the topic and the need for a comprehensive and systematic study of these issues.

**Formulation of goals of the article.** The goal of the article is to study the theoretical foundations of the organization of IT project efficiency analysis for tax planning of enterprises, taking into account the digitization process.

**Presentation of the main research material.** Currently, there is no clear definition of the efficiency of the IT enterprise. If we abstract from the field of IT, we can outline the following features taking into account the general definitions of economic efficiency:

- in order to assess the efficiency of the business entity, it is necessary to take into account indicators of the financial result;
- it is expedient to compare with industry indicators. For the IT sector, complications may arise. Although this industry in Ukraine is being formed very actively, the

average indicators for the industry in each subsequent period may differ significantly. That is why ensuring orientation to the indicators of competitors is a necessary direction, but difficult to implement.

Revenko O. [15] emphasizes that in modern conditions the importance of implementing a full-fledged tax planning system at enterprises is increasing, which will allow them to effectively manage costs and forecast economic and social effects as the results of their activities, taking into account changes in tax factors.

The process of tax planning is directly related to economic analysis. Taking into account the factors affecting the taxation of the enterprise, that are identified with the help of economic analysis, is an important prerequisite for effective optimization of the tax burden. This process allows taking measures aimed at minimizing tax risks and improving the quality of tax decisions.

Taking into account the economic analysis, it is possible to identify and evaluate a variety of factors, such as economic conditions, changes in legislation, industry specifics and internal business factors that affect the tax obligations of the enterprise. Based on this analysis there are developed tax planning strategies aimed at optimizing the tax burden.

In turn, the efficiency of the IT enterprise depends on the analysis of the efficiency of the IT project. Taking into account the high level of risk, issues of analyzing the efficiency of IT projects become very complex and require a wide range of knowledge. Various analysis methods are used to achieve reliable and objective results. Since the nature of decision-making in the field of IT is variable, the process of analyzing the efficiency of projects in this field is difficult and requires a lot of time and the collection of relevant information, that undergoes various processing and calculations.

In fact, the activity of an IT enterprise is considered as a practical implementation of the existing project case. Each of the projects is implemented within the budget of this particular project and the time limits of the technical task. To achieve the planned result, the project must have a clear plan of stages, decisions and measures, which are approved in accordance with the requirements for time, resources and performers [1; 4]. That is why the analysis of the efficiency of the IT project should be organized in such a way that its results support not only all aspects of the business of the IT enterprise in general, but also create appropriate information support for managing both the IT project portfolio and individual IT projects.

The result of the organization of the analysis of the efficiency of the IT project should be a defined

sequence and system of indicators that will allow to compare the obtained result (effect) with the costs incurred during its implementation.

We define the organization of the economic analysis of the efficiency of the IT project as a systematic approach to the improvement of methods and tools of analysis, processes of collection and processing of initial analytical data. Its purpose is to provide the necessary information for effective IT project management. This organization includes not only the improvement of analysis methods, but also the optimization of the processes of collecting primary information, its processing and generalization. In addition, it is aimed at obtaining specific data that is necessary for making management decisions within the IT project.

The complexity of the organization of the analysis lies in the fact that each enterprise is unique. All have different directions of their work, form of ownership and degree of interest in analytical information [9, 201]. In addition, there should be taken into account the above-mentioned high power of information flows in the IT industry, rapid changes inherent in the IT market, significant dependence on the situation in the world economy, the economy of the country, and even the region. Yet universal methods of analysis, that were not created specifically for the IT business, often do not meet the requirements for the implementation of business tasks of IT enterprises.

The goals of running an IT business can be software development, beta testing, implementation of IT technology elements, service provision, etc.

The technological features of conducting business in accordance with its goal/goals will shape the architecture of building an IT enterprise and the structure of its data flows.

Rapid changes can affect all aspects of an IT enterprise, even including goals, target user groups, and business directions.

The problem of the presence of powerful information flows, inherent in the IT business, is that an excessive amount of information creates the so-called «information noise», which complicates the analysis and decision-making by the managers of IT enterprises or structural divisions, and even makes them impossible without the use of analytical software for processing large volumes of data [3].

In the arsenal of the IT industry, there is an effective business tool for managing the activities of IT enterprises. Management of activities for the development and support of modern information technologies is carried out with the help of project

management tools [1; 4], which is based on the application of appropriate analytical procedures for assessing the efficiency of IT projects.

The organization of analytical work to determine the efficiency of an IT project involves the following:

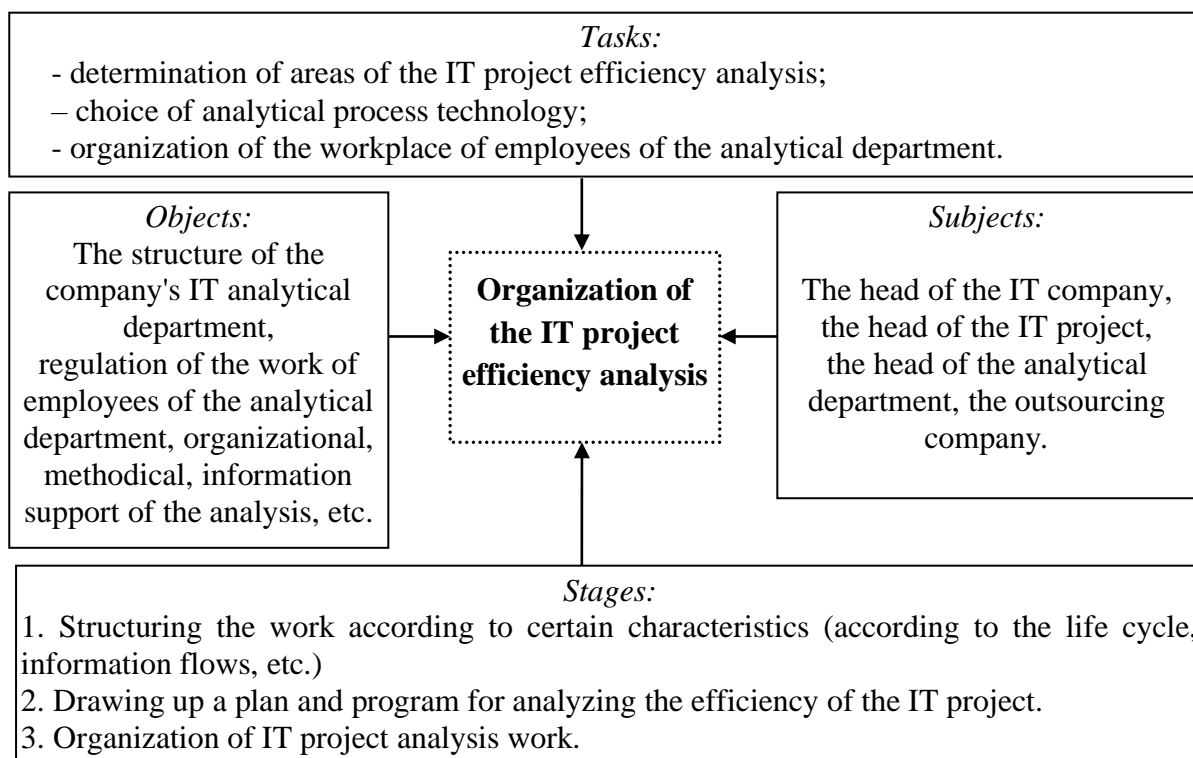
- development of general principles and order of analysis;
- planning stages of analysis;
- definition of material, methodical and scientific support;
- general management;
- acceptance of completed analytical works;
- registration of completed works;
- control over the implementation of the measures developed in the IT project with the aim of improving the IT enterprise.

To reveal the specifics of the organization of the IT project efficiency analysis, it is necessary a clear definition of its tasks, objects, subjects and stages of its implementation (Fig. 1).

It should be emphasized that we clearly demarcate the processes of organization of the analysis and its implementation, thereby singling out separately the subjects of the organization of IT project efficiency analysis. Therefore, the head of the IT enterprise, the head of the IT project, the head of the analytical department or the outsourcing company (depending on which form of organization of the analysis is chosen) may not conduct the analysis, but they are responsible or take the greatest part in the process of its organization.

Project management of IT enterprises, work planning, financial management are characterized by the significant influence of the use of various, sometimes inconsistent software tools for managing individual subtasks, divisions, and groups of developers. In practice, this leads to problems related to the inconsistency of loosely connected software tools, different approaches and models based on their algorithms, sometimes their inability to adapt to new tasks and new working conditions.

When analyzing the entire activity of an IT enterprise, one should take into account international standards on typical methods of managing the creation of software, in particular its projects, ISO 9001 – SSU ISO 9001:2015 «Quality management system», ISO/IEC 12207:2008 Systems and software engineering – Software life cycle processes, ISO/IEC 15504 Information technology – Process assessment [3; 7].



**Fig. 1. Peculiarities of the organization of the IT projects efficiency analysis**

*Source: authors' own development*

There are generally recognized methodologies for the development and implementation of products and services of the IT enterprises that must be taken into account when organizing the analysis: The Capability Maturity Model (CMM), Project Management Body Of Knowledge (PMBOK), Rational Unified Process (RUP), Adaptive Software Development (ASD), SCRibing Unified Methodology or SCRapbooking Unified Methodology or Sprint Continious Rugby Unified Methodology (SCRUM), etc. [1; 2].

The mentioned international standards, development and implementation methodologies are directly related to the creation of software or IT services, that is, they are only a basis for analyzing the activity of an IT enterprise, in particular, determining its efficiency. However, the successful operation of an IT enterprise requires a comprehensive approach and consideration of various aspects of business. In addition to the standards and methodologies related to the development of software and the provision of IT services, the effective functioning of an enterprise requires careful financial management, a rationally established information system of accounting and internal control, personnel management, as well as an effective marketing strategy. The success of an IT

enterprise depends on a balanced approach to all these aspects of the business.

However, there is still no effective methodology for analyzing the activity of an IT enterprise, not even groups of projects, but just one project. The situation is complicated by the fact that Ukrainian IT companies are engaged not only in software development, but also in its support, testing, etc. Such multifaceted work requires different approaches to managing employees' working time, resources, and has different financial and organizational aspects.

Approaches to the formalization of algorithms and software administration tools in the IT industry become obsolete in a short period of time. The peculiarity of projects in the IT sphere presents high requirements for reducing risks and the cost of works.

One of the features of the analysis organization in the IT sphere is the need to be adapted to drastic changes in IT projects, the high probability of which exists even at the stage of their implementation [8]. These changes can be not only in the technical task, the conditions of the implementation of the IT project, its financing, and the resources required for the implementation of the IT project, but even in the goal itself.

The analysis organization of the IT enterprise should take into account additional opportunities inherent in the information system of this subject, namely:

- access to data stores and showcases, which allows IT company managers to operate with extremely large volumes of information;
- OLAP-systems, the use of which allows you to efficiently operate data and analyze a large number of indicators of business activity;
- Data mining, the use of which allows finding non-obvious regularities and trends in extremely large volumes of information (big data) [5];
- Groupware, the use of which facilitates discussion and decision-making in large groups, use of virtual offices, etc.;
- GIS systems, the use of which facilitates data analysis with reference to certain territorial and geographical features.

The results of the analysis of the IT enterprise should have the following properties:

1. Provide support to the manager in the decision-making process both for structured tasks and for those that are more common in practice – semi- and unstructured tasks.
2. To bring the decisions made closer to the most effective and efficient ones.
3. Use one or, at the same time, several models of working out the information processing tasks with the accumulation of data on the history of solved tasks in the form of templates, as well as data on all aspects of the IT company's activity, in particular, and IT business, in general.
4. Interactive presentation and processing of tasks.
5. Adaptability to changes in the business environment and solving non-standard IT enterprise tasks.

6. Form not only one solution to the problem, but also their variants in a given sequence, for example, which meets the «efficiency» criterion.

**Conclusions.** There is still no effective and universal approach to the organization of the analysis of the activities of IT enterprises with the possibility of implementing a project approach to the work organization, that is typical for the IT business. The analysis organization for the subjects of this field is complicated both by the large volumes of information, which characterize the IT business, as well as by the peculiarities of the IT industry and the great dependence on the conditions in the market of IT services and IT products, in particular, rapid changes in them. Since the work, IT business goals, and organizational structure depend on many factors, it is worth structuring the model of relations between users of analysis data. The result of the analysis efficiency organization of the IT project should be such a defined sequence and system of indicators that will allow comparing the obtained result (effect) with the costs incurred during its implementation. It helps to understand how successfully the resources were invested in the project and how its results correspond to the established goals and expectations. Such a system of indicators allows you to effectively assess the profitability, productivity and efficiency of an IT project.

Analysis of the efficiency of the IT project plays an important role in the development of tax planning measures. This analysis allows a detailed study of the financial condition of the enterprise, including income, expenses, assets and liabilities. With its help, you can identify potential risks and opportunities to reduce the tax burden, develop forecasts of financial results under various taxation scenarios, which will help make informed management decisions. The perspective of further research is to determine the influence of the choice of tax planning methods on the formation of decisions in the field of accounting, taxation and analysis of the IT enterprises.

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*Отримано 20.01.2024*