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ACCOUNTING AND TAXATION

ОБЛІК І ОПОДАТКУВАННЯ

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REQUIREMENTS FOR THE DEVELOPMENT AND IMPLEMENTATION OF INFORMATION TECHNOLOGIES IN ACCOUNTING AND BUSINESS MANAGEMENT

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Summary. *The article discusses the problems of implementing information technologies in accounting and enterprise management. Today, many factors influence the process of active and effective application of information technologies for accounting and enterprise management, but it should be noted that the speed of informatization of enterprises in Ukraine largely depends on the use of modern, up-to-date software. In order to quickly and effectively implement modern information technologies, it is necessary to constantly monitor the updating and modernization of software tools and the corresponding system software. Changing the requirements for the design and implementation of modern information tools and the introduction of the latest approaches are necessary conditions for the effective use of digital technologies, which in turn increases the efficiency of work at various stages of enterprise management. The types of modern information technologies and their application in accounting were mainly studied. The advantages and disadvantages of modern special information technologies when applied in accounting for the purpose of forming the largest information system of the enterprise are analyzed. The leading tasks of cost accounting of the enterprise's activities, which are solved by means of modern information technologies, are identified. The analysis of crucial issues was carried out and the necessity of using modern software developments in accounting activities was substantiated. During the review of the latest scientific research, both domestic and foreign scientists, it was established that in the process of successful informatization of the enterprise, we consider it necessary to recommend not to avoid those leading requirements that contain and propose to apply the developed systems to ensure the effective functioning of the developed, based on the requirements, software tools. The successful integration of modern information technologies into enterprise management is directly proportional to the level of awareness of modern needs and opportunities. The process of introducing information technologies in accounting is permanent, therefore it requires a fleet of powerful computer equipment. The placement of information technologies in solving the problems of accounting, auditing and analysis of the company's activities in order to optimize their activities, which is directly related to the development and implementation of modern software tools, is determined.*

Key words: *accounting activity, enterprise management, information technologies, informatization, software product.*

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ВИМОГИ ДО РОЗРОБЛЕННЯ ТА ВПРОВАДЖЕННЯ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ В ОБЛІКОВІЙ ДІЯЛЬНОСТІ ТА УПРАВЛІННІ ПІДПРИЄМСТВОМ

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Резюме. *Розглянуто проблематику впровадження інформаційних технологій бухгалтерського обліку та управління підприємством. Сьогодні на процес активного та ефективного застосування інформаційних технологій бухгалтерського обліку та управління підприємством впливають багато чинників. Проте слід зауважити, що швидкість інформатизації підприємств в Україні значною мірою залежить від використання сучасного актуального програмного забезпечення. Для швидкого та ефективного впровадження сучасних інформаційних технологій необхідно постійно слідкувати за оновленням та осучасненням програмних засобів і відповідного системного програмного забезпечення. Зміна вимог до проектування та упровадження сучасних інформаційних засобів новітніх підходів є необхідними умовами для ефективного використання цифрових технологій, що, в свою чергу, підвищує ефективність роботи на різних етапах управління підприємством. Досліджено види інформаційних технологій та їх застосування в бухгалтерському обліку. Визначено провідні завдання обліку витрат діяльності підприємства, що вирішуються засобами сучасних інформаційних технологій. Проаналізовано переваги й недоліки інформаційних технологій при застосуванні в обліку з метою формування системи економічної інформації підприємства. Проаналізовано вирішальні питання та обґрунтовано необхідність застосування інформаційних технологій в обліковій діяльності. В ході наукового дослідження встановлено, що в процесі успішної інформатизації підприємства необхідно дотримуватися відповідних принципів для забезпечення ефективного функціонування обраних програмних засобів. Успішна інтеграція сучасних інформаційних технологій в управління підприємством прямо пропорційна рівню усвідомлення потреб та можливостей, а також якості взаємодії між співробітниками та керівництвом. Визначено місце інформаційних технологій у вирішенні проблем обліку, аудиту та аналізу діяльності підприємства щодо оптимізації їх діяльності, яка безпосередньо пов'язана із розробленням та впровадженням сучасних програмних засобів.*

Ключові слова: *облікова діяльність, управління підприємством, інформаційні технології, інформатизація, програмний продукт.*

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Introduction. The constant mobility of the development of modern information technologies affects the content of the activities of business entities, which consists of achieving an economic effect by obtaining profit, taking into account the optimization of activities by means of the end-to-end use of information technologies. In difficult conditions of shortage of personnel, management of enterprises needs sufficient information about the state of both internal factors and the external environment (demand for goods, price policy, etc.). In conditions of instability, uncertainty and unforeseen changes in the main indicators of financial and economic activity, quite relevant is the issue of using the software, which leads to cost savings and optimization of activities, which relate to the specifics of the IT and economic sectors.

Review of the latest research and literature. The problems of accounting, auditing and analysis of the company's activities with the development and implementation of modern software tools are analyzed in the scientific works of domestic and foreign scientists:

A. Babichev, K. Chernenko, V. Chobitok, K. Diachenko, Ya. Drachuk, A. Hafiiak, T. Obydiennova, S. Oliynyk, N. Radionova, D. Ryzhenko, M. Vasylieva, M. Yermolaeva, O. Zhovna, K. Zhura. They claim that the implementation of their development will increase the efficiency and cost management of operational activities [1–8]. They claim that the implementation of their development will increase the efficiency and cost management of operational activities. Hafiiak A., Yermolaeva M., Chernenko K., Prokhorova V., Chobitok V. Babichev A., Diachenko K. consider the main means of digitalization at enterprises [1–3]. Ya. Drachuk investigates the effectiveness of managing the company's cash flows by means of modern information technologies [4]. Zhovna O., Ryzhenko D., Lytvyn I. and Ivashchenko A. identify ways to improve the cash flow management system [5, 6]. Radionova N., Zhura K. define a conceptual approach to the organization and methodology of conducting an audit of the company's funds [7]. Obydiennova T. and Vasylieva M. consider it necessary to apply a systematic, complex and cybernetic approach to cost analysis, which cannot be effectively implemented without modern software tools [8].

Modern accounting automation information systems include a large selection of standard solutions that provide the main areas of accounting and adapt to modern business conditions, however, each specific enterprise has its own unique features of accounting that cannot be predicted in advance. The technological process of data processing with a computer form of accounting can be divided into three stages. The first stage of the accounting process is the collection and registration of primary data for computer processing. At the second stage, arrays of accounting data are formed on electronic media: a log of business transactions, a structure of synthetic and analytical accounts, directories of analytical objects, permanent information. At the same time, control over the process of processing information recorded in arrays of accounting data is carried out. The final stage of the process is obtaining results for the reporting period at the user's request, either in the form of synthetic accounting registers, analytical tables, reports from accounting accounts, or displaying the required information on the display screen. The purpose of the work is to study the theoretical and methodological aspects of accounting, auditing and analysis of activity costs to substantiate theoretical provisions and practical recommendations for improving the methodology of development and implementation of special software for accounting, bookkeeping and other functions related to enterprise management.

The main goal of the article is to determine the place of information technologies in accounting and enterprise management.

Task setting. The following scientific tasks have been set out to achieve the target goal: to develop the peculiarities of the implementation of information technologies of accounting and enterprise management; to investigate the types of information technologies and their application in accounting; development of the leading tasks of cost accounting of the enterprise, which are solved with the help of modern information technologies; perform an analysis of crucial issues and substantiates the need for the use of information technologies in accounting activities.

Presentation of the main material. In today's complex conditions, the requirements for the competence of specialists who have the skills of quick adaptation and the ability to learn and increase their competencies have increased. It has been proven that in conditions of fierce competition, when it is necessary to allocate resources efficiently, be flexible and make as few mistakes as possible, the method of effective implementation of information technologies in accounting activities helps to achieve this goal. The analysis of scientific and pedagogical literature makes it possible to conclude that the connection between the development of actual technologies and modern methods of conducting accounting activities is present and is an actual problem, the solution of which allows us to determine promising directions in the field of application of information technologies in the process of ensuring the improvement of the efficiency of the functioning of the business management system.

To achieve the defined goal, the following tasks are set: to give a comprehensive description of the institution's activities; to research and analyze the main components of the system adopted in the institution and the form of organization of accounting in its divisions; determine and characterize the peculiarities of the institution's accounting policy; study the company's methodology regarding the selection and features of using special software for keeping analytical and other accounting of the company's expenses; consider and systematize the requirements for the information and technical support of the institution's cost accounting, selected or developed by the leading specialists of the department; to investigate the methods and means of implementing the use of information technologies for accounting activities, taking into account the potential risks of their use. The object of the study is the accounting and analytical procedures of operations with the costs of the enterprise by means of information technologies. The subject of the research is the theoretical and methodological principles, as well as the modern practice of using information technologies for accounting, auditing and analysis of enterprise costs.

The design and development of the software product must take into account the results of the study of the entity's financial condition, as well as the state of the enterprise's cost accounting, in which a variety of methods must be used: the historical method; abstract logical method; method of comparative analysis; statistical observation and financial and economic analysis; analogy and experiment; methods of current grouping and generalization of information in accounting. It should be noted that the information and legal basis of the study is legislative and regulatory acts regulating the accounting, auditing and analysis of enterprise costs, official statistical materials, methodical materials, Internet data. That is why the factual basis of the conducted research is the results of the work carried out by experts on accounting problems, audit methods and cost analysis of the enterprise, as well as: the charter, the order on the accounting policy, the job description of the chief accountant, financial and statistical reporting of several enterprises, primary documents and accounting cost accounting registers of enterprises [1, 2].

An information system is considered a certain complex of complementary organizational and technical means for effective work with information in order to obtain the optimal expected result. The purpose and task of the information system is to determine the formation of a certain set of information needed for optimal management of its resources, ensuring the creation of an information and technical environment for managing its activities. Information and analytical systems are classified, in particular, by the type of tasks they solve. Among such tasks, that are solved, including at the enterprises of Ukraine, the following can be highlighted in particular: analysis of the financial state of the enterprise; development and analysis of investment projects, formation of technical and economic justifications; preparation of business plans; planning and making investment decisions; project management; assessment of financial efficiency. It is impossible to consider the problems of business analysis without understanding the concept of business and the place of information technologies in the conduct of accounting activities. Therefore, the main purpose of business analysis is to provide business advisory services for its further development as a result of the conducted analysis, which is not possible without the use of modern information technologies. It is also necessary to take into account a number of requirements for accounting and economic information, and to observe certain principles: a system approach (implies a one-time entry of information into the system and its repeated use); reliability (characterizes and ensures uninterrupted operation using various methods); continuous development of the system; economy; compatibility [1, 2].

When designing and creating software, it is necessary to determine all the requirements and functions of the use of future development. When accounting for production costs, the accounting department records mutual accounts with suppliers of raw materials, materials, etc.; analyzes and controls the cost of providing services; forms accounting reports, requirements for the transfer of materials to production, acts of write-off of materials in production; keeps records of production and general production costs (except wages); prepares and forms management reports. Accounting for payments includes: the accumulation and generalization of information in the required section (detail) about: the calculation of wages, execution of other payments to employees, individuals and legal entities by current legislation: participation in carrying out an inventory of liabilities; keeping analytical accounting in terms of objects of off-balance sheet accounting. When accounting for tangible assets, reports on the movement of tangible assets are received from the divisions in a timely manner, checking the correctness of each document and its legality; accuracy and reliability of all indicators in documents and reports; the correctness of the arithmetic calculation of indicators in each document; availability of revenue and expense documents attached to the report, comparing with other reports; balances of material values at the beginning and end of the reporting period; organize the timely distribution of accounting transactions on analytical accounts; compile statistical reports in a timely manner; make final entries, withdraw and verify account balances; exercise control over commodity values; organize and conduct inventory, process its results; participate in the commission on write-off of material values; timely inform the chief accountant about the movement and availability of material values; at specified times, audit of accounting data with balances of materially responsible persons, etc. Such software development should support various accounting systems and keep records for several enterprises in one information base. Such software development should have opportunities for the organization of accounting: certain accounting according to a multi-level plan of accounts; accounting for several plans of accounts; multidimensional analytical accounting; quantitative accounting; currency accounting and currency coverage accounting. A necessary requirement for the software product is the awareness of the need to determine financial results, closing the period, which begins with checking the primary data of the information base, the correctness of calculation data and, if necessary, correcting errors.

Developers model the accounting process of the enterprise by developing and testing control examples. The institution usually conducts preliminary testing of the software product to eliminate potential flaws. That is why it is usually not a system distribution that is installed, but an already tested program with auditable accounting functions used by the institution, a partially formed and filled reference database, etc. There is also a need to take into account in the process of designing and developing a software product – to take into account the possibility of generating several standard reports, namely: working balance statement of account, account analysis, account analysis by sub-account, account card, sub-account cards, order journals, information on postings. As for the formation of generalized indicators that characterize the results of activity in the reporting period, this procedure is implemented in the program with the help of a set of so-called regulated reports. Arguing that the closing of accounts is a process that includes a number of interdependent components, therefore, when designing and further developing a software product, it is necessary to take into account those components and basic values that are used when calculating the cost of products, works and services, and writing off the differences between actual and planned cost to separate accounts. Based on the requirements for the system, the means of implementation can be chosen arbitrarily, in particular, the Apache server, the PHP programming language is also usually used, or another database

management system, such as MySQL or SQL Server. It is also necessary to provide means of protection of information stored in the database to avoid possible leakage or distortion of information. Protection against SQL injections is implemented by introducing special restrictions when working with information, and to ratify the format of the entered data, introducing specially created functions and procedures into the software code. To ensure security at the level of data transmission, it is advisable to make a decision to pre-install the necessary components on the Apache server, which will allow the use of SSL encryption of data packets.

Conclusions. Each accounting system has its advantages and disadvantages, including the automated accounting system. Indeed, automation greatly facilitates the work of accountants and reduces the labor intensity of individual operations, while reducing the number of errors when compiling primary documents and consolidated accounting registers. Due to its properties, automated system support allows you to urgently receive the necessary information on the command. As summary, it can be determined that methods of accounting for production costs and methods of costing are aimed at achieving different goals, which proves their difference and the need for the existence of each of them at enterprises for the organization of an effective accounting system of production costs, which increases and expands the system of requirements for the use of special software at the enterprise and information technologies as a whole. The main tasks of cost accounting of the company's activities are to provide users with information about the volumes, terms, and periods of spent resources; forecasting in terms of additional resources of the enterprise; ensuring the highest possible level of return from the use of resources in different time intervals; provision of real and high-quality information about the cost of certain types of products; providing objective data for drawing up the enterprise budget and the possibility of evaluating each unit of the enterprise from a financial point of view; making reasonable and effective management decisions regarding the implementation of powerful information technologies in production to optimize its activities.

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