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**THE CONCEPT OF MANAGEMENT ACCOUNTING IN THE SYSTEM OF
THE INFORMATIVE PROVIDING OF THE INNOVATION PARADIGM
КОНЦЕПЦІЯ УПРАВЛІНСЬКОГО ОБЛІКУ В СИСТЕМІ ІНФОРМАЦІЙНОГО
ЗАБЕЗПЕЧЕННЯ ІННОВАЦІЙНОЇ ПАРАДИГМИ**

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Abstract. *The paper considers the concept of management accounting in the system of information support for the activity of innovative structures. The place of management sphere in the innovation paradigm is clarified. It was determined that the management process is one of the most important objects of innovation implementation. The peculiarities of the functioning of management systems in the conditions of adaptation to the realities of the fourth industrial revolution are studied. The need for changes in the management system in the direction of increasing its innovativeness has been proven. The problems of improving the efficiency of the innovation system and innovation activity are systematized. It is proven that in modern economic conditions, the management system in innovative structures requires proper informative providing, which is formed within the framework of strategic management accounting, as a part of accounting and analytical system of such structures.*

Key words: *management accounting concept, innovation paradigm, information provision, innovation activity, innovation structures, innovation management, management innovations, strategic management accounting*

Introduction.

In modern business conditions, the management system requires proper informative providing, which is formed in the framework of strategic management accounting, which is an integral part of the accounting and analytical system, which is available in business entities for the purpose of improving the information system and focusing on ensuring the quality of the strategic management, its continuous improvement and development of the enterprise as a whole.

Despite the fact that innovation occupies a prominent place among such management functions as forecasting, planning, organization, coordination, regulation, control, information provision and communication, analysis and motivation, there is still no specific "management" definition category "innovation". The science of management defines innovation as the process of creating, mastering and implementing the latest management technologies in all functional areas of the economic organization, as well as the systematic search for new technologies within promising areas of organizational and technological development.

Main text.

The Law of Ukraine "On Innovative Activity" interprets this type of activity as



an activity aimed at the use and commercialization of the results of scientific research and development, which lead to the promotion of new competitive goods and services to the market [1].

It should be noted that the essential characteristics of innovative activity depend on the method of conducting business activities. Thus, in the conditions of the industrial economy, innovative activity has a periodic and functionally fragmented character, in the innovative economy it is permanent, at the level of individual organizations, for the knowledge economy it is system-integral.

The most common approach to the study of innovations in the field of managerial activity is its orientation towards ensuring economic development. Y. Schumpeter [3] determined the place of the management sphere in the innovation paradigm by distinguishing 5 types of innovations:

- 1) production of new products, goods, services or products with qualitatively new properties unknown to consumers;
- 2) introduction of a new method of production based on a new scientific discovery or a new approach to the commercial use of products;
- 3) development of a new sales market;
- 4) attraction of new materials, types of raw materials and their sources;
- 5) introduction of new or improvement of old forms of organizational and management processes.

The management process is one of the most important objects of innovation implementation. It provides for the interaction of the subject and the object by management using communication of direct and feedback channels. At the same time, this interaction occurs exclusively between people in the process of performing professional duties.

The management process ensures the functioning of management within the defined management contour, and the quality of the defined functioning depends on the professional competence of management personnel. In turn, the management contour includes a system of indicators based on basic and boundary conditions, as well as priority goals. The material, financial, personnel and informational resources of organizations are the basic conditions of the management process. Boundary conditions adjust the development of the management process in the context of achieving priority goals. The latter should guarantee the organization's survival on the market and are the foundation for ensuring its competitiveness.

Innovativeness, as the ability to implement production and management innovations and to make the most of scientific and technical potential, along with effectiveness, economy, quality, timeliness, and profitability, is one of the main criteria for evaluating the effectiveness of management.

Global trends, which causing the need to implement innovative management tools include the transition from mass standardized production to maximum personalization, acceleration of changes and shortening of life cycles of products and technologies, shift of competition to the international level, high dynamism of consumer requests on the background of absolutization of information provision.

Distinguishing the principles of innovative management depends on which principles are considered the basis of traditional management. These can be the



principles of specialization, standardization, planning and control, hierarchy of benefits, etc. If we evaluate the system of innovative management through the prism of A. Fayol's principles, it can be noted that only some of them remain relevant (justice, corporate spirit), and other principles should be adjusted to the innovative component of modern management trends. In particular, the following must be taken into account in the division of labor:

- increasing spread of outsourcing;
- discipline, single-mindedness and initiative are increasingly turning into innovative leadership;
- instead of the subordination of personal interests to the general, it is necessary that everyone's interests be integrated into common goals;
- instead of order - comfort and promotion of creative mood.

Scientists distinguish several relatively independent stages of development of research on the organization of innovative management of branches of the national economy, which were ultimately embodied in a factor approach, a functional concept, as well as systemic and situational approaches.

In the period of the predominant use of the factor approach, scientific research and development was considered as one of the most important factors in the development of the economic potential of the country, individual industries and enterprises. However, the specified development was achieved primarily due to extensive levers: increasing the number of scientific personnel and improving the material and technical base. In the management of innovation processes, statistical factor models built on the basis of correlation and regression dependence prevailed.

The functional concept considered innovative management as a set of management functions and management decision-making processes. This approach is based on the division of labor in innovation management, in parallel with the specialization and optimization of management decisions. It can be argued that within the framework of the functional concept, an attempt was made to bring the concepts of "innovation management" and "management by innovation" as close as possible, which is completely wrong. In the practice of management, optimization models and calendar planning of works have become the most widespread. The functional concept is also characterized by careful regulation of procedural aspects of management on the basis of special provisions on departments and services, job instructions, parity of powers and duties, etc.

Within the framework of the system approach to the innovative management of the industry, the greatest attention is paid to the functioning of innovative enterprises, each of which acts as a complex organized system consisting of a set of interconnected elements. These elements are aimed at achieving certain development goals, taking into account the complex of internal and external factors that affect each individual management decision.

In modern conditions, a situational approach to innovative management has been developed. Within this approach, the situation is considered as a set of values of factors affecting the functioning of individual enterprises and the industry as a whole in a specific period of time. In the situational approach, an attempt is made to integrate the best qualities of each of the other approaches in the context of their use



for management decisions in specific situations. A situational approach to innovative management opens up unlimited opportunities for creative use of a variety of tools, simultaneously increasing managers' responsibility for choosing the right decisions. In the process of using this approach, managerial tasks require managers, in addition to high professionalism, to have leadership qualities and creative abilities.

The fourth industrial revolution and the transformation of automated production, data exchange systems and production technologies into a single self-regulating system with minimal or no human intervention in the production process contributed to a certain rethinking of innovation management. At the same time, the peak format of the development of the artificial intelligence of machines, which will be capable of self-development and self-sufficiency and at the same time much better in terms of efficiency and effectiveness than the capabilities of people themselves (in particular, managers) is the singularity - a state in which "people will no longer have to update computers, telecommunication systems and robotic mechanisms. These machines and systems will reprogram themselves. People will not understand how they work, but everything will work by itself. The management system in the "singular environment" also requires a different organization, and from individual managers it requires a change in the way of thinking and corresponding actions. After all, the singular environment is by its very nature extremely flexible, turbulent, potentially unfavorable and destructive.

Successful management systems in the conditions of adaptation to the realities of the fourth industrial revolution will gradually move away from hierarchical structures to innovative models based on network interaction and cooperation. From a strategic point of view, the existing level of management and awareness of current changes in all areas is extremely low compared to the need to rethink economic, social and political systems to respond to the challenges of the fourth industrial revolution. As a result, the national and global organizational structures necessary for the regulated diffusion of innovation are inadequate or non-existent. There is also a lack of a consistent, positive and unified concept at the global level, which could define the opportunities and challenges of the fourth industrial revolution and which is of fundamental importance for involving different strata and communities in the process, as well as preventing a negative reaction of society to radical changes.

The specified factors determine the need for changes in the management system in the direction of increasing its innovativeness. They should maximally adapt the nature and methods of management support of the technological, economic, social and political processes of the fourth industrial revolution in order for these processes to be as efficient and effective as possible from the point of view of the development of human society and his safety. In each individual case, a specific manifestation of innovative management is managerial innovation.

Management innovation is most often understood as a special form of changing existing principles, structure, procedures, methods, techniques and/or any elements of the organization's management system to radically new ones, which is the result of creative activity [2]. Management innovations, on the one hand, are the result of the interaction of fundamental management science, analytics and management practice.

At the level of individual business entities, management innovations such as



controlling, reengineering, system intervention strategy, neuro-network technologies, information-associative modeling, structural-functional modeling, etc. have become widespread. The successful implementation of the specified innovations requires the presence of the following conditions: a systemic vision of management changes on the part of the management, an established innovation infrastructure, a high level of management professionalism, timeliness of innovations and their compliance with general goals, staff loyalty to innovative changes and development, approval or support of innovative solutions by external consultants.

Increasing the efficiency of the innovation system and innovation activity is achieved thanks to the successful solution of the following problems:

- lack of an effective state strategy for innovative development with a clear allocation of global priorities, dominant high-tech industries;
- lack of trust in the relationship between participants and partners of the innovation system;
- an unsatisfactory system of legal regulation and legislative support for the functioning of the ecosystem and innovative development;
- lack of domestic experience and proper culture of borrowing the best world standards in this field;
- weak initiative of the state in stimulating the development of the innovative ecosystem, innovative infrastructure, favorable innovative climate;
- imperfection of legislation in the field of prevention of imitation of innovations and pseudo-innovative activities.

These and other problems are the result of the general low-quality economic, social and legal policy of the state, as well as weak management in the system of innovative activity. Therefore, the creation of an effective innovation system requires a preliminary assessment of its current state, the identification of weaknesses, a review of the relationships between the subjects of the innovation process, the search for motivational points of contact for the establishment of partnership rather than competitive relations, the establishment of institutional norms and rules that are economically beneficial for all participants, the maximum use of information resources and intellectual potential of everyone.

In addition, innovativeness represents a certain field of knowledge conceptualized in innovation management. Therefore, it is aimed at the qualitative change of the socioeconomic system. This is a complex and long process that requires systematic regulation, constant reproduction and provision of sufficient conditions for this. Consideration of innovativeness as a modern category will contribute to the development of theoretical discourse, enriching scientific research. Consideration of innovativeness as a process is necessary for the search for an effective mechanism for the transformation of scientific knowledge, innovative ideas into material form, and for the rapid passage of all stages of the life cycle of innovations. The operational aspect of innovativeness is designed to highlight weak points in order to develop a strategic state policy aimed at developing innovative activity and increasing the competitiveness of domestic enterprises. The outlook aspect of innovativeness reflects the emergence of a new quality. It articulates to new values designed to provide enterprises with sustainable competitive



advantages in the market and the realization of their mission, while complying with the ethical norms of interaction of the subjects of the innovation ecosystem. Thus, the systemic consideration of innovativeness is an important methodological basis for the formation of strategically important competitive advantages in the globalized world, the modern stage of which is determined, in particular, by integrated structures, which, in addition, are the basis for maintaining the stability of production in developed countries.

Summary and conclusions.

The study of the main trends in the development of innovative structures in Ukraine in recent years confirms that the number of innovatively active enterprises in Ukraine is growing and this trend continues to persist. In modern business conditions, the management system in innovative structures requires proper information providing, which is formed within the framework of strategic management accounting, as a structural part of accounting and analytical system of such structures. Reliable information providing of process management needs of these structures requires substantiation of new accounting technologies, which should take into account the risky nature of innovations and the main trends in the development of strategic management accounting tools.

Conceptually, the management accounting of any innovative enterprise is an information flow and a methodological apparatus, which together make it possible, on the one hand, to build one's own line of business, and, on the other hand, to be in interaction and mutual cooperation with other enterprises. From the point of view of the accounting organization, this duality makes it possible to talk about the possibility of synthesis in strategic accounting of both financial and managerial accounting.

References:

1. Про інноваційну діяльність: Закон України. Редакція від 05.12.2012, підстава 5460-VI. URL: <https://zakon.rada.gov.ua/laws/show/40-15> (дата звернення: 20.11.2023).
2. Шаповал С.С., Фоменко Г. С., Плешу Г. Управлінські інновації як головний чинник реструктуризації підприємств-суб'єктів ЗЕД. *Труди Одеського політехнічного університету*. 2009. № 1 (31). С. 193-198.
3. Шумпетер Й. Теория экономического развития. Капитализм, социализм и демократия. М. : Эксмо, 2007. 864 с.

Анотація. В роботі розглядається концепція управлінського обліку в системі інформаційного забезпечення інноваційної парадигми. Досліджено сутнісні характеристики інноваційної діяльності. З'ясовано місце управлінської сфери в інноваційній парадигмі. Визначено, що управлінський процес є одним з найважливіших об'єктів впровадження інновацій. Проаналізовано глобальні тенденції, що викликають потребу у впровадженні інструментів інноваційного управління. Розглянуто оцінку системи інноваційного управління крізь призму принципів А. Файоля. Узагальнено етапи розвитку досліджень щодо організації інноваційного управління: факторний підхід, функціональна концепція, системний і ситуаційний підходи. Досліджено особливості функціонування управлінських систем в умовах адаптації до реалій четвертої промислової революції. Доведено необхідність змін в системі управління в бік підвищення його інноваційності. З'ясовано сутність, види та умови успішної реалізації управлінських інновацій. Систематизовано проблеми підвищення



ефективності функціонування інноваційної системи й інноваційної діяльності. Доведено, що в сучасних умовах господарювання система управління в інноваційних структурах потребує належного інформаційного забезпечення, яке формується у межах стратегічного управлінського обліку, як складової обліково-аналітичної системи таких структур і вимагає обґрунтування нових облікових технологій, які мають враховувати ризикову природу інновацій та основні тенденції розвитку інструментів стратегічного управлінського обліку.

Ключові слова: концепція управлінського обліку, інноваційна парадигма, інформаційне забезпечення, інноваційна діяльність, інноваційні структури, інноваційне управління, управлінські інновації, стратегічний управлінський облік

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