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**THE ESSENCE AND FEATURES
OF INNOVATIVE MANAGEMENT**

Abstract. The article explores the concept of «innovative management», studied the history of the formation of the theory of this issue and the combination with other derivatives in terms of content and essence. The «structure» of innovation management was also considered from two positions, where the description included the following categories – object, subject, purpose, content, impact levels, and stages, etc. The main functions of management of innovative activity are presented. Scientific works of scientists in the field of innovation and management are studied and listed. The author's definitions of the concepts "management of innovative activity», «innovation management», «management of innovations» and «innovative management» are given. The difference between the definitions is shown. The distinctions in the understanding of combinations of the words innovation and management are presented according to the basic concepts and directions: «innovative management», «innovation management», «management of innovations», «innovative control». The specific functional areas of innovation management in modern conditions at three levels of management are revealed. The authors presented many definitions of the concept of «innovative management». After analyzing them, they were divided into four groups: as a process, as a system, as a change, as a result. The authors have developed and proposed types of innovative management. Innovative management has been proposed and reviewed at the micro, meso and macro level. For each level, control functions are listed. It was concluded that in the present conditions, the main management paradigm is the new management and its quality.

Keywords: management, innovation, innovative management, types of management, management levels, innovation management.

Introduction

The qualitative changes taking place in modern economic conditions contain an innovative component in management and development tactics.

Intensive growth of innovation in the economy has become all-encompassing. The positive shifts in the industry are explained by the increase in them of information, intellectual and innovative elements. All this predetermines the transformation in the management of business entities namely the increasing role of innovation impact.

Methods

The basis of the study was the theoretical and practical aspects in the field of formation of accounting policies in order to manage the economic activity of the enterprise, set out in the works of domestic and foreign scientists. General scientific methods of analysis and synthesis were used for processing primary information; monographic, abstract-logical, economic-statistical, design-constructive research methods.

Scientific statements, conclusions, and recommendations were obtained on the basis of such general scientific methods and techniques as induction, deduction, analysis, synthesis, systems approach, comparative assessment, etc.

Results

The first researchers to introduce scientific management methods are Taylor F.W., Lenin V.I., Mayo E., Edison T.A., Siemens V.F., Schumpeter I.A., Kondratiev N.D., Drucker P., Maslow A.H., Bell D., Welch J., Jobs Art., Deming E., and others.

Their works were related to the study of a wide range of issues, including the consideration of scientific methods and management techniques at industrial enterprises, aimed at reducing working time and automation. At the same time, the importance of humanizing labor, making collegial decisions and motivation was noted. The terms «innovative entrepreneur», «innovation clusters», and «innovation waves» were introduced for the first time. [1, p.37].

The theoretical foundations of innovation management were also considered by such scholars as S. B. Abdygaparova, T.I. Isakhmetov, M.Sh. Alinov, Askarov E.S., Moncheva N., Perlaki I., Hartman V.D., Mansfield E., Foster R, Twist B., Rogers E., Prigozhin A.I., Zyavlin P.N., Kazantsev A.K., Medynsky V.G., Morozova Yu.P., Ogoleva N.G., Kovalev N.T., and others.

In the history of the formation of scientific management of most countries that have passed this way, the following periods can be distinguished: 1930-1950. - characterized as a period of industrialization, radical structural changes, a strong centralization of power. 1950-early 60s – the rise of scientific management is characteristic, since the structure of the national economy is complicated, a diversified industry is formed. This period is associated with the new «managerial boom» the emergence of cybernetics. 1960-1970 – trends in the integration of various management approaches. Since 1980, there is a need for radical shifts in the ratio of central management and economic freedom of production units, new measures combining planning and market methods, expanding the independence of the main links of the economy.

The combination of the concepts of «innovation» and «management» is dictated by the development of the science of management and the strengthening of the point of view of considering it from new perspectives, positions and methods.

You can find several interpretations and combinations of these two concepts, for example, «innovative management», «management of innovations», «innovation management», «innovative control (management)». But all of them are united by a process aimed at «updating», the connection of the two concepts: «new» and «management».

The distinctions in the understanding of combinations of these words can be presented in the following way:

- «innovative management» is a general process based on the introduction of innovations in any activity systems by establishing a new order, a new custom, an invention, a new phenomenon, new technologies. At the same time, the process of translating innovations into innovations requires the expenditure of various resources, including capital (investment), energy and time [2, p. 38];

- «management of innovations» is a tool for the creation, development, and dissemination of innovations and the resulting changes in the technical, technological, economic, organizational and social systems;

- «innovation management» is an innovation management process associated with the management of the scientific environment (obtaining new knowledge, conducting basic and applied research, developing new technologies); enterprise management (optimization of organizational structures, restructuring, rationalization of the organization of production and non-production processes); personnel management (staff development, seminars and trainings, personnel orientation towards a scientific approach to work, development of incentive systems and remuneration, etc.).

- «innovative control (management)» is one of the elements of general management, the scope of which functionality consists in the management of organizations and society as a whole by innovative methods. Where goals are effective gradual or cardinal improvement in the quality of goods realized, production and social processes. The main functions are in forecasting innovation development, its planning, organization, motivation, accounting and control of changes, as well as in their analysis and evaluation [3, p. 10].

Innovative control (management) are given many definitions:

- 1) the process of reincarnation of a new idea for the concept of product, business process, marketing, technology, materials and components into a commercial project for the world, a country or a specific region in order to maximize profits and optimize risks as part of the overall business system strategy [4, 5];

2) the final result of the creative activity, which was embodied in the form of a new or improved product or technology, practically applicable and capable of satisfying certain needs. In other words, innovation is the result of the implementation of new ideas and knowledge with the aim of their practical use to meet certain consumer needs [6, p. 52];

3) the final result of the creation and development (introduction) of a fundamentally new or modified means (innovation) that satisfies competitive social needs and gives a number of effects (economic, scientific and technical, social, technological) [7, p. 35];

4) a new or improved product (product, work, service) method (technology) of its production or use, innovation or improvement in the organization and (or) economy of production and (or) product sales, providing economic benefits, creating the conditions for such benefits or improving consumer properties of products (goods, works, services) [8, p. 19];

5) change (new combinations) of production factors, motivated by an entrepreneurial spirit, with the aim of introducing and using new types of goods, new ways and methods of production, new sources of raw materials, developing new markets, new forms of production organization (reorganization with the aim of monopolization) [9, p. 31];

6) a special tool of entrepreneurs, a means by which they use change as a chance to implement a new type of business or services. Innovation is the development and introduction of a new, previously non-existent, with the help of which the old, well-known elements give a new outline to the economy of this business [10, p. 14];

7) a set of principles, methods, and forms of management of innovation processes, innovation activity, organizational structures and their personnel engaged in this activity [11].

8) a special kind of professional activity aimed at achieving specific innovative results in the market conditions, based on the rational use of scientific, labor, material and financial capital, the application of diverse principles, functions and methods of the economic management mechanism [12, p.31];

9) one of the directions of management strategy carried out at the highest level of company management [13, p. 388];

10) special organizational and management activities aimed at obtaining economic, social and environmental results of the functioning of the socio-economic system through the creation and preferential use in production and business activities of innovation as the main products, as well as effective labor factors [14, p. 303];

11) a set of principles, methods, and forms of management of innovative processes, organizational structures and their personnel engaged in this activity [15, p. 18];

12) one of the many varieties of functional management, the object of which are innovative processes [16, p. 8];

13) managing the processes of creating and introducing innovations, solving problems of their practical application [17, p. 12];

14) a special type of management activity aimed at obtaining the greatest effect through the use of innovations in various fields of activity [18, p. 26];

15) activities for the development and management of innovative activities with the maximum result and the expenditure of minimum resources [1, p. 26];

Having analyzed the above definitions presented, they can be generalized and divided into four groups. Table 1 presents the concept of «innovative control» from different points of view of research scientists.

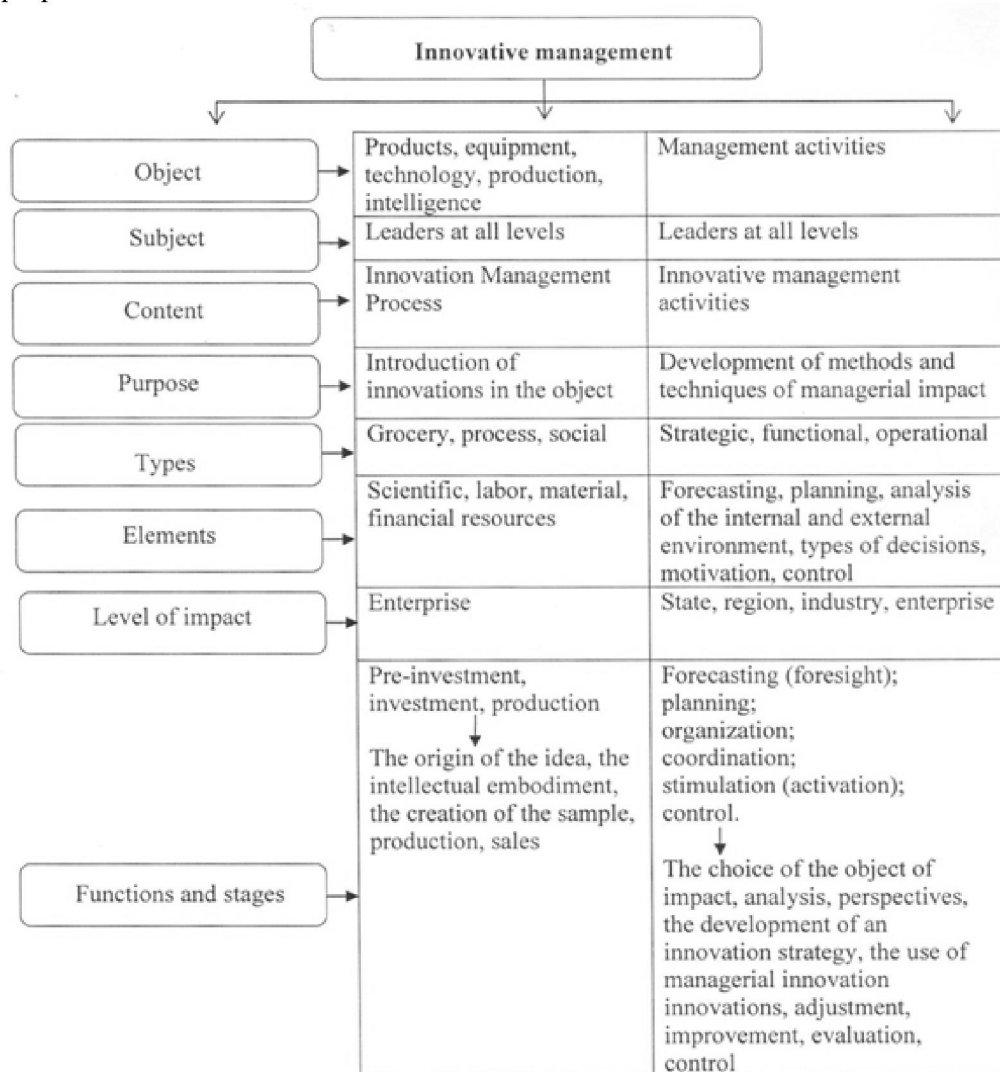
Strategic sustainable development of the economy is impossible without the systematic continuous use of products of scientific, innovation activity. With all the variety of interpretations, there are two main types of innovation control (management) in figure 1. The fundamental difference of the species is the innovation management facility. Management may be associated with the introduction of innovations in production and technology in order to create a new product. Also, innovative control (management) can be associated with the development of new management methods, leading to improved management, allowing to achieve common goals and strategies at all socio-economic levels.

Table 1 – Definition of the concept of «Innovative Management» in the works of researchers

№	Classification feature	Description	Authors
1	As a process	Introduction of innovation	V.G. Anisimov, S.B. Abdygaparova
2	As a change	Perfection and reincarnation	N.S. Bezugla, V.A. Dianova, A.A. Shemetev, J. Schumpeter
3	As a result	The embodiment in the form of a product, technology, technology, new type of business	A.V. Surin, D.V. Sokolov, A.B. Titov, M.M. Shabanova, A.S. Kulagin, Peter F. Drucker, E.S. Askarov, R.A. Fatkhutdinov, V.G. Medynsky
4	As a system	The set of methods, principles, techniques, resources	S.V. Korotky, T.I. Isakhmetov, M.Sh. Alinov, I.N. Gerchikova

Note: compiled by the authors

As can be seen from Figure 1, the object of management, in the first case, can be the result of the creative process in the form of a new product, technology, etc. Innovation in this understanding is characterized by the following main points. First, as an innovation, an object is understood - a new consumer value based on the achievements of science and technology. Secondly, the emphasis is on the utilitarian side of innovation – the ability to satisfy social needs with a great «beneficial effect». In this case, the most important feature of innovation is the technical novelty, as well as the novelty of its consumer properties.



Another variant of the object of innovation management is management. In other words, this is the use of new special management tools by managers to realize their potential.

Objects are affected by subjects – leaders of all levels (represented equally in both types), which are divided into higher, middle and lower. The highest level, top managers, carry out management in general or are deputy top managers.

The middle level of management «middle managers» is represented by the heads of departments (heads of departments, industries, branches, divisions). These managers solve questions of a general nature for their structural divisions and are responsible for the main activity of the organization. The lowest level of management supervisors, are represented by managers who are directly subordinate to the executors: workers ordinary employees and specialists. Supervisors include heads of groups, teams, sectors, organizers of certain types of work and operations.

The purpose and content of innovative management in both cases is a continuation of the disclosure of the essence of the objects of management.

Types of innovations for the first type of management can be:

- grocery – new products consumed in the sphere of production (as means of production) or in the sphere of consumption (as an object of consumption or labor);
- process – new technologies, equipment for the production of manufactured or new products;
- social – new methods of work organization and production management. It should be noted that the following ways of innovation are possible: radical – fundamentally new products, technology, methods of organization and management; combinatorial – the use of various combinations of structural connection of elements; modifying – improvements, additions to the original designs, forms, principles.

Types of innovations by the second type of management are divided into:

- strategic management, which involves the development of a common set of strategies, their distribution over time, the formation of success potential and the provision of strategic control over their implementation;
- functional (or special) management is to manage certain areas of activity or links;
- operational management involves the development of tactical and operational measures aimed at the practical implementation of the adopted strategies for the development of the organization [16, p. 7].

The first type of control covers one level of impact, the micro level. The second, besides the enterprise, can influence on the meso and macro levels.

In general, the levels involved in the innovation process can be represented in the form of the three most typical groups.

Group A. State economic systems and administrative bodies (republican, regional, branch):

- government agencies (ministries, committees, departments, etc.);
- regional governments;
- large state enterprises;
- interstate joint management bodies, enterprises and organizations;
- state research institutes, design bureaus, design and engineering, design and technological and other organizations, as well as similar objects that are the property of the state and local self-government bodies.

Group B. Uncommercial profitless scientific and educational budget organizations:

- state research centers and regional budget research centers;
- academic and industry (interdisciplinary) technopolises, experimental bases, laboratories and test sites;
- institutions, organizations of scientific and technical infrastructure (information services, libraries, data banks, etc.);
- state and regional universities, higher educational institutions, training centers, organizations for staff development.

Group C. Entrepreneurial economic systems that operate, as a rule, on the principles of self-sufficiency:

- transnational and intergovernmental joint business structures (companies, joint-stock companies, etc.);
- association, concerns, syndicates;
- industrial and financial groups, holdings;

- corporations and firms;
- state-business mixed companies (joint-stock companies);
- private enterprises [19, p. 32].

Functions and stages are combined into a single as they are complementary to each other. The functions of innovation management include: pre-investment - analysis of ideas, collection and processing of information; investment - identifying participants, determining volumes, stages and control points, identifying all possible risks and developing ways to prevent them, calculating the amount of resources; production - the creation of the final product, tracking progress, solving problems, production, evaluation of the object, assessment of acquired experience.

The functions of the second type are represented by the classic management functions. The forecasting function in innovation management covers the development of a long-term change in the technical, technological and economic state of the management object as a whole and its various parts. The result of forecasting are forecasts, that is, the prediction of the corresponding changes. A feature of forecasting innovation is the alternative technical and economic indicators incorporated in the creation of innovation. In this process, it is important to correctly identify the emerging trends in scientific and technological progress and trends in consumer demand, as well as marketing research. Managing innovation based on their foresight requires the development of a certain sense of market mechanism and intuition from the manager, as well as the use of flexible emergency solutions.

Planning covers the full range of activities for the development of targets in the innovation process, and to translate them into practice.

The function of an organization in innovation management comes down to uniting people who jointly implement an investment program based on some rules and procedures. The latter include the creation of government bodies, the construction of the structure of the management apparatus, the establishment of interconnections between management units, the development of guidelines, instructions, etc.

The coordination function in innovation management means the consistency of work at all levels of the management system, management personnel and individual specialists involved in the development of innovations.

The incentive function in innovation management is expressed in encouraging employees to be interested in the results of their work in creating and implementing innovations.

The control function in innovation management consists in checking the organization of the innovation process, the plan for creating and implementing innovations, etc. Through control, information is collected on the use of innovations, on the progress of the life cycle of this innovation, changes are made to investment programs, and to the organization of innovation management. Control involves the analysis of technical and economic results [18, p.21].

The considered analytical vision of the process of innovative management can be supplemented with levels at which this type of management can be implemented. Allocate vertical and horizontal separation levels.

There are three vertical levels differentiated by subjects of management: -macro, -meso, and microlevels.

- 1) the highest (macro level) – state administration bodies, the parliament, the presidential apparatus;
- 2) medium (meso level) – corporations, associations, ministries, departments;
- 3) basic (micro level) – enterprises, small business units.

The macro level is associated with the rational placement and efficient use of scientific and technological potential, increasing the contribution of science and technology to the development of an innovative economy, ensuring progressive structural changes in the production sector, increasing its efficiency and competitiveness by creating innovative products and technologies, improving the environmental situation and protecting information resources, the integration of science and education. Based on the foregoing, the objects of management will be the state research and innovation system, the innovative industrial policy, the business environment, the innovation infrastructure, the link between science and production, etc.

The micro level is associated with the process of bringing a scientific idea or technical invention to the stage of practical use, generating income, as well as linking to this process technical, economic and other changes in the social environment. In this regard, the objects of management will be: innovative

programs and projects; new knowledge and intellectual products; manufacturing equipment and processes; production and business infrastructure; organizational and technical solutions of production, administrative, commercial or other nature, significantly improving the structure and quality of production and the social sphere; raw materials, means of their extraction and processing; mechanisms of formation of the consumer market and sales of commodity products.

At all three levels, there are three horizontal sub-levels, differentiable depending on the duration of the solution of the corresponding tasks. In particular stand out: strategic management; tactical control; operational management. Thus, at the level of strategic management, the development prospects of the society as a whole as well as individual areas and spheres in the long term, are determined. As a rule, global economic tasks are solved, associated with an increase in the rate of economic growth, curbing inflation, etc. Tactical management is characterized by a shorter time period for implementation, in connection with which specific measures are planned to achieve the intended goals. At the same time, within the tactical framework, certain aspects of strategic management may be adjusted for national purposes, for example, in a situation of changing individual circumstances or they may be overlooked in the process of formulating a strategic management plan. For agencies and officials involved at the level of strategic management, there are serious requirements for professionalism, flexibility of thinking as well as the ability to take independent initiative decisions. Operational management is aimed at solving newly emerging and current tasks and problem situations, in connection with which it is supposed to have a clear purposeful activity aimed at solving a specific task, based on the current circumstances.

Conclusion

Thus, considering the innovative management, it is important to distinguish between the object, that is, what the managerial impact and efforts will be directed to. Those management measures that are relevant, will bring the maximum effect and should be prioritized. Here we should not forget that the synthesis of the two above described trajectories in the description of innovative management is also possible. That is, to apply new management methods in building a line of conduct in innovation.

In general, it should be noted that any management activity, including innovation, is aimed at one strategic goal - an economic benefit, which is largely determined by the quality of management at all levels of the management hierarchy. The slogan "from quality management to quality management" has a profound meaning in this context. The main management paradigm is the new management and its quality. It is caused by the emergence of new requirements, new programs, new operating conditions. Achieving new high-quality management, largely depends on the use of advanced ideas, more advanced techniques and organizational forms of management.

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ИННОВАЦИЯЛЫҚ БАСҚАРУДЫҢ МӘНІ МЕН ЕРЕКШЕЛІКТЕРІ

Аннотация. Мақалада "инновациялық басқару" ұғымы зерттелді, осы мәселе теориясының қалыптасу тарихы және мазмұны мен мәні бойынша басқа да туынды терминдермен үйлесуі зерттелді. Сондай – ақ, сипаттамаға келесі санаттар-объект, субъект, мақсат, мазмұны, әсер ету деңгейлері және т. б. кіретін инновациялық басқарудың "құрылымы" екі позициядан қаралды. Инновациялық қызметті басқарудың негізгі функциялары ұсынылған. Инновациялар, басқару саласындағы ғалымдардың ғылыми еңбектері зерттелген және тізімделген. "Инновациялық қызметті басқару", «инновацияларды басқару», «инновациялардың менеджменті» және "инновациялық менеджмент" ұғымдарының авторлық анықтамалары келтірілген. Ұғымдардың арасындағы айырмашылығы көрсетілген. Инновациялар мен басқару сөз тіркесін түсінудегі айырмашылығы негізгі ұғымдар мен бағыттар бойынша ұсынылған: "инновациялық қызметті басқару", «инновацияларды басқару», «инновациялардың менеджменті» және "инновациялық менеджмент". Басқару-дың үш деңгейінде қазіргі заманғы жағдайларда инновациялық менеджменттің ерекше функционалдық салалары ашылды. Авторлар «инновациялық басқару» ұғымның көп анықтамаларын ұсынды. Оларды талдап, төрт топқа бөлді: үрдіс ретінде, жүйе ретінде, өзгерістер ретінде, нәтиже ретінде. Авторлармен инновациялық басқарудың түрлері әзірленіп, ұсынылған. Инновациялық үрдіс микро, мезо, макродеңгейінде ұсынылып, қарастырылған. Әр деңгей үшін басқару функциялары тізімделген. Қазіргі жағдайда басқарудың негізгі парадигмасы - бұл жаңа басқару мен оның сапасы деген қорытынды жасалынған.

Түйін сөздер: басқару, инновациялар, инновациялық менеджмент, басқару түрлері, басқару деңгейлері, инновациялық менеджмент.

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СУЩНОСТЬ И ОСОБЕННОСТИ ИННОВАЦИОННОГО УПРАВЛЕНИЯ

Аннотация. В статье исследовано понятие «инновационное управление», изучена история становления теории данного вопроса и сочетание с другими производными по содержанию и сущности терминами. Также рассмотрена «структура» инновационного управления с двух позиций, где в описание входили следующие категории – объект, субъект, цель, содержание, уровни воздействия и этапы и др. Представлены основные функции управления инновационной деятельностью. Изучены и перечислены научные труды ученых в области инноваций, управления. Приведены авторские определения понятий «управление инновационной деятельностью», «управление инновациями», «менеджмент инноваций» и «инновационный менеджмент». Показана разница между определениями. Разграничения в понимании сочетаний слов инновации и управление представлены по основным понятиям и направлениям: «инновационный менеджмент», «управление инновациями», «менеджмент инноваций», «инновационное управление». Раскрыты специфические функциональные области инновационного менеджмента в современных условиях на трех уровнях управления. Авторы представили множество определений понятия «инновационное управление». Проанализировав их, разделили на четыре группы: как процесс, как систему, как изменение, как результат. Авторами разработаны и предложены виды инновационного управления. Инновационное управление предложено и рассмотрено на микро, мезо и макроуровне. Для каждого из уровней перечислены функции управления. Сделан вывод, что в нынешних условиях, главная парадигма управления – это новое управление и его качество.

Ключевые слова: управление, инновации, инновационный менеджмент, виды управления, уровни менеджмента, инновационное управление.

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