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Classification of innovations in higher education system and mechanisms of their management

Abstract. Need of questions' studying of innovations' management for the higher education system during an era of its reforming it is caused by a significant role of the industry in development of the country and society and also the specific nature of innovation in the sphere. There is the article purpose determined within this direction: to present the research results of theoretical fundamentals of typology of innovations and mechanisms of management of them in the modern educational sphere. Conclusions of authors are based on application of the analysis methods, synthesis, generalization, induction and deduction, comparison. Researchers carried out the comparative analysis of interpretation of innovations in the higher education, productive and procedural approaches to innovations and classifications of types of innovations corresponding to them in higher education institutions are studied. According to authors the difference in approaches of interpretation of "innovations" term predetermines also the subsequent divergence in understanding of the mechanism of management of them. At application of productive approach to innovations the main focus of the mechanism of management is directed by them to the organization of use and improvement of an innovation. The coverage of the mechanism of management of innovations at procedural approach is limited to management of origin, introduction, development of innovations. The review, comparison and further systematization of theoretical aspects of the management mechanism of innovations of domestic and foreign scientists were sources of conclusions about features and specifics of management of innovations in the higher education system of the Republic of Kazakhstan.

Key words: innovation, higher education, classification of innovations in higher education, higher education institution, the mechanism of management.

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Introduction: Now in economic literature there is no standard terminology in the innovative activity field in education including the highest. Researches of modern scientists-economists in the field of innovations' management are devoted to mainly production sphere. Meanwhile owing to its specifics questions of creation, realization, improvement and use of innovations are important for education more in comparison with other life spheres of society and state. The new knowledge and methods of their search and development based on the last achievements of STP set a task of innovative transformation of processes for higher education institutions. Results of theoretical researches in which the shortcoming is felt recently are a basis of the new ideas' implementation in education.

Task setting. Due to the aforesaid it is advisable to authors to begin a research of a creation perspective of organizational mechanisms of innovations' management with the analysis and systematization of the existing approaches to "innovation", "mechanism of management" concepts in relation to education, to carry out innovations' differentiation and corresponding mechanisms, to systematize "mechanism" and "the mechanism of management" definitions including in relation to higher education.

Research methods. Materials (including dissertation) researches of scientists in the management field formed theoretical base of a research. Comparison, the analysis and synthesis of data and the subsequent systematization allowed to develop conclusions some, in turn, are presented graphically. As materials of a research also current data on dynamics of higher education institutions development served in the Republic of Kazakhstan, theoretical and analytical articles devoted to problems of education development in the Republic of Kazakhstan in modern conditions.

Results and discussion. Innovations first of all can be connected with technical and technological and productions which purpose is an economic situation of subjects improvement. At the same time the innovation is a many-sided and multipurpose concept and is characteristic also for the social and humanitarian and cultural sphere.

The “innovation” term comes from Latin “novatio” that means “updating” or “change” and the prefix “in” that is transferred as “to the direction”. I.e. the “innovation” term can be translated literally as “in the direction of changes”. The “innovation” concept for the first time appeared in scientific research of the 19th century, however gained distribution in the 20th century in J. Schumpeter works who considered an innovation in the production systems sphere in the form of new scientific and organizational combination of production factors motivated with entrepreneurial spirit; in other words it is or a combination in the new way of the existing production factors, either new goods or methods which are not tested yet or production for the new market and also production with the new means’ use of production [1].

The set of approaches to “innovation” concept of modern economic science come down to two main directions - either to effectiveness or to procedurality. The following authors treat representatives of the first direction: Mutanov G.M., Baimuratov U.B., Kantarbayeva A.K., Askarov E.S., Alinov A.Sh., Sautpayeva Sh.E., Gokhberg L.M., Molchanov I.N., Medynsky V.G. and Ildemenov S.V., Avsyannikov N.M., Gubarkov S.V., Kokurin D.I., Kulagin A.S., Minnikhanov R.N., Krayushkin O.V., Fatkhutdinov R.A., Raizberg B.A., Huchek M., Gorfinkel V.Ya., Sokolov D.V., Titov A.B. and Shabanov M. M., Lapin N.I., Rappoport V.Sh., Begidzhanov P.M. and etc. The procedural view of an innovation meets in Abdygapparova S.B., Titov A.B., Messi D. works, Kvintas P. and Will D., Goldstein G.Ya., Bezdudny F.F., Smirnova G.A. and Nechayeva O.D., Kovalyov R.D., Valente T., Cook Ya. and Myers P., Dodgson M., Vodachek L., Glukhova V.V., Kabakova V.S., Gvishiani D.M., Tvis B., Yakovts Yu.V., Santo B., Morozova Yu.P., Tarda G., Zavlina P.N. and Vasilyeva A.V., Balabanova I.T., Varnet X., Hamilton D., Gross N., Dickinson N., Miles M., Haberman N., Adams A. Vasset Dzh. Let’s provide some of interpretation in table 1.

Table 1

Approaches to the “innovation” concept

Innovation as a result	
Author	Interpretation
Mutanov G.M.	The innovation introduced in any form and in any sphere of human activity providing the high-quality change of processes, products and services characterized by the following sets of properties: - can be the result of any kind of purposeful scientific and (or) practical activities or have accidental origin; - to have practical applicability; - can create positive and negative social and economic consequences for society; - can not have commercial value.
Baimuratov U.B.	Result of financial means’ investment into intellectual development for the purpose of receiving profit by means of the subsequent process of introduction in production of this development for achievement of leadership in the market.
Kantarbayeva A.K.	Commercially realized technical, technological, administrative or other innovation.
Askarov E.S.	Introduction of new knowledge-intensive developments in practice and obtaining real advantage for people consumers.

Sautpayeva Sh.E.	The object introduced to various spheres of the person activity, received as a result of the conducted scientific research, opening different from the previous analogs essentially new qualities and properties, leading to changes in a field of activity, providing satisfaction of the existing requirements in the market and leading to receiving an economic benefit by subjects of the market.
Alinov M.Sh.	Result of the new idea realization in any sphere of the life and human activity promoting satisfaction existing or to creation of new requirement in the market and the bringing economic effect
Gokhberg L.M.	The end result of innovative activity which received the embodiment in the new or advanced product form.
Molchanov I.N.	The result of scientific work directed to process of public practice improvement and intended for direct realization in social production.
Medynsky V.G., Ildemenov S.V.	The object introduced in production as a result of the conducted scientific research or the made discovery is qualitatively different from the previous analogue.
Avsyannikov N.M.	Result of practical or scientific and technical development of an innovation.
Kokurin D.I.	Result of activities for updating, transformation of the previous activities for updating, transformation of the previous activity leading to replacement of some elements with others or addition which are already available new.
Kulagin A.S.	The new or improved products (goods, work, service), ways (technology) of its production or application, innovation or improvement in the sphere of the organization and (or) economy of production and (or) product sales providing an economic benefit, creating conditions of such benefit or improving consumer products' properties. (goods, work, service)
Minnikhanov R.N.	The end result of scientific research or opening is qualitatively different from the previous analogue and introduced in production.
Krayushkin O.V.	Change in initial structure of a production system which brings in emergence of its qualitatively new state.
Fatkhutdinov R.A.	The end result of an innovation introduction for the purpose of change of the management object and receiving economic, social, ecological, scientific and technical or other effect type.
Raizberg B.A.	Innovation in the field of the equipment, technologies, the workplace management based on use of science achievements and the best practices and also these innovations' use in the most different areas and fields of activity.
Innovation as a process	
Author	Interpretation
Abdygapparova S.B.	Process of the innovation introduction, its use with the replication possibility, repeated repetition on other objects
Messi D., Kvintas P., Will D.	The first use of a new product, process or a system; the complex process including such types of activity as researches, design, development and the organization of a new product production, process or a system.
Goldstein G.Ya.	Technical and economic cycle in which use of the researches' sphere results and development directly causes technical and economic changes which make the return impact on activity of this sphere.
Bezudny F.F., Smirnova G.A., Nechaeva O.D.	The process of the new idea implementation in any sphere of life and activity promoting satisfaction of the existing requirement in the market and bringing economic effect.
Kovalyov R.D.	Complex process of creation, distribution and use of new practical means of the best satisfaction of the known need of people.
Valente T.	Change in initial structure of a production organism i.e. as transition from internal structure to a new state, changes both with positive and with negative social and economic consequences.
Kuk Ya., Mayers P.	It is a full process from the idea to the ready-made product realized in the market.
Dodgson M.	The scientific, technological, organizational and financial activity leading to commercial introduction new (or improved) a product or new (or improved) process of production or the equipment.

Vodachek L.	Target change in functioning of the enterprise as a system.
Glukhov V.V.	Use of the research and development results directed to the process improvement of production activity, economic, legal and social relations in the field of science, cultures, educations and other fields of the society activity.
Tviss B.	Process in which the invention or the idea acquires the economic contents.
Yakovets Yu.V.	Implementation of high-quality changes in production.
Santo B.	Socially technical and economic process which through practical use of the ideas and inventions leads to creation of the first in properties products, technologies and in case it is guided by an economic benefit, profit.
Morozov Yu.P.	Process of development, mastering, operation and exhaustion of the productive and economic and social potential which is the cornerstone of an innovation.
Tard G.	Process of an invention development; production of new products or processes directed to change.
Note - Compiled by the authors based on the source [2-19]	

It should be noted that procedural approach found bigger distribution among the western scientists-economists while representatives of the Kazakhstan science and the countries of the former Soviet Union develop mainly productive approach to innovations in the researches. From domestic scientists - supporters of the process direction can be allocated Abdygapparova S.B. whose distinctive feature of the point of view on an innovation is the distribution aspect.

Adherents of productive approach allocate in the works a concept of innovative process, i.e. process of transformation of an innovation to commercially favorable result, since search, selection, innovation assessment before mass production of an innovative product; sets of the scientific and technological and organizational changes leading to creation of innovations, processes of distribution of an innovation [2,18].

Views of some representatives of procedural approach to innovations, thus, consider it as innovative process entirely (Morozov Yu.P.) or as its part (Kuk Ya., Myers P., Messi D., Kvintas P., Will D., Kovalyov R.D., Tard G.). The definitions of the listed and other authors given in the table, in our opinion, differ in bigger differentiation and an aspect in comparison with interpretation of representatives of productive approach. But irrespective of the direction researchers focus attention on changes of a product, system, activity, structure.

Supporters of productive approach to innovations – Sautpayeva Sh.E., Askarov E.S., Molchanov I.N., Medynsky V.G., Ildemenov S.V., Minnikhanov R.N. Raizberg B.A. consider an innovation or an innovation as the end result of the research activity directed to development, creation, distribution, use of innovations. In a sense the innovation is understood by them as the mastered product of scientific work, opening, applied scientific research. The leading Kazakhstan scientist Mutanov G.M. does not exclude the probability of accidental emergence of an innovation and not just as a result of purposeful scientific work or practical activities.

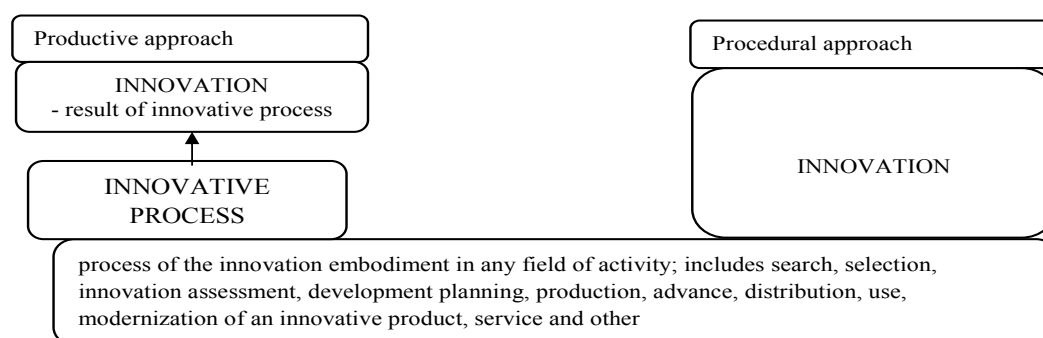


Figure 1 – Understanding of an innovation in procedural and productive approach

Mainly the interest of the listed authors is in the plane of the economic and social relations. The innovation is treated by them as steady state of the object which underwent realization of an innovation as a result of which it, an object, passed into qualitatively new state allowing satisfying more fully needs of the subjects interested in it and promoting effective implementation of functions.

The important property of an innovation in the form of the brought positive effect in a condition of an object, high-quality improvement of its functioning is accurately traced in the interpretation of Medynsky V.G., Ildemenov S.V., Kulagin A. S., Krayushkin O.V., Fatkhutdinov R.A. Really, the sense of an innovation consists in the benefit brought by it and improvement of an object in the form of process, work, service, goods, technology, etc. Along with their producers innovations bring benefit and to consumers whose satisfaction of needs as an important role of an innovation is noted by the Kazakhstan scientists Sautpayeva Sh.E., Askarov E.S., Alinov A.Sh. And the last emphasizes value of innovations in emergence of new requirements in the market.

For both approaches' supporters the practical embodiment and practical applicability are undoubted properties of an innovation while the commercial value and obligatory existence of positive effect, despite importance, for a small number of researchers (Mutanov G.M., Valente T.) do not treat its indisputable attributes. These authors in interpretation of a definition mention the probability of emergence of negative social and economic consequences and the introduction effect of an innovation. For example, processes of digitalization of processes in all spheres of activity of society inevitably aggravate an unemployment problem. Or for the economic object introducing innovations in connection with the changed social and economic operating conditions effect in the final of innovative process it can be other, than at a stage of planning of development of an innovation.

Nevertheless, judgments of possible lack of commercial value of an innovation of Mutanov G.M. and about probability of negative social and economic consequences of an innovation for Valente T. and Mutanova G. M. society are exceptions of opinions of most of supporters of both the productive, and procedural directions which prevailing part focus attention on obligatory existence of positive effect (economic, social, technical, ecological, etc.) from the innovation introduction. Favorable consequences of an innovation are of interest as to representatives of procedural approach (B. Santo, Bezdudny F.F., Smirnova G.A., Nechayev O.D.), and to supporters of productive approach (Kulagin A. S., Fatkhutdinov R.A.).

The financial and commercial aspect of the innovation realization for the producer is present at the Kazakhstan scientists' works Baymuratov U.B. and Kantarbayeva A.K. In particular, Baymuratov U.B. focuses attention on investment of financial means as important condition of the innovation realization. Deserves special attention of judgment of an innovation of the Kazakhstan scientist Stavbunik E.A. considering an innovation in micro and macroeconomic aspects (table 2).

Table 2

Micro and macroeconomic aspects of an innovation

Innovation	
Microeconomic aspect	Macroeconomic aspect
Use by economic subjects of the new receptions and combinations of economic activity irrespective of the field of economy connected with the expected improvements of process of production and directed to receiving profit	The new alternative option of rationalization of consumption of limited resources for the purpose of achievement of qualitatively new type of economic growth in the conditions of the accelerated operation of the law of increase in requirements reached by interaction of the government and market institutions
Note - Compiled by the author based on the source [20]	

In the innovation interpretation given by Morozov Yu.P. it is possible to notice analogy to the concept of the life cycle (LC) of an innovation which is found in works of followers of productive approach. The stages of potential of an innovation allocated with this researcher are similar to innovation LC stages.

At the same time, assessment of effect of innovations differs in subjectivity depending on the one who estimates and that considers as the purpose or a result of an innovation. In the light of the objects' contradictions of market economy and society cases of presence at an innovation, for example, positive technical, social effect, but, at the same time and negative, for example, ecological effect are frequent. Representatives of both directions in the interpretation of "innovation" term do not pay sufficient attention to the importance of an innovation for society.

In our opinion, when studying specifics of management of innovations in the higher education procedural approach is more acceptable because the definition "management" is more applicable to understanding of processes, than results. Management of an innovation as result is interpreted as the management it by distribution, use, modernization, but at the same time previous listed processes (search, selection of an innovation, development planning) remain outside the boundaries of the innovations' management. Procedural approach provides a full complex of actions both before introduction of an innovation, and after it.

It should be noted that the scientists researches in the field of innovative management are devoted mainly to innovations' realization in a business area, than to innovation in the non-productive industries. Also education in which understanding of innovations has certain specifics is not an exception, in particular, their main result is improvement of quality of educational services.

The analysis of judgments of an innovation of the productive and procedural approach supporters allows to mark out the general properties of an innovation:

- 1) improvement of a state, building, functionality of the innovation object. The product, process, structure, systems can act as an object;
- 2) practical applicability and embodiment, possibility of distribution;
- 3) existence of effect (mainly positive though also negative is not excluded) as for the subjects realizing innovations irrespective of the economy sphere, and for other interested subjects (consumers, the market) and for society in general;
- 4) mainly the result of scientific research and (or) practical activities in any sphere of human activity;
- 5) need for investment;
- 6) the process multistage of the innovation introduction.

If to consider an innovation as a result of innovative, i.e. creative process on development, distribution of an innovation then proceeding from conclusions of many authors it is possible to mark out its main properties:

- scientific and technical novelty;
- a practical externalization, i.e. used in one or several industries or spheres;
- being in demand, i.e. the idea realization leads to more qualitative satisfaction of the society requirement, therefore, commercial feasibility;
- price existence. Both the novelty and result of its externalization in the form of an innovation have the price which is formed under the influence of market mechanisms;
- cost existence. Innovative process is steadily followed by expenses.

In our opinion, at procedural approach the innovation considered as the set of creation procedures, distribution, improvement and use of an innovation, the new idea, technology, etc. possesses, the following lines:

- need of management, i.e. purposeful influence of the subject initiating an innovation on an object which in turn, as a result of innovative process changes the substantial or functional essence;

- value of accurately definite purpose of an innovation;
- duration or life cycle of an innovation.

According to us, the definition of an innovation given to Abdygapparova S.B. is most applicable to specifics of innovative processes in the higher education system (HE) of the Republic of Kazakhstan, especially in the context of management of it. Nature of innovations and processes of their introduction in various higher education institutions have similar lines owing to the fact that they are initiated by reforming of the higher education system in general. Therefore, it is possible to assume, as mechanisms of management of innovations in the HE organizations are similar.

As the innovation, having property of qualitative novelty arises and realizes the only time but an innovative process does not come to the end only with emergence of an innovation. Further follows the distribution, use, transformation, modernization, i.e. the high-quality changes which are not innovations by the novelty criterion but making the content of innovative process. Therefore, management of innovations can be considered purposeful impact on the mentioned processes.

The Russian economist Antamoshkina O.I. treats an innovation in education as the training process transformation leading to growth of quality of educational process “as an effective result from the innovation introduction” [21].

According to Pankova N.V. the level of educational process, higher in comparison with the previous analogue, new consumer qualities of an object are a basis of innovations [22]. The classification offered by Pankova N.V. differs in complexity despite a research of innovations in the educational plane. Meanwhile, innovations in higher education institutions are not limited only by educational ones. The modern higher school takes place both administrative and social and some other innovations. Nevertheless the system of multi-criteria classification of innovations offered by her is an interest for researchers of innovative activity in higher professional education (figure 2).

Interpretation of the innovations kinds in higher education in the Management of Oslo and authors Pankova N.V., Zhilyaeva I.A., Mezhonova L.V., Veselovskaya M.Ya. and Kulikova Yu.P. in many aspects are similar. Appropriate to stop on the most main types of innovations in more detail.

Product innovations of a higher educational institution are provided by introduction in educational process of new educational services carrying out the significant improvement which is followed by significant change of functional and consumer qualities of educational services. Also the introduced mastered results of research, developmental activity of scientific and innovative infrastructure of higher education institution act as product innovations of higher education institutions.

Today in the Republic of Kazakhstan it is possible to carry to product high school innovations widely realized in higher education institutions (including regional) new educational programs, programs of two-degree education, the program of distance learning. The mastered results of research and (or) design activity of scientific and innovative infrastructure of higher education institution- scientific laboratories, design offices, etc. also act as product innovations.

Process innovations assume the new considerable improved methods, techniques, technologies of providing educational services, significant changes in the equipment and the software of educational process of higher education institution new much more improved technological processes, the equipment and the software used in financial and economic, personnel, material, organizational and other support of higher education institution.

Within activity of higher education institution act as process innovations:

- growth of qualification and competences of higher-education teaching personnel;
- use of the progressive information and communication technologies including developed

in the higher education institution;

- application of electronic manuals and electronic library resources,
- actively implementable building block system of training, creation of the individual educational trajectories on its basis;
- application of e-learning and distant learning technologies;
- electronic document management, etc.

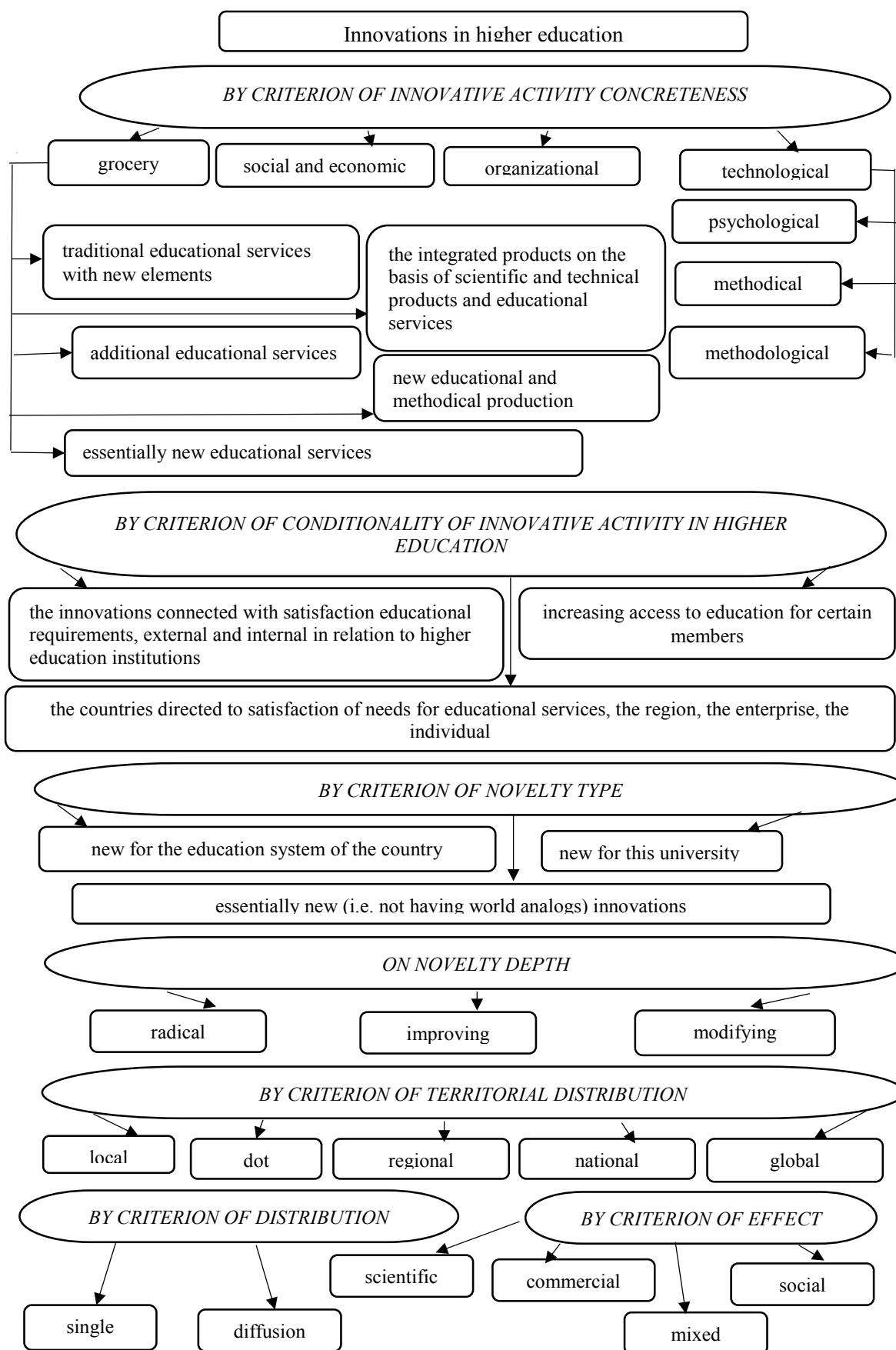


Figure 2 - Classification of innovations in higher education
 Note - Compiled by the authors based on the source [22].

Modern innovative processes in the system of higher professional education are beyond only educational or pedagogical innovations. In figure 2 there are researches' results of other authors presented (figure 3).

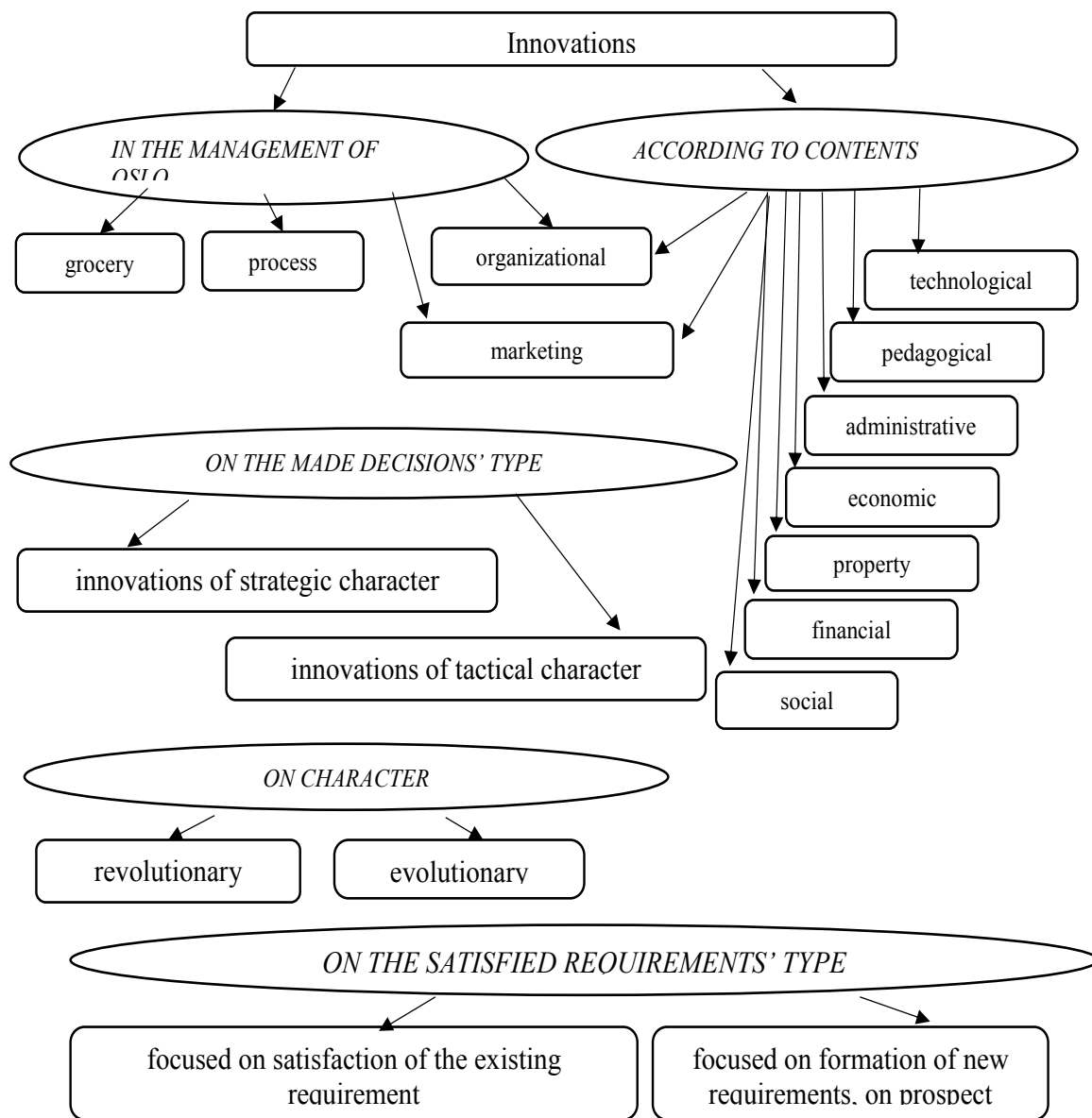


Figure 3 – Classification of innovations in higher education
Note - Compiled by the authors based on the source [23-26].

Organizational innovations act as a factor of product and process innovations' support, improvement of a higher education institution activity for the benefit of improvement of its educational services quality, growth of research potential with simultaneous increase in cost efficiency of a higher education institution. The organizational innovations are:

- change of legal organizational form of educational institution;
- reorganization of structure of the higher education institution management;
- change of correlation of influence spheres of structural divisions;
- redistribution of functions' structure, technologies of management, change of structure of subordination of higher education institutions' structural divisions;

- modernization of a system of HTP material stimulation and a higher education institution personnel, change in the social and legal sphere of a higher education institution.

Marketing innovations assume introduction of new not used earlier marketing methods:

- the existing markets' research;
- carrying out comparative analysis for determination of demand and competitiveness of a higher education institution services, their advance on the market;
- opening and introduction on the new markets or segments;
- use of advertizing in the Internet, in social networks;
- use of the Associations capacity of the university graduates;
- use of technologies of a higher education institution's positive image formation (organization and participation of a higher education institution in flash mobs, organization of the volunteer movement and etc.).

Researches of innovations in Veselovsky M.Ya. and Kulikova Yu.P. educational sphere have classification of innovations by contents in the basis: technological, pedagogical, marketing, economic, organizational, financial, property, administrative [24].

Now influence of technological innovations on others is indisputable because information and communication and telecommunication technologies are a basis of development of a modern educational system: the automated information systems of higher education institutions, the systems of distance learning, the system of testing Web test, electronic library, the information and administrative systems of informing workers on performance of necessary actions and decisions and others. Development of technological innovations is followed by pedagogical innovations, i.e. transformation of pedagogical methods and receptions, change of content of teaching activity, the place, a role and functions of the teacher in educational process and management of these processes. Under the influence of innovative educational technologies marketing innovations, owing to emergence of new sales markets of innovative products of a higher education institution are formed. Therefore, the new type formation of the economic relations with the subjects interested in cooperation of higher education institutions (employers, customers of educational services, etc.), or economic innovations also depends on extent of technological innovations' use. Financial innovations assume new sources of financing of higher education institutions' activity. Property innovations are expressed in the formation of a system of the relations concerning operations with property which is used in innovative process. Innovations of any kind will be realized at the presence of effective administrative innovations.

Practical realization of innovations provides construction and the organization of functioning of the mechanism of their management. In case of productive approach to innovations the mechanism of their management, in our opinion, assumes management of the innovations use, their further improvement. In this case the management mechanism of innovations becomes continuous before the termination of innovations' life cycle which in turn comes at senselessness of further improvement, modernization, use. Procedural approach to innovations assumes other understanding of the mechanism of their management. In this case, in our opinion, it will make the content of management of all stages of development and an innovation introduction until the beginning of the realized idea functioning.

In literature there is no accurately certain interpretation of the "mechanism of management of innovations", "mechanism of management of innovations in higher education system" terms. The specifics of these categories should be begun with studying of the "mechanism", "mechanism of management", "organizational mechanism", "organizational mechanism of management" concepts.

The word "mechanism" has the Greek origin and means "a car". In the Ozhegov S.I. Russian dictionary the term "mechanism" in relation to the social and economic sphere is treated as "a system", the device defining an order of some type of activity, the sequence of states, processes

determining any action, the phenomenon [30]. In this understanding the term found wide circulation in the equipment. Mechanisms in these fields of activity differ with the purposes, objects, subjects, means, etc. Several interpretations of the mechanism concept are given in reference books of general purpose:

- the device for transfer and transformation of the movement;
- the system defining an order of any type of activity;
- the sequence of states, the processes determining by themselves the phenomenon, action.

The mechanism is a component of process, action, activity and it has to be ready for performance of the corresponding process functions. Connection of the mechanism with management represents the internal content of process, its “know-how”.

Economic, organizational, market, organizational and economic, information mechanisms are known to economic science. Mainly these concepts are associated with management. In scientific literature there is no accurate differentiation of these definitions, a lot of things depend on commitment of authors to this or that school of sciences. In scientific literature insufficient attention is paid to questions of the organizational mechanism of administrative processes. The available definitions are characterized by the width of interpretation and, mainly, do not give definite answer on a question of the features of the organizational mechanism distinguishing it from other known mechanisms. Bogdanov A.A. the organizational mechanism in the form of the ways’ system, methods and devices of formation and regulation of the objects’ relations with external and internal environment [31].

There is the existence of criteria for any mechanism which can be divided conventionally into internal and external. To internal criteria, actually forming the mechanism, belong:

- purpose of creation and subsequent functioning of the mechanism;
- objects and subjects of influence or management;
- internal structure of elements.

To external factors which are indicators of the mechanism solvency, in our opinion belong factors of the external environment. The mechanism, being the integral attribute of a system is urged to provide achievement of the goals which are to some extent called to adapt a system to the external environment changes. Therefore, a main objective of any mechanism finally is timely and correct to transform impulses and signals of the external environment to internal means of a system.

Operation of the mechanism begins with the start moment of the corresponding process, in the rest of the time it is in a static state waiting for a start. The active condition of the mechanism is characterized by the subject impact on an object by means of use of methods set, tools and resources by it including information. The intensity of the mechanism operation is defined by the subject, at the same time the nature of an object and the external environment is taken into account by it. The mechanism being the attribute of a system finally accepts also the purpose of its existence- adaptation to conditions and changes in the external environment.

In economic science authors understand a system or a complex of the interconnected elements directed to achievement of any purpose(s) as the mechanism.

Researchers-economists consider the mechanism:

- in the form of the processes’ set which is the intimation basis [32];
- as a system of procedures forming decision or rules of its acceptance [33];
- in the kind of the forms’ set, methods and measures of organizational and economic character allowing a production system to function continuously [24];
- as a system of concrete principles, forms and methods of regulation of the corresponding economic relations [34];
- set of means and ways of administrative influence [35];
- the procedure of the management decisions adoption, set of procedures of management

decisions adoption, set of rules and procedures of acceptance by the Center (subject of the management) of decisions affecting behavior of active economic agents (objects of the management) - in particular on information given by them and the actions chosen by them [25].

Presented above approaches to the term “mechanism” focus attention on the content of functions, the used methods and other attributes characterizing administrative actions. But at the same time authors do not attach due significance to the purpose of the mechanism functioning. The purposes of the mechanism are always accurately defined, despite influence of external and internal factors. For example, the market mechanism, most known in the economic sphere, has accurately a definite purpose- the fullest satisfaction of interests of subjects of the market. Each of subjects has its own purposes, nevertheless “makes a contribution” in formation of a common goal of the mechanism. Proceeding from it, a conclusion about degree of adjustability of the mechanism which force is in direct dependence on influence and potential of its subjects follows.

The concept “mechanism of management” is further specification of the concept “mechanism” as in a more or a less extent includes, concretizes or synthesizes the given interpretation. Invariable in any mechanism of management are:

- methods in the form of procedures’ system and rules of target influences;
- instruments in the form of means and ways of target influences’ implementation;
- legal and regulatory and information support.

According to A.V. Barlukova the mechanism of management performs two main functions of management:

1) delivers information to the subject of management about a condition of the management object: analysis of an object condition, development and adoption of the management decision;

2) provides realization and execution of decisions: the choice of the performer and ensuring execution of the made management decision, control of execution of the management decision, assessment of the made decision and introduction of adjustments [29].

The maintenance of the mechanism of management in a complex with functions can be presented according to figure 4.

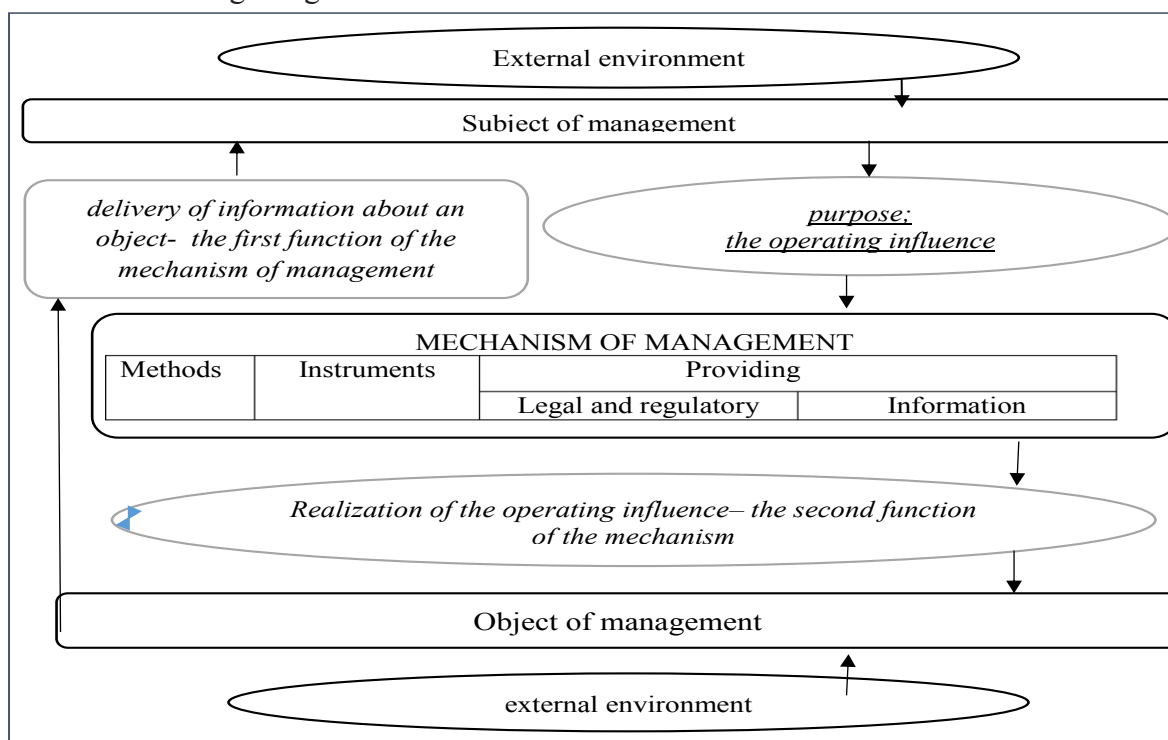


Figure 4 – Maintenance of the management mechanism

Note - Compiled by the authors based on the source [28-29].

The given maintenance of the mechanism of management is applicable also for innovations as objects including for innovations in a higher education system. Creation of the mechanism of management of innovations in a higher education institution is accompanied by some objective obstacles to which belong the following:

1) activity of higher education institutions is regulated and controlled by state bodies, in particular by the Ministry of Education and Science of the Republic of Kazakhstan and divisions accountable to them. Therefore, selection and realization of innovations is depending on state policy in education and, as a rule, an innovation at the level of higher education institutions answer its requirements;

2) there are certain difficulties in definition and (or) measurement of the innovations effectiveness in higher education institutions, therefore, and effectiveness of the mechanism of their management. Unlike innovations in an innovation business environment in higher education institutions are sources of mainly social, technological, scientific effect, in many cases which is not giving in to exact assessment. In our opinion, about results of functioning of the mechanism of the innovations' management it is possible to judge by changes of indirect indicators' values which, in turn, are indicators of other processes' development.

3) a higher education institution is not only the organization introducing innovations but also "making" them in the development form and in the subsequent innovation having the commercial value.

As owing to specifics objective and subjective conditions of realization individual elements are inherent in each type of innovations and the mechanism of management will be characterized by peculiar features. A part of the innovations realized in higher education institutions of the Republic of Kazakhstan are identical and initiated by accession to the Bologna agreement in 2010 and the subsequent construction of the system of higher and postgraduate education according to three basic principles of the Bologna model which are:

1) three-level preparation "Bachelor degree- Master's degree program- PhD post-doctoral program";

2) modular approach;

3) credit system of education.

To everywhere realized innovations in the sphere of domestic higher education belong:

- introduction of the academic mobility forms of students and higher-education teaching personnel;

- the information and communication systems (ICS), individual for each higher education institution which structure joins the systems of distance learning, information and analytical complexes on educational process management, electronic library and others. The principle of ICS action of various higher education institutions is identical, however the quality, functionality and internal contents are individual.

Now appropriate to consider actively used information and communication systems not so much as an innovation and as the mechanism of their management in view of performance by them of the considered MM functions- deliveries to the subject of department information about an object and realization of the operating influence. And in ICS of domestic higher education institutions the first function is more expressed. The innovation in this case, in our opinion, should be considered from the productive point of view, therefore, the mechanism of their management of innovations are at the same time the mechanism of management of their use and improvement that can make a subject of further researches in the innovative management field in higher education.

Conclusion: "Innovation" and "the mechanism of management" act as a result of systematization of the definitions existing in scientific literature conclusions:

- the innovation in the higher education system represents the change in activity of the organizations of higher education leading to its quality growth now;

- the majority of the known interpretation of the term “innovation” belong or to productive (the innovation is considered as a result of introduction, development of an innovation) or to procedural (the innovation is considered as the process of the new idea realization) direction. The research of content of the innovations’ management in the higher education system of the Republic of Kazakhstan demands consideration of innovations in terms of procedural approach;
- some criteria of innovations’ classification in higher education are specific (conditionality of innovative activity in higher education, the maintenance of innovations), others are inherent in innovations in other spheres (type, depth, effect, distribution);
- the mechanism of innovations’ management is set of methods, instruments and ensuring target influence of the subject of innovations’ management:
 - a) on process of the result use of innovations’ introduction (in case of productive approach),
 - b) directly on process of origin, introduction and development of an innovation (in case of procedural approach);
- in scientific literature economic, organizational, information mechanisms of innovations’ management are known, however there is no accurate differentiation between them;
- as the organizational mechanism of innovations’ management it is possible to consider the information and communication systems of higher education institutions owing to performance of two key functions by them.

Список литературы

- 1 Шумпетер И. Теория экономического развития. Капитализм, социализм и демократия. – М.: Эксмо, 2007. – 864 с.
- 2 Мутанов Г.М. Инновации: создание и развитие. – Алматы: Қазақ университеті, 2012. – 244 с.
- 3 Баймуратов У.Б. Инвестиции с инновациями: синергия в конкурентоспособности экономики // Социально-экономическая и индустриально-инновационная модернизация Казахстана: проблемы и перспективы: Сб. материалов. межд. науч. конф., посвященной 60-летию образования Института экономики Комитета науки Министерства образования и науки Республики Казахстан (часть 1). – Алматы: Институт экономики, 2012. - С.59-66
- 4 Алинов М.Ш. Инновационный менеджмент. – Алматы.: Экономика, 2012. – 204 с.
- 5 Абдыгаппарова С.Б. Инновационный менеджмент. – Алматы: Экономика, 2003. – 164 с.
- 6 Кантарбаева А.К. Предпринимательство: институционально-эволюционный подход. – Алматы : Раритет, 2000. -200 с.
- 7 Аскарров Е.С. Инновационный менеджмент. – Алматы: Экономика, 2014. – 272 с.
- 8 Саутпаева Ш.Е. Инновационный менеджмент. – Астана: Издательство КАТУ им С. Сейфуллина, 2008. -100 с.
- 9 Абдрахманова Г.И., Городникова И.В., Гохберг Л.М., Грачева Г.А. и др. Экономика знаний в терминах статистики: наука, технологии, инновации, информационное общество: словарь / Под ред. Л. М. Гохберга. - М.: Экономика, 2012.
- 10 Завлин П.Н. Основы инновационного менеджмента. Теория и практика. – М.: Экономика, 2010. - 475 с.
- 11 Медынский В.Г. Инновационный менеджмент. -М.: НИЦ Инфра-М, 2013. -295 с.
- 12 Авсянников Н.М. Инновационный менеджмент. – М: Издательство РУДН, 2011 – 189 с.
- 13 Кокурин А.И., Назин К.Н., Тогоев А.М. Устинова Л.Н. Управление инновациями (маркетинго-ориентированный подход). Монография. Второе издание - М.: Изд. Рудомино», 2010 - 496с.
- 14 Кулагин А.С. За что и как платить ученому // Инновации – 2015. № 10 (204). - С.8-22.

- 15 Минниханов Р.Н., Алексеев В.В., Файзрахманов Д.И., Сагдиев М.А. Инновационный менеджмент в АПК. – М.: МСХА, 2003. – 430 с.
- 16 Санто Б. Инновация как средство экономического развития. – М.: Прогресс, 1990. – 296 с.
- 17 Тард Г. Социальная логика. – М.: Ленанд, 2014. – 504 с.
- 18 Губарьков С.В. Управление инновациями в сфере высшего образования: теоретико-методологические аспекты. – Владивосток: Изд-во Дальневост. федерал. ун-та, 2010. – 280 с.
- 19 Белая О.П., Горовая В.И. Управление инновационными процессами в высшей школе. – Ставрополь: Изд-во СГУ, 2010. – 140 с.
- 20 Ставбуник Е.А. Инновация как экономическая категория и ее классификационная структура // Вестник КазНУ. Серия экономическая. – 2004.- - № 5 (45). – С.20-23.
- 21 Антамошкина О.И. Инструменты оценки эффективности инвестиций в инновационные образовательные технологии. – Красноярск: Красноярский государственный аграрный университет, 2011. – 84 с.
- 22 Панкова Н.В. Государственное управление системой образования. – СПб.: СМБГУЭФ, 2007. – 160 с.
- 23 Руководство Осло – Рекомендации по сбору и анализу данных по инновациям / Совместная публикация ОЭСР и Евростата. Четвертое издание. М.: 2018. – 256 с.
- 24 Веселовский М.Я., Куликова Ю.П. Управление развитием образовательных учреждений высшего профессионального образования на основе интеграции учебного процесса, научной деятельности и бизнеса: монография. – М.: Эдитус, 2012. – 60 с.
- 25 Межонова Л.В. Интегрированный университетский комплекс: организационно-экономические инновации в управлении: монография. – Владивосток: Дальнаука, Изд-во ВГУ-ЭС, 2014. – 168 с.
- 26 Жилыева И.А. Экономико-организационный механизм инновационного развития сферы образовательных услуг: монография. – М.: Издательско-торговая корпорация «Дашков и К», 2015. – 150 с.
- 27 Тимошенко Г.А. Развитие системы информационно-коммуникационного обеспечения инновационной деятельности российских вузов: дис... канд. экон. наук: 08.00.05 / Тимошенко Георгий Александрович. – Москва, 2014. – 184 с.
- 28 Гринь А.М. Организационно-экономический механизм управления вузом: монография. – Новосибирск: Изд-во НГТУ, 2006. – 380 с.
- 29 Барлукова А.В. Механизм управления как неотъемлемый элемент системы управления туризмом // Известия Иркутской государственной экономической академии (Байкальский государственный университет экономики и права). – 2010. - №6 (74), с.121-124.
- 30 Ожегов С.И. Толковый словарь русского языка. – М.: Оникс V-A-C press, 2019 г. – 1376 с.
- 31 Богданов А.А. Тектология. Всеобщая организационная наука. М.: Финансы, 2003. – 496 с.
- 32 Чурин А.С. Проблемно-ориентированный механизм устойчивого развития предприятия: дисс...канд. экон. наук: 08.00.05 / Чурин Андрей Сергеевич. - Новочеркасск, 2006. 229 с.
- 33 Свечникова В.В. Организационно-экономический механизм инновационного развития корпоративных структур: дисс. канд. экон. наук: 08.00.05 / Екатеринбург, 2010. - 200 с.
- 34 Теория управления: социально-технологический подход: энциклопедический словарь. / А. Г. Гладышев, В. И. Патрушев, В. Н. Иванов; сост.: В. Г. Городяненко, В. И. Григорьев ; Академия наук [АН] социальных технологий и местного самоуправления [и др.]. - 3-е изд., перераб. и доп. - М: Муниципальный мир, 2004. - 668 с.
- 35 Новиков Д.А. Механизмы управления. – М.: Леканд, 2011. – 216 с

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Жоғары білім беру жүйесіндегі инновациялар мен оны басқару механизмдерінің жіктелуі

Андатпа. Жоғары білім беру жүйесінде инновацияларды басқару мәселелерін зерттеу қажеттілігі оны реформалау дәуірінде елдің және қоғамның дамуындағы саланың елеулі рөліне, сондай-ақ саланың өзіне жаңалықтарды енгізудің ерекше сипатына негізделген. Осы бағытты дамыту шеңберінде мақаланың мақсаты анықталды: қазіргі білім беру саласындағы инновациялар типологиясының теориялық негіздерін және оларды басқару механизмдерін зерттеу нәтижелерін ұсыну. Авторлардың қорытындылары талдау, синтез, қорыту, индукция және дедукция, салыстыру әдістерін қолдануға негізделген. Зерттеушілер жоғары білім берудегі инновациялардың түсіндірілуіне салыстырмалы талдау жүргізді, жаңашылдықтарға нәтижелі және іс жүргізу тәсілдері және оларға сәйкес келетін жоғары оқу орындарындағы инновация түрлерінің жіктемесі зерделенді. Авторлардың пайымдауы бойынша «инновациялар» терминін түсіндіру тәсілдеріндегі айырмашылық оларды басқару тетігін түсінудегі келесі айырмашылықты алдын ала анықтайды. Инновацияларға нәтижелі тәсілді қолдану кезінде оларды басқару тетігінің негізгі екіні жаңалықтарды пайдалануды және жетілдіруді ұйымдастыруға бағытталған. Іс жүргізу тәсілі кезінде инновацияларды басқару тетігінің әрекет ету саласы жаңалықтардың пайда болуын, енгізілуін, игерілуін басқарумен шектеледі. Отандық және шетелдік ғалымдардың жаңалықтарын басқару тетігінің теориялық аспектілерін шолу, салыстыру және одан әрі жүйелеу Қазақстан Республикасының Жоғары білім беру жүйесіндегі инновациялар менеджментінің ерекшеліктері мен ерекшеліктері туралы қорытындылардың көзі болып табылады.

Түйін сөздер: инновация, жоғары білім беру, жоғары білім беру инновациялардың жіктелуі, ЖОО, басқару механизмі.

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Классификация инноваций в системе высшего образования и механизмов управления ими

Аннотация. Необходимость изучения вопросов управления инновациями в системе высшего образования в эпоху ее реформирования обусловлено значительной ролью отрасли в развитии страны и общества, а также специфическим характером внедрения новшеств в самой сфере. В рамках развития данного направления определена цель статьи: представить результаты исследования теоретических основ типологии инноваций и механизмов управления ими в современной образовательной сфере. Выводы авторов основаны на применении методов анализа, синтеза, обобщения, индукции и дедукции, сравнения. Исследователями проведен сравнительный анализ толкований инноваций в высшем образовании, изучены результативный и процессуальный подходы к нововведениям и соответствующие им классификации видов инноваций в вузах. По утверждению авторов, различие в подходах толкования термина «инновации» предопределяет и последующее расхождение в понимании механизма управления ими. При применении результативного подхода к инновациям основной акцент механизма управления ими направлен на организацию использования и совершенствования нововведения. Сфера действия механизма управления инновациями при процессуальном подходе ограничена управлением зарождением, введением, освоением новшеств. Обзор, сравнение и дальнейшая систематизация теоретических аспектов механизма управления нововведениями отечественных и зарубежных ученых явились источниками выводов об особенностях и специфике менеджмента инноваций в системе высшего образования Республики Казахстан.

Ключевые слова: инновация, высшее образование, классификация инноваций в высшем образовании, вуз, механизм управления.

References

- 1 Shumpeter I. Teoriya ekonomicheskogo razvitiya. Kapitalizm, sotsializm i demokratiya [Theory of Economic Development. Capitalism, socialism and democracy], (Eksmo, Moscow, 2007, 864 p.).
- 2 Mutanov G.M. Innovatsii: sozdaniye i razvitiye [Innovation: creation and development], (Kazak universiteti[Kazakh University], Almaty, 2012, 244 p.).
- 3 Baymuratov U.B. Investitsii s innovatsiyami: sinergiya v konkurentosposobnosti ekonomiki, Sotsial'no-ekonomicheskaya i industrial'no-innovatsionnaya modernizatsiya Kazakhstana: problemy i perspektivy: Sb. materialov. mezhd. nauch. konf., posvyashchenoy 60-letiyu obrazovaniya Instituta ekonomiki Komiteta nauki Ministerstva obrazovaniya i nauki Respubliki Kazakhstan (chast' 1) [Investments with innovations: synergy in the competitiveness of the economy // Socio-economic and industrial-innovative modernization of Kazakhstan: problems and prospects: Sat. materials. Int. scientific Conf., dedicated to the 60th anniversary of the Institute of Economics of the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan (part 1)] 59-66 (2012) [in Russian].
- 4 Alinov M.S.H. Innovatsionnyy menedzhment [Innovation Management], (Ekonomika[Economics], Almaty, 2012, 204 p.).
- 5 Abdygapparova S.B. Innovatsionnyy menedzhment [Innovation Management] (Ekonomika[Economics], Almaty, 2003, 164 p.).
- 6 Kantarbayeva A.K. Predprinimatelstvo: institutsional'no-evolyutsionnyy podkhod [Entrepreneurship: an institutional evolutionary approach] (Raritet [Rarity], Almaty, 2000, 200 p.).
- 7 Askarov Ye.S. Innovatsionnyy menedzhment [Innovation Management] (Ekonomika[Economics], Almaty, 2014, 272 p.).
- 8 Sautpayeva S.H. Ye. Innovatsionnyy menedzhment [Innovation Management] (Izdatel'stvo KATU im S. Seyfullina [KATU S. Seifullin Publishing House], Astana, 2008, 100 p.).
- 9 Abdrakhmanova G.I., Gorodnikova I.V., Gokhberg L.M., Gracheva G.A. i dr. Ekonomika znaniy v terminakh statistiki: nauka, tekhnologii, innovatsii, informatsionnoye obshchestvo [Knowledge economy in terms of statistics: science, technology, innovation, information society], (Ekonomika[Economics], Moscow, 2012, 240 p.).
- 10 Zavlin P.N. Osnovy innovatsionnogo menedzhmenta. Teoriya i praktika. [Basic of innovation management. Theory and practice] (Ekonomika, Moskau, 2010, 475 p.).
- 11 Medynskiy V.G. Innovatsionnyy menedzhment [Innovation management], (NITS Infra-M, Moscow, 2013, 295 p.).
- 12 Avsyannikov N.M. Innovatsionnyy menedzhment [Innovation management], (RUDN, Moscow, 2011, 174 p.).
- 13 Kokurin A.I., Nazin K.N., Togoyev A.M. Ustinova L.N. Upravleniye innovatsiyami (marketingo-oriyentirovannyy podkhod) [Innovation Management (marketing-oriented approach)] (Rudomino, Moscow, 2010, 496 p.).
- 14 Kulagin A.S. Za chto i kak platit uchenomu [For what and how to pay the scientist]. Innovatsii [Innovations], 10 (204), 8-22 (2015). [in Russian].
- 15 Minnikhanov R.N., Alekseyev V.V., Fayzrakhmanov D.I., Sagdiyev M.A. Innovatsionnyy menedzhment v APK [Innovative management in agriculture] (MAA, Moscow, 2003, 430 p.).
- 16 Santo B. Innovatsiya kak sredstvo ekonomicheskogo razvitiya [Innovation as a means of

economic development] (Progress, 1990, 296 p.).

17 Tard G. Sotsial'naya logika [Social logic] (Lenand, Moscow, 2014, 504 p.).

18 Gubar'kov S.V. Upravleniye innovatsiyami v sfere vysshego obrazovaniya: teoretiko-metodologicheskiye aspekty [Gubarkov S.V. Managing Innovation in Higher Education: Theoretical and Methodological Aspects] (Izdatel'stvo Dal'nevostochnogo federal'nogo universiteta, Vladivostok, 2010, 280 p.).

19 Belaya O.P., Gorovaya V.I. Upravleniye innovatsionnymi protsessami v vysshey shkole [Management of innovative processes in higher education] (Izd-vo SGU, Stavropol', 2010. 140 p.).

20 Stavbunik Ye.A. Innovatsiya kak ekonomicheskaya kategoriya i yeye klassifikatsionnaya struktura [Innovation as an economic category and its classification structure] Bulletin of KazNU. A series of economic [Vestnik KazNU. Seriya ekonomicheskaya] 5(45), 20-23(2004). [in Russian].

21 Antamoshkina O.I. Instrumenty otsenki effektivnosti investitsiy v innovatsionnyye obrazovatel'nyye tekhnologii [Tools for evaluating the effectiveness of investments in innovative educational technologies] (Krasnoyarskiy gosudarstvennyy agrarnyy universitet, Krasnoyarsk, 2011.84 p.).

22 Pankova N.V. Gosudarstvennoye upravleniye sistemoy obrazovaniya [State administration of the education system] (SMbGUEF, St. Petersburg, 2007, 160 p.).

23 The Measurement of Scientific, Technological and Innovation Activities Oslo Manual Guidelines for Collecting, Reporting and Using data on Innovation. 4th edition. (Paris, 2018. 256 p.).

24 Veselovskiy M.YA., Kulikova YU.P. Upravleniye razvitiyem obrazovatel'nykh uchrezhdeniy vysshego professional'nogo obrazovaniya na osnove integratsii uchebnogo protsessa, nauchnoy deyatel'nosti i biznesa: monografiya [Managing the development of educational institutions of higher professional education based on the integration of the educational process, research activities and business] (Editus, Moscow, 2012, 60 p.).

25 Mezhonova L.V. Integrirovannyi universitetskiy kompleks: organizatsionno-ekonomicheskkiye innovatsii v upravlenii: monografiya [Integrated University Complex: Organizational and Economic Innovations in Management] (Dal'nauka, VGUES Publishing House, Vladivostok, 2014, 168 p.).

26 Zhilyayeva I.A. Ekonomiko-organizatsionnyy mekhanizm innovatsionnogo razvitiya sfery obrazovatel'nykh uslug: monografiya. [Organizational Mechanism of Innovative Development of the Sphere of Educational Services] (Izdatel'sko-torgovaya korporatsiya «Dashkov i K», Moscow, 2015, 150 p.).

27 Timoshenko G.A. Razvitiye sistemy informatsionno-kommunikatsionnogo obespecheniya innovatsionnoy deyatel'nosti rossiyskikh vuzov. PhD diss. [About the development of a system of information and communication support for innovation activities of Russian universities]. (Moscow, 2014. 184 p.)

28 Grin' A.M. Organizatsionno-ekonomicheskii mekhanizm upravleniya vuzom: monografiya. [Organizational and economic mechanism of university management] (Izd-vo NGTU, Novosibirsk, 2006, 380 p.)

29 Barlukova A.V. Mekhanizm upravleniya kak neot'yemlemyy element sistemy upravleniya turizmom [The management mechanism as an integral element of the tourism management system] Izvestiya irkutskoy gosudarstvennoy ekonomicheskoy akademii [Bulletin of the Irkutsk State Economic Academy (Baikal State University of Economics and Law)] 74 (6), 121-124 (2010). [in Russian].

30 Ozhegov S.I. Tolkovyy slovar' russkogo yazyka [Explanatory dictionary of the Russian language.] (Oniks V-A-C press, Moscow, 2019, 1376 p.).

31 Bogdanov A.A. Tektologiya. Vseobshchaya organizatsionnaya nauka [Tectology. General

Organizational Science] (Finansy, Moscow, 2003, 496 p.).

32 Churin A.S. Problemno-orientirovannyu mekhanizm ustoychivogo razvitiya predpriyatiya. PhD diss. [Problem-oriented mechanism for sustainable enterprise development]. (Novocherkassk. 2014, 229 p.)

33 Svechnikova V.V. Organizatsionno-ekonomicheskii mekhanizm innovatsionnogo razvitiya korporativnykh struktur. PhD diss. [Organizational and economic mechanism of innovative development of corporate structures]. (Yekaterinburg, 2010, 200 p.)

34 Teoriya upravleniya: sotsial'no-tekhnologicheskii podkhod: entsiklopedicheskiy slovar' [Management Theory: Socio-Technological Approach: Encyclopedic Dictionary.]/ A. G. Gladyshev, V. I. Patrushev, V. N. Ivanov. (Munitsipal'nyy mir, Moscow, 2004, 668 p.).

35 Novikov D.A. Mekhanizmy upravleniya. [Management mechanisms.] (Lekand, Moscow, 2011, 216 p.).

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