Hryshchenko Olena Fedorivna,

JEL Classification: D70, D79, D81, O31

Candidate of Economic Sciences, Assistant Professor of the Department of Marketing and MIA, Sumy State University (Sumy, Ukraine);

Klisinski Janusz S.,

Doctor of Economics, Associate Professor, Head of the Department of Marketing and Entrepreneurship of Technical-Humanistic Academy (Bielsko-Biala, Poland), Professor of the Economic Theory Department, Sumy State University (Sumy, Ukraine);

Akhrameieva Marvna Vasylivna,

Student of the Faculty of Economics and Management, Sumy State University (Sumy, Ukraine)

RESEARCH OF THE MANAGERIAL DECISION-MAKING CONDITIONS IN THE INNOVATIVE SPHERE

The aim of the article. The aim of the article is to identify the characteristics of decision-making in innovation, analysis of foreign experience such decisions and the possibility of using this experience in domestic practice.

The results of the analysis. At present it is impossible to imagine any area of our life without innovation. But according to statistics, 10 launched of 8 new products fail. The majority of the causes of the failure of marketed goods are due to shortcomings in the field of marketing.

Decision-making in the innovation area has its own characteristics associated primarily with a high degree of risk and uncertainty, as well as creative, intuitive and non-standard nature of these decisions.

The analysis found that among academics, there are many approaches to the formation stages of decision-making. But all these approaches boil down to one thing – the problem solving is required. This article conclusions that in innovation is better to use an approach that includes the following decisions: market research market needs; analysis and selection of innovation; assessment of the results of research to the real state of things; analysis of the causes of non-compliance and the development of proposals for changes in adverse situations; analysis of the ranking of innovative design; technical and economic evaluation of the chosen solution; selection of a specific decision.

The article analyzes the experience of developed countries to adopt management decisions as an example of innovative financing sector. Based on this analysis, one can conclude that Ukraine should pursue support domestic producers innovation and improve mechanisms state financial support for research and development, taking into account the experience in these matters countries more effectively implement and use innovations.

Conclusions and directions of futher researches. The urgency of developing and implementing management decisions in the sphere of innovations is related to unresolved issues relating primarily current economic situation in Ukraine. Timely application of sound management decisions in innovation will enable entities to respond to the situation in its internal and external environments, quickly adapt to the different changes and gain significant competitive advantage. Availability of qualified innovative managers help organizations reduces costs; minimize risks and errors while promoting innovative technologies, the development of products and services, new business ideas. In terms of restructuring actualized the need for creation of new mechanisms for decision-making in innovation management based on the innovative capacity and innovation in the enterprise environment.

Ukraine, as a country that is not yet fully adapted to today's market changes, it is imperative to consider and learn from the experience of developed countries, while adjusting to fit their characteristics (financial security, economic status, priority sector).

To improve the practical application of various types and models of management decisions in the innovation sphere in Ukraine should first establish legislation that should allow developing and learning from the experience of developed countries.

Keywords: managerial decision, innovative sphere, dynamic development, innovative activity, innovation.

Setting the task in general form. Nowadays innovative sphere is a very dynamic part of the economy in all countries. Time to make decisions is limited, because the person, who is able to come to the market with new production, will receive the biggest market part. And that's why the process of decision-making in such sphere should be very fast. To make decisions is one of the main elements in the innovative management, because just they lead to the final result (positive or negative) at the end.

The urgency of the article is connected firstly with peculiarities and importance to make managerial decisions in the innovative sphere. Nowadays this topic is not enough investigated, especially taking into account the current situation in the Ukrainian market. Partial removal of old interdepartmental barriers didn't provide with the necessary organization of the decision-making mechanism in the innovative sphere coordinated providing SRRSW (scientific-research and research-constructive works) resources. Such problems have to be decided as fast as possible in order to increase the level of the Ukrainian economy competitiveness.

Analysis of recent researches and publications. Questions concerning managerial decisions in the innovative activity are investigated in the works of the domestic and foreign scientists, such as: Bilovodska O.A. [1], Horodova I.B. [2], Zaika S.V. [5], Kazak A.N. [6], Komkov N.I. [7], Krechetov A.H. [8], Mykytiuk P.P [9], Sytnikova D.S. [11] Shakhbasov A.Sh. [14].

The aim of the article is to determine the peculiarities of the decision-making process in the innovative sphere, analysis of the foreign experience to make such decisions. According to the stated object there were defined such tasks: to find main conditions, which are necessary to make innovative decisions, to analyze of the models, styles and stages to make these decisions and to observe foreign experience of this process.

Main material. It is hard to imagine the modern world without innovations, which are the grounds for our civilization development. Tendencies for the modern world economy show that the leading countries achieved real success, promoting by innovative development way [13]. To make effective decisions in this sphere is a reliable basis for its efficient use.

According to the world statistics, 8 goods from 10 are unsuccessful in the market of new production. Due to other investigations, 40% of consumers' goods, 20% of industrial-productive goods, 18% of service suffer from the commercial down.

Specialists distinguish such causes of misfortune that overtake new production in the market:

- mistaken determination of the quantity demanded 45%;
- products defects, which cause the returning of goods 29 %;
- not enough efforts to promote production to purchaser (weak advertisement etc) 25%;
- over-pricing 19%;
- rivals' actions (they are expressed in decrease in price, strengthen of the advertisement etc) – 17%;
 - incorrect time to bring the good into the market 14%;
- undecided productive problems, which don't allow to open goods issue to the demand -12%.

Thus, more causes of introduced goods failure are connected with droppings in the marketing activity brunch.

A lot of researches in the USA concern the innovations failure. One of the American Journal "Science" number practically is about the investigation of the innovation failure causes.

The first and the main reason of the innovation failure in the American companies, owing to the published data in the journal, is the absence of enthusiast. As for the home practice, we have a lot of inventors, but they have not any support. But somehow the USA grant patents for inventions 15 times larger, than any other country.

The second reason of the research failures is refinancing. 86% of innovative projects have not been completed, because they were refinanced. It means that "lack of funding" may be effective.

The third reason is the absence of the work with final user. Due to the researches, described in "Science" in 82% of cases innovations lead to the failure, if there is no correspondent interrelations with consumers (there is no interviews of the final users, future consumers' wishes are ignored, incorrect interpretation of their answers etc.).

The forth reason of the innovative findings loss is to follow the chosen concept. In 69% of cases the investigations failed, because investigators don't want to make changes into the product. But one may argue such statement, because those inventors, who believe in their thoughts brilliance and go till the end, show more often excellent results.

The fifth reason is also unusual, it is big collective. As in case with refinancing, there is inverse relation of the collective size and invention felicity. The argument is shown that in 61% cases just the collective leads to investigation failure. The journal presented the statistics, in accordance with which one inventor provides approximately 4 times more innovations for each 1 \$, invested into the scientific researches and investigations, than medium collective with 5 persons, and approximately 24 times larger than project groups with over 50 workers.

The sixth reason is the market potential (56% – deadlocked investigations), and the seventh – economy of project (54% – innovations without vital activity).

American scientists calculated that profit norm from 17 the most successful innovations, developed in the 70s, is on an average 56%. At the same time the profit average rate from investments into American business during last 30 years is only 16%. That's why it is not strange that in spite of their adventurous projects, innovators with good ideas and concrete achievements attract attention of many potential investors [12].

Shakhbazov A. [14] considers that the main reasons of the poor successful innovations introduction in the native practice are [14]:

- low level of the innovative "maturity";
- no need of native business in innovations;
- loss of the innovative culture (cultural explosion of which was in 70s-80s last century) [14].

Even big companies don't avoid failures with new goods. "SONY", "Du Pont", corporation "FORD" are some of these companies. The reasons of their failures are different: wrong orientation in consumers' demands, lack attention in sale forming, wrong analysis of the rivals' actions etc.

In general, we can say about the lack of innovative processes in Ukraine, that when real demand for innovations appears in the country, necessary staff and resources to realize projects will be found, and there will be necessary infrastructure.

Every day everyone face a lot of possible variants to choose something (from everyday situations, to important scientific questions). The variant, which we choose among other alternatives, is a decision.

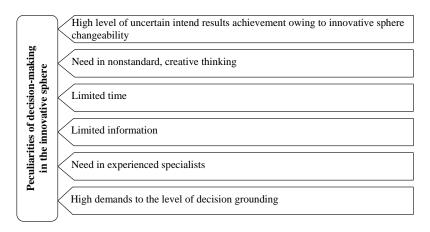
Today there are many disciplines, which study the problem of decision-making. They include mathematic programming, the theory of games, the theory of statistic decisions, the

theory of optimal automatic management. Together with them a set of new applied disciplines appeared, the title of which was not known 40 years ago. They are investigation of operations, system analysis, economics and cybernetics. All these disciplines study the same problem - the scientific analysis of the possible actions with aim to define the most effective among them in the modern conditions, i.e. to search optimal decision concerning management object [9].

In respect to the managerial decision, it differs from the usual decision in the fact, that it concerns mostly productive-commercial and productive-economic problems solving and is a product of the managerial work. Managerial decisions have to be made taking into account the active legislation. Moreover, they should lean on the real and full information concerning internal and external enterprise environment with aim to consider maximum the situation on internal and external enterprise sides. It means that managerial decision is the result of managerial work concerning choice of the most optimal way to solve this or that problem. In general scientists have not only one point of view concerning the definition of the concept "managerial decision".

Each stage of the innovative process has concrete object and situation during its achievement, and it needs the adequate decisions in the management process [9].

The peculiarities of decision-making in the innovative sphere are connected with high level of uncertainty, dynamic development and changeability of this sphere (fig. 1). That's why it is important to have the whole picture of the innovative activity results (intermediate, final). And also this activity is a creative process, which is connected with nonstandard, creative and intuitive decisions.



 $\it Figure~1-Peculiarities~of~decision-making~in~innovative~sphere$

The managerial decision-making concerning innovations introduction has to be grounded both in the context of earlier planned and reflected economic reasonability in business plan, and within the long-term strategic planning [13].

It is necessary to say, that managerial innovative decision grounding in the long-term plan is a difficult task, because everything is changed very fast in modern world, full of information. That's why, the planned decision to be made in future, before the moment of acceptance, is not always urgent. In order to decide such problem, people who make decisions, have to observe tendencies in the market and in time correct their decisions due to changes, which have taken place.

Innovative decision at the enterprise is a key element of the intensive growth, which leads

to strengthen its market positions, to enlarge gross earnests and clean profit. The development of enterprise on the innovative grounds strengthens its positions in the competitive struggle. Without innovative constituent the enterprise loses creativity and flexibility, and rivals get advantages in the competitive battle [4].

Thus, innovative decision is the important element of the modern enterprise activity, which provides it close association with market economy changeable conditions and provides maximal correspondence to these conditions.

Impulse to use decisions in the innovative sphere, is a necessity in liquidation, decrease of the actuality or problem solving, i.e. to bring nearer current object's parameters (phenomena, systems) to the desired ones (prognosticated) in future [3].

Specialist-innovator, who is engaged in managerial activity, knows that such activity is generally defined with clear scheme "analysis – planning – control", and the management base is decision, i.e. there is choice of organization's opportunities. A complex innovative system functions successfully when it was created owing to the scientifically grounded decisions [2].

Types and models of the made decisions in the innovative sphere depend on innovations life cycle stage. On the stage of made decision ideas generating they depend on the manager's subconscious processes are of creative and intuitive nature. On the second stage, materialization of idea with innovations, decision-making mainly consists of motivated and rational actions. On the stages of introduction, production and commercialization with innovations, one uses decision-making methods, based on mathematic modeling. Thus, the decision-making in the innovative sphere has multiple and alternative character.

Among models of decision-making the most known is Kepner-Tregoe model "wastebasket", Ringi's model or "ask to be decided".

Initiators of the first decision-making model were Benjamin Tregoe and Charles Kh. Kepner. They distinguished the following constituents of the effective decision-making process: 1) quality of decision as for factors, which demand attention; 2) quality of the possible alternatives estimation; 3) quality of enquiry that what one may get from these alternatives.

This model may be presented by the following stages: 1) decision forming, definition of the decision-making level (it is better to do in group, as authors of the model suppose); 2) object statement and its division on "necessary" and "preferred"; 3) investigation and estimation of the alternatives; 4) estimating mark for each alternative is calculated from sum of coefficients, multiplying on the correspondent factor on scale from 1 to 10; 5) arevious variant is determined from the point of view of connected with it risk estimation, which can't be calculated. If the risk is high, variant will be rejected, one will choose next one.

Model "wastebasket" is connected with process to generate many ideas by making decisions and "throwing" most of them into the "wastebasket". Thus, the decisions and ways of problems solving, which remain after analysis, are highly effective.

Ringi's model or "ask to be decided" is a system, which demonstrates Japanese approach to make decisions "bottom-upwards" and possibly is the most famous example of the collective decision-making in business. Ringi goes from bottom to top in all departments, which are related to this problem, until gets to table of the top management. It gives down the decision whether the proposition is accepted or not. This system allows all workers to participate in the corporative decision-making process [5].

There are different instruments, simple (SWOT-analysis) and complicated (OLAP) to simplify the decision-making nowadays.

In order to define the instruments, which are used in decision-making of high corporative level, Stenfors S. and Tanner L. Carried out research, in which 182 respondents were asked.

There were 865 instruments in the questionary paper. 94 % of instruments were grouped in 18 total groups. The results are shown in Table 1.

Table 1 – Support of the grouped instruments by managers [15]

Instrument	Number of remembering
1. SWOT- analysis	136
2. Electronic tables	120
3. Balanced system of factors	104
4. Analysis of risks	66
5. Analysis of the financial accounts	63
6. Qualitative methods	53
7. Script of the planning	46
8. Analysis of the environment	40
9. Brainstorm	37
10. Statistic analysis	33
11. Life cycle analysis	25
12. Optimization	23
13. Instruments of the project management	20
14. Modeling	20
15. Analysis of the added value set	10
16. Means of the human resources management	7
17. Informational systems management and business	7
18. Enterprise resources planning	7
Number of classified instruments (94 %)	815

On the basis of received results by the foreign specialists, instruments which are used in companies to make decisions of high level, are mostly concentrated to determine and to support rational decision aspects, than creative ones. But we think that, taking into account of rational and creative aspects has to be held in tandem, because only detailed innovative decision will be successful in the market.

There are four styles of managerial decision-making: directive, analytical, conceptual and behavior. Let's observe them in details:

- 1. Directive style is characterized for individuals, who prefer simple, clear problem solving. In many cases they examine only one-two decision variants.
- 2. Managers with analytical style like to find complex decisions; moreover their arguments are based on exhausted information size.
- 3. The conceptual style is chosen by individuals, who wish to analyze wide range of information.
- 4. Behavior style is usually peculiar for managers with high feeling of responsibility for other people, they usually pay attention to the personal development of people around and may make decisions, which provide to achieve own targets by other people.

Usually among represented styles of decision-making there are no styles, which wouldn't be passed in any situation and would be good enough all interested sides. As in any other sphere there are no ideal or universal style, that's why manager has to know how to combine all mentioned styles depending on the concrete situation and make the best decision in the situation. Managerial decisions are related to different forms, methods of decision-making, management levels, management functions. The division of decisions in accordance to innovative management levels due to Ogoleva L.N. is shown in the Table 2.

This table shows that the higher level of management, the more powers is for manager to

make decisions. As we see, managers of the lower level can't make even operative decisions. Often the problem is seen inside on this level, and only managers can correctly assess the situation.

Table 2 – Distribution of the decision character due to the innovative management levels [10]

Levels of management at the innovative enterprise	Decision character, which are made	
Levels of management at the innovative enterprise	Strategic	Operative
<i>Higher:</i> manager of the innovative enterprise, his deputies in SRRSW, producing, sale etc.	+	+
<i>Medium:</i> managers of the departments and innovative enterprise administration	_	+
Lower: managers of creative groups, low laboratories, productive areas	_	1

Usually, decisions, on the bases of which organizations choose the direction of their activity, and consequences of which appear during many years and have to be made on the highest level. But decisions with little risk and making of which lets to be done by the lowest authority, may be made by workers locally, and managers can control these processes. Taking into consideration mentioned above and with view on the fact that among strategic and operative decisions there are medium-term (tactic) decision, we suggest to add Table 2 in such way (Table 3).

Table 3 – Distribution of the decision character due to the innovative management levels, (added by authors)

Levels of management at the innovative enterprise	Decision character, which are made		
Levels of management at the innovative enterprise	Strategic	Tactic	Operative
Higher: manager of the innovative enterprise, his			
deputies in SRRSW, producing, sale etc.	+	+	+
Medium: managers of the departments and innovative		1	
enterprise administration	_	т	т
Lower: managers of creative groups, low laboratories,			
productive areas	_	_	+

The process to investigate, make and realize marketing innovative decisions is characterized by the structural complexity, many-sidedness and labour intensity of works for their choice from the developed alternatives [1].

There are many approaches to form stages of decision-making. For example, Herchikova I.N. distinguishes such stages of the managerial decision-making: 1) target forming; 2) problem study on the basis of the received information; 3) choice and grounding of the effectiveness criteria and possible consequences of the made decision; 4) discussion of different problem solving variants with specialists; 5) choice and forming of the optimal decision; 6) decision-making; 7) concretization of decision for its doers.

Sytnikova D.S. suggests her own algorithm of the managerial decision-making: 1) problem statement; 2) determination of the effective solving criteria; 3) classification of criteria; 4) investigation of the alternatives; 5) comparing of alternatives; 6) estimation of risk;

7) choice of alternative; 8) analysis of the accepted decision realization; 9) post-analysis of the realized decision [11].

According to Krechetov O.H. the decision-making process in the innovative sphere consists of three stages:

- 1. *Investigation of the innovation* (creation of the concept and documentary describing of the innovation).
- 2. Decision making: 1) production of the alternatives, 2) prognostication of each alternative consequences, 3) detailing of the alternative selection criteria, 4) choice of the alternative, which mostly satisfies with minimal effectiveness standard, among other alternatives.
- 3. *Decision realization*. Characteristics of innovation are managerial decision variables, i.e. the factors, which may be manipulated by management system and which are depend on organization history on its successful or unsuccessful activity in past [8].
- R. Barret supposes that the decision-making process consists of 4 stages: data collecting, information processing, decision finding and making, and three possible results: reaction, answer or instructions, which come to us in the process of reflection. These stages and answers are shown in the fig. 2, together with 6 decision-making regimes [16].

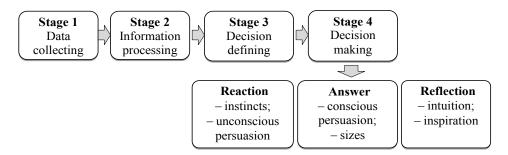


Figure 2 – Four stages, three reactions and six decision-making regimes [16]

Such variety of approaches to form decision-making stages is connected with uncertainty of the managerial decision concept. Moreover, some scientists think, that decision-making process is started from problem defining, to solve which one needs this decision, and other – from aim statement of the decision.

To our mind, the innovative decision-making should be started from defining and analyzing of the problem, because it allows to see the whole situation, which appeared, and make the most optimal decision.

Different world managerial schools have some peculiarities concerning decision-making (table 4).

The peculiarity of the American school is that the person, who approves decisions, takes care about the result after such decision making, not about the decision. In German school the decision approving is observed as the constituent of planning and control processes. The distinguished characteristic of the Japanese school is that one person doesn't have rights to make decisions alone, and the whole group is responsible for decision approving. Less effective approach to make decisions is characterized for Ukrainian managers. Taking into account managerial culture of other states, we may suppose, that it is effectually to use more

severe management under native conditions. One can use instruments, which are characterized for decision-making schools, but one should remember that they have to be adapted to the concrete conditions, peculiar to the native situation.

Table 4 – Models of innovative decision making managerial schools

School	Decision approving stages	Advantages	Disadvantages
American	 Problem diagnosis. Criteria and limits forming. Alternatives defining. Alternatives estimation. Final choice 	1. Complex control. 2. International and global level of solving. 3. Use of creative potential and intuition in decision-making. 4. High individual responsibility. 5. Severe hierarchy structure: every worker has only one director	Decrease of flexibility while task changing. Effectiveness reduction of the many decision-making stages. American managers' attempts to solve problem at once. Many management levels
German	Possibilities of decision. Problem statement. Probable actions. Search of information. Assessment. Decision making	Foresight. High discipline. Most German managers have professional-technical education. Respected attitude towards competence	Financial aspect of the decision is very important. Carrier promotion has relatively low speed
Japanese	Correct task statement. Alternative decisions proposal. Choice of the best decision	Decision realization is very fast. Everybody is interested in the realization of decision. Group responsibility for decision making. Social problems are the most important among others	I. Indistinct responsibilities distribution. 2. The problem appearing owing to the necessity to make only one decision

All these approaches are directed to one, which means to decide the necessary problem or task. So, the datum time to make decision with any approach means the appearing of the problematic situation.

On the next stage the necessary information and appeared problem legal aspect are determined.

When the problem and opportunities are appraised and analyzed, the stage of variants decision developing, and then the realization of the chosen variant. The next stage represents the control and estimation of the received results, on the basis of which whether right decision was made and appropriate conclusions are made.

On the basis of such conclusions, we create the decision-making stages in the innovative sphere (fig. 3).

To get the effective innovative decision, one needs creativity, unordinary thinking, and of course qualified workers, who are experts in some brunches. The methodic to conduct "brainstorm" is an excellent "platform" to unite these three constituents.

The developed countries have no less risky innovative process. However with state and market support they have infrastructure and financial streams mechanisms management, which decrease these risks to the accepted decision, "filtering" over-risky projects and ideas, without their anticipated realization.

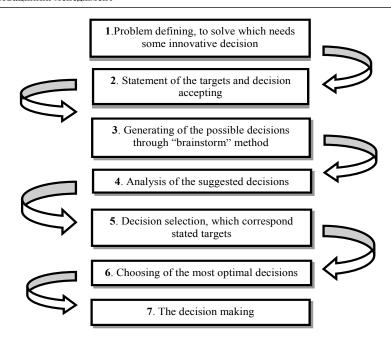


Figure 3 – Stages of the managerial decision-making process

Such management technology shows the great role of the non-material assets market, innovative mediators and so on (Table 5).

Table 5 – Experience to provide financially technology commercialization in the developed countries [7]

Financial support	Financing resources	Country
1	2	3
Improvement of the state financial SRRSW support mechanism	 state crediting (with return) and grants; state guarantees to receive banking credits; state order of the strategically important production for SRRSW; share participation in the scientific researches (50%); tax relieves; abnormal amortization; export-import shares to support national scientific product; delays to pay taxes while investing own SRRSW; state financing of costs on patents support and providing of their protection with results financing from budget (near 10% of SRRSW value is for patents protection); right to bring all costs for SRRSW to the product costs 	The USA, Italy, Belgium, England, Sweden, Canada
Support of the innovations national producer	Introduction of the modern mechanisms to decrease material costs for SRRSW (advancing of customer on the stage of scientific search, protection of the future market, foreign scientists (knowledge community on created intellectual product) involving, early protection of the trading stamps	EU, the USA Japan

Table 5 (continued)

1	2	3
Support of the innovations national producer	Support of the national brands development programs	The USA, EU, Japan, South Korea
	Support of the small and medium innovative business by limiting of the biggest IC firm-owners impact through antimonopoly legislative strengthening	The USA, EU
Support of the innovations national producer	Co-financing of the company initiatives through the system of licensing or creating spin-off companies (Ministry with its fund support approximately 20 agencies on patenting and patents use, agencies on estimation and commercialization of innovations for a few regional universities and also for non-university researching institutions)	Germany England
Selection of cost- effective results for commercialization	Investigation and development of the innovative mediators' mechanism between state SRRSW, academic researches and private business – organizers on technologies transfer	EU, the USA

Thus, Ukraine has to choose its own way of the innovative growth, but it should take into account the world experience and other countries tendencies.

The most adequate form to organize innovative activity becomes the scientific system integrator (SSI), which provides the opportunity to use the elements of the research and producing infrastructure, which are mostly acceptable for the project realization. The human factor is the key element of SSI. Investigators of the project study market, form the goals and tasks, involve performers and suppliers from different countries, control the final stages of the new technology advent and provide its commercialization [6].

Ukraine falls behind the most developed countries due to the level and scale of activities in innovative sphere. And the potential possibilities of our country population are enough large, especially in educational and scientific spheres. It should be used. I think that to involve students to decide these or those questions in the innovative sphere may bring good results, because it is better to see the problem from outside, in order to make the most optimal decision. Moreover, students, as representatives of the young and active population part, have their own creative ideas, which may be useful to make the innovative decision.

Firstly, it is necessary to form initiatives to stimulate involving of the young specialists-beginners. Such initiative should be formed on the level of our country government, which must to support it legislatively. Such project can be formed as the program, oriented to activate students', graduates', university workers' activity. This program plays the role of fundament for cooperation between enterprises, which need to make innovative decisions both young and active part of the population.

Such cooperation will give the opportunity, on one hand, to turn the scientific research results into economic wealth, on other hand – to involve future specialists to the practical activity, which in its turn will give the possibility to feel their own importance and to develop own experience.

Similar programs have been already used in the developed countries. The example is German program of innovative activity stimulation in the universities EXIST.

Thus, there are many problems in the managerial decision-making process in the innovative sphere for today. The main are:

- traditional mechanisms to investigate and introduce innovations are mostly damaged, and new mechanisms have not been formed yet;
- most people, who make managerial decisions on different levels, don't have enough experience. It is often that this experience has principles, which were peculiar to managers of the Soviet Union;
- low level of the economic training among most managers, which is observed in the undertreatment from the innovative project financial side;
 - inadequate level of the person's informedness, who makes decision;
 - time deficit, which is necessary to check base for decision-making in more details;
- problem of the financial and economic conditions, which impact the stimulation of market environment innovative activity especially on the regional level);
 - imperfection of the innovative activity infrastructure support.

Conclusions and directions of further researches. The actuality of the managerial decisions investigation and introduction in the innovative sphere is connected with unsolved problems concerning Ukrainian modern economic situation.

In time use of right managerial decisions in the innovative sphere will give opportunity to economic management subjects adequately to react the situation in the external and internal environment, to adapt quickly to the changes and competitive privileges. The qualified innovative manager will help to decrease costs, minimize risks and mistakes while innovative technologies promotion, develop goods and services, introduction of the new business-ideas.

It is worth noting that managerial decision-making in the innovative sphere has its peculiarities what is connected with following factors: high level of uncertainty, high level of risks, necessity in qualified staff with substandard, creative thinking, development dynamic and innovative sphere changeability, limits in time etc.

The conducted analysis in this article shows that there are a lot of approaches to form managerial decision-making stages. Each of the approaches allows to structure decision-making process in such way, that finally one can get the most optimal and effective result. Authors of the article suggest using the following managerial decision-making stages:

- 1) problem definition, solving of which needs to make the innovative decision;
- 2) statement of targets to make decision;
- 3) generating of the possible decisions through method "brainstorm";
- 4) analysis of the suggested decisions;
- 5) selection of the decisions, which correspond the stated objectives;
- 6) choice of the most optimal decisions;
- 7) acceptance (making) of the clear decision.

Under restructuring conditions the necessity to form new mechanisms of the managerial decision making in the innovative management is actualized taking into account innovative potential and innovative climate at the enterprise and state. The development of concrete mechanisms for decision making in the sphere of iinovative activity can be the direction for further researches.

The mechanism may be activation of the enterprises cooperation, which works in the innovative sphere with young specialists and scientists, who have necessary potential. Therefore such mechanism should be supported by the state.

1. Біловодська О.А. Розроблення методичного підходу щодо вибору маркетингового інноваційного рішення з множини існуючих альтернатив / О.А. Біловодська, О.Ф. Грищенко // Розвиток сучасної логістико-орієнтованої економіки: збірник наукових праць Донецького державного університету управління. — Донецьк : ДонДУУ, 2012. — Серія Економіка; вип.227. — Т. XIII. — С. 348-357.

- 2. Городова И.Б. Развитие теории управления принятия решений функционирования рынка инноваций [Электронный ресурс] / И.Б. Городова. Режим доступа: http://economics.open-mechanics.com/articles/383.pdf
- 3. Грищенко О.Ф. Системний аналіз сутності та процесу прийняття інноваційних рішень у системі управління підприємствами / О.Ф. Грищенко // Механізм стратегічного управління інноваційним розвитком : монографія / за заг. ред. О.А. Біловодської. Суми : Університетська книга, 2012. 432 с.
- 4. Грищенко О.Ф. Інноваційне рішення ключовий фактор забезпечення сталого розвитку сучасного підприємства / О.Ф. Грищенко // Маркетинг і менеджмент інновацій. 2011. №1. С. 120-127.
- 5. Заїка С.В. Сутність прийняття інноваційних рішень в умовах ризику і невизначеності [Електронний ресурс] / С.В. Заїка, Т.В. Янчук // Экономика предприятия. Режим доступу: http://www.rusnauka.com/4_SND_2013/Economics/10_127159.doc.htm
- 6. Казак А.Н. Перспективи інноваційно-технологічного розвитку економіки на національному і регіональному рівнях / А.Н. Казак // Вісник СевНТУ: зб. наук. пр. Вип. 109/2010. Серія: Економіка і фінанси. Севастополь, 2010. 57 с.
- 7. Комков Н.И. Поэтапный механизм анализа, оценки и отбора проектов / Н.И. Комков, С.Ю. Ерошкин, Н.Г. Мамонтова // Проблемы прогнозирования. 2008. №6. С. 82-86.
- 8. Кречетов А.Г. Инновационное управление предприятием [Электронный ресурс] / А.Г. Кречетов // On-line библиотека. Режим доступа: http://www.xserver.ru/user/inupp/
- 9. Микитюк П.П. Інноваційний менеджмент : навчальний посібник / П.П. Микитюк. Тернопіль : Економічна думка, 2006. 295 с.
- 10. Оголева Л.Н. Инновационный менеджмент : учебное пособие / Л.Н. Оголева. М., 2004. 238 с.
- 11. Ситникова Д.С. Процедура принятия управленческого решения в области инноваций [Электронный ресурс] / Д.С. Ситникова, И.Б. Гусєва. Режим доступа: http://www.mai.ru/events/sfiro/articles/sec7/sitnikova.doc
- 12. Тумалев А.В. Традиции, инновации и причины неудач инноваций [Электронный ресурс] / А.В. Тумалев, Л.К. Шамина. Режим доступа: http://www.ibl.ru/konf/070411/10.html
- 13. Ульяшина С.Ю. Принятие управленческих решений по использованию интелектуальной собственности при разработке инновационных проэктов и бизнес-планировании [Электронный ресурс] / С.Ю. Ульяшина // Аудит и финансовый анализ. 2007. №3. Режим доступа: http://www.auditfin.com/fin/2007/3/Ulyashina/Ulyashina% 20.pdf
- 14. Шахбазов А.Ш. Инновационный менеджмент. Причины неудач в России [Электронный ресурс] / А.Ш. Шахбазов. Режим доступа: http://delovoymir.biz/2012/03/22/innovacionnyymenedzhment-prichiny-neudach-v-rossii.html
- 15. Sari Stenfors. High-level Decision Support in Companies: Where is the Support for Creativity and Innovation? / Sari Stenfors, Leena Tanner // Creativity and Innovation in Decision Making and Decision Support. First edition. 2006. Vol. 1. P. 222.
- 16. Richard Barrett. The Six Modes of Decision-Making / Richard Barrett [Electronic resource] / Richard Barrett. Access mode: http://www.valuescentre.com/uploads/2010-07-06/Six%20Modes%20of%20Decision%20Making.pdf
- **О.Ф. Грищенко,** канд. екон. наук, асистент кафедри маркетингу та УІД, Сумський державний університет (м. Суми, Україна);
- **Я.С. Клісіньскі,** д-р екон. наук, доцент, завідувач кафедри маркетингу і підприємництва Технічно-Гуманістичної Академії (м. Бєльско-Бяла, Польща), професор кафедри економічної теорії, Сумський державний університет (м. Суми, Україна);
- **М.В.** Ахрамеєва, студент факультету економіки та менеджменту, Сумський державний університет (м. Суми, Україна)

Дослідження умов прийняття управлінських рішень в інноваційній сфері

У статті розкриті основні теоретичні аспекти процесу прийняття управлінських рішень та їх особливості у інноваційній сфері, переглянуто міжнародний досвід з цього питання, а також проаналізовано основні види, моделі та стилі прийняття рішень у сфері інновацій.

Ключові слова: управлінське рішення, інноваційна сфера, динамічність розвитку, інноваційна діяльність, інновація.

- **Е.Ф.** Грищенко, канд. экон. наук, ассистент кафедры маркетинга и УИД, Сумский государственный университет (г. Сумы, Украина);
- **Я.С. Клисиньски,** д-р экон. наук, доцент, заведующий кафедрой маркетинга и предпринимательства Технико-гуманитарной академии (г. Бельско-Бяла, Польша), профессор кафедры экономической теории, Сумский государственный университет (г. Сумы, Украина);
- **М.В. Ахрамеева,** студент факультета экономики и менеджмента, Сумский государственный университет (г. Сумы, Украина)

Исследование условий и факторов принятия управленческих решений в инновационной сфере

В статье раскрыты основные теоретические аспекты процесса принятия управленческих решений и их особенности в инновационной сфере, а также проанализированы международный опыт по этому вопросу. Также рассмотрены основные виды, модели и стили принятия решений в сфере инноваций.

Ключевые слова: управленческое решение, инновационная сфера, динамичность развития, инновационная деятельность, инновация.

- 1. Bilovodska, O.A., & Hryshchenko, O.F. (2012). Rozroblennia methodichnoho pidhodu shchodo vybora marketynhovoho innovatsiinoho rishennia z mnozhyny isnuiuchykh alternatyv [Development of methodical approach to the selection of innovative marketing solutions for the set of existing alternatives]. Rozvytok suchasnoi logistyko-orientovanoi ekonomiky: zbirnuk naykovykh prats Donetskoho derzhavnoho universitetu upravlinnia The development of modern logistics-oriented economy: Collected Works, Donetsk State University of Management. (pp. 348-357). Donetsk: DSU [in Ukrainian].
- 2. Horodova, I.B. (n.d.). Razvitiie theorii upravleniia priniatiia reshenii functionirovaniia rynka innovattsii [Development of the theory of decision-making control of market innovation functioning]. *economics.open-mechanics.com*. Retrieved from: http://economics.open-mechanics.com/articles/383.pdf [in Russian].
- 3. Hryshchenko, O.F. (2012). Systemnii analiz sutnosti ta protsess pryiniattia innovatsiinykh rishen u systemi upravlinnia pidpryiemstvamy [System analysis of the nature and process of making innovative solutions in the management of enterprises]. *Mehanizm stratehichnoho upravlinnia innovatsiinym rozvytkom The mechanism of strategic management of innovative development.* O.A. Bilovodska (Ed.). Sumy: Universitetska knyha [in Ukrainian].
- 4. Hrishchenko, O.F. (2011). Innovatsiine rishennia kliuchovyi factor zabezpechennia staloho rozvytku suchasnoho pidpryiemstva [Innovative solutions as a key factor for sustainable development of the modern enterprise]. *Marketynh i menedzhment innovatsii Marketing and management of innovations*, 1, 120-127 [in Ukrainian].
- 5. Zaika, S.V. (n.d.). Sutnist innovatsiinykh rishen v umovah ryzyku i nevyznachenosti [The essence of innovation decision making under risk and uncertainty]. www.rusnauka.com. Retrieved from http://www.rusnauka.com/4_SND_2013/Economics/10_127159.doc.htm [in Ukrainian].
- 6. Kazak, A.N. (2010). Perspektyvy innovatsiino-tehnolohichnoho rozvytku ekonomiki na natsionalnomu i rehionalnomu rivniakh [Prospects for technological innovation and economic development at the national and regional levels]. *Vistnyk SevNTU Bulletin of SevSTU* [in Ukrainian].
- 7. Komkov, N.I., Yeroshkin, S.Yu., & Mamonthova, N.H. (2008). Poetapnyi mekhanism analiza, ottsenki i otbora proektov [Stepwise mechanism of projects' analysis, evaluation and selection].

Problemy prohnozirovaniia – Problems of prediction, 6, 82-86 [in Russian].

- 8. Krechetov, A.H. Innovatsionnoie upravleniie predpriiatiiem [Innovative enterprise management]. (n.d.). *On-line biblioteka*. Retrieved from http://www.xserver.ru/user/inupp/ [in Russian].
- 9. Mykytiuk, P.P. (2006). *Innovatsyinyi menedzhment [Innovative Management]*. Ternopil: Ekonomichna Dumka [in Ukrainian].
- 10. Oholeva, L.N. (2004). Innovatsionnyi menedzhment [Innovative Management]. Moscow [in Russian].
- 11. Sitnikova, D.S. (n.d.). Protsedura priniatiia upravlencheskoho reshenia v oblasti innovatsii [Management decision procedure in the field of innovation]. www.mai.ru. Retrieved from http://www.mai.ru/events/sfiro/articles/sec7/sitnikova.doc [in Russian].
- 12. Tumalev, A.V., & Shamina, L.K. (2011). Traditsii, innovattsii i prichiny neudach innovattsii [Traditions, innovations and causes of innovations' failures]. *www.ibl.ru*. Retrieved from http://www.ibl.ru/konf/070411/10.html [in Russian].
- 13. Uliashyna, S.Yu. (2003). Priniatiie upravlencheskikh reshenii po ispolizovaniiu intelektualnoi sobstvennosti pri razrabotke innovatsionnykh proektov i bizness-planirovanii [Managerial decision-making on the use of intellectual property in the development of innovative projects and business planning]. *Audit i finansovyi analis Audit and financial analysis*, 3. Retrieved from http://www.auditfin.com/fin/2007/3/Ulyashina/Ulyashina%20.pdf [in Russian].
- 14. Shakhbazov, A.Sh. (2012). Innovatsiinyi menedzhment. Prichiny neudach v Rossii [Innovative Management. Reasons for failure in Russia]. *delovoymir.biz.* Retrieved from http://delovoymir.biz/2012/03/22/innovacionnyy-menedzhment-prichiny-neudarossii.html [in Russian].
- 15. Sari, Stenfors, & Leena, Tanner. (2006). High-level Decision Support in Companies: Where is the Support for Creativity and Innovation? *Creativity and Innovation in Decision Making and Decision Support*, 1st edition, Vol. 1, 222 [in English].
- 16. Barrett, R. (2010). The Six Modes of Decision-Making. www.valuescentre.com. Retrieved from http://www.valuescentre.com/uploads/2010-07-06/Six%20Modes%20of%20Decision%20Making.pdf [in English].

Отримано 08.02.2014 р.