# Kateryna O. Boyarynova<sup>1</sup>, Tetyana V. Voitun<sup>2</sup> ACTUALIZATION AND PRECONDITIONS OF ENTERPRISE'S INNOVATIVE ADAPTABILITY ESTIMATION

The article grounds the important role played by enterprise's readiness to innovative changes, its innovative ability and activity manifested through innovative adaptability of an enterprise. It is proven that fulfilment of all the requirements in complex evaluation of enterprise's innovative activity could be achieved through the generalized system of indices, which take into account all features of evaluation.

**Keywords:** innovation; innovative attractiveness; innovative adaptability of enterprises. **JEL: M2.** 

# Катерина О. Бояринова, Тетяна В. Войтун АКТУАЛІЗАЦІЯ ТА ПЕРЕДУМОВИ ОЦІНЮВАННЯ ІННОВАЦІЙНОЇ АДАПТИВНОСТІ ПІДПРИЄМСТВА

У статті обґрунтовано важливу роль, яку відіграють готовність підприємства до інноваційних змін, його інноваційна спроможність та активність, що проявляються в інноваційній адаптивності підприємства. Доведено, що найповніше вимогам комплексного оцінювання інноваційної діяльності підприємства відповідає узагальнена система показників, яка враховує усі особливості оцінювання.

**Ключові слова:** інновації; інноваційна привабливість; інноваційна адаптивність підприємства.

Рис. 2. Літ. 10.

# Екатерина А. Бояринова, Татьяна В. Войтун АКТУАЛИЗАЦИЯ И ПРЕДПОСЫЛКИ ОЦЕНКИ ИННОВАЦИОННОЙ АДАПТИВНОСТИ ПРЕДПРИЯТИЯ

В статье обоснована важная роль, которую играют готовность предприятия к инновационным изменениям, его инновационная способность и активность, что проявляются в инновационной адаптивности предприятия. Доказано, что наиболее полно требованиям комплексной оценки инновационной деятельности предприятия соответствует обобщенная система показателей, которая учитывает все особенности оценивания.

**Ключевые слова:** инновации; инновационная привлекательность; инновационная адаптивность предприятия.

**Introduction.** Within market economy the effect of the environment and numerous institutional processes leads to steady growth of factors, both external and internal, which impact enterprise activity. Under such circumstances, there is uncertainty in managerial decision making. This condition is aggravated by the lack of guidelines developed in relation to development management. This requires special attention given the uncertainty of external factors which affect the results of enterprises' operations.

In today's business environment innovative processes at enterprises in any industry of national economy are crucial. Extensive methods have almost exhausted themselves and the improvement of market production should be based on the latest solu-

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tions in the fields of technology, organizational forms, methods and guidance in management. Accumulation, justification, adoption, evaluation and implementation of these guidelines are the contents of innovative processes.

Company's development, its competitiveness growth under turbulent market conditions and continuous monitoring of operating entities are only possible due to active use of adaptive management techniques.

Latest research and publication analysis. Assessment of innovative industrial adaptability to different levels of management with the use of specific indicators can be read in many research work by well-known domestic and foreign scientists. Particularly, problems of innovative adaptation development in the context of enterprise readiness to innovative changes and innovative ability manifested through innovative adaptability of enterprises is studied by such scholars as Y. Adler et al. (1976), O. Nechyporuk (2007), N. Silantieva (2007), L. Zakharkina (2010) etc.

The aim of the article is to justify the methodological recommendations and analyze the key approaches to evaluation of innovative adaptability of enterprises.

**Key research findings.** Within market economy successful operation of any company is provided by the innovative component. Economic development in today's conditions is increasingly dependent on technological shifts through innovation. Therefore, the ability to identify, build and effectively apply innovative potential becomes the determining factor of competitiveness and further development of enterprises.

From the perspective of a particular company, it is necessary to consider innovation as a way to adapt to constant changes in external environment. Innovative activities are associated with gradual effect on the results as well as within increased risk of unpredictable results, not only the opportunity to obtain higher profits.

Importance of innovative activity for every enterprise and for national economy is well-known. Without close collaboration of researchers and businessmen, without new products and introduction of new technological processes it is impossible to provide economic growth and/or a competitiveness increase.

Therefore, it is expedient to estimate possibilities of enterprises to carry out effective innovative activity, as on the estimation the success of innovations' introduction will depend to a great extent. As experience shows, every enterprise is characterized by its inherent features, criteria and competitive edges, by sensitivity and receptivity to innovations.

All innovations and applied innovation processes lead to changes in the usual mode of an enterprise. As demand for innovation occurs under the influence of a certain inconsistency, as the ratio of actual and the desired situation of an enterprise put forward by management proposals for changes may cause inconvenience and hassle at work, let alone improving it. In this case, an important role is played by enterprise's readiness to innovative changes, its innovative ability and activity, manifested through innovative enterprise's adaptability (Adler et al., 1976).

Innovative adaptability of an enterprise is a continuous monitoring process, i.e. searching, studying, researching and creating new products for enterprise and improvement of processes based on the use of all available means and capabilities of an enterprise, leading to qualitative changes (competitiveness increase, more stability in changing environmental conditions, entry to new markets etc.). Thus, the con-

cept of innovative adaptability is the accumulation of concepts such as the innovative potential of enterprise, innovative ability of enterprise, innovative activity of an enterprise and its innovative attractiveness (Figure 1).

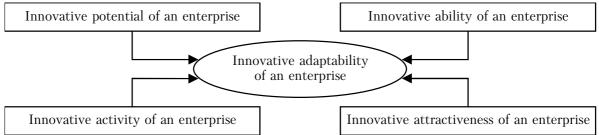


Figure 1. Elements of innovative adaptability of an enterprise, developed by the authors

One of the main factors of innovative adaptability is innovative potential of an enterprise.

The main essence of innovation and innovation activities are changes to be considered for potential income. Therefore, innovative potential is the potential and an object of scientific analysis and research, diagnostics and continuous improvement (Zakharkina, 2010). In today's conditions the main way to maintain high rates of development and achieve the required level of profitability is to permanently implement innovations. Revitalization of innovative development is one of the most important factors of survival for domestic entities under conditions of harsh competition. Thus, innovative capacity is a prerequisite for successful implementation of innovations (Bogma, 2011).

After analyzing various approaches to the nature of innovative potential of a company and its evaluation we can give the following definition of it:

Innovative potential is a structural part of company's potential, is formed by a combination of factors (components) of different levels of organization having the maximum capacity to perform active innovation.

Evaluation of innovative potential of the company is the process of diagnosing a set of industrial-technological, logistical, organizational, administrative, financial, economic and other resources that will enable the company to develop and implement innovations, and which is the basis for a balanced selection of a development strategy.

This innovative potential assessment is the basis for direct evaluation of enterprise's effectiveness.

Innovative potential of an enterprise depends on a range of factors that determine implementation and use of innovations. The process of innovative potential formation is affected by the following factors: the state of innovative climate in a country, innovative activities of a particular company, sophistication and mobility of innovations' management etc.

Evaluation of enterprise's innovative capacity should focus on identification of the factors which influence its formation, development and implementation. This should be carried out to determine the extent of use of innovative features now and on this basis to conclude about the state of innovations at an enterprises (Makariy, 2001).

It should also be noted that this analysis is complex and requires the maximum of effort. Specificity of this problem is that assessing the number of individual ele-

ments within innovative potential cannot be achieved through the method of peer review and usual calculations. In our opinion, it is advisable to combine them with quantitative analysis (for greater objectivity of the results).

Considering the complexity and comprehensive nature of innovative potential of a company, in our opinion, require a certain sequence of steps in carrying out its evaluation:

- 1) analysis of innovative potential structure;
- 2) detection of innovative business opportunities;
- 3) evaluation of innovative activity of enterprises (Zakharkina et al., 2010).

Evaluation of enterprise's innovative capacity should be carried out using the appropriate system of parameters, which differ depending on a stage in the development and implementation of innovations.

The evaluation components of innovation potential are determined by the ability of innovative companies.

Innovative ability of industrial enterprises is characterized by various factors. Obviously, such factors are not static, they dynamically change in different directions. Taking this into account, we can track their influence on changing indices of innovative attractiveness, thus amending the results of evaluation. Only then the estimation of innovative adaptability can be considered objective and will come forward as a reliable instrument in the process of making managerial decisions by managers at different levels.

It should be noted that the more components are used in estimation of innovative adaptability of an enterprise, the larger would be the competitive advantage for an effective innovation. The final stage involves the evaluation of innovative adaptability determining the level of innovative activity of an enterprise. For this purpose the synthesis rate of innovations at an enterprises is used (Nechyporuk, 2007).

The next stage of innovative adaptability evaluation is the determination of enterprise innovative attractiveness. Analysis of enterprise's innovative attractiveness means the detailed analysis of factors of innovative potential and the terms of innovations' introduction. Analysis of enterprise's activity gives the possibility to estimate profitability and terms of return, finding also the most ponderable risks.

Innovative attractiveness of an enterprise can be determined through integral estimation which settles the groups of indices of investment attractiveness method. Integral estimation enables connecting in one index much of different information. This figure may be later of interest for investors, due to their limited resources for independent investigation. In other words, not very successful combination of factors is sometimes more effective than a combination of most developed elements because is less expensive for investors (Poltynyna and Golubev, 2009).

Therefore, after this study we can report that there is no united approach to the selection of guidelines for implementation of innovative solutions and to the evaluation of innovative enterprise's adaptability, which in the full extent characterizes the level of enterprise's innovativeness. However, it is possible to identify certain common areas of economic evaluation here:

- knowledge-based production;
- quality and competitiveness of products;
- technical and economical level of production;

- update of technologies;
- the ability to export products;
- material being resources' abundance;
- quality of innovative processes organization;
- innovative competence (Makariy, 2001).

While analyzing the innovative ability of enterprises there is a need to take into account the factors of external and internal environment, in particular: financial and economic state, progressiveness of management technologies, skilled potential of an enterprise and the efficiency of its use, quantitative descriptions of technique and technologies used etc. (Silantieva, 2007). Now these factors are not taken into account in the evaluation of innovative adaptability of enterprise.

Therefore, a detailed study and analysis of the characteristics of each individual component in the evaluation of enterprise's innovative adaptability lead us to focusing on the need for an integrated approach to the evaluation of innovative adaptability of domestic enterprises. This technique has been used successfully in foreign practice, this system allows measuring key indicators of company's strategic and operational processes with the implementation of innovative benefits.

Based on the generalization of the studied models used in international practice, we can present the generalized system of indicators of enterprise's innovative adaptability (Figure 2).

#### Preparatory stage:

- definition of the purpose of the enterprise;
- developing a company's strategy;
- formation of the communication strategy for a company;
- identification of indicators that correspond to the overall strategic goal of an enterprise.

#### **Organizational stage:**

- development of a generalized system of indicators;
- formation of strategic objectives in the areas of the developed system performance;
- formation of local objectives in accordance with strategic objectives;
- formation of indices within local purposes in accordance with the overall objective of the stage of innovative activities.

#### Implementation stage:

- development of models for decision making on innovative activity;
- development of guidelines for the improvement of company's innovative activity.

Figure 2. Stages in the generalized system of performance evaluation of enterprise's innovative adaptability, developed by the authors

Figure 2 shows the fully integrated assessment of enterprise's innovation requirements with the generic scorecard which takes into account all evaluation peculiarities and this:

- allows assessing internal and external environment of an enterprise with the use of financial and non-financial indicators;
- reflects the relationship between the evaluation indicators, ensuring the implementation of a chosen strategy;
  - takes into account motivation (Trydid, 2002).

We should also mention that for each entity a set of these indicators is individual and depends on the priority of a particular component within the generalized system performance in the innovation strategy of a company.

Conclusions and recommendations for further research. At the present stage of Ukraine's development enhancing innovations is becoming one of the drivers that allow companies increase their value and promote the development of new forms of capital.

In order to strengthen the competitive position of each company is trying innovative measures that would help them develop should be introduced. However, this requires significant state support, aimed at ensuring adequate economic climate in the country to start innovative processes. Its main aim is to combine scientific research with the main tasks of production, namely, training of scientific personnel, implementation of effective programs for the development of innovative processes, fruitful cooperation between corporations and universities or research institutes etc.

Thus, innovative development is a complex concept that combines innovative capacity and innovation process. The unity of these elements creates a synergistic effect that provides transition from one qualitative state to another (Community Innovation Survey 2006–2008 First findings).

Timely, thorough and comprehensive evaluation of innovative adaptability and its effective implementation based on guidelines will enable company to obtain substantial benefits from introduction and implementation of innovations. This can be further expressed by the following results:

- 1) scientific and technical effect;
- 2) social impact;
- 3) environmental impact;
- 4) economic impact.

Methodical suggestions are developed in relation to the evaluation of innovative adaptability of enterprise. Further development of discrete recommendations can be used in practical economic activity of enterprises, in particular, at shaping the options of innovative programs realization by the participants of innovative process. A prospect for further research might be the development of a clear system of indices for the evaluation of enterprises' innovative development level in Ukraine.

#### **References:**

Aдлер~Ю.П.,~Маркова~Е.В.,~Грановский~Ю.В. Планирование эксперимента при поиске оптимальных условий. — М.: Наука, 1976. — 280 с.

Богма O.C. Сутність інноваційного потенціалу підприємства, 2011 // web.znu.edu.ua.

3ахаркіна Л.С. Перспективна оцінка технологічних рішень у стратегічному плануванні інноваційного розвитку машинобудівних підприємств України // Економіка та управління підприємствами машинобудівної галузі: проблеми теорії практики: Збірник наук. праць. — 2010. — №4. — С. 72—87.

Захаркіна Л.С., Будьоний Б.О., Захаркін О.О. Удосконалення методичних підходів до вибору стратегії інноваційного розвитку підприємства // Вісник Національного технічного університету «Харківський політехнічний інститут»: Збірник наук. праць.— Тематичний випуск: Технічний прогрес і ефективність виробництва.— 2010.— №8.— С. 59—65.

*Макарій Н*. Оцінка інвестиційної привабливості українських підприємств // Економіст.— 2001. — № 10. — С. 52—60.

 $\it Hечипорук~O.B.$  Методика рейтингової оцінки інвестиційної привабливості промислових підприємств // Коммунальное хозяйство городов.— Серия: Технические науки.— 2007.— Вып. 75. — С. 275—284.

*Полтініна О.П., Голубєв А.В.* Методичний підхід до оцінювання інноваційної привабливості підприємства в сучасних умовах розвитку економіки України, 2009 // www.rusnauka.com.

*Силантьєва Н.С.* До питання визначення сутності інноваційної активності підприємства // Наукові праці Національного ун-ту харчових технологій. -2007. №23. - С. 75-77.

 $\mathit{Тридід}\ O.M.$  Організаційно-економічний механізм стратегічного розвитку підприємства: Монографія. — Харків: Вид. ХДЕУ, 2002. — 364 с.

Community Innovation Survey 2006–2008 First Findings. Central Statistics Office. Forfas. Structural Business Statistics // www.cso.ie.

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### книжковий світ



# СУЧАСНА ЕКОНОМІЧНА ТА ЮРИДИЧНА ОСВІТА ПРЕСТИЖНИЙ ВИЩИЙ НАВЧАЛЬНИЙ ЗАКЛАД

## НАЦІОНАЛЬНА АКАДЕМІЯ УПРАВЛІННЯ

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Має гриф підручника від МОН України.

У даному підручнику викладено матеріал, який дає системне уявлення щодо менеджменту. Комплекс представлених навчальних матеріалів стосується відносин управління на макро- та мікрорівні економічної системи, що дозволяє сформувати сутнісне бачення щодо менеджмент-взаємозв'язків різно-

манітних видів діяльності. У цілому викладений матеріал суттєво поширює теоретичні і методичні уявлення щодо менеджменту.

Підручнник включає теоретичні засади менеджменту, історію його виникнення і розвитку, форми і методи документообороту при здійсненні управлінської діяльності, основи операційного менеджменту, розкриває нові тенденції у розвиткові стратегічного менеджменту. Містить також менеджмент-практикум щодо основних засад управління.

Призначений для студентів вищих навчальних закладів, викладачів, аспірантів, а також всіх тих, хто цікавиться питаннями управління.