

**Conceptual aspects
management of
competitiveness the
economic entities**

**Collective monograph edited by
M. Bezpartochnyi, I. Britchenko**

Higher School of Social and Economic
Przeworsk (Poland) 2019

**Koncepcyjne aspekty
zarządzania
konkurencyjnością
podmiotów gospodarczych**

**Monografia zbiorowa
pod redakcją naukową
M. Bezpartochno, I. Britchenko**

Wyższa Szkoła Społeczno-Gospodarcza
Przeworsk (Polska) 2019

UDK 339.137.2

Conceptual aspects management of competitiveness the economic entities: collective monograph / edited by M. Bezpartochnyi, I. Britchenko, in 2 Vol. / Higher School of Social and Economic. – Przeworsk: WSSG, 2019. – Vol. 1. – 274 p.

The authors of the book have come to the conclusion that it is necessary to effectively use modern approaches the management of competitiveness the economic entities in order to increase the efficiency of using the resource potential, formation of competitive advantages and development strategies. Basic research focuses on economic diagnostics of ensuring the competitiveness of economic entities, marketing and logistics, analysis of energy-efficient potential, assessment of development potential. The research results have been implemented in the different models of inventory management, corporate social responsibility management, business process management and project management. The results of the study can be used in decision-making at the level the economic entities in different areas of activity and organizational-legal forms of ownership, ministries and departments that promote of development the economic entities and increase their competitiveness. The results can also be used by students and young scientists in modern concepts and mechanisms for management of competitiveness the economic entities in the context of efficient use the resource potential and introduction of modern innovations.

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The collective monograph is approved for publication at the meeting of the Scientific Council of the Higher School of Social and Economic in Przeworsk of 09^h January 2019, *Minutes No. 02.*

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ISBN 978-83-937354-1-9

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24. Roman, M., *Human resources in Romania – evaluation and efficiency*, ASE Publishing, Bucharest, 2003.
25. Schuler, RS, Dowling, P., De Cieri, H., (1993). *An integrative framework of strategic international human resource management*, *Journal of Management*.
26. Stein, C. (2016) 'Virtual Reality Design: How Upcoming Head-Mounted Displays Change Design Paradigms of Virtual Reality Worlds'. *Mediatropes, 6, (1): 52-85.*

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**MODERN
MANAGEMENT
TOOLS FOR
INCREASE ENERGY
EFFICIENCY LEVEL**

Providing competitive advantages in the activities of any organization should become a strategic priority and a key direction of development. It is necessary qualitatively appreciate all the potential of increasing the efficiency of production and economic processes. It's about managerial, organizational and technological potential, energy, ecological, resource and human reserves.

Energy efficiency – is one of the key aspects of the competitiveness, especially in conditions high energy intensity of production. According to some estimates, today, the Ukrainian industrial sector uses outdated technologies, production equipment and machinery at the same level as that exploitation in developed countries in the 90's of the last century. In parallel, some domestic enterprises use energy-intensive technologies that were used in Europe in the 1960's and today they are considered ineffective and “dying” [1].

It has been emphasized that in Global energy efficiency ranking in

2017 drawn up by the World Economic Forum, Ukraine takes the 73^d place from 127 countries. In the same time, Ukraine has yielded all European countries and the level of energy efficiency is equivalent to such as Nicaragua and Ghana (Figure 3.1).

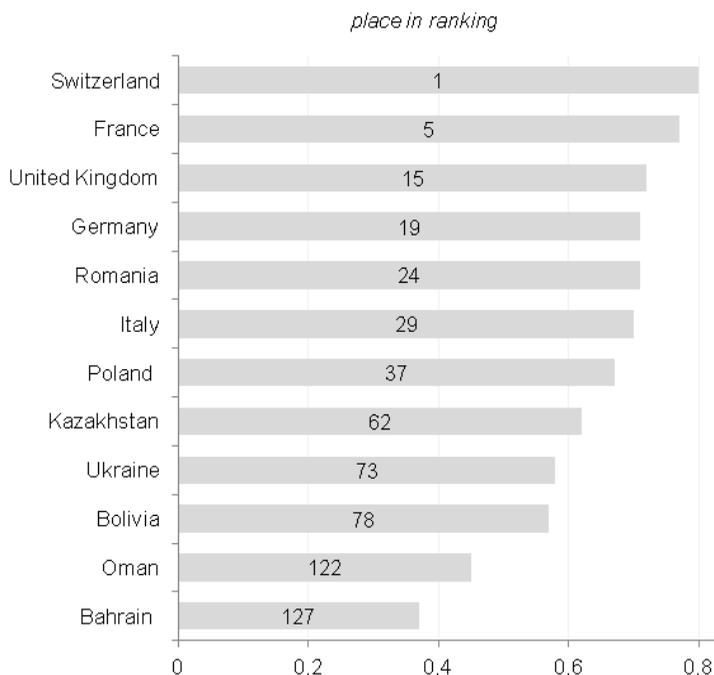


Figure 3.1 Global Energy Architecture Performance Index 2017, for some countries (EAPI, score on a scale of 0 to 1)

Source: compiled by the authors [2,3]

The Energy Architecture Performance Index (EAPI) is a composite index that focuses on tracking specific indicators to measure the energy system performance of 127 countries. At its core are 18 indicators defined across the three sides of the “energy triangle”, which are: economic growth and development, environmental sustainability, and energy access and security.

Ukraine takes the 119th place from 127 countries for the using of fuel and energy recourses per unit to the production. Also, our country takes the 122^d place for the import dependence indicator (import value exceeds 12% of GDP). In 2017, in Ukraine natural gas consumption equals 32 billion cubic meters, of which 15 billion cubic meters (nearly

50%) was imported from different European countries [4].

Despite, for different international expert appreciates, Ukraine has every opportunity to realize its great potential and substantially increase its energy efficiency. The active state policy in sphere of energy saving is concentrated mainly on the processes of housing insulation and the thermo-modernization of existing buildings.

Today, in our country there are “warm loans”, targeted subsidies of the population for the accumulation of financial resources and reinvestment in the thermal modernization of residential building. However, with the mental national understanding of the global energy problems of the state level, low living standards, this practice of reinvestment of funds saved through payments in energy saving measures remains questionable [5].

If there is some energy efficiency motivation programs in housing sector of Ukraine, than for industry any motivation tools and mechanism are practically absent. Domestic business stays alone with the big problem of the increase their energy efficiency. Now domestic enterprises are looking for the way and opportunities, financial resources and organizational measures for realization their energy efficiency potential. The absurdity of such a state policy is intensified by the activity of motivational policy in developed countries, where state support was and remains quite substantial.

The problem of energy saving is still very important and actually in modern conditions of price ad tariff increase at Ukrainian enterprises. World experience shows that energy efficiency is primarily a process of investing in innovative development. That is, the process of increasing energy efficiency is impossible without a constant innovation and investment resource.

However, it is not necessary to promote the localization of only energy-saving activities, because it is in strong interaction and interconnection with innovation and investment processes of increasing energy efficiency. Conversely, the high potential for reducing energy intensity will contribute to the development of innovation infrastructure with further investment support. It is absolutely clear that energy efficient is a constant investment process, necessary to provide innovative shifts.

Despite a number of obvious advantages and great benefits of energy saving, it is difficult to say such activity is massive among Ukrainian producers.

It's an important to remember that, there is no implemented energy

management system in the Ukrainian enterprises (nearly 70% of 400 enterprises-respondents). About 13% of respondents believe that such an introduction is not appropriate. Nearly 21% of respondents do not have any information about energy management at all. Actually, about one third of the enterprises surveyed do not see any benefits from the implementation of energy management systems [5]. Radical modernization of industrial technologies on our domestic production, increase of product quality standards to European levels, growth of level competitiveness of Ukrainian products – are necessary requirements of modern management.

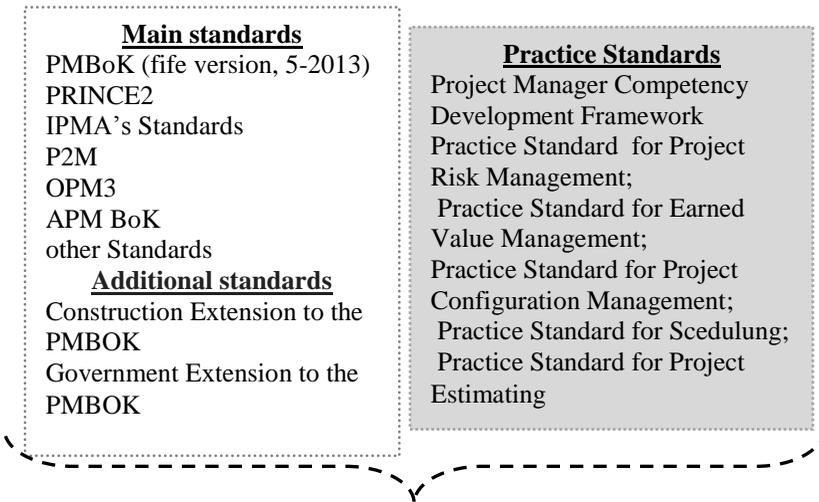
For an effective start-up of innovative changes, it is necessary to create a workable motivation system with clear innovative solutions that will function in a comfortable social climate. In practice, enterprise management can use international standards and concepts for the organization system management for the offered innovative solutions (Figure 3.2).

The processes of increasing energy efficiency and energy-saving activities are closely linked to the search, optimal selection and analysis of individual innovation projects. The world leaders such as the United States, Japan and Germany have raised this issue to a high standard and, at the national level, have developed universal methodologies for practical tools for managing projects and programs.

Ukrainian Project Management Association orientates managers with the IPMA certification system and Japanese standard P2M [9]. The P2M (Program and Project Management for Enterprise Innovation) is a conceptual Japan's methodology for project and program management in the use of innovative technologies for the enterprise. The main difference between this standard is the focus on improving the organization of management to innovative projects implementation.

Using PM methods and tools cannot ensure the success of a project, but it can improve its chances of success. Many methods and tools have been developed since and are now available and routinely used by projects managers.

However, the use of modern management concepts, as a rule, requires the presence of appropriate corporate culture and effective work, with high employee loyalty to the enterprise. Only in such situation is it possible to use workers creative potential for implementation innovative processes. Often, there is no need to use financing motivation for workers, when they feel their own significance for the company.



ISO 10006:2003, ISO 9000:2005, ISO 9001:2008, ISO 9004:2000, ISO 10012:2003, ISO 19011:2002, ISO 21500, ISO/IEC 29110

PMBok – USA, Russian Federation
PRINCE2- United Kingdom
P2M - Japan
IPMA's Standards - European Union, Ukraine

Figure 3.2 Project Management Standards and Guides

Source: compiled by the authors [6, 7, 8]

People in organization are most valuable asset and the only source of competitive advantage for business today. Everything can be replicated – products, services, infrastructure – but not human recourses. Once, great business leader of General Motors Alfred Sloan said: “Take my assets-but leave me my people and in five years i’ll have it all back”.

Besides, when economic crises occurred in the 1980s and 1990s, many manufacturing companies such as Toyota, Honda, Canon and Sharp also survived, as they adapted to changing times by continuing to invest in human development, as inexhaustible sources of innovation changes.

Effective implementation of innovation-oriented human potential is possible when we create rational organization system. Organizational potential – is the aggregate reserve of management system efficiency

increase, rational organization structure and internal processes, with the aim to accumulate the innovation potential as a source of the enterprise growth, its market value and competitiveness.

The professional management of human resources – is a source of qualitative changes of innovation activity and comprehensive development of the company.

Human resources are not only arithmetical set of knowledge, experience and practice of workers but also their ability to manifest themselves in the work. Therefore, successful organization and professional management of human resources are a main and significant reserve of innovation development of the company.

On Ukrainian domestic enterprises very often the innovation development slows down because of the lack of financing resources and weak investment activity. The investment potential on our enterprises is quite limited and financial priority is given to urgent production needs.

Also, one of the most important problems is planning process of investment development directions. Often, the prioritization of implementation plans with calculating investment decisions in the company is simply absent.

The modern management practice shows that about 15% of the information at on each management level is lost during communications. Therefore none manager will never understand the problems of the grassroots level and, moreover, he should not propose their solutions [11].

If most resources in business are limited, in the same time, the human resource has an unlimited potential for innovation-oriented knowledge and ideas creation. Unfortunately, lot of Ukrainian top managers does not see any need to change something. So, large amount of our manufactures have low competitiveness with further bankruptcy, because refuse to apply effective approaches, methods and concepts of modern management.

The building materials industry of Ukraine consists of enterprises with old Soviet history and the same inadequately formed corporate culture. Enterprises of production building materials are objects of special attention because in manufacturing process significant amount of energy resources is used. Accordingly in such conditions cannot be applied modern tools, effective management standards and program and project management concepts. With the considering of Ukrainian managers mentality level such application will never happen...

First of all it is necessary to create correct innovative-oriented human

system, where every worker feels own importance in corporate time and understanding need innovation changes. Only in comfortable microclimate human resource can realize their creative potential. It's quite clear that new organization changes and innovation activity realisation are perceived negatively among workers because their afraid of uncertainty situation.

In the old Ukrainian high energy intensity manufactures there is no hope for massive using of effective management tools despite on great world experience. All this processes impossible without favourable microclimate. Thus, it's necessary to start powerful motivational mechanism with different financing stimulate and clear remuneration schemes for innovation activity.

The main development preconditions of innovative processes must become a clear and understandable methodology for every worker that describes steps for innovation realisation. These steps include suggesting an innovative ideas, their correspond to priority criteria, main rules of making decisions and possible premium of payment.

One of the most important components is a priority selection criterion for every innovation idea. It must help the managers make right choice among the potential decisions. Speaking about business and commercial company – the financing criteria (profitable indicators) has a great advantage. These indicators include a payback period, a net present value, a cash flow from investing, a profitable index etc [12].

In modern Ukrainian realities of higher prices and tariffs on energy resources energy efficiency indicators become equally important. As a result it directly affect on the reducing energy cost of technological process and production system. These energy efficiency criteria's can include indicators such as energy unit cost on per production, energy intensity on goods and services for some period, the share of energy in cost production and others.

The quality improvement indicators, development of marketing and logistic processes, more efficient organizational and managerial conditions and improvement of working conditions also have a great importance for enterprise activities.

Today it's quite clear that innovation is a very important vital process. Therefore, the main task for the enterprise top management is the most rational and effective organization management of innovation processes.

Radical modernization of industrial technologies on our domestic production, increases of product quality standards to European levels,

growth of level competitiveness of Ukrainian products – are necessary requirement of modern management. High level of energy inefficiency is mostly concentrated in the industrial sector.

In modern conditions Ukrainian business management should not ignore the newest management tools that proved their effectiveness and workability. The lack of activation is primarily due to the mental unwillingness and personal non-awareness of the need to use modern tools for managing the company.

If the managers and personal are not ready to change its business strategy and use modern well-known instruments and concepts of organization then their activity will not be successful.

Firstly, top-management must understand need of changes, especially in higher energy efficiency level. The culture of effective energy consumption is the key of the profitable and competitiveness. To improve energy efficiency and to reduce final energy consumption are very important for our enterprises and almost impossible without modernization of production, using of new energy efficient technologies, investments in energy efficiency projects.

References

1. Serdyuk T. (2017) *Transformation of international economic relations: modern challenges, risks, opportunities and prospects: collective monograph /Serdyuk T., Franishina S. European integration processes in Ukraine in the sphere of energy efficiency // edited by M. Bezpartochnyi/ ISMA University. – Riga: «Landmark» SIA. – Vol. 3. – 197 p., 187-195.*
2. *Global Energy Architecture Performance Index Report (2017). The World Economic Forum. 91-93 route de la Capite CH-1223 Cologny/Geneva Switzerland www.weforum.org*
3. *Total energy consumption, Global Energy Statistical Yearbook, available at: <https://yearbook.enerdata.net/energyconsumptiondata>.*
4. Kuzmin V. (2018) *The higher energy efficiency. UNIAN. available at: <https://economics.unian.ua/energetics/10355241-doroga-neefektivnist-chomu-ukrajina-vtrachaye-energiyu.html>*
5. Franishyna S. (2017) *Activation of energy efficiency policy in conditions of European integration of Ukraine. Problems and tendencies development of the modern economy in the conditions of integration processes: theoretical and practical aspects: materials of the II International scientific and practical conference. Kherson. p. 62-65.*
6. Serdyuk V. (2017) *Features of conducting energy-saving activity at domestic enterprises. Materials of the International Scientific and Technical Conference "Energy Efficiency in the Spheres of Economics of*

- Ukraine", available at: <https://conferences.vntu.edu.ua/index.php/itb/egeu2017/paper/view/33495>
7. Baron C. *Analysis and Comparison of Project Management Standards and Guides* [Електронний ресурс]. /Rui XUE, Claude Baron, Philippe ESTEBAN // *Materials, Mechanical Engineering and Chemical Engineering*. Available at: <http://www.inase.org/library/2015/books/byrapaper/MMMCE/MMMCE01.pdf>
 8. *Library of PMI Global Standards*. [Електронний ресурс]. – Сайт Інституту управління проектами PMI, available at: <http://www.pmi.org/en/PMBOK-Guide-and-Standards/Standards-Library-of-PMI-Global-Standards>
 9. *Official site of the Ukrainian Project Management Association*, available at: <http://www.upma.kiev.ua>
 10. Scott D. Anthony (2011) *The Innovator's Guide to Growth. Putting Disruptive Innovation to Work*. Mark W. Johnson Joseph V. Sinfield Elizabeth J. Altman. Harvard business press Boston, Massachusetts, p. 346.
 11. Serdyuk T. (2016) *The place and role of innovative activity in the modern economic system* / T. V. Serdyuk, S. Yu. Franishina // *Modern technologies, materials and constructions in building: Scientific and technical journal*. Vinnitsa: VNTU. № 1(20). – 128 с.
 12. *Projects and project management in a modern company: study allowance* / G. L. Tsipes, A. S. Tovb. - M.: Olympus Business, 2009. – 463 с.

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**COAL
PRODUCER'S
ENERGY
EFFICIENT
POTENTIAL
ASSESSMENT**

In modern conditions, the limited availability of Ukraine's own fuel and energy resources, increasing the dependence on imported natural gas and, as a result, increasing energy prices are of particular importance for improving energy efficiency of industrial enterprises. In addition, in