e-mail: goroshkova69@gmail.com

ORCID ID: <https://orcid.org/0000-0002-7142-4308>

Researcher ID: D-6527-2019

Хлобистов Євген Володимирович, д.е.н., професор, академік Академії економічних наук України, професор кафедри екології

Національний університет «Києво-Могилянська академія»,

вул. Григорія Сковороди, 2, Київ 04655, Україна

e-mail: ievgen.khlobystov@ukr.net

ORCID ID: <https://orcid.org/0000-0002-9983-9062>

ДАННЫЕ ОБ АВТОРАХ

Горошкова Лидия Анатольевна, д.э.н., доцент, академик Академии экономических наук Украины, профессор кафедры предпринимательства, менеджмента организаций и логистики Запорожский национальный университет, ул. Жуковского, 66, Запорожье 69600, Украина

e-mail: goroshkova69@gmail.com

Хлобыстов Евгений Владимирович, д.э.н., профессор, академик Академии экономических наук Украины, профессор кафедры экологии

Национальный университет «Києво-Могилянська академія»

e-mail: ievgen.khlobystov@ukr.net

DATA ABOUT THE AUTHORS

Horoshkova Lidiia, D. Sc. in Economics, Professor of the Department of entrepreneurship, management of organizations and logistics,

Zaporizhzhya National University,

66 Zhukovskogo str., Zaporizhzhya 69600, Ukraine

e-mail: goroshkova69@gmail.com

Khlobystov Ievhen, D. Sc. in Economics, professor, Professor of the Department of Environmental Studies,

National university of «Kyiv-Mohyla academy»,

2 Skovorody str., Kyiv 04070, Ukraine

e-mail: ievgen.khlobystov@ukr.net

Подано до редакції 12.02.2021

Прийнято до друку 04.03.2021

УДК 330.112

<https://doi.org/10.31470/2306-546X-2021-48-131-138>

СУЩНОСТЬ И ОЦЕНКА АДАПТИВНОСТИ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ

Карпенко Е. М.,
Павлова Д. А.

Предметом исследования выступает адаптивность промышленного предприятия.

Цель исследования – выявить наиболее существенные факторы, влияющие на уровень адаптивности промышленного предприятия.

Методами исследования, использованными в работе, являются наблюдение, сбор, анализ и синтез, сравнение, группировка, системный и комплексный подход.

Результаты работы. В рамках данного исследования авторами проанализирована адаптивность промышленного, которая своими результатами логически связана с полным комплексом конечных результатов функционирования предприятия как производственной системы и подчинена необходимости достижения заданного уровня таких результатов.

Областью применения результатов исследования является инновационная политика предприятия, ориентированная на улучшение его позиционирования на рынке.

Выводы. Эффективность, сложность и стоимость реализации поведенческой, параметрической и структурной адаптации предприятия к изменяющемуся внешнему окружению растут в порядке их перечисления. Следовательно, перед руководством предприятия всегда стоит проблема выбора оптимального способа адаптации, во-первых, позволяющего обеспечить сохранение состояния гомеостатического равновесия предприятия и его внешней среды, во-вторых, способного быть им реализованным как с точки зрения имеющейся компетенции, так и располагаемых средств. Оптимальность способов адаптации определяется имеющимся потенциалом предприятия, отраслевыми условиями конкурентного взаимодействия и совокупностью факторов макросреды.

Ключевые слова: инновационная восприимчивость, инновационная активность, цели функционирования, производственная система, адаптивность предприятия, поведенческая адаптация, параметрическая адаптация, структурная адаптация.

СУТНІСТЬ І ОЦІНКА АДАПТИВНОСТІ ПРОМИСЛОВОГО ПІДПРИЄМСТВА

Карпенко О. М.,
Павлова Д. О.

Ключові слова: інноваційна сприйнятливість, інноваційна активність, мета функціонування, виробнича система, адаптивність підприємства, поведінкова адаптація, параметрична адаптація, структурна адаптація.

THE ESSENCE AND ASSESSMENT OF THE ADAPTABILITY OF AN INDUSTRIAL ENTERPRISE

Karpenko Elena,
Pavlova Darya

The subject of the study is the adaptability of an industrial enterprise.

The purpose of the study is to identify the most significant factors that affect the level of adaptability of an industrial enterprise.

The research methods used in the work are observation, collection, analysis and synthesis, comparison, grouping, system and complex approach.

Results of the work. Within the framework of this study, the authors analyzed the adaptability of an industrial enterprise, which by its results is logically related to the full range of final results of the enterprise functioning as a production system and is subordinated to the need to achieve a given level of such results.

The scope of application of the research results is the innovation policy of the enterprise, focused on improving its positioning in the market.

Conclusions. The efficiency, complexity and cost of implementing behavioral, parametric and structural adaptation of an enterprise to a changing external environment increase in the order they are listed. Therefore, the management of the enterprise always faces the problem of choosing the optimal method of adaptation, first, which allows to ensure the preservation of the state of homeostatic equality of the enterprise and its external environment, and secondly, which can be implemented by it both in terms of existing competence and available funds. The optimal adaptation methods are determined by the existing potential of the enterprise, the industry conditions of competitive interaction and the combination of macro-environment factors.

Key words: Innovative receptivity, innovative activity, functioning goals, production system, adaptability of the enterprise, behavioral adaptation, parametric adaptation, structural adaptation.

JEL Classification: O31, L16, L60

Relevance. The results of the analysis of the main trends in the development of the external environment of domestic enterprises and the factors that they generate allow us to conclude that almost all trends in the dynamics of the external environment of domestic enterprises can be both opportunities and threats to their sustainable development, and their transformation into an opportunity or threat for an enterprise is determined by how effectively it can adapt to the changes taking place.

Status of the issue. The problems of enterprise adaptability to the external environment are universal and are considered by various authors in the framework of the study of different types (economic, competitive, etc.) of enterprise stability, management of enterprise adaptation to market conditions, sustainable development of the enterprise, enterprise management (adaptive, strategic, etc.) [1, p. 152].

In the literature, there are three directions in the interpretation of the characteristics of an enterprise that determine its adaptation to changing environmental conditions, and its results: a) the interpretation of adaptivity as the stability of the properties of the enterprise in the conditions of a changing external environment; b) the interpretation of adaptivity as the stability of the behavior (strategy) of the enterprise in the conditions of a changing external environment; c) the interpretation of adaptivity as the stability of the results of the functioning of the enterprise in the conditions of a changing external environment [6]. The characteristics of these directions are given in the Table 1.

Thus, all existing interpretations of the essence of the adaptability of the enterprise and its results consider it as a property of the enterprise, the presence of which ensures the stability of certain parameters of its state or functioning. At the same time, stability is understood as the presence of any enterprise parameter within acceptable limits, regardless of the presence and strength of actions that change its value. Here, as a rule, we are talking about «quasi-stability» [8, p. 225], that is, about finding the parameters within the acceptable deviations, and not their optimal values. The analysis shows that the general disadvantage of the existing interpretations of the essence of enterprise adaptability and its results is their limitations, since each of them considers only a part of the controlled parameters of the internal environment of the enterprise or its functioning, to maintain the values of which within the specified limits requires the presence of adaptability [9, p. 71].

The concept of enterprise adaptability. The enterprise as a purposeful system, characterized by purposeful behavior, is an open system formation that interacts with the external environment. Thus, in the process of functioning of the enterprise, the system «enterprise-external environment» is formed, in which its elements actively interact with each other. The adaptability of an enterprise is its essential property, which is the result of the transition of the relations of interaction of the enterprise with the elements of the external environment into its attribute. Enterprise adaptation is a dynamic process that represents a set of responses of the enterprise to the factors of adaptation, which takes place in the «enterprise-external environment» system, thanks to which the enterprise's subsystems,

despite the variability of external conditions and internal targets, maintain the stability necessary for the compliance of its activities with its goals [5].

The table 1 - Characteristics of the existing approaches to the interpretation of the essence of the characteristics of the enterprise, which determine its adaptation to changing environmental conditions, and its

Distinctive feature of the approach	Adaptability as the stability of the properties of the enterprise	Adaptability as the stability of the behavior (strategy) of the enterprise	Adaptability as the stability of the results of the enterprise functioning
1. The considered reason for the exit from the stability state	Environmental impact	Environmental impact	Environmental impact
2. Enterprise-controlled parameters in the adaptation process	The set of properties and characteristics of the internal environment of the enterprise	The set of characteristics of the behavior (strategy) of the enterprise in the external environment	The totality of the results of the operation of the enterprise in the external environment
3. Results of the implementation of the adaptation process	Returning the values of the properties and characteristics of the internal environment of the enterprise to the limits of acceptable limits of their changes – quasi-stability of the internal environment of the enterprise	The return of the values of the characteristics of the behavior (strategy) of the enterprise in the external environment within the permissible limits of their changes – the quasi-stability of the enterprise strategy	Returning the values of the results of the enterprise's functioning in the external environment to the limits of acceptable limits of their changes or their growth

Thanks to the adaptation process, homeostasis is preserved, first, in the interaction of the enterprise with the external environment, and secondly, in the system «purposeful behavior of the enterprise–the potential of the enterprise». Homeostasis (from homeo... and Greek stasis – immobility, state) - the relative dynamic constancy of the composition, properties, stability of the main functions of the functional subsystems of the enterprise (that is, its internal environment) and the rules of its interaction with the external environment. Strictly speaking, the enterprise as a production system is in a state of disequilibrium – in a state of development-which is called «homeokinesis» [7].

In this regard, it should be noted that the processes of adaptation (that is, the maintenance of «homeokinesis») are a systemic combination of three components, which are the totality of the processes of external and internal adaptation:

1. The processes of maintaining balance in the system «purposeful behavior of the enterprise–the external environment».
2. Processes of maintaining balance in the system «purposeful behavior of the enterprise–the potential of the enterprise».
3. Processes of maintaining balance in the system «potential of the enterprise–the external environment» [11, p. 203].

Thus, the most important role in the process of adaptation of the enterprise is played by the set of rules of its behavior that make up the strategy.

The adaptation process is implemented whenever significant changes occur in the «enterprise-external environment» system, which can be initiated by each of the parties to the interaction. It provides the formation of a new homeostatic state, which allows you to achieve maximum efficiency of the enterprise in the current conditions of the external environment and at a given level of internal targets. Therefore, the maximum possible level of achievement of the set goals of activity is the most important criterion for the effectiveness of the adaptation process of the enterprise. Achieving the goals of the enterprise's activities by adapting automatically means meeting the requirements that, first, the external environment sets for the enterprise, and secondly, are set by the level of internal targets [3, p. 158].

Since the enterprise is not only an adaptive, but also an adaptive system, since it is inherent in the presence of a transformative nature, the process of adaptation of the enterprise can be expressed not only in the ordering of its internal environment and behavior, but also those fragments of the surrounding environments with which it interacts.

The enterprise and the external environment are always not in static, but in dynamic equilibrium [2, p. 39], their relations are constantly changing, and, consequently, the process of adaptation must also be constantly carried out.

An enterprise is able to carry out adaptation processes only if it has the property of adaptability. The adaptability of an enterprise is an economic category that denotes the property of an enterprise, the presence of which determines its ability to effectively implement the process of maintaining the state of homeostatic equilibrium in the «enterprise-external environment» system, during which all the qualitative characteristics of the parties to this interaction can change, and which allows the enterprise to meet the ideal of activity and achieve its goals in an unstable, complex, differentiated and competitive external environment [6].

Adaptability is not an immanent property that arises as a result of the interaction of the enterprise with the external environment. The processes of adaptation of the enterprise occur by implementing the capabilities of its corresponding

properties that it possesses. Thus, adaptability has two forms of its manifestation: factorial-in the form of the available adaptive capabilities of the enterprise, through which its adaptation is realized, and resultant-in the form of the results of the course of adaptive processes that have arisen due to the implementation of the adaptive capabilities.

Based on the above, it can be stated that the level of expression of adaptability as a property of an enterprise is determined by three groups of factors: causal, conditional, and inducing (see Figure 1).

Figure 1 - Determination relationship between enterprise adaptability and factors determining its level

Thus, the assessment of the adaptability of the enterprise in the factorial form of its existence should be made by assessing the value of the adaptability potential of the enterprise (and within its framework the possibilities of behavioral, parametric and structural adaptation), the factors of its external environment, the intensity of the motivation of the enterprise personnel.

The assessment of the value of the enterprise's adaptability in the resulting form of its existence should be made by evaluating the value of the results of the enterprise's achievement of the set goals of activity in the existing conditions of the external environment and under the existing target settings, measured by the growth rate of the corresponding indicators of achieving the set goals.

Ways to adapt the enterprise. The conducted theoretical studies of the nature of adaptability as a property of the enterprise allowed us to identify three main ways of its adaptation to the changes in the external environment:

1. Adaptation through the transformation of the strategy of the enterprise (behavioral adaptation), that is, the modification of behavioral ways of responding to changes occurring in the external environment and internal target settings. Behavioral adaptation is implemented by the enterprise by: a) repositioning in the external environment (space, competition, consumer consciousness) in order to be in the conditions of the external environment corresponding to the existing potential; b) the use of market power to change the external environment (both the competitive situation in the industry, and the general economic situation and the institutional environment).

2. Parametric adaptation, implemented by reconfiguring existing resources and competencies (a small change in production technology). The possibilities of parametric adaptation are generated by the redundancy of the enterprise's potential (production capacity and space, personnel, technical characteristics of products), versatility (versatility of equipment, liquidity of the balance sheet, breadth of competence) and diversification (diversification of suppliers and consumers) its elements [10, p. 87].

3. Structural adaptation, implemented by changing the composition of the sources of the enterprise's capabilities by introducing new ones and changing existing ones, and then using the obtained capabilities in the process of functioning. It is carried out by conducting R & D, training personnel, acquiring fixed assets and intangible assets, and changing the organizational structure.

The efficiency, complexity, and cost of implementing the above-mentioned ways to adapt an enterprise to a changing external environment are increasing in the order they are listed. Consequently, the management of the enterprise is always faced with the problem of choosing the optimal method of adaptation, first, which allows to ensure the preservation of the state of homeostatic equilibrium of the enterprise and its external environment, and secondly, which can be implemented by it both in terms of existing competence and available funds [4, p. 315]. The optimal

adaptation methods are determined by the existing potential of the enterprise, the industry conditions of competitive interaction and the combination of macro-environment factors.

Assessment of the adaptation of woodworking enterprises of the Gomel region to the dynamics of the environment. As a starting point for this assessment, we used data on some of the results of the functioning of woodworking enterprises in the Gomel region for the period 2012-2018. The integral results of the assessment based on the author's methodology are shown in Table 2 [7].

In general, for the period 2012-2018, the highest level of results of adaptation to the dynamics of the environment, focused on meeting the interests of representatives of interested groups, was demonstrated by Gomel Oboi and Kalinkovich Furniture Factory (KMC). Both of these enterprises demonstrated fairly stable positive dynamics of the group of results of their activities under consideration and provided average annual growth for this group of results at the level of 3.6% and 7.3%, respectively.

The Mozyr DOC (MDOC) demonstrated a relatively stable trend of increasing the level of self-adaptability in meeting the interests of interested groups. Despite the rather serious decline that took place in 2016-2017, this company in 2018 managed to significantly (by 8.3%) increase the group of results of its activities under consideration. In general, during the analyzed period, the worst dynamics of the results of activity was demonstrated by the Svetlogorsk Pulp and Paper Mill (SCCC), whose level of adaptation to the environment decreased by 19.2% on average over the year.

Table 2. Integrated assessment of the results of adaptation of woodworking enterprises of the Gomel region to the dynamics of the environment

enterprises	Time periods						Average for the analysis period
	2013/ 2012	2014/ 2013	2015/ 2014	2016/ 2015	2017/ 2016	2018/ 2017	
Adaptation outcomes related to meeting the interests of interested groups							
MDOC	0,853	1,033	0,918	0,761	-	1,083	0,930
Gomeldrev	-	0,909	1,049	0,387	1,135	-	0,870
Homeloboi	1,036	1,068	0,898	1,226	0,870	1,120	1,036
Rechitsadrev	0,875	1,236	0,996	0,777	0,351	-	0,847
KMC	0,893	1,274	1,159	0,857	1,251	1,007	1,073
SKKK	1,105	0,890	0,306	-	-	0,929	0,808
The results of adaptation related to the satisfaction of the interests of society							
MDOC	0,621	1,146	0,523	0,001	-	0,653	0,589
Gomeldrev	-	0,749	2,107	0,182	2,369	0,524	1,186
Homeloboi	1,008	1,025	0,849	0,668	1,246	0,967	0,961
EMF	-	0,001	-	0,324	2,797	0,797	0,980
Rechitsadrev	0,525	1,282	1,298	0,280	2,317	0,802	1,084
KMC	1,099	1,266	0,444	0,571	2,039	0,451	0,978
SKKK	0,898	0,911	0,565	0,244	2,774	1,291	1,114
The results of adaptation related to the satisfaction of the interests of the company The results of adaptation related to the satisfaction of the company's own economic interests to improve the efficiency of resource use							
MDOC	0,859	0,466	1,041	0,955	1,657	1,166	1,024
Gomeldrev	1,017	0,825	1,072	0,868	1,335	1,061	1,030
Homeloboi	0,999	0,834	1,120	0,865	1,426	1,169	1,069
EMF	0,930	0,841	0,555	1,229	1,054	1,326	0,989
Rechitsadrev	1,170	1,068	0,979	0,858	1,050	1,107	1,039
KMC	0,957	0,582	2,503	0,621	1,211	1,549	1,237
C SKKK	1,063	0,742	1,136	0,754	1,343	1,043	1,014

The situation in the analyzed period was fundamentally different with regard to the results of the adaptation of the woodworking enterprises of the Gomel region to the dynamics of the environment related to the satisfaction of the interests of the community. Gomeldrev, Rechitsadrev and JCCC were the leaders in terms of average annual growth rates. In the analyzed period, these enterprises managed to ensure an average annual growth of the considered type of results of their activities at a level exceeding 8%. The maximum growth rate was demonstrated by the Gomeldrev – 18.6%. It is necessary, however, to take into account that this growth, in fact, had an exogenous cause, because it was associated with a high level of tax burden on these enterprises. Thus, the development of these three enterprises was externally focused on the primary increase in the level of satisfaction of the interests of society, and in many respects-to the detriment of their other economic interests. In addition, it should be noted that the growth itself was very uneven. Sharp positive jumps alternated with no less significant reductions in the results of operations, which indicates a high degree of instability of the market positions of these enterprises and a high elasticity of their financial condition in relation to the conjuncture of the target market segments.

The most stable dynamics of its adaptability, associated with the satisfaction of the interests of the society in the analyzed period, was demonstrated by the largest enterprise in the industry - Gomeloboi. Despite the fact that,

on average, during the period under review, the analyzed results of the adaptation of this enterprise to the environment decreased by 3.9% per year, nevertheless, this enterprise managed to ensure a sufficiently high stability of its development trends and avoid sharp negative changes in the level of its adaptability. The most significant reduction in the level of adaptability of this enterprise for the group of results of its activities under consideration was observed in the period 2015-2016, which accounted for the general deterioration of the market situation, which negatively affected most enterprises in the industry. The CMC also demonstrated similar trends in its development, which were characterized by a slightly higher degree of instability, in the analyzed period.

The least high level of adaptability, focused on increasing the level of satisfaction of the interests of the society, in the analyzed period was inherent in the MDOC, where the average annual decrease in the relative level of the considered group of performance results reached 41%. The main reason for this situation was the relatively low priority of the considered group of the results of the activity of this enterprise (expressed, in particular, in minimizing the level of financing of its own social sphere) and its primary orientation to increase the level of satisfaction of its own economic interests and the interests of representatives of interested groups.

Analyzing the results of the adaptation of woodworking enterprises of the Gomel region to the dynamics of the environment associated with the satisfaction of their own economic interests, it should be noted that in this case, the selected enterprises showed much more stable positive trends in their development than in the previous two cases.

On average, during the analyzed period, almost all of the selected enterprises in the industry (with the exception of EMF) managed to provide a positive increase in the results of their activities related to the efficiency of resource use, which clearly indicates that the adaptation capabilities of these enterprises are focused on this group of performance parameters. As for the internal distribution of the analyzed enterprises according to the achieved level of the considered results of their activities, it should be noted that this distribution was in principle identical to that which took place in relation to their adaptation to the interests of the interested groups.

The leadership in the achieved adaptation results related to the satisfaction of their own economic interests belonged to the Gomel Region and the KMC, which ensured an average annual growth of such results at the level of 6.9% and 23.7% respectively. At the same time, however, it should be noted that the dynamics of the return of the main types of production resources in the first of these enterprises was significantly more stable than in the second, which allows us to consider its adaptive abilities as more developed. Gomeldrev and Rechitsadrev also managed to demonstrate a fairly stable positive dynamics of the considered group of results of their functioning, which in the analyzed period did not show an annual decrease in the level of performance by more than 16.5%, and on average for the period provided an annual growth of 3% and 3.9%, respectively.

In the analyzed period, the lowest average positive dynamics of the relative level of return on production resources was demonstrated by the EMF. The main reason for this was a significant decline in the level of the group of performance results under consideration, which took place in 2013-2015 and was primarily associated with a gap in the growth rates of the level of remuneration of employees and their output. However, starting in 2016, this enterprise managed to ensure a fairly stable growth of the considered results of its operation, as a result of which, by the end of the analyzed period, it was able to almost completely compensate for the consequences of the previous decline.

Considering the dynamics of the level of results of their activities related to the efficiency of resource use, common to all enterprises of the industry, it is possible to distinguish two time stages. The first of them is limited to 2013-2016 and is characterized by a general reduction in the results under consideration, the main reason for which was a rapid increase in the cost of production resources, not compensated by a corresponding increase in their returns. The second stage began in 2017. and it is characterized by a general increase in the considered type of performance of the industry enterprises, primarily associated with the beginning of their transition from the extensive to the intensive path of their development.

Generically analyzing the results of adaptation to the dynamics of the environment achieved by the woodworking enterprises of the Gomel region, we can conclude the following. The highest and fairly stable level of adaptive abilities is found in two enterprises of the industry – Gomeloboi and KMK-and the similarity of the results of their activities cannot be explained by the similarity of the scale of their functioning and any other extensive factors. Apparently, the leadership of these enterprises in terms of their adaptability is due to the qualitative features of their activities and, first of all, their focus on the maximum use of various types of innovations. In another group, it is possible to distinguish those enterprises in the industry that, although they have a moderate level of results of adaptation to the environment, but after the decline in their activities in recent years, have managed to provide a significant increase in their own adaptive abilities. The JCCC and, with certain reservations, the MDOC can be identified as representatives of this group. All the other enterprises of the industry considered can be conditionally grouped into the third group, the distinguishing feature of which is the high instability of development trends and the general reduction of adaptive abilities in the last years of the analyzed period.

Conclusions. The efficiency, complexity, and cost of implementing behavioral, parametric, and structural adaptation of an enterprise to a changing external environment increase in the order they are listed. Therefore, the management of the enterprise always faces the problem of choosing the optimal method of adaptation, firstly, which allows to ensure the preservation of the state of homeostatic equality of the enterprise and its external environment, and secondly, which can be implemented by it both in terms of existing competence and available funds. The optimal adaptation methods are determined by the existing potential of the enterprise, the industry conditions of competitive interaction and the combination of macro-environment factors.

Список использованных источников

1. Алексеева, М. Б., Ветренко, П. П. Анализ инновационной деятельности. Москва: Юрайт, 2019. 303 с.
2. Горфинкель, В. Я., Попадюк, Т. Г. Инновационное предпринимательство. Москва: Юрайт, 2019. 468 с.
3. Антонец, В. А. и др. Инновационный менеджмент. Москва: Юрайт, 2019. 303 с.
4. Гончаренко, Л. П., Кузнецов, Б. Т., Булышева, Т. С. и др. Инновационный менеджмент. Москва: Юрайт, 2019. 487 с.
5. Карпенко, Е. М. Потенциал производственной системы: сущность, методика оценки, процесс актуализации: монография. Гомель: ГГТУ им. П.О. Сухого, 2003. 377 с.
6. Карпенко, Е. М., Нехрист, О. А. Адаптивность предприятия как фактор его устойчивого развития. Известия Гомельского государственного университета им. Ф.Скорины. 2006. № 5(38). С. 111–118.
7. Карпенко, Е. М., Павлова, Д. А. Сущность и факторная обусловленность инновационной восприимчивости предприятия. Економічний вісник університету. 2020. Вып. 45. С. 66–72.
8. Лапин, Н. И., Карачаровский, В. В. Теория и практика инноватики. Москва: Юрайт, 2019. 350 с.
9. Медынский, В. Г. Инновационный менеджмент. Москва: Инфра-М, 2018. 350 с.
10. Ружанская, Л. С., Якимова, Е. А., Зубакина, Д. А. Стратегический менеджмент. Екатеринбург: Издательство Уральского Университета, 2019. 295 с.
11. Брусакова, И. А. и др.. Теоретическая инноватика. Москва: Юрайт, 2019. 333 с.

References

1. Alekseeva, M. B., Vetrenko, P. P. (2019). Analiz innovacionnoj deyatel'nosti [Analysis of innovative activity]. Moskva: YUrajt, 303 s.
2. Gorfinkel', V. YA., Popadyuk, T. G. (2019). Innovacionnoe predprinimatel'stvo [Innovative Entrepreneurship]. Moskva: YUrajt, 468 s.
3. Antonec, V. A. i dr. (2019). Innovacionnyj menedzhment [Innovation management]. Moskva: YUrajt, 303 s.
4. Goncharenko, L. P., Kuznecov, B. T., Bulysheva, T. S. i dr. (2019). Innovacionnyj menedzhment [Innovation management]. Moskva: YUrajt, 487 s.
5. Karpenko, E. M. (2003). Potencial proizvodstvennoj sistemy: sushchnost', metodika ocenki, process aktualizacii: monografiya [Production system potential: essence, evaluation methodology, actualization process: monograph]. Gomeľ: GGTU im. P.O. Suhogo, 377 s.
6. Karpenko, E. M., Nekhrst, O. A. (2006). Adaptivnost' predpriyatiya kak faktor ego ustojchivogo razvitiya [Adaptivity of enterprise as a factor of its sustainable development]. Izvestiya Gomeľ'skogo gosudarstvennogo universiteta im. F. Skoriny. - Proceedings of Gomel State University named after F. Skorina, 5(38). 111–118.
7. Karpenko, E. M., Pavlova, D. A. (2020). Sushchnost' i faktornaya obuslovlennost' innovacionnoj vospriimchivosti predpriyatiya [Essence and factor conditionality of enterprise innovation susceptibility]. Ekonomichnij visnik universitetu - University Economic Bulletin, 45. 66–72.
8. Lapin, N. I., Karacharovskij, V. V. (2019). Teoriya i praktika innovatiki [Theory and Practice of Innovation]. Moskva: YUrajt, 350 s.
9. Medynskij, V. G. (2018). Innovacionnyj menedzhment [Innovation Management]. Moskva: Infra-M, 350 s.
10. Ruzhanskaya, L. S., YAkimova, E. A., Zubakina, D. A. (2019). Strategicheskij menedzhment [Strategic management]. Ekaterinburg: Izdatel'stvo Ural'skogo Universiteta, 2019. 295 s.
11. Brusakova, I. A. i dr.. (2019). Teoreticheskaya innovatika [Theoretical innovation]. Moskva: YUrajt, 333 s.

ДАНІ ПРО АВТОРІВ

Карпенко Олена Михайлівна, доктор економічних наук, професор, завідувач кафедри міжнародного менеджменту

Білоруський державний університет
пр. Незалежності 4, м. Мінськ, 220050, Білорусь
e-mail: emkarpenko@mail.ru

Павлова Дар'я Олексіївна, аспірант

Білоруський державний університет
пр. Незалежності 4, м. Мінськ, 220050, Білорусь
e-mail: emkarpenko@mail.ru

ДАННЫЕ ОБ АВТОРАХ

Карпенко Елена Михайловна, доктор экономических наук, профессор, заведующий кафедры международного менеджмента

Белорусский государственный университет
пр. Независимости 4, г. Минск, 220050, Беларусь
e-mail: emkarpenko@mail.ru

Павлова Дарья Алексеевна, аспирантка

Белорусский государственный университет
пр. Независимости 4, г. Минск, 220050, Беларусь
e-mail: emkarpenko@mail.ru

DATA ABOUT THE AUTHOR

Karpenko Elena, PhD, Professor, Head of Department of International Management
 Belarusian State University
 pr. Nezavisimosti 4, Minsk, 220050, Belarus
 e-mail: emkarpenko@mail.ru
Pavlova Darya, graduate student
 Belarusian State University
 pr. Nezavisimosti 4, Minsk, 220050, Belarus
 e-mail: emkarpenko@mail.ru

Подано до редакції 03.03.2021

Прийнято до друку 21.03.2021

УДК 331.101.5

<https://doi.org/10.31470/2306-546X-2021-48-138-147>

СРАВНИТЕЛЬНЫЙ АНАЛИЗ ЗАТРАТНОГО И ДОХОДНОГО ПОДХОДОВ ОПРЕДЕЛЕНИЯ ВЕЛИЧИНЫ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА

Тетеринец Т. А.

Актуальность темы исследования заключается в изучении методологических основ оценки человеческого капитала.

Цель: сравнительный анализ основополагающих методологических подходов стоимостной оценки человеческого капитала.

Методы – анализ, синтез, сравнения и др.

Результаты работы: изучение методологии оценки развития и функционирования человеческого капитала представляется особенно важным в современных условиях. Приоритеты глобальной экономики свидетельствуют об ограничительном воздействии ресурсных преимуществ, определяя доминирующую роль инновационно-технологических факторов, включающих также уровень накопленного человеческого капитала. Учитывая невысокую ресурсоемкость развивающихся экономик, анализ методологических подходов оценки функционирования и развития человеческого капитала представляется особенно актуальным.

Выводы: изучены основные методологические подходы стоимостной оценки человеческого капитала. Рассмотрена эволюция их развития в контексте различных экономических учений. Представлены формализованные алгоритмы определения величины человеческого капитала в разрезе затратного и доходного принципов оценки. Выявлены преимущества и недостатки изученных методик и определены возможности их синергетического использования.

Ключевые слова: человеческий капитал, методология, подходы, способы, расходы, доходы, инвестиции, образование, период трудоспособности, возраст, ставка дисконтирования.

COMPARATIVE ANALYSIS OF COST AND INCOME APPROACHES TO DETERMINING THE VALUE OF HUMAN CAPITAL

Tsetsyarynets Tat'iana

The relevance of the research topic is to study the methodological foundations of human capital assessment.

Purpose: comparative analysis of fundamental methodological approaches to the valuation of human capital.

Methods – analysis, synthesis, comparisons and etc.

Results of work: the study of the methodology for assessing the development and functioning of human capital is particularly important in modern conditions. The priorities of the global economy indicate the restrictive impact of resource advantages, determining the dominant role of innovative and technological factors, which also include the level of accumulated human capital. Given the low resource intensity of developing economies, the analysis of methodological approaches to assessing the functioning and development of human capital is particularly relevant.

Conclusions: the main methodological approaches of human capital valuation are studied. The evolution of their development in the context of various economic doctrines is considered. Formalized algorithms for determining the value of human capital in the context of cost and income evaluation principles are presented. The advantages and disadvantages of the studied methods are revealed and the possibilities of their synergistic use are determined.

Keywords: human capital, methodology, approaches, methods, expenses, income, investments, education, working capacity, age, discount rate.

JEL Classification: J41, H52, I28, O15

ПОРІВНЯЛЬНИЙ АНАЛІЗ ВИТРАТНОГО І ПРИБУТКОВОГО ПІДХОДІВ ВИЗНАЧЕННЯ ВЕЛИЧИНИ ЛЮДСЬКОГО КАПІТАЛУ

Тетеринець Т. А.

Актуальність теми дослідження полягає у вивченні методологічних основ оцінки людського капіталу.

Мета: порівняльний аналіз основоположних методологічних підходів вартісної оцінки людського капіталу.