Innovative Approaches in the System of Regional Development Strategizing

Iryna Ignatieva^{1,*}, Alina Serbenivska¹, Anna Orel², Mariia Bieloborodova³ and Liudmyla Bondarenko³

¹Department of Marketing and Business Management, National University of «Kyiv-Mohyla Academy», Kyiv, Ukraine. ²Department of Foreign Economic Activities of Enterprises, National Aviation University, Kyiv, Ukraine. ³Department of Tourism and Enterprise Economics, Dnipro University of Technology, Dnipro, Ukraine.

Abstract: Nowadays, the development of effective strategic decisions for the development of the business environment in different areas requires new approaches and tools of strategic management. Among such innovative tools, the authors chose the position of the theory of spiral dynamics developed by Don Beck and Chris Cowan, which was based on the theory of emergent cyclic levels of existence of Clare W. Graves. Of particular relevance is the search for tools in the activities of certain areas, where the active community adopts experience and gains practice, and sometimes financial assistance from international institutions to implement their projects. It is proposed to use benchmarking as a specific methodological tool. The main aim of the study is to highlight the methodological principles of benchmarking in the analysis and formation of strategic directions of regions and search for a methodological tool that would identify not only the model region as an example of best practice in a particular area of strategic development, but also to understand which areas need some improvement to move to a more effective stage of spiral development.

Keywords: Strategizing, the development of regions, Leadership potential of the region, Benchmarking.

INTRODUCTION

At the present stage of market transformation of Ukraine's economy, one of the main factors in the stability of the achieved positive socio-economic trends in the country is to ensure sustainable economic growth and development of the social sphere. Management practice proves that the development and implementation of strategies of certain regions in the first place puts forward the problem of misunderstanding and ignorance of the full system of values of the population of a particular territorial community, which are the most important. A well-conducted strategic analysis is not a guarantee of the success of the adopted strategies and a guarantee of the development of certain territorial communities. Today, there is no need to prove the fact that today organizations of different types of management and employees are not static. Accordingly, certain territories and the population living in them are not static, too. Changes that can be successful or destructive are constantly taking place in regions of different scales. It is in this context that it is very important to pay attention to the causes of change. The issue of understanding changes in the values of the population as a key factor influencing any changes is the main methodological problem of the study. Quite important in this direction are studies in the

framework of the spiral dynamics of C. W. Graves. It is this theory that explains the mechanism and order of formation of methodological tool for studying such practices. The very personality values [2, p. 9]. In addition to studying the values of the population, the second important factor is the study of modern successful practices. Benchmarking is offered as a possession of benchmarking technologies and their productive use is an integral prerequisite for the development of business entities.

The key feature of benchmarking is its creative nature, focus on best practices with further use in the own practice. This allows to reach the level of best practices, in particular, in the strategic development of territories and to exceed it. This feature of benchmarking becomes extremely relevant when the economic situation develops very slowly, and in addition, the effects of pandemics increase the unpredictability of events. That is why the further development of the theoretical provisions of benchmarking, as well as its adaptation to domestic realities is an extremely necessary, timely and popular practice.

LITERATURE REVIEW ON ERP DEPLOYMENT

Strategizing of the development of certain regions without considering the value component leads to the formation of failed strategies. According to C. Cowan, if the developers of the strategy can answer the question: "Who, how, by whom, when and for what it should be managed?", the organization is on the way to include a value component in the strategy. It

^{*}Address correspondence to this author at the Department of Marketing and Business Management, Faculty of economic sciences, National University of «Kyiv-Mohyla Academy», Kyiv, Ukraine; E-mail: iignatyva@ukr.net

is important to understand and realize the principles of the value system, which is based on their dynamism; they pass certain stages from the view of the environment to the view of the outside and from the awareness of personal to collective. Thus, we can conclude that the theory of spiral dynamics by C. W. Graves is an effective tool of management practice that can be used to increase the effectiveness of strategic decisions.

In addition to taking into account the values in the strategizing system, an important point is to take into account the successful experience of implementing certain strategic decisions and the introduction of such experience. The main problem that arises in this case is finding out why a successful experience for one region is unpleasant and not successful for another. In the management system of the entity, the benchmarking tool acts as a strategic focus on the best achievements by comparing the results of activity and methods of work with the model. It covers the processes of technology research, organization of production and marketing, management and marketing methods at the model object to identify innovative experiences and their implementation in a particular object of study. In order to understand the possibilities of using such a tool in the formation of strategic directions of regional development, it is important to understand the possibilities and advantages of benchmarking methodology. Analytical review of foreign literature sources [3, 8, 9, 15, 20, 19, 22-25] revealed the existence of theoretical provisions and practical experience of effective application of benchmarking in business entities that belong to different industries. The main attention is paid to the classification and characteristics of certain types of benchmarking, the methodology of the model study, the principles of organization and use of its results in practice. The domestic theory covers issues that reveal the historical stages of development and importance of benchmarking, justifies the reasons and motives for its attribution to the level of management and marketing [5, 7, 16].

Based on the generalized practice and theory, benchmarking (Eng. Benchmarking) — is the process of finding a standard or model more cost-effective competitor in order to compare with the own and adopt its best practices. [15]. Taking into account such definitions, not only the business entity - the enterprise, but also a certain region or territorial community can act as an object. Of course, certain characteristics of such an object of study will differ from the enterprise. But it is worth noting that today the use of benchmarking in the practice of business running gives management the opportunity to continuously systematically search for best practices that lead businesses to a more perfect form and implement them. Positive experience in the application of benchmarking in PJSC "Obolon", PJSC "Farmak", the company "Sandora" and others prove that it is an effective tool for determining the position of an entity in comparison with other entities similar in size and / or scope of activity

RESEARCH METHODOLOGY

The study of the peculiarities of the formation of modern ways of territorial development in Ukraine has revealed that regional scholars and public administration experts highlight the need to introduce such a process in Ukraine as strategizing. The classic understanding of strategizing is associated with the development of a strategy for a particular region. But the systemic nature of the strategy and the experience of international practices in orientation in strategy is based on not only internal capabilities, but also considering geopolitical external influences. Infrastructures that go beyond the country and require a new type of strategic infrastructure management - all this has a decisive impact on all processes and significant decisions in the country. In this context, strategizing the development of a certain area - it is advisable to understand the method of multidimensional (multi-focus) self-management of the territory, taking into account longterm strategies of various external strategic players and in contrast to develop and implement their strategies.

Today, state monitoring of strategizing practice in Ukraine shows that most communities do not have much demand for the development and implementation of strategizing models of good quality. Often such a request is stimulated from the outside. European strategizing practices are disseminated through international technical assistance programs (for example «U-LEAD with Europe», «Decentralization brings better results and efficiency: DOBRE» and others). But despite the availability of sufficient methodological tools for building effective and efficient systems of strategic and project management, most rural communities still are in lack of not only quality development strategies, but also a public demand for quality strategizing models. The same applies to socio-economic development programs, which are often inconsistent with each other, without a clear prioritization of projects in them and clear and measurable indicators of their implementation. Collaborating communities are not always aware of the place of elaborated development strategies in the system of strategic planning and changes in the community management system that need to be implemented to make these strategies an integral part of decision-making mechanisms. Therefore, it is easy to see that the expected results of many strategies developed in 2015 and completed in 2020, most likely, will not be achieved. And as the results of communication with residents of different communities show, few people know about the existence of such documents at all, and those who do, do not consider them effective tools in ensuring community development [10]. Why the practices of strategizing are so ambiguously perceived by territories? Experts call the objective factors related to the human resources of the newly created local governments, the lack of practice and culture of strategizing and project management.

The conducted research of territories development strategizing processes allows to allocate the key stages differing in limits of key results:

- strategic analysis, which involves the implementation of stages and works aimed at analyzing the current situation and determining the most effective strategic scenario for the development of the region;
- goal-setting, which includes stages and works aimed at further detailing and concretization of the chosen strategy of socio-economic development of the region: defining the value system of the region's population, detailing them in goals, priorities,

Belonging to clu	sters						
Observation	Clusters 7						
1: Vinnytsia	1						
2: Volyn	1						
3: Dnipropetrovsk	2		Dendrog	ram using the met	nod of intergroup	connections	
4: Donetsk	3	-	5	10	15	20	2
5: Zhytomyr	4	22					
6: Transcarpathian	4	14					
7: Zaporozhye	1	18					
8: Ivano-Frankivsk	4	2					
9: Kyiv	5	19					
10: Kirovograd	4	12					
11: Luhansk	6	13					
12: Lviv	7	8					
13: Mykolayiv	4	24					
14: Odessa	1	5					
15: Poltava	3	17					
16: Rivne	4	23					
17: Sumy	4	11					
18: Ternopil	1	4					
19: Kharkiv	1	9					
20: Kherson	4	3					
21: Khmelnytsky	1						
22: Cherkasy	1						
23: Chernivtsi	4						
24: Chernihiv	4						

Fig. (1). Strategizing the socio-economic development of the territory. * Formed by the authors on the basis [15].

specific plans, implementation mechanisms (presented in Fig. 1).

The study of strategizing methodology, which is mainly based on a systematic and program-targeted approach allows us to conclude about the methodological unresolved issue of taking into account the variables that affect the generalized function of territorial development.

RESULTS AND DISCUSSION

This definition of variables and their impact on the efficiency of administrative structures is a major achievement of the situational approach, which has become a logical continuation of systems theory. The situational approach most fully reflects the problems that arise in management, it is universal and, in fact, contains the basic methods associated with management decisions contained in other approaches. The solution of problems of situational analysis of territories development is connected with expediency of inclusion in procedures of spatial economic researches of a stage of the comparative analysis of territories on the basis of system of the corresponding criteria.

The method of spatial benchmarking can be cited as the tool that most fully satisfies the above-mentioned position. This tool is based on the original concept of benchmarking, which is designed for the level of primary business entities with the subsequent transformation of key concepts and methodological foundations in the direction of spatial research.

When using benchmarking tools at the level of territories, it is advisable to clarify such key concepts used in the implementation of the procedure as the region under analysis and the model territory. The territory (community, region) under analysis is an area for which the results of the procedure the formation of recommendations to improve the parameters of the problem area of the study is provided.

Model territory ("best practice region") is a region characterized by improved studied indicators compared to the given region (subject area).

The study of the methodological principles of benchmarking made it possible to formalize the stages of the benchmarking study of the development of territories (Fig. 2). [14, 19, 21]

In the presented variant, the choice of the model territory is a key module of the benchmarking research procedure. However, the choice of the model territory is complicated due to the objectively existing problem of compatibility of territories due to the disproportions of the spatial development of regional systems.

Thus, to solve the stated problems, a system of criteria for selecting a model region is stated. This system consists of four groups of indicators:

- indicators that reflect the current state and functioning of spatial systems, which are closely interrelated with specific historical features of their origin and development;
- the level of provision of the territory with capital resources as traditional factors of economic growth of the studied territories, per one employee in the economy;
- final indicators of the functioning of regional systems per employee in the economy;
- leadership potential of the territory, as a specific integrated indicator of the level of social, personnel and managerial potential, which allows to partially formalize the value characteristics of a particular territorial community.

We pay attention to the fourth group of indicators. When selecting this group, it should be noted that an understanding of leadership is key. Society's need for leaders determines the scientific interest in understanding the concept of "leader" and "leadership". The results of research in this area are covered in a number of publications [10-12]. The task of effective strategizing requires the implementation of a whole list of new functions (business processes) at the level of management of a particular region. Such functions include the ability to analyze the macro environment, the ability to identify current needs, the requirements of stakeholders, the ability to put forward and generate innovative ideas in the field of creating new services, and others.

Execution of these functions is possible only if they are provided with the necessary resources: technical, technological, personnel, information, financial, etc. Because the resources that a particular region has are always limited, and they can be distributed among the above functions in such a way as to achieve the maximum possible systemic effect.

Thus, in an unstable environment, the maximum capacity of the region will be determined not by the maximum amount of GDP, but by the ability of the region's leaders to anticipate potential changes in the external environment and the willingness to respond flexibly to them. For this purpose, the term "potential" is used in the literature. The importance of paying attention to the issue of leadership potential of a particular area today is obvious to the development of any business entity. The study of the problem of leadership development allows us to conclude that some researchers consider this problem from the standpoint that human resource development is one of the components of the leader's competence, and from other positions leadership is the driving force of human resource development. The conducted research of authors allowed to allocate indicators identifiers of leadership potential of a certain territory. Indicators that could be characteristics of health, intellectual level, intellectual development potential, and human development potential were selected as a subsystem of leadership indicators.

Let's return to the study of benchmarking of territories. As the key indicator is the leadership potential, to determine the ranking of the region by leadership potential, the clustering procedure was used, and the sequential selection of the model region. The main criteria for selecting the model region are:

- similarity of regions in terms of area (area and share of dominant economic activities in the overall structure of gross domestic income as an indicator of the scale of segments of space and their territorial specialization);
- proximity in terms of sectoral specialization (indicators of the volume of fixed assets used per 1 employed in the economy as a resource of regional development, taking into account the norms of accumulation of physical and human capital associated with the dynamics of attracting and intensity of labor and capital resources in specific point in time);
- proximity in terms of GDP per capita in the economy and the average annual value of fixed assets per employee in the economy.

We propose to determine the model region and the rating of regions in the cluster, according to methodological techniques, which are based on the use of certain groups of indicators that are the main indicators of the level of regional development. To assess the development of regions in the study the following indicators were used: gross regional product per 1 sq. km (GRPS), gross regional product per 1 employee (GRPE), capital investment per 1 sq. km (CIA), capital investment per 1 sq. km (CRD), the cost of research and development per 1 employee (CRD), the number of entities per 1 able-bodied person (NEAP), the number of educational institutions per 1 able-bodied person (NIAP), the share of students in the total working population (SWP), the proportion of patients in the total population (PPP), the number of entities per 1 km of area (EA) (Table 1).

The formation of clusters according to the level of regional development and indicators of leadership potential was carried out using IBM SPSS Statistics 22 (hierarchical cluster analysis) (Fig. 2).

Cluster analysis is performed in order to structure and segment into homogeneous sets according to the selected criteria of the regions of Ukraine. Due to the small number of observations, the method of hierarchical cluster analysis was chosen. The mechanism of clustering is as follows. Initially,

Innovative Approaches in the System

Region	NEAP, un.	NIAP, un.	SWP, %	PPP, %	EA, un.	GRPS, ml. UAH	GRPE, th. UAH	CIA, th. UAH	CIE, th. UAH	CRD, th UAH
Zhytomyr	75,9	0,03	4,64	66,2	1,48	2,86	0,15	172,7	8,89	0,05
Transcarpathian	84,2	0,02	3,85	59,0	3,69	4,80	0,11	198,7	4,53	0,14
Ivano-Frankivsk	67,0	0,02	5,64	85,7	3,02	6,24	0,14	248,2	5,51	0,07
Kirovograd	69,3	0,03	3,10	66,3	1,22	2,97	0,17	223,7	12,7	0,06
Luhansk	182,1	0,03	5,64	15,4	2,43	1,51	0,11	76,92	5,76	0,11
Mykolayiv	89,9	0,03	6,02	68,4	2,02	3,76	0,17	243,3	10,8	0,43
Poltava	71,0	0,03	6,32	56,1	1,64	6,52	0,28	560,6	24,3	0,07
Rivne	61,1	0,02	5,63	76,0	1,63	3,36	0,13	157,7	5,92	0,03
Kherson	81,9	0,04	4,91	55,7	1,45	2,18	0,12	127,0	7,17	0,14
Chernivtsi	99,2	0,04	6,10	63,8	5,34	5,15	0,10	185,3	3,44	0,24
Chernihiv	67,4	0,03	3,63	75,8	1,03	2,45	0,16	165,8	10,8	0,10

Table1. Indicators of Development of Regions of Ukraine in 2020 (Fragment).

^{*} Calculated by the authors according to the data [17].

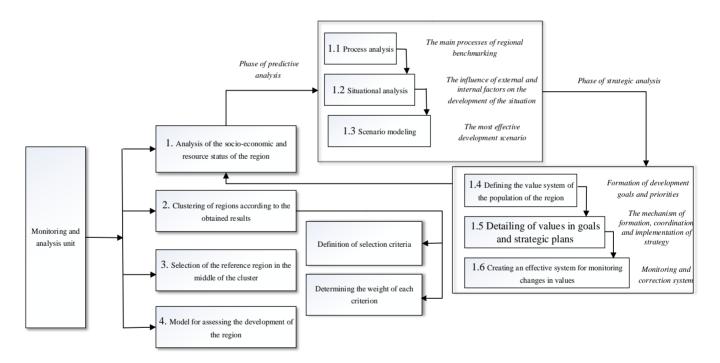


Fig. (2). Belonging to dendrogram clusters using the intergroup relationship method. *Formed by the authors on the basis [16].

each observation forms a separate individual cluster. Two individual clusters are then searched for and merged. The process continues until a certain number of clusters remain. The distance between clusters is calculated for quantitative variables by the Euclidean distance square method. When choosing the clustering method, the Ward's method was used, and the values were previously standardized. According to the results of comparisons, the formed dendrogram is presented in Fig. (2). According to the results of calculations, 4 clusters were formed. The first cluster included 9 regions, the second - 11, the third - 3, the fourth - 1. To determine the model region, the second cluster was selected. The list of regions included in this cluster is presented in Table. **2**. The model value for each indicator is the region with the maximum value. The rating was performed by the Euclidean distance method in Table **2**.

	Indexes										T 12 4 6	
Region	NEAP, un.	NIAP, un.	SWP, %	PPP, %	EA, un.	GRPS, ml. UAH	GRPE, th. UAH	CIA, th. UAH	· · ·	CRD, th. UAH	Indicator of compre- hensive assessment	Rating
Zhytomyr	0,42	0,75	0,7	0,77	0,28	0,44	0,52	0,31	0,37	0,11	1,81	7
Transcarpathian	0,46	0,60	0,6	0,69	0,69	0,74	0,39	0,35	0,19	0,32	1,67	5
Ivano-Frankivsk	0,37	0,58	0,8	1,00	0,57	0,96	0,49	0,44	0,23	0,16	1,63	4
Kirovograd	0,38	0,78	0,4	0,77	0,23	0,46	0,60	0,40	0,52	0,14	1,77	6
Luhansk	1,00	0,81	0,8	0,18	0,46	0,23	0,40	0,14	0,24	0,26	1,96	11
Mykolayiv	0,49	0,70	0,9	0,80	0,38	0,58	0,59	0,43	0,45	1,00	1,32	1
Poltava	0,39	0,65	1,0	0,65	0,31	1,00	1,00	1,00	1,00	0,16	1,34	2
Rivne	0,34	0,54	0,8	0,89	0,31	0,52	0,45	0,28	0,24	0,08	1,91	10
Kherson	0,45	1,00	0,7	0,65	0,27	0,33	0,43	0,23	0,29	0,33	1,82	8
Chernivtsi	0,54	0,88	0,9	0,74	1,00	0,79	0,34	0,33	0,14	0,56	1,46	3
Chernihiv	0,37	0,69	0,5	0,88	0,19	0,38	0,57	0,30	0,45	0,22	1,82	9
Standard (maximum values)	182,16	0,04	6,3	85,7	5,34	6,52	0,28	560,6	24,31	0,43	-	-

Table 2. The Results of a Comprehensive Rating Assessment of the Development of Regions Depending on the Leadership Potential in the Cluster.

* Calculated by the authors according to the data [16].

Thus, the Mykolaiv region is defined as the standard region in a cluster. Thus, we have a region where the ratio between the main indicators of the scale of the region and leadership potential is the best ratio. That means, a sufficient leadership potential for development has been formed in this region. Benchmarking of territories involves the following research it is to determine the magnitude of the impact of leadership potential on the development of the region by correlation and regression analysis. However, constant, accurate monitoring observations are needed to obtain operational data by region.

CONCLUSION

Thus, benchmarking is an alternative method of strategizing, using which the task of regional development can be determined taking into account reasonable criteria and indicators. The application of benchmarking in the management system allows you to systematically find and evaluate all the benefits of the best experience of the model region and create opportunities for their use in your own region.

As a result of the research, key groups of indicators for the benchmark-territory were determined. The analysis was carried out in 4 groups. At the same time, group 4 is of key importance - the leadership potential of the territory, as a specific integral indicator of the level of social, personnel and management potential. The success of regional strategy implementation proves that territories with high leadership potential are more successful. Solving the problem of improving regional strategizing, taking into account system-forming factors and the need for a flexible response to modern challenges, is the most effective lever of influence on socioeconomic processes. Therefore, the main scientific task today is the development of methodological principles of situational monitoring, as well as the creation of conditions for its implementation.

REFERENCES

- Bek D., & Kouen, K. (2010). Spiral'naya dinamika. Upravlyaya cennostyami, liderstvom i izmeneniyami v XXI veke. Moskva: Izdatel'stvo Otkrytyj mir.
- Benchmarking. Retrieved from: https://en.wikipedia.org/wiki/Benchmarking
- Berde, A., & Nadaban, M. (2008). Regional benchmarking process in cognac project (Coordination of RDI policies and their coherence with other policies in the Newly Acceded Countries): Agroinform Publishing House.
- Biliavska, Y.V. (2014). Vykorystannia benchmarkinhu v operatsiinomu protsesi turystychnoho pidpryiemstva. Visnyk Poltav. un-tu ekon. i torh, 2, 78-84.
- Chomu ¢vropejs'kij dosvid strateguvannya vazhko prizhiva¢t'sya u sil's'kih gromadah? Retrieved from: https://www.prostir.ua/?library=chomu-jevropejskyj-dosvid-

stratehuvannya-vazhko-pryzhyvajetsya-u-silskyh-hromadah

- Dubodelova, A.V., Yurinecz', O.V., & Kataev, A.V. (2010). Klasifikacziya vidiv i sferi zastosuvannya benchmarkingu v sistemi menedzhmentu pidpriemstva. Marketing i menedzhment innovaczij, 1, 102-106.
- Dubrovskaya, Y.V., Kudryavceva, M.R., & Kozonogova, E.V. (2018). «Umnyj» benchmarking kak osnova strategicheskogo planirovaniya regional'nogo razvitiy. Ekonomicheskie i social'nye peremeny: fakty, tendencii, prognoz, 3, 100-116. Retrieved from http://esc.vscc.ac.ru/article/2668?info=authors DOI: 10.15838/esc.2018.3.57.7

Fedotov, A.N. (2016). Mexanizm realizacii strategii razvitiya regiona s ispol`zovaniem koncepcii benchmarkinga. Baikal Research Journal, 4, 12-19. Retrieved from http://brj-bguep.ru/reader/article.aspx?id=20847 DOI : 10.17150/2411-6262.2016.7(4).12.

Harmes-Liedtke, U. (2007). Benchmarking Territorial Competitiveness. Duisburg: Mesopartner. Retrieved from: https://castles.com.ua/rivne.html Ignatieva, I., Serbenivska, A., & Havrylenko, T. (2020). Leadership potential impact on performance of small and medium-sizes business. Financial and Credit Activity Problems of Theory and Practice, 1, 120-128. Retrieved from:

http://ekmair.ukma.edu.ua/handle/123456789/18866

Ignatieva, I.A., Serbenivska, A.Y., & Havrylenko, T.V. (2020). Vplyv liderskoho potentsialu na rezultatyvnist maloho i serednoho biznesu. Finansovo-kredytna diialnist: problemy teorii ta praktyky, 1, 120-128. Retrieved from

https://doi.org/10.18371/fcaptp.v1i32.200296

Ignatieva, I., & Babina, E. (2019). Impact of leadership potential on change potential. Modern Science - Moderní věda, 5, 19-30. Retrieved from

http://ekmair.ukma.edu.ua/bitstream/handle/123456789/17820/Igna ti%D0%B5va_Impact_Of_Leadership_Potential_On_Change_Pote ntial.pdf?sequence=1&isAllowed=y

- Khyzhniakova, N.O. (2019). Metodologichni zasadi analizu rozvitku teritorij. Economic journal Odessa polytechnicuniversity, 1, 61-69. Retrieved from https://economics.net.ua/ejopu/2019/No1/61.pdf DOI: 10.5281/zenodo.3406174
- Koellreuter, C. (2002). Regional Benchmarking as a tool to improve gional foresight. Brussels: European Commission. Research DG-Directorate
- Kovalchuk, S. (2010). Benchmarkinh yak universalnyi instrument otsiniuvannia stratehichnoi diialnosti pidpryiemstva. Marketynh v Ukraini, 3, 20-31.
- Kurchaev, S.V. (2010). Konceptual`ny`e osnovy` formirovaniya strategii social`no-e`konomicheskogo razvitiya regiona. Vestnik Volgogradskogo gosudarstvennogo universiteta. Ser. 3, E`konomika. E`kologiya, 2, 21-27.
- Oficijnij sajt Derzhavnoï sluzbbi statistiki Ukraïni. Statistichna informaciya. Retrieved from: http://www.ukrstat.gov.ua/
- Panchishin, T.V. (2017). Regional'nij benchmarking yak instrument municipal'nogo ta derzhavnogo upravlinnya. Ekonomichni nauki. Naukovi zapiski, 2, 84-92. Retrieved from

Received: Nov 14, 2022

This is an open-access article.

Copyright © 2022- All Rights Reserved

Revised: Nov 25, 2022

Accepted: Dec 27, 2022

http://nz.uad.lviv.ua/static/media/2-55/10.pdf

- Patterson, J.G. (2002). Grundlagen des benchmarking. Die suche nach der besten lösung broschiert. München: New Business Line
- Pedak, I.S. (2017). Benchmarking yak mexanizm porivnyal'nogo analizu ta zaporuka majbutn'ogo regioniv. Vcheni zapiski TNU imeni V.I. Vernads'kogo. Seriya: Derzhavne upravlinnya Tom 28 (67), 1, 52-56. Retrieved from http://www.pubadm.vernadskyjournals.in.ua/journals/2017/1_2017/

http://www.pubadm.vernadskyjournals.in.ua/journals/2017/1_2017/ 11.pdf

- Pogulyajko, Y.M. (2021). Instrumenti investicijno-innovacijnogo zabezpechennya regionu v umovah decentralizacijnih zmin. Ekonomichnij forum, 1, 34-46. Retrieved from
- https://eujem.cz/wp-content/uploads/2021/eujem_2021_7_3/09.pdf Rejder, R. (2007). Benchmarking, kak instrument opredelenie strategii i povyshenie pribyli. Moskva: RIA «Standarty i kachestvo».
- Sakovich V. Spiral'naya dinamika vozvrashchenie k urovnyam sushchestvovaniya // Oficial'nyj sajt «Spiral'naya dinamika» Retrieved from https://spiraldynamics.ru/spiralnaja-dinamikavozvrashhenie-k-urovnjam-sushhestvovanija-spiralnaja-dinamikavozvrashhenie-k-urovnjam-sushhestvovanija/
- Smentina, N.V., & Fialkovs'ka, A.A. (2019). Benchmarking u sistemi ekonomichnim rozvitkom ob'ednanix teritorial'nix gromad. Ekonomika Ukraïni, 12, 49-59. Retrieved from http://economyukr.org.ua/docs/EU_19_11_049_uk.pdf
- Yusupov K.N., Timiryanova V.M., Toktamysheva Yu.S., Popov D.V. (2018) Hierarchical and spatial effects in the development of municipalities, Economic and Social Changes: Facts, Trends, Forecast, 11(5), 137-154. DOI: 10.15838/esc.2018.5.59.9