

**Organizational-economic  
mechanism of management  
innovative development of  
economic entities**

**Collective monograph edited by  
M. Bezpartochnyi**

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Higher School of Social and Economic  
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# **Mechanizm organizacyjno- ekonomiczny zarządzania innowacyjnym rozwojem podmiotów gospodarczych**

**Monografia zbiorowa  
pod redakcją naukową  
M. Bezpartochnego**

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Wyższa Szkoła Społeczno-Gospodarcza  
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The authors of the book have come to the conclusion that it is necessary to effectively use modern approaches the management of innovative development the economic entities in order to increase the efficiency of activity, to ensure competitiveness, to intensify innovation activity. Basic research focuses on assessing of the life cycle innovation, innovation ensuring of enterprises, diagnostics of financial ensuring for innovative development of enterprises, evaluation the regulation of investment-innovation processes. The research results have been implemented in the different models of management innovations in various sectors of the economy, developing and implementing innovative strategies for development entrepreneurship, improving production technologies and product quality, standardization and certification products. 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 on an innovative basis. The results can also be used by students and young scientists in modern concepts and mechanisms for management of innovative development the economic entities in the context of efficient use the resource potential and improvement of innovation policy.

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10. Vnukova, N. M., Achkasova, S. A., Goryanik, O. V. (2018) *Developing the Risk Management System in the Activity of Financial Intelligence Division. Business Inform. №12. P. 329-339.*

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## **ACCOUNTING PROVISION OF INNOVATIONS' LIFECYCLE AS MANAGEMENT OBJECTS**

Modern tendencies of economic science development are characterized by growing interest in innovations, focused on creating and implementing energy saving technologies, waste management technologies, ecological production; biotechnology resources. These processes are accompanied by significant expenses that need full coverage in the system of enterprise management accounting and in financial reporting indices.

The analysis of scientific papers on this topic revealed that in international professional journals, scientists focused mainly on the development of the concept of environmental management accounting. In particular, Burritt (Burritt, R., & Herzig, C., & Schaltegger, S. & Viere T., 2019) considered the diffusion of innovations theory in accounting, which enabled to understand the dynamics of implementing environmental management accounting more deeply and search new effective tools of accounting and management.

The above-mentioned authors concluded that in order to ensure complex conditions of innovative development it is not enough to use only one method of management (namely expenses accounting). This method is extremely important as it is aimed at obtaining reliable

information. However, it requires an inter-discipline understanding of innovations in accounting and environmental management.

Al-Sayed (Al-Sayed, M. & Dugdale, D., 2016) stressed on the growing dynamics of innovations in business processes and analyzed the group of factors influencing:

1) initiation and making decisions “Activity-based innovations” (ABI);

2) the degree of using ABI. As a result of detailed analysis of the studied factors the authors made the conclusion: “ABI can now be regarded as mainstream management accounting practice”.

The main peculiarity of such approach is that the practical management mainly does not use standard (unitary) models of decision-making. However, “any innovation-specific contextual factor (such as level of overhead) in management accounting innovation studies” (Al-Sayed, M. & Dugdale, D., 2016) is the object of constant interest for management.

In solving the main tasks of expenses accounting on innovations Ukrainian scientists concentrate their attention on the following problem questions:

1) the existence of multi-choice concept “innovation expenses” and its terminological discrepancy in theoretical, legislative, and practical spheres (Ozeran, H. & Hyk, V., 2013, pp. 21-22; Benjko, M. M. 2013, pp. 5-11; Gholub Ju. Ju. 2012, pp. 253-260);

2) the multi-choice of methods of reflecting innovation expenses in accounting system (Ozeran, H. & Hyk, V., 2013, p.p. 22-28; Jefimenko, T. I. 2014, pp. 158-162; Ghnylycjka, L. 2007, pp. 45-48);

3) the gaps in working out recognition criteria of innovative objects’ origin as a part of assets; such gaps prevent from adequate disclosing information about them in reporting (Meljnychuk, I. V. (2014, pp. 180-185; Jefimenko, T. I. 2014, pp. 167-172);

4) the absence of uniform accounting methods on innovation expenses that could provide their adequate reflection in the enterprise information system (Ozeran, H. & Hyk, V., 2013, p. 29; Jefimenko, T. I. 2014, pp. 167-172; Chebanova, N. V. & Jefimenko, T. I. 2015, pp. 60-63; Yushchak, Zh. M. 2014, pp. 449-457; Ghrycaj, O. I. 2010, pp. 198-201; Ghurina, N. V. 2010, pp. 53-57; Kantajeva O. V. 2009, pp. 25);

5) the absence or inadaptability of ledgers for accounting innovation expenses (Yushchak, Zh. M. 2014, pp. 449-457; Borodkin, A. S. 1981; Saenko, K. S. 1991; Ghnylycjka, L. 2007, pp. 45-48; Pustovyt, A. N. 2000, pp. 40-44; Pushkar, M. S. 2006);

6) “human factor”, which is the cause of ineffective accounting, i.e. the lack of professional interest of accountant, the subject of business operations’ registration, in full disclosing and increasing data analyticity of innovation expenses (Ozeran, H. & Hyk, V., 2013, p. 29).

Scientific discussion around these problems does not lose topicality. However, some issues that are declared by the authors as “problem ones” in reality do not require scientific approaches to their solving. For example, “the problem of the absence of ledgers to reflect innovation expenses” is a far-fetched scientific myth, which points to absolute isolation of scholar-theoretician from accounting practices. We consider that there is no problem of the absence of ledger “form” in modern accounting, because it is a question of professional competence and opportunities of the subject responsible for organizing accounting at enterprise.

In real conditions the fundamental knowledge of accounting being the basis of accountant’s professional competences enables him to imagine and model any ledger, which corresponds to the parameters of non-standard situation. Head of enterprise or chief accountant cannot but “know” about computer or special software products for conducting accounting and also many suggestions as to adaptation and integration of automated software products in information environment of a particular enterprise.

Accordingly, if research is limited to abstract recommendation “to automate accounting”, it means that the author’s suggestions are based on archaic approaches to understanding the essence of the problem (or the problem which actually no longer exists).

In this context it is expedient to focus on the most important aspects of scientific discourse on the problems of innovation processes’ accounting.

### **1. Recognition of innovations as an object of accounting.**

Some authors ground their research on the need to reflect “innovations that have the status of quantity determined or separated objects” in accounting records (Sachenko, SI & Chereschniuk, OM, 2018, p.743).

However, “innovations” are not and will never be the subject of accounting. Even if innovation is understood as creation of a particular product – good or service, first of all expenses are accounted, and then – the newly created product that has a specific name, quantitative parameters and corresponding economic characteristics according to which it is recorded to a particular account.

Singling out accounting objects of innovation activity is possible only if the rules of their identification and methods of cost measurement are formulated.

According to V. M. Zhuk (Zhuk, V. M. 2011, pp. 36-39), the main objects of accounting innovation activity are:

- estimates on creation;
- expenses on investments in new technologies and research activities;
- innovative products;
- processes of products' commercial using (or their using for further innovation activity).

Most scholars connect the objects of accounting innovations with the concepts of "intangible assets" and "intellectual property". There are some significant differences along with common features of disclosing in accounting the information on intangible assets and innovations (Melnychuk, I. V. 2014, pp. 178-185).

1) most of intangible assets' accounting objects, such as the firm's reputation, brand creation, do not undergo the processes of research and development, which is characteristic of innovations;

2) objects of intangible assets are not necessarily characterized by novelty, which is one of the main indicators of innovations;

3) a number of intangible assets by their essence cannot be alienated (licenses, preferences, etc.), at the same time, innovations are new products of the firm which are unique and can be sold or leased to get additional economic benefits.

HCBO 8 "Intangible assets" includes three criteria of recognizing the results of research and developments as part of assets. This list of criteria does not fully meet market demands; that is why I. V. Melnychuk (Melnychuk, I. V. 2014, pp. 178-185) suggests the following additional criteria:

- if there is a possibility to get economic benefit from selling innovation, which cannot be identified, but there are interested buyers;
- if there is a possibility of singling out the object from unidentified intangible assets for own using in the production system in order to obtain economic benefits;
- if the asset can be exchanged for another asset to obtain economic benefits.

Thus, summarizing research papers enables to generate two "scenarios" of identifying the objects of accounting innovations (Jefimenko, T. I. 2014, pp. 167-172).



- **as an asset of innovative origin** (fixed asset or intangible asset) in balance sheet. Provided that the enterprise proved or “intends or is technically capable and has resources to bring the asset to the state in which it is suitable for using or selling and expects to receive future economic benefits from such asset” (Ministry of Finance of Ukraine 2013, *National Accounting Standards*);

- **as an item of expenses** (administrative, expenses on selling, other operating expenses) of the reporting period in which such expenses were made, if economic benefits from using such object have already been received.

## **2. multi-choice of concepts.**

The authors, using the method of induction in the process of cognition, often quote the definition of “innovation” that in the future may cause substantial deviations from searching the true ways to overcome the problems of accounting. An example of such deformation is a false interpretation of innovation expenses as “new objects of accounting”.

In this aspect, we support the opinion of scholars who consider that innovation expenses are not an absolutely new object of accounting. Such expenses are the object of management and one of the key indices in the process of making managerial decisions related to increasing the efficiency of enterprises’ financial-economic activity (Ozeran, H. & Hyk, V., 2013, p. 28).

Rapid development and active introduction of innovations cause the modification of economic processes and are accompanied by the corresponding expansion of the terminological base, which enables to understand in more detail the essence of real economic operations taking place at enterprise.

For the analysis and synthesis of terminological aspects of defining innovations one should refer to their historical genesis.

The origins of innovation categorical interpretation date back to the 30s of the XXth century, when Y. Schumpeter in his fundamental researches explained the causes of economic development by the attempts to get super-profits generated at the expense of temporary monopoly, which appears in connection with introducing innovations that is “... changes aimed at introducing and using new kinds of consumer products, new production and transport facilities, markets and forms of production organization in industry” (Lebedeva, L. V. 2010, pp. 16-24).

Critical analysis of scientific opinions on interpreting the content of

the term “innovation” enables to substantiate two enlarged approaches: dynamic in which innovation acts as “innovation- process, innovation – a complex of measures”; and static, in which innovation is “innovation-product, innovation - the final result” (Gholub Ju. Ju. 2012, pp. 253-260).

The representatives of “dynamic terminology” interpret innovation as a process in which an invention or idea acquire economic sense, during which the scientific idea or technology are brought to the stage of practical using and begin to give economic effect; or as a new impetus to scientific-technical knowledge ensuring market success.

The related substantiation of the studied term as a complex of technical, production, and commercial measures directed at introduction in the economy of new machinery, technologies, inventions and so on, causing the appearance of new products, improved industrial processes and equipment on the market; as a new phenomenon; as a new scientific-organizational combination of production factors motivated by entrepreneurial spirit (Benjko, M. M. 2013; Volkov, O. I. & Denysenko, M. P. 2007; Mykytjuk, P. P. 2007; *Quality management systems*; Fatkhutdinov, R. A. 2008).

The supporters of “static” terminology interpret innovations as the final result of innovation activity – a new or improved product introduced on the market. (Mezenina, N. S. 2012; *The measurement of scientific and technological activities. proposed guidelines for collecting and interpreting technological innovation data.*; Verkhovna Rada of Ukraine 2002, «*Law of Ukraine» On Innovation Activity*»).

We consider the definition of dynamic approach more substantiated because the final product of innovation activity will be recognized in the future as a part of current or fixed assets (including intangible). And, in fact, innovation is a process of emerging novelty which generates consumer values, which ensure sustainable growth of the financial result, i.e. new economic benefits.

The conducted studies give the reason to consider that multi-choice of approaches to interpreting the term “innovation expenses” does not pose real threats to practical accounting because methods of their solving are highlighted quite widely in scientific and professional literature. The specific subject of accounting – accountant, is the key aspect in solving this problem; much depends on his (her) competence, business skills, and ability to adapt to the requirements of modern information environment.

Using professional judgment of accountant based on using basic

terminological minimum and comprehensive studying additional terms that correspond to the specific production situation is a determining factor of accounting effectiveness. Similar to the model presented in the scientific paper by Kantsedal (Kantsedal, N. A., 2019, p. 33), the combination of accountant's basic skills together with taking into account specific circumstances of enterprise innovation activity envisages:

- multi-aspect study of economic terminology and specific technical terminology related to accounting and characterizing innovation processes more fully;

- search of the most representative term, which enables to understand the economic essence of innovation expenses for determining criteria of their recognition and registration in the accounting system at a particular period of time;

- constant interaction with relevant regulatory base in order to confirm or refute terminological identity of the notion "innovation expenses" as the object of accounting with the aim to predict economic, tax, or legal consequences of registering corresponding economic operations in accounting information system.

Following these rules will help to avoid incorrect terminological borrowings, which make the illusion of "a new vision of accounting".

### **3. Multi-choice methods of accounting innovation expenses.**

Systematizing scientific notions about the ways of constructing accounts' correspondence of accounting the objects of innovations demonstrates multi-choice approach in scholars' recommendations: to keep records of them as a part of other operating activity expenses, to keep records as a part of fixed assets, to keep records as a part of deferred expenses, to keep records as a part of capital investments.

To form the initial asset value of innovative origin, most scientists suggest the using of sub-accounts of capital investments accounting with possibility of their detailing (Jefimenko, T. I. 2014, pp. 167-172; Chebanova, N. V. & Jefimenko, T. I. 2015, pp. 60-63; Meljnychuk, I. V. 2014, pp. 178-185; Kirsanova, V. V., Sukhareva, T. O. & Kovaljova, O. M. 2011, pp. 216-221).

For example, the following sections of analytics can be the units of detailing sub-accounts of capital investments accounting in innovations: "Expenses on acquisition (creation) of innovation assets"; "Innovative technologies purchased under license agreement"; "Innovation assets and technologies received from the science park"; "Innovation assets created as a result of joint activity".

The supporters of “expenditure” approach, recognizing synthetic accounting of innovations, offer to keep records of innovation expenditures as a part of other operating activity expenses according to the following list of analytical accounts: “Information expenses”; “Expenses for preparing innovation activity (intangible)”; “Expenses for preparing innovation activity (tangible)”; “Production expenses of innovation activity (Yushchak, Zh. M. 2014, pp. 449-457).).

Within this scientific approach, the suggestions concerning the reflection of innovation expenses as a part of deferred expenses are substantiated. Thus, L. Hnylytska (Ghnylycjka, L. 2007, pp. 45-48.) offers to conduct expenses’ analytical accounting within the accounts of deferred expenses accounting according to the types of developed products within the range of expenditures and stages of conducted work in order to improve phased accumulation of expenses for developing new products and writing off the costs on serial production. The suggestion to conduct accounting of innovation expenses cumulatively starting from preparing design documentation and to manufacturing experimental series of products is the procedural peculiarity. This approach corresponds to the provisions of international accounting and financial reporting standards.

Zh. M. Yushchak (Yushchak, Zh. M. 2014, pp. 449-457) suggests using the combination of several expense accounts for the formation of accounting records to confirm the lifecycle stages of innovation assets. In accounting practice, in the author’s opinion, at first, the expenses connected with innovation activity, should be recognized as a part of deferred expenses. After completing the project, in case of positive result, the accumulated innovation expenses are to be written off on the account “Capital investments”, and in case of negative result – on the account “Expenses on research and development”, which reduce the financial result.

Hrytsai A. and Z. Yanchenko substantiate the separation of account of innovation expenses accounting (Ghrycaj, O. I. 2010, pp. 198-201; Janchenko, Z. B. 2014, pp. 344-354).

Separate account for accounting expenses on innovation processes has to contain information about all enterprise expenses, connected with innovation activity. Expenses on innovation processes will be recognized as expenses during a certain period together with recognizing profit, for which they are made. To determine financial result this account will be closed by the account “Financial results” (Ghrycaj, O. I. 2010, pp. 198-201). Developing the above-mentioned

scientific approach, Z. Yanchenko notes that after singling out innovation expenses on a separate account, the methods of calculating the cost of innovative product will become clearer and more transparent, which will increase investment attractiveness of enterprise innovation activity (Janchenko, Z. B. 2014, pp. 344-354).

We consider “expenses” approach more substantiated in constructing the principles of accounts’ correspondence in accounting innovation objects, as innovative products have to be recognized in future on accounts of fixed assets or stocks. Separating innovation expenses on a separate account is rational, because “Expenses on research and development” envisage the result of recognizing the object of intangible assets, which, as it was proved above, in most cases is not identical with the object of innovative developments. Introducing of the above mentioned account will result in changes of methodological approaches to expenditure accounting, in particular, it is necessary to substantiate the criteria of innovation expenses “productivity” for detailing the mechanism of including “productive expenses” in the primary cost of future innovative development and decreasing the financial result of the corresponding kind of activity by the sum of “unproductive” expenses (the expenses were made, however, “the product” does not meet the criteria of innovative product).

Possible complications of finding sources of financing innovative programs, developments, projects and the risks of determining the degree of innovativeness of the original product prove the substantiality of scientific suggestions in creating the reserves of providing innovation activity expenses (Ghurina, N. V. 2010, pp. 53-57; Kirsanova, V. V., Sukhareva, T. O. & Kovaljova, O. M. 2011, pp. 216-221).

We consider that it is expedient to conduct accounting records of the above mentioned object in the enumeration of capital’s components, namely, in the part of created provisions for deferred expenses and payments.

### **Conclusions.**

1. Innovation processes cause broadening of economic terminology and ambiguous approaches to interpreting certain terms. This is an indicator of demand for advanced solutions of the subject of accounting – accountant, using innovative approaches by him in searching substantiated and effective methods of accounting corresponding objects.

2. Scientific solving problems in accounting (including accounting of innovation expenses) should be considered by the method “from

reverse”, which answers the question: “Does practical accounting really make such a request in scientific environment?”. This will help to avoid developments having the signs of “pseudo”, in which the problem is far-fetched, and methods of its solving have “zero” effectiveness for management.

3. While reflecting innovative processes in the accounting system, “innovation expenses”, but not “innovations” are the object of accounting observation. “The reserve of ensuring innovation activity expenses” can be recognized as the related accounting object as a part of financing sources

4. Generalizing scientific papers enables to generate two “scenarios” of identifying the objects of accounting innovations: as asset of innovative origin; as expense item.

5. Critical analysis of scientific positions on interpreting the content of the term “innovation” enables to substantiate two enlarged approaches: dynamic, in which innovation is “innovation-process, innovation - complex of measures”; and static, in which innovation is “innovation - product, innovation - final result”.

6. We consider “expenses” approach more substantiated in developing the principles of accounts’ correspondence of accounting innovation objects, because innovative products have to be recognized in future on accounts of fixed assets or stocks. Separating innovation expenses on a separate account is rational, because “Expenses on research and development” envisage the result of recognizing the object of intangible assets, which, as it was proved above, in most cases is not identical with the object of innovative developments.

7. There are the following prospects of further scientific search in this direction: developing approaches to generate internal reporting forms for innovation expenses management; training and regulatory approving methodical recommendations on accounting innovation activity objects of industrial enterprises at the national level; substantiating analytical indicators of innovation activity success (e.g. the level of innovation activity profitability; payback period of innovative projects; the duration of the production cycle of innovative development; the degree of innovation expenses’ productivity, etc.).

## References:

1. Al-Sayed, M. & Dugdale, D. (2016). *Activity-based innovations in the UK manufacturing sector: Extent, adoption process patterns and contingency factors. The British Accounting Review. Volume 48, Issue*

- 1, pp. 38-58. Available at: <https://doi.org/10.1016/j.bar.2015.03.004> (accessed 15 May 2019).
2. Benjko, M. M. (2013) «Content of innovations in accounting, analysis and control as an adaptive reaction to changes in economic processes», *Ekonomichni nauky. Cerija : Oblik i finansy*, Vol. 10(5), pp.5-14. (In Ukr.)
  3. Borodkin, A. S. (1981), *Uchet novoi tekhniki v obieedinenii* [Accounting for new technology in the association], *Tekhnika*, Kyjiv. (In Rus.)
  4. Burritt, R., & Herzig, C., & Schaltegger, S. & Viere T. (2019). *Diffusion of environmental management accounting for cleaner production: Evidence from some case studies. Journal of Cleaner Production*. Vol. 224, pp. 479-491. Available at: <https://doi.org/10.1016/j.jclepro.2019.03.227> (accessed 15 May 2019).
  5. Chebanova, N. V. & Jefimenko, T. I. (2015) «Objects of innovative origin and their recognition», *Naukovyj visnyk Uzhgorodskogo universytetu. Serija: Ekonomika*, Vol. 1 (2), pp. 60-63. (In Ukr.)
  6. Fatkhutdinov, R. A. (2008), *Innovatsionnyi menedzhment* [Innovation management], SPb Piter. (In Rus)
  7. Ghnylycja, L. (2007) «Improvement of cost accounting for development and development of new products in instrument making», *Bukhghalterskyj oblik i audit*, № 10, pp. 45-48. (In Ukr.)
  8. Gholub Ju. Ju. (2012), «Essential characteristic of innovations», *Finansy, oblik i audyt : zb. nauk. pr. / M-vo osvity i nauky, molodi ta sportu Ukrainy, DVNZ «Kyjiv. nac. ekon. un-t im. Vadyma Ghetmana»*, Vol. 20, pp. 253-260. (In Ukr.)
  9. Ghrycaj, O. I. (2010) «Areas of improvement of accounting of expenses for innovative processes», *Problemy ekonomiky ta menedzhmentu: Visnyk Nacionalnogho universytetu «Lvivjska politekhnika»*, № 683, pp. 198-201. (In Ukr.)
  10. Ghurina, N. V. (2010) «Accounting for the costs of innovation», *Naukovyj visnyk Uzhgorodskogo universytetu: Serija: Ekonomika*, Vol. 29 (2), pp. 53-57. (In Ukr.)
  11. Janchenko, Z. B. (2014) «Accounting and analytical support for management costs of innovation activities», *Problemy teorii ta metodologiji bukhhalterskogho obliku, kontrolju i analizu. Ser. : Bukhhalterskyj oblik, kontrolj i analiz*, Vol. 1, pp. 344-354 . (In Ukr.)
  12. Jefimenko, T. I. (2014) «Assets of innovative origin: improvement of enterprise accounting policy», *Innovacijna ekonomika*, № 2, pp. 167-172. (In Ukr.)
  13. Kantajeva O. V. (2009) «Issues of development of the theory and practice of accounting and analysis of innovation activity of

- enterprises», *Bukhghaltersjkyj oblik i audit*, № 4, pp. 25. (In Ukr.)
14. Kantsedal, N. A. (2019). *Bukhghalterskyi oblik tsyfrovoyi epokhy: rozshyrennia terminolohichnykh kordoniv [Accounting in the Digital Age: Expansion of Terminological Boundaries]*. *Oblik i finansy*. № 1(83), pp. 28.-34. Available at: [https://doi.org/10.33146/2307-9878-2019-1\(83\)-28-34](https://doi.org/10.33146/2307-9878-2019-1(83)-28-34) (accessed 15 May 2019).
  15. Kirsanova, V. V., Sukhareva, T. O. & Kovaljova, O. M. (2011) «Problems of accounting of innovation activity», *Visnyk socialjno-ekonomichnykh doslidzhenj*, Vol. 41(2), pp.216-221. (In Ukr.)
  16. Lebedeva, L. V. (2010) «Innovation: categorical definition and classification issues», *Formuvannja rynkovoji ekonomiky*, № 23, pp.16-24. (In Ukr.)
  17. Meljnuchuk, I. V. (2014) «Assessment and accounting of intellectual innovations in the process of production and marketing», *Stalyj rozvytok ekonomiky*, № 1, pp. 178-185. (In Ukr.)
  18. Mezenina, N. S. (2012) «Innovation as a result and process», *Molodoi uchenyi*, № 6, pp. 189-191. (In Rus.)
  19. Ministry of Finance of Ukraine (2013), *National Accounting Standards, Factor*, Kharkiv.
  20. Mykytjuk, P. P. (2007), *Innovacijnyj menedzhment [Innovation management]*, Centr uchbovoji lit., Kyjiv. (In Ukr.)
  21. Ozeran, H. & Hyk, V. (2013). Aktualni problemy obliku vytrat na innovatsii [Actual problems of accounting for the costs of innovation]. *Bukhghalterskyi oblik i audyt*. №12, pp. 21-29. (in Ukr.)
  22. Pushkar, M. S. (2006), *Kreatyvnyj oblik (stvorennja informacii dlja menedzheriv) [Creative Accounting (Creating Information for Managers)]*, Kart-blansh, Ternopilj. (In Ukr.)
  23. Pustovyty, A. N. (2000) «Accounting for development of new types of products», *Bukhghaltersjkyj oblik i audit*, № 10, pp. 40-44. (In Ukr.)
  24. *Quality management systems. Recommendations for the improvement of activities: international ISO 9004 quality management standard*, available at <http://www.klubok.net/pageid143.html> (accessed 22 May 2019).
  25. Sachenko, S. I. & Chereszniuk, O. M. (2018). *Kontseptsiiia obliku innovatsiinoi diialnosti [Concept of accounting of innovative activity]*. *Skhidna Yevropa: ekonomika, biznes ta upravlinnia*. Vol. 6(17), pp. 740-745. (in Ukr.)
  26. Saenko, K. S. (1991), *Uchet zattrat na meropriiatiia NTP [Cost accounting for NTP events]*, *Finansy i statistika*, Moskva. (In Rus.)
  27. *The measurement of scientific and technological activities. proposed guidelines for collecting and interpreting technological innovation data. Oslo manual. European Commission. Eurostat //* [Electronic



resource]. – Available at : <http://www.oecd.org/dataoecd/35/61/2367580.pdf>.

28. Verkhovna Rada of Ukraine (2002), «Law of Ukraine» On Innovation Activity» available at <http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=40-15> (accessed 22 May 2019).
29. Volkov, O. I. & Denysenko, M. P. (2007), *Ekonomika ta orghanizacija innovacijnoji dijajlnosti [Economics and organization of innovation activities]*, Centr uchbovoho lit., Kyjiv. (In Ukr.)
30. Yushchak, Zh. M. (2014). *Osoblyvosti obliku vytrat innovatsiinoi diialnosti [Features of accounting for the costs of innovation]. Problemy teorii ta metodolohii bukhhalterskoho obliku, kontroliu i analizu. Vol. 3 (30), pp. 449-457. (in Ukr.)*
31. Zhuk, V. M. (2011), «Conceptual approaches to solving superficial and in-depth problems of accounting for innovation», *Oblik i finansy APK, № 1, pp. 36-39. (In Ukr.)*

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## **USE OF GRAVITATIONAL MODELS FOR SPATIAL SYSTEMS STUDYING**

One of the most promising branches of the national economy of Ukraine is the resort and recreation sphere. As well as the development of other industries, the development of the resort and recreation sector largely depends on the investment of financial resources in the industry. But, due to the difficult financial situation in Ukraine, political changes in the country, significant investments in the industry are now very problematic.

In this regard, the important direction of the industry's development is the search for and implementation of practices that do not require significant funding, but can provide significant development. One of these areas is a set of activities aimed at expanding the geography of holidaymakers and their numbers.

When studying the resort and recreation industry, a very important point is the study of the geography of the tourists' permanent residence.

# **Organizational-economic mechanism of management innovative development of economic entities**

Collective monograph edited by  
M. Bezpartochnyi

## **Mechanizm organizacyjno-ekonomiczny zarządzania innowacyjnym rozwojem podmiotów gospodarczych**

Monografia zbiorowa pod redakcją naukową  
M. Bezpartochnogo

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