

THE ACADEMY OF MANAGEMENT AND ADMINISTRATION IN OPOLE

***SYSTEMY ZARZĄDZANIA I SPOŁECZNO-  
GOSPODARCZE: NAUKOWE I PRAKTYCZNE  
ASPEKTY ZRÓWNOWAŻONEGO ROZWOJU***

***ADMINISTRATIVE AND SOCIO-ECONOMIC  
SYSTEMS: SCIENTIFIC AND PRACTICAL  
ASPECTS OF SUSTAINABLE DEVELOPMENT***

***УПРАВЛІНСЬКІ ТА СОЦІАЛЬНО-ЕКОНОМІЧНІ  
СИСТЕМИ: НАУКОВО-ПРАКТИЧНІ АСПЕКТИ  
СТАЛОГО РОЗВИТКУ***

*Monograph*

*Edited by Mykola Ohienko*

*Tadeusz Pokusa*

Opole 2021

**ISBN 978-83-66567-29-0**

Administrative and socio-economic systems: scientific and practical aspects of sustainable development. Monograph. Opole: The Academy of Management and Administration in Opole, 2021; ISBN 978-83-66567-29-0; pp.470, illus., tabs., bibls.

**Editorial Office:**

Wyższa Szkoła Zarządzania i Administracji w Opolu  
45-085 Polska, Opole, ul. Niedziałkowskiego 18 tel.  
77 402-19-00/01 E-mail: info@poczta.wszia.opole.pl

**Reviewers**

prof. dr hab. Marian Duczmal, prof. dr hab. Volodymyr Lagodiienko

**Editorial Board**

*Mykola Ohiienko, Tadeusz Pokusa, Alona Ohiienko, Grygorii Boiko, Kvitoslava Avramenko,  
Larysa Kyienko-Romaniuk, Olga Vyshnevskya, Tatyana Bilyavska, Oksana Adamenko*

**Publishing House:**

Wyższa Szkoła Zarządzania i Administracji w Opolu  
45-085 Polska, Opole, ul. Niedziałkowskiego 18 tel. 77  
402-19-00/01

200 copies

Authors are responsible for content of the materials

ISBN 978-83-66567-29-0

© Authors of articles, 2021  
© Publishing House WSZiA, 2021

# TABLE OF CONTENTS

|   |    |
|---|----|
| INTRODUCTION .....  | 10 |
| PART 1  |    |
| <b>ACTUAL MANAGEMENT PROBLEMS: BY TYPES OF ACTIVITY</b>   |    |
| <b>АКТУАЛЬНІ ПРОБЛЕМИ УПРАВЛІННЯ: ЗА ВИДАМИ ДІЯЛЬНОСТІ</b>  |    |
| 1.1. Key indicators of efficiency and quality of official activity of civil servants:<br>practice of development and implementation<br>Ключові показники результативності, ефективності та якості службової<br>діяльності держслужбовців: практика розробки та впровадження<br>( <i>Grygorii Boiko</i> )..... | 13 |
| 1.2. Psychodiagnosis and conflict forecasting in management<br>Психодіагностика та прогнозування конфліктів в управлінській<br>діяльності<br>( <i>Tetiana Branitska, Nataliia Logutina</i> ).....   | 21 |
| 1.3. Problems of regional training in the conditions of digitalization of the<br>economy of Ukraine on the basis of sustainable development<br>( <i>Hanna Burdelna, Anna Bozhenko</i> ).....  | 30 |
| 1.4. Effective use of electric mobile devices as a tool for innovative<br>agricultural development<br>Ефективне використання електричних мобільних засобів , як<br>інструмент інноваційного розвитку сільського господарства<br>( <i>Denys Bondarchuk</i> ).....  | 40 |
| 1.5. Assessment of trends in the development of the insurance market in<br>Ukraine: national and regional aspects<br>Оцінка тенденцій розвитку страхового ринку України: національний<br>та регіональний аспект<br>( <i>Hurina Olena, Dombrovska Liudmyla</i> ).....  | 44 |
| 1.6. Formation of effective management in personnel career management<br>at enterprises<br>Формування ефективного менеджменту в управлінні кар'єрою<br>персоналу на підприємствах<br>( <i>Hanna Burdelna, Daria Hutsevych, Anastasia Semykina, Apolonia Klepacz</i> ).....                                    | 59 |
| 1.7. The effectiveness of public and private enterprises<br>Результативність функціонування державних та приватних підприємств<br>( <i>Ivan Kischak, Wojciech Duczmal, Olena Iakovunyk, Viktoriia Yurchenko</i> ).....  | 68 |

|  |     |
|--|-----|
| 1.8. Innovations in waste management: experiences of visegrad countries<br>( <i>Tatiana Kobylinska, Olena Motuzka, Iuliia Motuzka</i> ).....   | 84  |
| 1.9. Modeling of indicators of foreign economic activity of the region<br>Моделювання показників зовнішньоекономічної діяльності регіону<br>( <i>Kramarenko Anna, Dombrovska Daria</i> ).....  | 92  |
| 1.10. Condition and problems of use of agricultural machinery in Ukraine<br>Стан та проблеми використання сільськогосподарської техніки в Україні<br>( <i>Vitaliy Kryvoruchko</i> ).....   | 100 |
| 1.11. Objective need and problems of overcoming asymmetry of<br>regional development<br>Об'єктивна необхідність та проблеми подолання асиметрії розвитку<br>регіонів<br>( <i>Liudmyla Nazarova, Denis Iakovunyk</i> ).....   | 105 |
| 1.12. Functioning of transport systems of the Mykolaiv area and their influence<br>on ecology<br>Функціонування транспортних систем Миколаївської області та їх<br>вплив на екологію<br>( <i>Andrii Ohienko, Ferdynand Reiss</i> ).....  | 117 |
| 1.13. Quality management systems for transport services and its improvement<br>Системи управління якості транспортних послуг та їх удосконалення<br>( <i>Tetyana Slipukha, Katarzyna Syrytczyk</i> ).....  | 123 |
| 1.14. General analysis of the polyclinic personnel management system components<br>( <i>Oleksandra Stoian, Svitlana Petrychenko, Kostiantyn Netudykhata, Roman<br/>Buzhykov</i> ).....   | 132 |
| 1.15. Theoretical bases of formation at future managers of a financial and economic<br>profile of readiness for administrative activity<br>Теоретичні засади формування у майбутніх менеджерів фінансово-<br>економічного профілю готовності до управлінської діяльності<br>( <i>Svetlana Tarasova, Marek Janicki</i> )..... | 141 |
| 1.16. Development of software platforms for scenario generation using DSL and<br>Neo4j graph database<br>Розробка програмної платформи для генерації сценаріїв з<br>використання DSL та графової БД Neo4j<br>( <i>Mykola Fisun, Ihor Kandyba, Svetlana Borovlyova, Maryna Falenkova</i> ).....                               | 146 |
| 1.17. Synergy of innovative behavioral indicators as an innovative tool in HR<br>management<br>( <i>Alona Obozna, Nataliia Shabelnik, Olena Havrilova, Maryna Pozhydaieva,<br/>Mariola Macala</i> ).....   | 156 |

PART 2

**ACCOUNTING AND ANALYTICAL SUPPORT OF MARKET PROCESSES IN THE  
GLOBAL ENVIRONMENT**

**ОБЛІКОВО-АНАЛІТИЧНЕ ЗАБЕЗПЕЧЕННЯ РИНКОВИХ ПРОЦЕСІВ У  
ГЛОБАЛЬНОМУ СЕРЕДОВИЩІ**

|   |     |
|---|-----|
| 2.1. Sustainable development of territories: global challenges and environmental priorities<br><i>(Olga Vyshnevskya, Olena Velychko)</i> .....  | 162 |
| 2.2. Application of huff model in retail trade area analysis<br><i>(Yuliya Gladka, Olena Kharkianen)</i> .....  | 171 |
| 2.3. Accounting and analytical support of enterprises' non-financial reporting<br><i>(Liliia Kozachenko, Alla Kostyrko, Józef Kaczmarek)</i> .....  | 175 |
| 2.4. Modeling of user activity in the social sphere on the basis of his statistical data<br>Моделювання активності користувача в соціальній сфері на основі його<br>статистичних даних<br><i>(Vladislav Asieiev, Inessa Kulakovska)</i> .....   | 182 |
| 2.5. Organization of financial control for private enterprises, analysis of its<br>information support and ways of improvement<br>Організація фінансового контролю для приватних підприємств, аналіз<br>його інформаційного забезпечення та шляхи вдосконалення<br><i>(Olena Usykova)</i> ..... | 190 |

PART 3

**MODERN POLICY IN THE HOSPITALITY AND TOURISM INDUSTRY**

**СУЧАСНА ПОЛІТИКА В ІНДУСТРІЇ ГОСТИННОСТІ ТА ТУРИЗМУ**

|  |     |
|--|-----|
| 3.1. Trends in modern cultural tourism as an export strategy for tourism<br>development<br><i>(Iryna Bondarchuk-Chugina, Olena Orlova)</i> .....   | 199 |
| 3.2. Processes of improving the management mechanism in the hospitality industry<br>of Ukraine<br>Процеси удосконалення управлінського механізму в індустрії гостинності<br>України<br><i>(Karyna Svidlo, Svitlana Peresichna, Ivan Haliasnyi)</i> ..... | 208 |

|   |     |
|---|-----|
| 3.3. Revitalization of the Dnipro «rusty horseshoe» as a cluster of creative industries and tourism<br>Ревіталізація «іржавої підкови» Дніпра як кластер креативних індустрій та туризму<br><i>(Vladyslav Prymenko, Kateryna Sefikhanova, Vira Shchenova, Vitalii Kononykin).....</i> | 218 |
| 3.4. Analysis of tourism development strategy in the Northern Black Sea Coast<br>Аналіз стратегії розвитку туризму у Північному Причорномор'ї<br><i>(Vitalii Sivak).....</i>  | 228 |
| 3.5. Recreational and economic component as a modern component of socio-cultural activity<br>Рекреаційно-господарська складова як сучасна компонента соціокультурної діяльності<br><i>(Tetiana Tkachenko, Iwona Mstowska).....</i>  | 238 |

## PART 4

**CURRENT PROBLEMS OF OLYMPIC AND PROFESSIONAL SPORTS****АКТУАЛЬНІ ПРОБЛЕМИ ОЛІМПІЙСЬКОГО ТА ПРОФЕСІЙНОГО СПОРТУ**

|   |     |
|---|-----|
| 4.1. Management of modern commercial structure in physical raising and sport<br>Управління сучасною комерційною структурою у фізичній культурі та спорті<br><i>(Oksana Adamenko, Tadeusz Pokusa) .....</i>  | 248 |
| 4.2. The results of the performance of the Ukrainian paralympic athletics team at the World Championship 2019 in Dubai (UAE)<br>Результати виступу параолімпійської збірної команди України з легкої атлетики на Чемпіонаті Світу 2019 р. у м. Дубай (ОАЕ)<br><i>(Derkach Viktor, Pryshutov Pavlo).....</i> | 256 |
| 4.3. Causes of sudden cardiac death in athletes and clinical cases of heart rhythm and conduction disturbances in young sportsmans<br>Причини раптової серцевої смерті атлетів та клінічні випадки порушення ритму і провідності серця у молодих спортсменів<br><i>(Igor Martsinkovsky).....</i>            | 264 |
| 4.4. Current trends and prospects of project management in sports<br>Сучасні тенденції та перспективи розвитку проектного менеджменту в спорті<br><i>(Oksana Savina, Kuvaldina Olga).....</i>   | 272 |
| 4.5. Sports selection system and forecasting in volleyball<br>Система спортивного відбору і прогнозування у волейболі<br><i>(Olga Sokol, Tetiana Bolotnykova).....</i>  | 282 |

PART 5

**TRANSFORMATIONAL PROCESSES IN THE EDUCATIONAL SPACE:  
PSYCHOLOGICAL AND PEDAGOGICAL ASPECTS**

**ТРАНСФОРМАЦІЙНІ ПРОЦЕСИ В ОСВІТНЬОМУ ПРОСТОРИ:  
ПСИХОЛОГО-ПЕДАГОГІЧНІ АСПЕКТИ**

- 5.1. Issue of motivation of future primary school teachers in the context of problem-based learning  
Питання мотивації майбутніх учителів початкової школи в контексті проблемного навчання  
(Tatyana Bilyavska) ..... 292
- 5.2. To the problem of experimental research of political socialization of students  
До питання про експериментальне вивчення політичної соціалізації студентської молоді  
(Tetyana Dmytrova)..... 298
- 5.3. Conditions for the development of moral forms of behavior in theatrical activities of preschoolers  
Умови розвитку моральних форм поведінки в театралізованій діяльності дошкільників  
(Angelica Kurchatova)..... 303
- 5.4. The teaching methodology of the normative course «Genetics» for students of pedagogical specialties within the framework of a credit and transfer system  
(Olena Kucher)..... 309
- 5.5. Psychological and pedagogical factors of effective interaction «teacher and student»  
(Vadym Lykhach, Anna Lykhach, Dariusz Rogowicz)..... 314
- 5.6. The influence of the value-semantic sphere of personality on the professional development of the future specialist of socio-economic professions  
Вплив ціннісно-сислової сфери особистості на професійне становлення майбутнього фахівця соціономічних професій  
(Lyudmila Matokhniuk, Olha Valchuk)..... 323
- 5.7. Modern approaches to the formation of creative personality of primary school students by means of game technologies  
Використання ігрових технологій під час формування творчої особистості здобувачів початкової освіти  
(Svitlana Parshuk, Iryna Moisieienko, Svetlana Tovkach)..... 333

|   |     |
|---|-----|
| 5.8. Activization of musical thinking of future choir conductors in art institutions of higher education<br>Активізація музичного мислення майбутніх диригентів хору у мистецьких закладах вищої освіти<br><i>(Olena Pikhtar, Bartosz Mirucki)</i> .....              | 341 |
| 5.9. The use of group learning methods in the process of training future primary education specialists<br>Використання технологій групового навчання в процесі підготовки майбутніх фахівців початкової освіти<br><i>(Alla Tymchenko, Dariusz Stanuchowski)</i> ..... | 341 |
| 5.10. Research of psychological features of decentralization of young people<br>Дослідження психологічних особливостей децентралізації осіб юнацького віку<br><i>(Shportun Oksana)</i> .....  | 356 |

PART 6

**CURRENT PROBLEMS OF TRAINING LEADERS OF A NEW FORMATION IN AN OPEN SOCIETY**

**АКТУАЛЬНІ ПРОБЛЕМИ ПІДГОТОВКИ КЕРІВНИКІВ НОВОЇ ФОРМАЦІ В УМОВАХ ВІДКРИТОГО СУСПІЛЬСТВА**

|   |     |
|---|-----|
| 6.1. Analysis of recent research and publications on the problem of public governance research<br>Аналіз останніх досліджень і публікацій з проблеми дослідження публічного управління<br><i>(Tatiana Ivatsko, Jadwiga Ratajczak)</i> .....   | 368 |
| 6.2. Health of Ukrainian citizens - Strategic resource of the state<br>Здоров'я громадян України – стратегічний ресурс держави<br><i>(Nadiya Vasylenko, Yaroslav Radysh)</i> .....  | 372 |
| 6.3. Changes in normative and legal provision reform of the administrative-territorial structure of the subregional level<br>Зміни в нормативно-правовому забезпеченні реформування адміністративно-територіального устрою субрегіонального рівня<br><i>(Olena Povazhuk, Wojciech Rudy)</i> ..... | 387 |



|       |   |     |
|-------|---|-----|
| 6.4.  | Ways of development of managerial competencies in public service managers<br>Шляхи розвитку управлінських компетенцій у керівників публічної служби<br><i>(Volodymyr Zaiachkovskyy, Tetiana Galych, Andrii Skomorovskyi)</i> .....  | 396 |
| 6.5.  | Features of the development of psychological competence of the manager in the system of continuous education<br>Особливості розвитку психологічної компетентності управлінця у системі безперервної освіти<br><i>(Larysa Kyienko-Romaniuk, Maya Lukova, Filip Pokusa)</i> ..... | 403 |
| 6.6.  | Security and defense sector management: possibilities of applying a system of checks and balances<br>Менеджмент сектору безпеки та оборони: можливості застосування системи перевірок та протываг<br><i>(Yuriy Moskalchuk)</i> .....  | 410 |
| 6.7.  | Technologies of development of creative potential of personality<br>Технології розвитку творчого потенціалу особистості<br><i>(Olena Stakhova)</i> .....  | 414 |
| 6.8.  | The use of information technology in the management of education alinstitutions<br>Використання інформаційних технологій в управлінні закладом освіти<br><i>(Serhii Poida, Maya Semko)</i> .....  | 422 |
| 6.9.  | Foreign experience of professional development of pedagogical workers (system of public administration)<br>Зарубіжний досвід організації професійного розвитку педагогічних працівників (система публічного управління)<br><i>(Olena Lebid)</i> .....                           | 435 |
| 6.10. | Cultural diplomacy: transformation of art and strategic management<br>Культурна дипломатія: трансформація мистецтва та стратегічного управління<br><i>(Ninel Kaschenko)</i> .....   | 438 |
|       | ANNOTATION<br>АНОТАЦІЇ .....  | 447 |
|       | ABOUT OF AUTHORS<br>ВІДОМОСТІ ПРО АВТОРІВ.....  | 462 |

### **1.17. Synergy of innovative behavioral indicators as an innovative tool in HR management**

In the era of modern technologies, it is very important to have an internal communication network that would both unite the manager and his staff, and develop them, and make it possible to give each other feedback - in a very simple, accessible form. When there is no such tool or it is very complex, then you forget that everyday merit can be maintained and strengthened, thereby learning the basic desire of people to be better.

Corporate values, principles and innovative behavioral indicators - as the main models and the most important drivers of behavior change, have been and remain a fundamental part of corporate culture.

Businesses are increasingly investing in innovation and creativity, but these attempts can fail when isolated from traditional business analysis, strategy, and problem solving.

The modern informational post-industrial society requires companies to integrate creativity and strategy in such a way that innovations are basic, relevant and effective in the process of management activities.

In his conceptual model, practical scientist Steve Martin [1] highlights the methodology of behavioral sciences in business, which will provide managers with effective work with subordinates with reliable and sustainable communications. "Organizations are increasingly realizing the value of presenting behavioral science as a combination of ideas from psychology, economics, and neuroscience" [1].

A behavioral science approach is a behavior change model that sets out specific steps that organizations must take to benefit from using behavioral science in a sustainable manner [1].

Under the leadership of Professor Bill Duggan, an experienced strategy leader, and Professor Amy Murphy [2], they offer exclusive tools to improve and systematize the idea generation process and develop effective ideas that are worthwhile to turn into growth strategies for your organization.

New ways of thinking and radical approaches are needed to stay ahead of the competition and gain market share. Marketing programs provide an integrated intuition and tactical, disciplined approach as an innovative tool in human resources management.

It is necessary to establish business processes, replacing the attitude of employees to work with "I have to, okay, I will do it" with "I want it and I will do it best."

The formation of innovative projects for the entire team of the organization is vital to improve the internal communications of the organization's employees when working with their ideas by increasing the motivation of employees.

Let's highlight the main questions that show the relationship between the head of the company and his employees when experimenting with the use of behavioral indicators:

- How to involve employees not only in the proposal, but also in the proactive implementation of ideas;
- How to pilot a project so as not to allocate a budget for the direct implementation of ideas;
- How to use a competitive spirit in working with ideas;
- How is the selection of ideas and their implementation;
- How to turn a short-term pilot project into a long-term corporate tradition;
- How corporate values, principles and behavioral indicators remain a fundamental part of corporate culture;
- How to use microlaring;

In resolving these issues, one of the new approaches fits into the personnel management process the "Gamification" method.

Gamification in HR is the use of game mechanics and game design elements to engage and motivate employees to achieve their goals that coincide with certain business objectives of the company [3].

The gamified project for the development of an innovative culture and innovative behavior of employees is engaged in the development of an innovative corporate culture. This is, of course, connected with the high business need to change: it is clear that if a manager acts in the same way as before, then not only will he not achieve new successes, but will also lose the existing stability.

Innovative thinking must be the key to the new culture, and managers must look for solutions that would help shape this thinking in employees as well.

For example, an employee, while performing his work, exhibits innovative behavior in each of his behavioral indicators, for example, at internal meetings, where the focus is on other employees, and their behavior can serve as a role model.

Does this recognition carry any additional perspectives for employees?

The ability to be innovative and use technology in new ways is essential to strengthen the movement towards a people-centered approach in the company. Achieving this requires technical savvy and quick response to ever-changing requirements.

Let us recall that not only HR specialists, but also all the leaders of the company should know and remember about the latest trends [4].

What is an innovative culture and an innovative company to us?

1. *Constant flexibility increases productivity.*

Flexibility involves rethinking how and by whom work is done. Notice the new tendency to focus on results rather than hours spent at work. By following it, leaders must clearly define and articulate results and then allow their teams to develop their own methods of achieving them.

The companies that conducted these experiments saw productivity gains, as organizations not only were able to maintain productivity, but also reduced stress levels. Participants also reported that they were taking a much more balanced approach to life.

Understanding this enables HR teams and businesses to jointly develop alternative proposals - the “one size fits all” approach is not as effective. HR professionals must use the principles of design thinking to understand what will benefit different teams.

### *2. HR – Gamification.*

Knowledge workers develop through independence, skill and communication. Gamification combines intrinsic and extrinsic motivation, making it more relevant than ever. The clever combination (synergy) of game design, psychology, motivation theory, and neurophysiology creates a remarkably effective path to results. For example: the gamification of team learning promotes the unification of people geographically located in different places.

### *3. Getting creative.*

Career paths are no longer linear. Creating opportunities for internal relocation remains a priority as companies move from a linear to a mosaic approach to career paths. This allows for more horizontal movement and a balance between business and personal needs.

People and talent acquisition teams are interested in fresh strategies; as with many other divisions, they need to add flexibility and innovation. It’s worth starting with a critical look at the candidate’s experience and the use of value-adding technologies.

### *4. Outsourcing of HR functions*

The role of HR professionals continues to evolve from oversight and implementation to supporting business agility and leadership coaching. Unfortunately, some teams are still focused on the administrative aspect of HR and do not use outsourcing or technology solutions for specialized tasks. This could be a nail in the coffin - right now it’s worth focusing on how to bring value to the business. HR professionals should consider improving their T-shaped competence.

### *5. Leadership*

Leadership development starts with personal development and self-awareness. Inclusive leadership seeks to create, change and innovate while keeping the human needs in mind.

This courage to deliberately break down barriers step by step - this approach welcomes the diversity and value of the contribution of each team member, encourages the responsibility, desire and obligation of everyone to contribute to decision-making and shaping reality.

Psychological safety is key, especially if you want to instill a culture of innovation in a company. Leaders must create an environment in which employees can be real and comfortable, using every opportunity to experiment, explore, and solve problems.

#### *6. Responsibility.*

Responsibility is nothing new. The approach to this issue is new. Educational organizations, companies that accelerate learning will have a competitive edge.

Leaders can no longer micromanage. They must clearly define the goal and leave it to the team to decide how and what to do.

Many HR leaders are still on the way to adopting the indicated points / actions, so we indicate that the best first step is to work out leadership development programs so that they are more effective and attractive for the business [5].

LEARNING MANAGEMENT SYSTEM (LMS) And a social network with gamification are interconnected, they can exchange experiences, discuss acquired knowledge, share cases of their application in practice, interact with mentors - and all this, permeated with gamification tools, gives a synergistic effect in the mutual association of employees with useful knowledge and their involvement in continuous development.

Gamification capabilities will help with the involvement of employees in the performance of all tests and tasks - a game microformat: blocks of thematic questions on any topic - even about the mission and values, even about a hobby that is better to master in your free time.

Considering the above, let us single out the following types of innovative behavioral indicators in the management activities of the organization's management [6]:

- corporate values, principles;
- Approach to the Application of Behavioral Science;
- internal communications of employees to improve and systematize the process of generating ideas;
- gamification in HR;
- learning management system (LMS).

“When used effectively, diversity in the workplace can be a catalyst for creative and innovative breakthroughs, as well as a path to building effective teams and improving organizational performance,” Leader-Practitioner Karin Block's approach.

## Referenses:

1. Электронный ресурс // <https://hr-academy.ru/hrarticle/tri-povoda-serezno-otnositsya-k-geymifikatsii.html>
2. Электронный ресурс [*Из книги К.Вербих и Д.Хантер "Вовлекай и властвуй"*] // [http://loveread.ec/read\\_book.php?id=65948&p=1](http://loveread.ec/read_book.php?id=65948&p=1)
3. Электронный ресурс <http://blog.pryaniky.com/tag/korporativnaja-kultura>
4. Электронный ресурс // <http://fajpbonghpcpkhjiiebgdklnkndgjjcch/suspended.html#ttl=%D0%B3%D0%B5%D0%B9%D0%BC%D0%B8%D1%84%D0%B8%D0%BA%D0%B0%D1%86%D0%B8%D1%8F%20%7C%20HR-Portal&pos=0&uri=https://hr-portal.ru/tags/geymifikaciya>
5. Электронный ресурс // [http://blog.pryaniky.com/Gamification\\_Design\\_Elements\\_For\\_Learning](http://blog.pryaniky.com/Gamification_Design_Elements_For_Learning) by bizcommunity.com
6. Innovative approaches in personnel management of the organization: a competency approach / Obozna Alona, Pinchuk Anna // Modern approaches of socio-economic development of regions: theory and practice (Інноваційні підходи в управлінні персоналом організації: компетентнісний підхід): monograph. Poland, Opole: The Academy of Management and Administration in Opole, 2020.