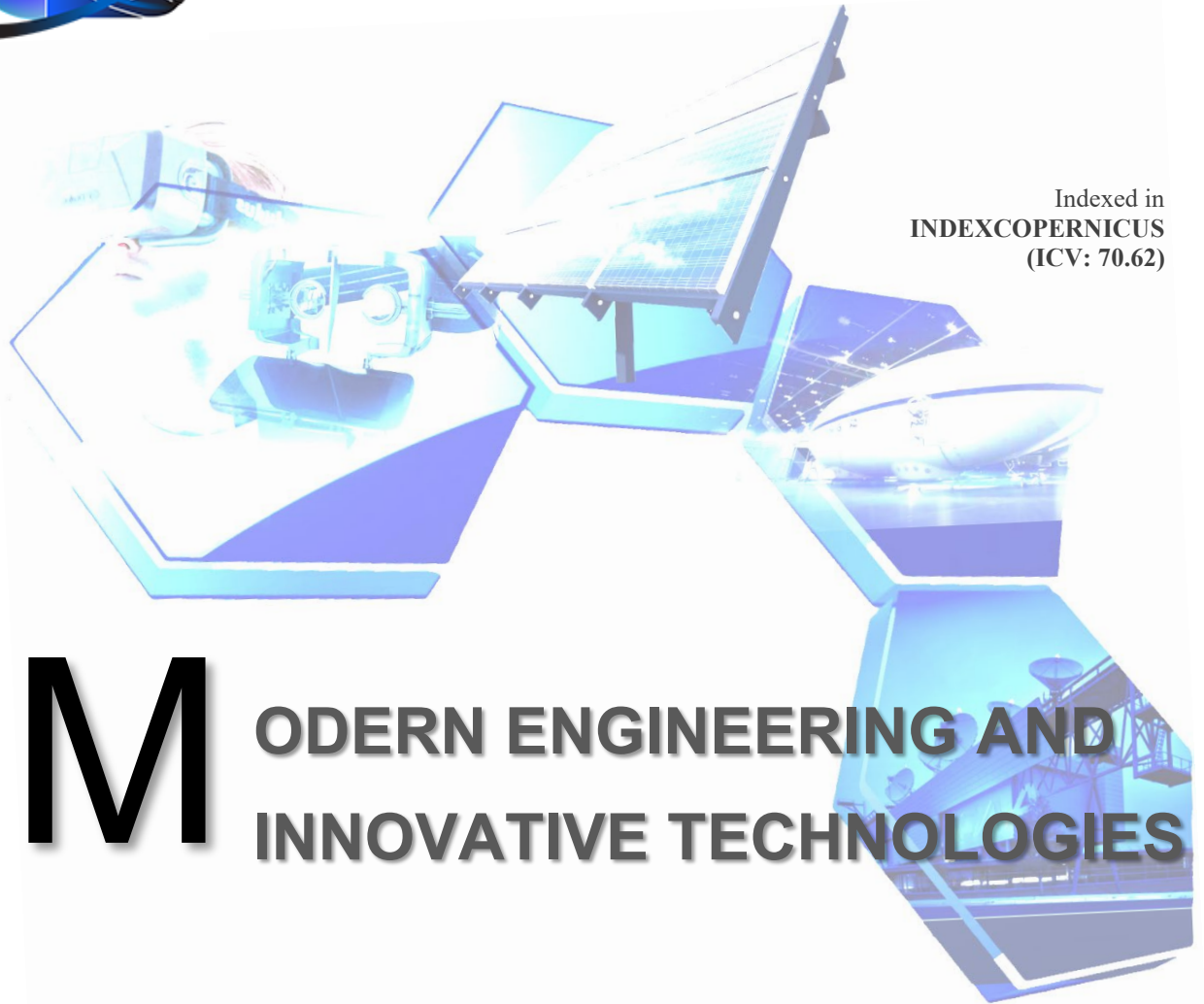




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MANAGEMENT OF RESOURCES AND EXCURSION POTENTIAL IN TOURISM-RECREATIONAL AND RESTAURANT CLUSTER STRUCTURES

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Abstract. *This study examines the role of the Blue Economy in enhancing resource management and excursion potential within tourism-recreational and restaurant cluster structures. An integrated approach combining economic, ecological, and social dimensions is proposed to optimize the use of natural, cultural, and infrastructural resources while maintaining ecological balance. Conceptual models and algorithms are developed to assess the impact of resource management and excursion potential on cluster performance. The findings highlight that the Blue Economy fosters sectoral synergy, cost optimization, sustainable development, and support for local communities, thereby increasing territorial attractiveness, long-term excursion potential, and economic efficiency in regional tourism clusters.*

Prospects for further research include the development of quantitative indicators for excursion potential, the evaluation of Blue Economy strategies in diverse regional contexts, and the integration of digital resource management tools to enhance cluster coordination and achieve sustainable development outcomes.

Keywords: *clusters, hotel and restaurant businesses, resource management, Blue Economy, excursion potential.*

Introduction

The current development of tourism-recreational and restaurant clusters is impossible without an integrated approach to resource management, which involves considering the principles of the Blue Economy, particularly the emphasis on the sustainable use of water and coastal resources, effective environmental management, and economic optimization. In the context of increasing competition in the global tourism market, these approaches and the capabilities formed on their basis to



effectively utilize natural, cultural, and infrastructural resources—especially at the regional cluster level—are a crucial factor in enhancing their competitiveness and attractiveness to tourists.

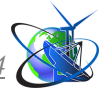
The relevance of this approach is also determined by the specific features of these clusters' functioning. In particular, the restaurant sector actively uses water resources in food preparation processes, washing, and ensuring sanitary conditions [5]. Moreover, in coastal or river regions, restaurant clusters, by developing local fish and seafood gastronomy, shape the gastronomic identity of the territory contributes to increasing its tourist attractiveness. At the same time, tourism and recreational activities are often formed around natural water bodies and coastal areas, which significantly diversify the tourism product of a region [2]. Territories that effectively utilize water resources and adhere to the principles of sustainable development become more attractive to tourists. According to the State Agency for Tourism Development of Ukraine, in 2022–2023, more than 40% of domestic tourists chose tourism-recreational and restaurant clusters that possess unique water and coastal resources and significant excursion potential.

Resource management and the excursion potential formed on their basis within modern cluster structures involves not only coordination among various economic actors—from hotel and restaurant businesses to transport operators and cultural and entertainment organizations—but also their effective integration. Such interaction is aimed at maximizing the economic return of the cluster through optimizing the use of natural, cultural, and infrastructural resources while simultaneously maintaining ecological balance and ensuring sustainable development.

In this context, the purpose of the study is to substantiate and identify effective approaches to resource management and excursion potential in tourism-recreational and restaurant cluster structures, taking into account the principles of the Blue Economy.

Overview of the external environment

It should be noted that, according to the studies of O. Shepelov, O. Bohdanov [6], P. Mistri, A.K. Mistry [3], M. O. Slizhe, M. A. Berlinskiy, and Y. El Khadri [4], the



primary objective of the Blue Economy concept is to ensure sustainable economic development through the rational utilization of water and coastal resources while minimizing negative impacts on ecosystems and maximizing socio-economic benefits for local communities. Accordingly, the present study builds upon these scholarly contributions in order to identify and substantiate effective approaches to resource management and the development of excursion potential within tourism-recreational and restaurant cluster structures in accordance with the principles of the Blue Economy.

The relevance of this research is determined by the following consideration: despite the existence of conceptual and applied studies on the Blue Economy, there remains a lack of systematic and scientifically grounded approaches to the quantitative assessment and management of the excursion potential of clusters.

Methods

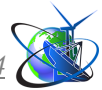
In this study, the subject of analysis is tourism-recreational and restaurant cluster structures with high excursion potential. The primary objective is to identify effective approaches to resource management and the development of excursion potential, taking into account the principles of the Blue Economy.

To formalize the relationships, the following conceptual model was applied:

$$TP = \alpha \cdot BE + \beta \cdot IS + \gamma \cdot C, \quad (1)$$

where: $\alpha, \beta, \gamma \in [0, 1]$ — coefficients representing the influence of respective factors on the formation of excursion potential; $\alpha + \beta + \gamma = 1$ — normalization condition for the contribution of each element; BE — the intensity of Blue Economy principles implementation in the region (sustainable resource allocation, minimization of ecological impact); IS — the level of sector integration (tourism, recreation, transport, fisheries, hotel and restaurant business, research institutions, local communities); C — cluster performance efficiency (coordination of participants, optimization of resource use, implementation of joint projects); TP — excursion potential of the territory.

The study employs a systemic approach that combines quantitative and qualitative methods:



1. Analysis of scientific literature and international practices — to identify key principles of the Blue Economy and examples of their implementation in cluster structures, particularly in EU countries and Mediterranean regions.

2. Synthesis of conceptual models — integrating Blue Economy principles into the cluster development model to construct a linear algorithm describing the relationships between resource potential, sector integration, and territorial excursion potential.

3. Logical modelling — building structured models of how resource management affects the functioning of tourism-recreational and restaurant clusters, as well as determining the relationships between territorial excursion potential and cluster performance efficiency.

Research results

The Blue Economy concept focuses on the integration of various types of economic activities that rely on shared natural resources (water, coastal areas, recreational territories, and bioresources) [1; 3]. The cluster model provides an organizational framework for combining these activities—tourism enterprises, restaurants, transportation, fisheries, recreation, research institutions, and local communities—within a single territory. Therefore, clusters serve as an institutional mechanism for implementing the principles of the Blue Economy, as they enable coordination among different actors and joint resource management [3].

Consequently, numerous examples already exist where Blue Economy principles are realized through cluster or network structures. In particular, in European Union countries, the active formation of marine or Blue Economy clusters began following the adoption of the Blue Growth strategy in 2012, which stimulated the development of innovative cluster initiatives in coastal regions [4]. During this period, several clusters emerged, bringing together enterprises from the tourism, maritime transport, fisheries, aquaculture, energy, and recreational services sectors. Among the most notable examples are:



1. Pôle Mer Bretagne Atlantique (France) — a marine innovation cluster established in 2005, comprising over 400 organizations, including maritime enterprises, research institutions, and government bodies;
2. Pôle Mer Méditerranée (France) — a cluster focused on fostering innovation in the marine economy and the sustainable use of marine resources;
3. Clúster Marítimo de Canarias (Spain) — a cluster integrating marine tourism, port activities, maritime transport, and research organizations;
4. Maritime Technology Cluster FVG (Italy) — a cluster in the Friuli Venezia Giulia region, bringing together shipbuilding, marine technology, and tourism enterprises;
5. Energy Valley Cluster (Norway) — a cluster combining marine energy, ocean infrastructure technologies, and innovative solutions for the sustainable use of marine resources.

Moreover, in the Mediterranean region, networks of cooperation among maritime clusters have been established, notably the WestMED Maritime Cluster Alliance, created within the framework of the European initiative for the development of the Blue Economy in the Mediterranean. Its activities are aimed at coordinating collaboration among maritime clusters and promoting innovative projects in sectors such as marine tourism, fisheries, aquaculture, maritime transport, and renewable energy. The integration of these activities based on the rational use of marine resources aligns with the principles of the Blue Economy and contributes to the sustainable development of coastal areas.

Thus, in contemporary European practice, cluster structures serve as important institutional mechanisms for implementing Blue Economy principles, ensuring coordination across different sectors and efficient use of natural resources.

For tourism-recreational and restaurant clusters, the Blue Economy is particularly significant because it stimulates cooperation among enterprises from different sectors, promotes joint management of natural resources, enhances the excursion potential of a territory by combining natural, cultural, and gastronomic resources, and ensures ecological sustainability of tourism development.



The role of this concept in tourism-recreational and restaurant cluster structures lies in establishing an integrated approach to resource management, which enables: the optimization of natural and infrastructural resources through the coordination of activities among all cluster participants; the enhancement of the cluster's economic returns; the preservation of ecological balance and the attractiveness of territories for tourists; the provision of social benefits for local communities through job creation and the development of local businesses.

Thus, the Blue Economy concept serves as a methodological foundation for the development of sustainable tourism-recreational clusters, combining economic efficiency, ecological sustainability, and social responsibility.

The impact of the Blue Economy concept on resource management in tourism-recreational and restaurant cluster structures is shaped by the need to ensure sustainable development and cluster competitiveness. In this context, the term “resource management” is more appropriate than “managerial potential” or “resource potential,” as it emphasizes not only the availability of specific resources or management capacities, but primarily the processes of coordinating, rationally utilizing, replenishing, and integrating these resources into the activities of cluster structures. In contrast, “resource potential” refers only to the aggregate of available natural, economic, and infrastructural resources of a territory, while “managerial potential” reflects the capabilities of management actors to make and implement managerial decisions.

We contend that the category of “resource management” most fully reflects the mechanism for the practical implementation of Blue Economy principles, namely the efficient use of resources, minimization of losses, and the provision of long-term ecological and economic sustainability of clusters [3-4]. In this context, its impact is directed towards (see Table 1):

- the rationalization of natural resource use;
- fostering synergy among cluster participants;
- cost optimization and economic resilience.

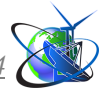


Table 1 - The impact of the Blue Economy concept on resource management in tourism-recreational and restaurant cluster structures

Basic principles of influence	Features of Blue Economy impact on resource management and excursion potential	Focus of Blue economy concept impact
Rational use of natural resources	Within clusters, the Blue Economy promotes sustainable use of water bodies, coastal zones, and recreational areas	Reduces the risk of ecosystem degradation and contributes to long-term economic efficiency
Synergy among cluster participants	Blue Economy principles involve integrated management of all participants in the tourism-recreational chain, from hotel and restaurant businesses to transport operators and cultural organizations	Prevents duplication of resources and increases the efficiency of infrastructure use
Cost optimization and economic resilience	Implementation of energy-efficient and water-saving technologies within clusters	Reduces operational costs and enhances enterprise profitability

Source: created by the authors based on [1; 3-4]

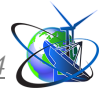
Based on the data presented, the algorithm for assessing the impact of resource management on the functioning of tourism-recreational and restaurant cluster structures can be expressed as a function integrating these components:

$$TP = \alpha \cdot RR + \beta \cdot S + \gamma \cdot OE, \tag{2}$$

where: $\alpha, \beta, \gamma \in [0, 1]$ — weighting coefficients reflecting the influence of resource rationalization, synergy, and cost optimization, respectively ($\alpha + \beta + \gamma = 1$); $RR = f(\text{water bodies, coastal zones, recreational areas})$; $S = f(\text{coordination of businesses, transport operators, cultural organizations})$; $OE = f(\text{hotels, restaurants, marinas, beaches, tourist routes, material and technical resources})$.

It should be noted that the rationalization of natural resource use is a response to the scarcity of water bodies, recreational areas, and coastal zones, which are key to a region’s tourism appeal. Without systematic management, their use may lead to ecosystem degradation and a decline in tourist demand.

Synergy among cluster participants is driven by the need to coordinate the activities of diverse actors within the tourism-recreational chain, including hotel and restaurant businesses, transport operators, cultural and entertainment organizations, and local communities. This coordination helps avoid duplication of infrastructure, enhances resource-use efficiency, and enables the creation of cohesive tourism



products.

Cost optimization and economic resilience arise from the need to enhance the economic efficiency of tourism-recreational and restaurant clusters while simultaneously preserving ecological and social resources. This requires the implementation of energy- and water-saving technologies, digital resource management systems, and integrated planning models (see Fig. 1). Such measures reduce operational costs, increase cluster profitability, and reinforce the long-term stability of regional development.

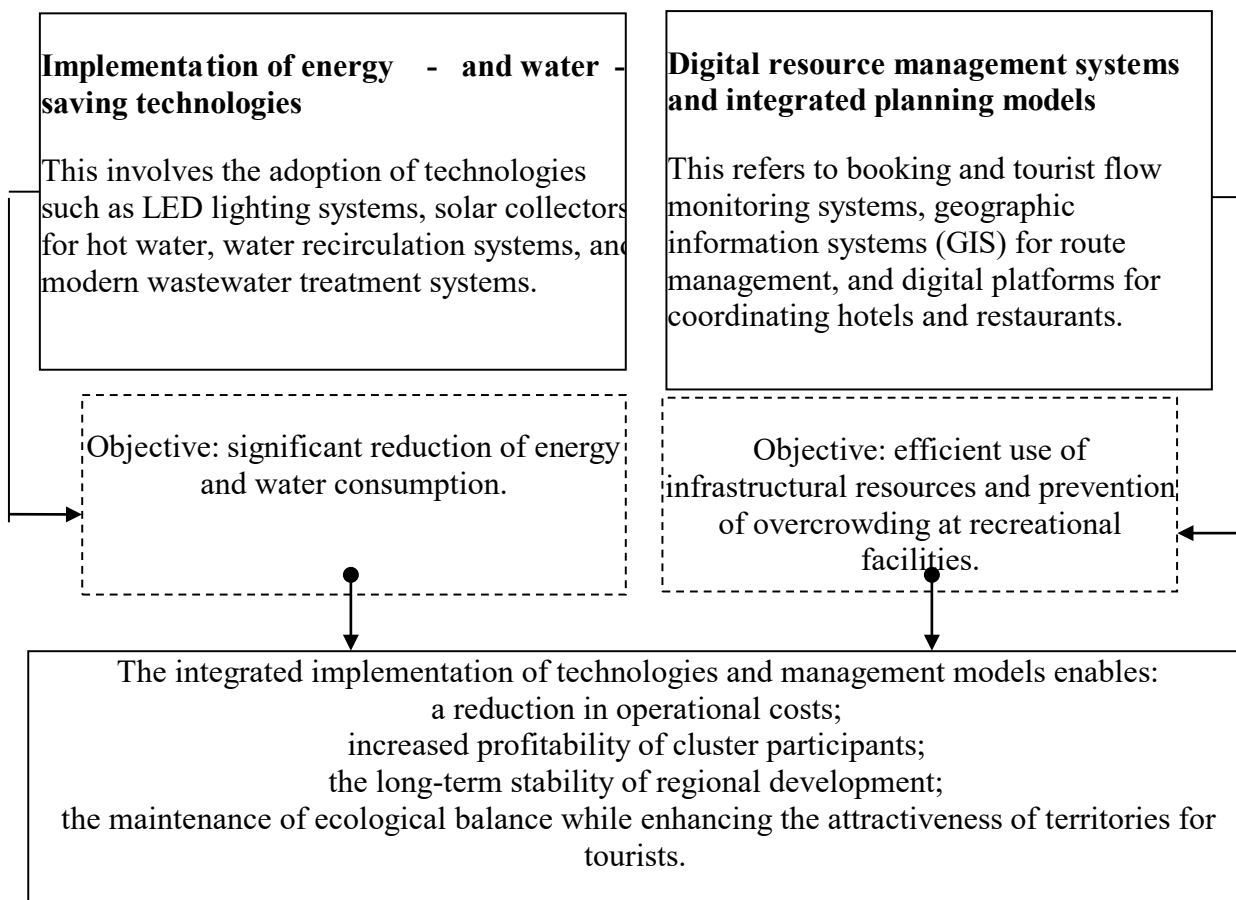


Figure 1 - Logic of cost optimization and enhancement of economic resilience in resource management within tourism-recreational and restaurant cluster structures

Source: created by the authors based on [1-2; 6]

The impact of the Blue Economy concept on the functioning of tourism-recreational and restaurant cluster structures arises from the need to ensure the



comprehensive attractiveness of these territories for tourists and their sustainable development. To define the nature of such attractiveness, the category “excursion potential” is used, which is considered more appropriate than “excursion activities.” Similarly, to describe the character of development, attention is paid not only to the actual forms of excursion organization but also to the aggregate of existing natural, cultural-historical, infrastructural, and organizational resources that create opportunities for expanding excursion activities. These resources act as factors of both cluster attractiveness and long-term sustainability.

Thus, excursion potential characterizes the integrated capabilities of a territory to develop diverse excursion products and programs. Consequently, the influence of the Blue Economy on this category is directed towards (see Table 2):

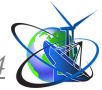
- the creation of a cohesive tourism product;
- the long-term attractiveness of the territory;
- the support of local communities.

Table 2 - The Impact of the Blue Economy concept on the management of excursion potential in tourism-recreational and restaurant cluster structures

Basic principles of influence	Features of Blue Economy impact on resource management and excursion potential	Focus of Blue Economy concept impact
Creation of a cohesive tourism product	The cluster structure allows the integration of natural, cultural, and gastronomic resources into coordinated excursion routes	Enhances the attractiveness of the region for tourists
Sustainable development and long-term attractiveness	By preserving natural and cultural sites, tourism clusters maintain their excursion potential for decades	Promotes repeat visits and a positive regional image
Support of local communities	The application of Blue Economy principles stimulates the development of local enterprises in tourism and restaurant sectors	Provides economic benefits to local communities and improves the quality of tourist services

Source: created by the authors based on [1; 3; 5-6]

Based on the data presented, the algorithm for assessing the impact of excursion potential on the functioning of tourism-recreational and restaurant cluster structures can be expressed as a function integrating these components:



$$EP = \alpha \cdot IC + \beta \cdot LA + \gamma \cdot LC, \quad (3)$$

where: $\alpha, \beta, \gamma \in [0, 1]$ — coefficients representing the influence of the respective components on the formation of excursion potential ($\alpha + \beta + \gamma = 1$); EP — excursion potential of the territory; IC — integrated tourism product (cohesive tourist experience); LA — long-term attractiveness of the territory; LC — support of local communities.

The creation of a cohesive tourism product is driven by the need to integrate natural, cultural, and gastronomic resources into a unified system, enabling the development of comprehensive excursion routes and enhancing the cluster's attractiveness in both domestic and international markets [6].

Sustainable development and long-term attractiveness are achieved through the application of Blue Economy principles, which ensure the preservation of natural and cultural resources, regulate their use, and minimize negative ecological impacts [2-3]. This approach allows tourism clusters to maintain their excursion potential over an extended period and provides a foundation for repeat visits by tourists through the implementation of environmentally responsible territorial management practices, rational use of natural resources, development of ecological infrastructure, and the execution of conservation measures.

Support of local communities arises from the integration of the economic and social components of a cluster. Through the participation of local entrepreneurs, artisans, food service establishments, and cultural organizations in the development of tourism products, economic benefits are generated for communities, jobs are created, and local infrastructure development is stimulated.

Thus, the implementation of the Blue Economy concept in regional tourism-recreational and restaurant clusters simultaneously preserves the ecological value of territories, enhances excursion potential, and improves economic efficiency.

Closing and conclusions

Effective management of resources and potential for excursions in tourism, recreational, and restaurant cluster structures requires a comprehensive, integrated approach that combines economic, ecological, and social aspects of development. The



application of Blue Economy principles enables the coordination of activities across multiple sectors, including tourism, hotel and restaurant businesses, transport, recreation, and cultural organizations, based on the sustainable use of natural and coastal resources.

Resource management in the cluster context involves not only the coordination of economic actors but also the optimization of natural, cultural, and infrastructural resources to create a cohesive tourism product and develop integrated excursion potential. This approach ensures a balance between the economic efficiency of clusters and the ecological sustainability of territories, enhancing their competitiveness and attractiveness for tourists.

The implementation of Blue Economy strategies within cluster structures fosters the development of innovative resource management models, supports local communities, and contributes to the long-term sustainability of tourism territories. These factors are key to encouraging repeat visits and ensuring the stable development of the tourism-recreational sector.

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Анотація. Це дослідження розглядає роль «блакитної економіки» у покращенні управління ресурсами та екскурсійного потенціалу в рамках туристично-рекреаційних та ресторанных кластерних структур. Запропоновано інтегрований підхід, що поєднує економічні, екологічні та соціальні виміри, для оптимізації використання природних, культурних та інфраструктурних ресурсів, зберігаючи при цьому екологічний баланс. Розроблено концептуальні моделі та алгоритми для оцінки впливу управління ресурсами та екскурсійного потенціалу на ефективність кластера. Результати дослідження підкреслюють, що «блакитна економіка» сприяє галузевій синергії, оптимізації витрат, сталому розвитку та підтримці місцевих громад, тим самим підвищуючи територіальну привабливість, довгостроковий екскурсійний потенціал та економічну ефективність у регіональних туристичних кластерах.

Перспективи подальших досліджень полягають у розробці кількісних показників екскурсійного потенціалу, оцінці стратегій «блакитної економіки» в різних регіональних контекстах та інтеграції інструментів цифрового управління ресурсами для покращення координації кластерів та досягнення результатів сталого розвитку.

Ключові слова: кластери, готельно-ресторанний бізнес, управління ресурсами, блакитна економіка, екскурсійний потенціал.

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