DOI: https://doi.org/10.30525/978-9934-26-220-3-34

Oksana Roik

Ph.D., Associate Professor of Tourism Lviv Polytechnic National University

Natalia Pankiv

Ph.D., Associate Professor of Tourism Lviv Polytechnic National University

ASSESSING THE LEVEL OF INNOVATION IN THE TOURISM SECTOR IN MODERN REALITIES

Summary

The study focuses on achievements, both foreign and domestic scientists, considering the need to use innovative management for effective development of tourism in Ukraine. Despite the recognized importance of innovation as a key factor that ensures the development of both individual enterprises and the country as a whole, the main aspects of innovation in the tourism industry remain insufficiently studied and need to be clarified. In order to achieve the goal, the following tasks have been defined: to investigate the categorical apparatus of the concept of «innovation in tourism» (it will define the essence of this category). The object of the research is the process of applying innovations in the tourism business in the conditions of disproportionate development of national and regional tourism services markets. The theoretical and practical approaches to the application of innovations in the development of tourism in Ukraine have become the subject of the study. Also the Index of assessment of the level of innovation in the tourism sector of Ukraine is calculated. The results show that tourism sector is characterized by low innovation. The consequences of the negative impact on the activities of modern representatives of the tourism industry and the need to revise the policy of providing tourist services during the war justify the need for innovation that can positively affect the solution of existing problems.

Introduction

In recent years, the sphere of tourism in Ukraine has been going through difficult times. The COVID-19 pandemic has become a challenge for the tourism industry, making domestic travel more popular in Ukraine, as it will take some time to resume international tourism. In the conditions of the coronavirus pandemic and the need to adhere to quarantine restrictions and social distance, it became expedient to develop such types of tourism as green (rural) and ecological tourism. To this end, the «Guidelines (Protocol) for the provision of rural green tourism services (rural hospitality) in the corona- and post-coronavirus period» were developed, which states that: «Within 2020 –

the year of tourism development in rural areas, NGO Rural Green Tourism in Ukraine» in cooperation with the National Tourism Organization of Ukraine joined the global initiative of the World Travel and Tourism Council (WTTC) #Safe travels. Experts of the Union and the EU Project Geographical Indications in Ukraine and partners developed a Protocol to adapt the work of farmsteads with priority to protect human health and effectively mitigate the effects of the COVID-19 pandemic. Its implementation will allow the owners of rural estates that provide rural green tourism services: to take effective practical measures to reduce the risk of coronavirus disease COVID-19 as owners of rural estates, their families, and tourists; to gain additional competitive advantage, guaranteeing the tourist increased attention to the protection of his health; to improve the quality of rural green tourism services (rural hospitality) taking into account the sanitary and hygienic requirements and the requirements of social distancing [1].

The next terrible event for Ukraine was the war. On February 24, 2022, the Russian Federation launched a full-scale, aggressive war against Ukraine on the land, sea, and the air using units of the armed forces, heavy ground weapons, including long-range artillery, missiles, naval ships, and military aircraft. The invasion has already resulted in significant civilian casualties, mass destruction, and damage to Ukraine's infrastructure and natural heritage. Russian troops are attacking peaceful Ukrainian towns and villages from various directions, including the temporarily occupied Donbas and Crimea and the north-eastern region. This is an act of war, an attack on the sovereignty and territorial integrity of Ukraine, and a gross violation of the UN Charter and fundamental norms and principles of international law. Russia's military action is undoubtedly an unjustified and unprovoked act of aggression against independent and sovereign Ukraine, as well as a violation of all existing norms of international law on nature protection, sustainable development, humanitarian law, basic morals, and principles of human coexistence. In addition to the most obvious consequences of the war in many regions of Ukraine, such as deaths, destruction of homes, general destruction, and poverty, the war worsens the country's economic situation, threatens the environment, and worsens social living conditions [2].

Therefore, at the current stage of economic development and given the current situation in the world, it is important for the survival of businesses in the war in Ukraine is the search for modern methods and tools for managing business processes, which should be based on the principles of their adaptation to changing conditions innovative technologies. Service companies respond extremely quickly to changes and new challenges, which are characterized by a significant level of dynamism, diversification of offers in the services market, and fierce competition. Therefore, innovations are transformed into a decisive factor in determining new technologies for managing business processes of enterprises in the service sector of the regions, in particular the hotel and restaurant and tourism business.

Henderson I. L., Avis M. and Tsui W. K. T. [3], Wikhamn W., Armbrecht J. and Wikhamn B. R. [4], Sipe L. J. [5], Verreynne M. L., Williams A. M., Ritchie B. W., Gronum S. and Betts K. S. [6], Thomas R. and Wood E. [7] are considered the application of innovation potential and substantiation of economic need for innovations. Charkina T. Yu. Martseniuk L. V. Zadoia V. O. and Pikulina O. V. [8], Smyrnov I., Liubitseva O. [9], Kulinyak I. Ya., Zhigalo I. I., Yarmola K. M. [10], Hrebeniuk H., Charkina T., Martseniuk L., Pikulina O. [11] have proposed some solutions in the innovative management of enterprises and the formation of the technological component through the introduction of information systems and models, economic mechanism of sustainable tourism, marketing management of tourism enterprises, and organizational aspects of the tourism market, partially highlighting innovation strategy.

The works of these authors are a significant contribution to the development of the theory of innovative management of tourism enterprises. However, today there are a limited number of publications on the development of innovations in tourism in wartime.

Part 1. Theoretical review of the definition of innovation in tourism

The growth of the competitiveness of enterprises involved in tourism largely depends on their innovation activities. To ensure proper operation, travel companies must constantly use innovations both to combat crises and to develop to survive in a market of free competition. Innovative processes taking place in tourism affect not only tourism companies directly, but also a large number of infrastructure organizations. Therefore, their study is relevant and of considerable scientific and practical interest.

Over the last fifteen years, there have been several publications examining tourism innovation as one of the most promising innovation sectors in the service sector. Scientists [4–7] consider in their works various aspects of innovation in tourism. However, despite the recognized importance of innovation in the tourism industry, many aspects remain understudied and need to be considered and clarified.

To date, there is no single definition of the term «innovation in tourism», there is no single classification of such innovations, insufficient attention is paid to sources of information on which to study them, as well as methods of assessing innovation activity of tourism enterprises [5].

There is no consensus among scholars who study tourism to define it. Some researchers characterize tourism mainly as an industry, others as a field of activity, but today more and more scientists consider tourism as an industry (for example, Charkina, T. Yu. Martseniuk, L. V. Zadoia, V. O. and Pikulina, O. V. [8]).

Modern tourism as an area that meets the needs of people who travel, has become an industry – part of the world economy, a powerful economic complex of national economies, operating in close cooperation with the environment, economic system, and society as a whole [10]. The tourism industry produces,

sells, and consumes travel services for people who are temporarily away from their place of residence and do not carry out paid activities at their place of residence.

The tourism industry includes enterprises belonging to various types of economic activity, the main purpose of which is to organize a comfortable and high-quality provision of requirements and wishes of the tourist. The functions of such enterprises are the creation, implementation, and organization of consumption of services and goods for tourism [11].

Based on this, the tourism industry is a set of hotels and other means of accommodation, means of transport, catering facilities, objects, and entertainment facilities, objects of cognitive, medical, health, sports, religious, religious, business, and other purposes, organizations that carry out tour operator and travel agency activities, as well as provide tourist and excursion services [7].

One of the key factors in the development of both the economy in general and the tourism industry, in particular, is innovation. The term «innovation», which means «innovation» in English, was introduced into scientific circulation by the Austrian scientist J. Schumpeter [13]. In his work «Theory of Economic Development», he identified five areas of innovation: the introduction of new products; the introduction of a new method of production; the opening of a new market; the conquest of a new source of raw materials or semi-finished products; introduction of a new organizational structure of production.

Analysis of the scientific economic literature on innovation in tourism indicates the existence of different approaches to the definition of this term. Given the fact that tourism includes a large number of different enterprises, there is a difficulty in the substantive definition of the essence of this concept.

In particular, Lee C., Hallak R. and Sardeshmukh S. R. [14] in their work by innovation means the process of creating, adopting, and implementing new ideas, processes, products, or services, as well as the ability to change and adapt. While Verreynne M. L., Williams A. M., Ritchie B. W., Gronum S. and Betts K. S. [6] define them as the process by which a new idea or practice becomes useful, new ways to solve various problems to meet people's needs.

Smyrnov I., Liubitseva O. [9] under innovation in tourism determines the outcome of actions aimed at creating a new or changing an existing tourism product, developing new markets, using advanced information and telecommunications technologies, improving tourism, transport, and hotel services, creating strategic alliances for tourism business, the introduction of modern forms of organizational and managerial activity of tourist enterprises.

Kulinyak I. Ya., Zhigalo I. I., Yarmola K. M. [10] substantiated this term as a result of the application of a novelty in the tourism industry by increasing its efficiency and obtaining, above all, a commercial effect, which should ensure the sustainable operation and development of the industry. Kulinyak I. Ya., Zhigalo I. I., Yarmola K. M. and others [13] are defined innovations in tourism

as innovations developed and implemented that allow obtaining benefits in the form of economic or social effects and other positive results.

Hrebeniuk H., Charkina T., Martseniuk L., Pikulina O. [11] consider innovations in tourism as various organizational and managerial innovations, consisting of targeted changes that are made at different levels of the tourism industry.

N. Vlasova, V. Smirnova, and N. Semenchenko [12] under the innovations in tourism consider systemic measures that have a qualitative novelty that leads to positive changes, as well as ensure the functioning and development of the industry in the region.

Consideration of different interpretations of the term «innovation in tourism» provides an opportunity to conclude that there is still no single definition. There is an ongoing debate among scholars about what to consider innovation in tourism — the result, implemented product or service, or the process of implementing an idea and its implementation in the finished result or individual stages of the process (development, implementation, commercialization, use).

Innovations in tourism include those innovations that are accompanied by the restoration and development of the spiritual and physical strength of tourists, fundamentally new changes in tourism products, improving the efficiency of the tourism industry, improving the formation, positioning, and consumption of tourism goods and services, progressive changes in factors of production [15].

When applying innovations in tourism, it is necessary to take into account the principles of innovation in tourism, proposed in [15], namely: scientific – the use of scientific knowledge and methods for innovation, in accordance with the needs of tourists; systematic – the development strategy of innovative tourism development in the region should take into account the factors and conditions necessary to meet the needs of people in recreation and leisure; direct and indirect environmental factors; compliance of innovations with the needs of tourists – offering only such innovations that are really needed by the client, and not those that can make and implement a travel agency; positive prevention of unreasonable, ill-considered implementation of innovations that can be dangerous for tourists, tourism enterprises, the environment and society as a whole; compliance of innovation activity and its results with the level of development of society; connectivity – each new product at a certain stage of its life cycle should evoke and stimulate the idea of creating the next innovation and provide financial support for this process; safety – the innovation must guarantee the absence of harm to humans and the environment.

Thus, the application of innovations in the tourism sector is aimed at creating a new tourism product, providing unique tourism services, and applying new marketing approaches using the latest techniques and IT technologies, which will increase the competitiveness of tourism products in national and international markets.

Part 2. Research of features of formation and realization of innovations by the tourist enterprises in modern conditions

The importance of innovation for the market of tourist services in modern economic conditions is constantly growing, as recent years confirm the fact that the effective operation of tourism enterprises requires major changes in the innovation sphere. Innovative development of tourism enterprises can be carried out primarily through the interaction of components of the internal environment and available resource potential. Therefore, the importance of innovation for enterprises is constantly growing and becomes a factor in shaping its innovation potential, promoting the use of new competitive technologies, and ensuring economic growth.

According to the specifics of the market of tourist services, the innovation process is a constant and continuous stream of transformation of ideas into new technologies or their components and bringing them to use directly to obtain a qualitatively new tourist product. The innovation environment is the socio-economic sphere that promotes the formation of innovation policy and culture, is the object of innovation of tourism enterprises, and provides a variety of economic needs and interests.

As a result, the innovation potential should integrate and be based on the characteristics that characterize: the general innovation environment; the innovative potential of the enterprise that stimulates competition; relationships between different elements of the innovation sphere; the level of innovation activity of the enterprise and the effectiveness of innovation activities. Based on this, all these components define the innovative potential of the enterprise as a measure of its readiness (ability) to perform tasks that ensure the achievement of goals in the innovation sphere, creation, development, and dissemination of various types of innovations, innovation in economic results [16].

European experience in supporting innovation shows that to form a system of effective interaction of all actors in innovation, it is necessary to create a modern infrastructure to support innovation. The lack of such a system infrastructure is one of the main obstacles to the innovative development of the tourism market [15].

However, it should be noted that in modern conditions, some tourism companies, or try to engage in innovation, or market conditions encourage them to innovate. The analysis focuses on specific and applied research on the state of innovation by tourism enterprises in the region and clarifies the problems that hinder their innovative development. Therefore, in the target sample, we included representatives of various tourist and excursion companies that have experience in creating innovative products and implementing innovations. Therefore, this study is not a sociological survey in the full sense of the word but has the character of an expert-evaluation analysis [16]. Among the studied enterprises, we see great potential for innovative growth and the need to develop special programs to intensify innovation (Table 1). According to the table, 55,9% of respondents are interested in implementing innovations, which

is a much higher figure compared to the share of enterprises that have implemented innovations.

 $\label{thm:continuous} Table\ 1$ Survey results of tourism enterprises that have implemented innovations

Indicators of innovation implementation	Share of respondents, %						
The interest of tourist enterprises in implementing innovations*							
The interest Share of respondents, %							
Yes (the interest)	55,9						
I do not know	32,5						
No (not interested)	11,6						
The main priorities for the implementation of innovative activities by tourism enterprises							
Economic	73,2						
Organizational	16,5						
Temporal	5,1						
Social	3,7						
Ecological	1,1						
Biological	0,4						
Type of innovative proposals required for a tourist enterprise*							
Launch a new product (service)	48,5						
Organizational and managerial	25,3						
Technical and economic	26,2						
Don't need anything	4,9						
Specify the specific innovative solution	1,7						
required for the enterprise	27,2						
Experience in implementing innova	ations by tourism enterprises						
Positively successful	42,7						
The implementation of innovations has	,						
begun and is not completed	14,6						
Rejected the implementation at the stage							
of studying the proposal	1,9						
Didn't find any useful suggestions	14,6						
We do not plan to implement	1,9						
Innovation is implemented without							
economic benefit	5,8						
Sources through which tourism companies plan to maintain their competitive position							
Implementation of innovations	54,41						
Management improvement	42,6						
Attracting loans	20,5						
Establishing contacts with the authorities	17,6						
Staff training	47						
Attracting investment	23,5						
Resource savings	39,7						
Use of new information and communication	27,9						
technologies							
Other	5,8						

Source: developed by the authors on the basis of [15; 16]

This means that the companies that took part in the survey are good candidates for organizing joint pilot innovation projects. It should also be noted that the implementation of innovation strategy in enterprises has intensified in recent years, resulting in 22.3% of surveyed enterprises spending on improving or creating an innovative tourism product more than 30% of net profit. Assessing the types of effects from the implementation of the model of innovative development by their importance by the goals of each entity in the first place put economic (73.2%), organizational (16.5%), temporary (5.1%), social 3.7%), ecological, biological (1.5%). According to the survey data, it can be concluded that in most innovative tourism enterprises the overall effectiveness of the model of innovative development will be formed by indicators of profitability, economic efficiency, brand awareness, and the formation of its organizational market segment. A set of innovative proposals necessary for their implementation is a very important factor for the formation of innovation strategies and the development of innovative projects for the development of tourism enterprises.

Analysis of the data in the table shows that technical and economic innovation proposals are needed -48.5% of enterprises, launching a new product (service) -26.2%, organizational and managerial -25.3%, and nothing is needed -4.9%. The question also provided an option to propose a specific innovative solution that is needed for a tourism enterprise. This option was chosen by 27.2% of respondents who indicated the following needs for innovation [15]:

- production (improving the quality of the tourist product (service); assistance in preparing for the implementation and reconstruction of the enterprise; the latest advances in marketing);
- organizational and economic (price, cost, profitability, profit; creation of unions of representatives of the tourism business to develop new activities; financing and operational management for the implementation of innovative projects);
 - social (wages, employment, training);
- ecological (nature protection, creation of ecological tourist trails, marking of tourist routes, etc.).

Survey data show that 42.7% of respondents called their experience of innovation positive, 47.5% started innovation implementation and did not complete it, and 14.6% did not find a useful proposal.

In modern conditions, an important aspect of effective economic activity of tourism enterprises is the sources of maintaining and improving their competitive position in the tourism market in the formation of an innovative environment. According to the table, more than half of respondents (54.41%) plan to rely on innovation. The main areas of maintaining competitive positions are also improving management (42.6%), staff training (47%), and saving resources (39.7%). These areas correspond to the basic principles of innovation policy in the tourism market of the European Union and the world. Such ratios

indicate that the enterprises and organizations of the region, which are involved in innovation processes in the tourism business, are quite professional and prudent in identifying the main ways to improve their activities. These results are also basic guidelines for the implementation of key measures to support innovation processes.

The conducted expert-evaluation analysis of the tendencies of the introduction of innovations by tourist enterprises allows us to state that the problems of innovative activity should be considered from the standpoint of their division into causal and consequential.

A critical analysis of the nature of the identified problems showed that the first group covers such problems as the incompetence of business leaders, lack of appropriate qualifications; lack of opportunities for the implementation of innovation strategies; the presence of negative influence of environmental factors, in particular the legal unregulation of certain aspects of innovation, financial instability, etc. [16].

In turn, the second group of problems includes late and incomplete implementation of tasks provided by the developed plans; inefficient organizational management structure; inconsistency, and fragmentation of the strategic innovation planning process.

As a result, at the current stage of development of the tourism market and in order to transform it to a qualitatively new level of development, it is necessary to significantly expand and strengthen the implementation of innovation, which should serve as a link between science, tourism, government, and local government. The practical application of such a proposal in the innovative development of the tourism sector will not only increase the level of competitiveness of the enterprise but also assess the feasibility of introducing new types of tourism products and services.

Part 3. Assessment of the level of innovation in the tourism sector of Ukraine by the method of SPACE-analysis

Based on the provisions of the General Agreement on Trade in Services, the innovation of the tourism sector is developing in three directions:

- introduction of innovations (organizational innovations) related to the development of the enterprise and tourism business in the management system, including reorganization, acquisition of competing entities based on the latest technology and advanced technologies; personnel policy (restoration and replacement of staff, training system, retraining and incentives for employees); rational economic and financial activities (introduction of modern forms of accounting and reporting that ensure the stability of the situation and development of the enterprise);
- marketing innovations that will cover the needs of target consumers or attract customers not covered at this time;
- periodic innovations are aimed at changing the characteristics of the tourism product, its positioning, and competitive advantages [17–18].

These criteria are characterized by several indicators, so SPACE-analysis belongs to the category of complex multicriteria methods. It allows you to assess the position of the industry in the national economy, analyze several characteristics of the industry and determine the optimal strategy. It should be noted that the basis of the SPACE analysis method is a priori modelling based on expert assessments. The expediency of using the method of expert assessments in this study is justified by the following [18]:

- strategic analysis in conditions of high uncertainty of the external environment often includes several intuitive, analytically unconfirmed information aimed at solving the problem;
- the use in the analysis of estimates of the most qualified specialists in the field gives a certain level of reliability, in addition, this reliability is highly probable and quite acceptable for decision-making in situations of uncertainty that constantly occur in a competitive environment;
- in modern conditions the importance of collective opinions, conclusions, recommendations, and decisions increases.

Using SPACE-analysis, the following component levels of innovation in the tourism sector of Ukraine are identified: Financial strength of the tourism sector (Financial strength) (FS); Competitive advantage (CA); Industry attractiveness (IA); Environmental stability (ES).

The definition of the system of criteria takes into account the specifics of the industry, its production capacity, and financial condition, level of competition, as well as objectives and goals. The formulation of criteria, their evaluation, and definition of the recommended strategy require a thorough knowledge of both the methodology of strategic analysis and the specifics of the industry.

The assessment of the level of innovation in the tourism sector is based on an integrated index, in the process of which the individual components under study are summarized by the introduction of weights. The main stages of calculating the index for assessing the level of innovation in the tourism sector (I_{ITS}) are given in the table 2.

Table 2 shows the results of the evaluation of criteria that characterize, respectively, the financial situation of the tourism sector, its competitiveness, the attractiveness of the industry, and the stability of the environment. The assessment was carried out with the involvement of experts in this field. An integrated indicator for assessing the level of innovation in the tourism sector of Ukraine is defined as the ratio of the sum of individual partial indices of indicators to the average value of these indices (about the number of indicators). The results of calculations of integrated indicators for assessing the level of innovation in the tourism sector of Ukraine are given in the table 2.

Stages of calculation of the index of assessment of the level of innovation in the tourism sector (I_{ITS}) of Ukraine

$Stage\ I-normalization$

Using the approach of the weight factor of individual indicators in the total amount (the sum of all weights is equal to 1), allowed to reduce all indicators to the range from 0 to 1:

$$z_{ij} = w_i * x_i, \tag{1}$$

where z_{ij} – is the standardized indicator, w_i – is the weight factor of individual indicators in the total amount (the sum of all weights is equal to 1), and X_i is the value of the actual indicator.

Stage II – calculation of sub-indices

Calculation of sub-indices as the arithmetic mean of the normalized groups of baseline indicators:

$$I_{\text{basic}(i)} = \frac{1}{i} \sum_{j=n}^{i} \text{score} (z_{ij}), \tag{2}$$

where $I_{\mathrm{basic}(i)}$ – the total value of the group of baseline indicators for the country i, score (z_{ij}) – this is the value of the sub-index of the country i for the group of indicators j, j – sub-index group indicator, where n – corresponds to the number of indicators in the group.

Stage III – determining the weights of sub-indices

Equivalent weight distribution between the four sub-indices (1/4)

Stage IV – calculation of the integrated index

The obtained standardized values will allow calculating the index by the formula:

$$I_{ij} = \frac{1}{n} \sum_{j=1}^{n} I_{\text{basic}(i)},\tag{3}$$

 $I_{ij} = \frac{1}{n} \sum_{j=1}^{n} I_{\text{basic}(i)},$ where $I_{\text{basic}(i)}$ – the total value of the group of baseline indicators for the country in – the number of indicators that characterize the level of innovation in the tourism sector.

Source: developed by the authors on the basis of [19; 20]

Assessment of the level of innovation in the tourism sector of Ukraine will be carried out on the following scale: <0.4 – unsatisfactory level; 0.41–0.64 – satisfactory level; 0.65–0.8 – high level; 0.81–1.0 – a very high level [19]. The integrated index of the level of innovation in the tourism sector of Ukraine during 2019–2021 remained at the same level – at a satisfactory level (from 0.65 in 2019 to 0.63 in 2021). This indicates the high opportunities for the competitiveness of the industry, which contributes to the attractiveness of the industry (3.3 points), but recently the level of its stability (2.6 points) is lower due to the constant influence of external factors, including political and economic, on the activities of enterprises.

By calculating the integrated indicator of innovation in the tourism sector of Ukraine by the method of SPACE-analysis, you can determine the reserves to increase the tourist attractiveness of the industry, or establish the existing level of tourist attractiveness by available tourism resources, investments, and more. According to the results of the expert-statistical assessment, the current level of innovation in the tourism sector of Ukraine according to the method of SPACE analysis is at a satisfactory level. Thus, we can conclude that innovation in the tourism sector remains extremely low, and levers and implementation mechanisms are ineffective. Solving

Table 3
Indicators for assessing the level of innovation in the tourism sector of Ukraine by the method of SPACE-analysis

Criteria	Expert assessments, points		Weight	Balanced scores					
Criteria	2019		2021	w_i	2019	2020	2021		
The financial strength of the tourism industry (Financial strength) (FS)									
Return on investment	3,2	3,3	3	0,2	0,64	0,66	0,6		
Return on equity	2,8	2,7	2,6	0,2	0,56	0,54	0,52		
Profit dynamics	3,8	3,2	3,1	0,1	0,38	0,32	0,31		
Financial autonomy	3,3	3,2	3,1	0,2	0,66	0,64	0,62		
Solvency of the industry	3,5	3,6	3,7	0,1	0,35	0,36	0,37		
Level of financial risk	4,2	4,5	4,6	0,1	0,42	0,45	0,46		
Overall evaluation of the criterion FS				1	0,502	0,495	0,48		
Competitiveness of the tourism sector (Competitive advantage) (CA)									
Net profitability of sold products	3,4	3,3	3,4	0,2	0,68	0,66	0,68		
Net profitability of production	2,4	2,4	2,4	0,2	0,48	0,48	0,48		
Market share	2,2	2,3	2,2	0,1	0,22	0,23	0,22		
Product competitiveness	2,4	2,5	2,4	0,2	0,48	0,5	0,48		
The efficiency of use of fixed assets	3,4	3,4	3,4	0,2	0,68	0,68	0,68		
Overall assessment of the CA criterion				1	0,508	0,510	0,508		
The attractiveness of the tourism industry (Industry attractiveness) (IA)									
Profit level	2,5	2,4	2,4	0,4	1	0,96	0,96		
Stage of the life cycle of the industry	4,4	4,4	4,2	0,2	0,88	0,88	0,84		
Dependence of industry development on the situation	3,5	3,3	3,3	0,2	0,7	0,66	0,66		
Overall assessment of the IA criterion				1	0,86	0,833	0,82		
Stability of the tourism sector (Environmental stability) (ES)									
Profit stability	3,3	3,2	3,1	0,2	0,66	0,64	0,62		
The level of development of innovation	3,4	3,3	3,1	0,2	0,68	0,66	0,62		
Marketing and advertising opportunities	4,4	4,5	4,4	0,2	0,88	0,9	0,88		
Overall assessment of the ES criterion					0,74	0,73	0,71		
Integral index of the level of innovation in the tourism sector of Ukraine					0,652	0,643	0,629		

Source: developed by the authors on the basis of [15; 16]

these problems is possible only through the transformation of tourism policy and requires a clear delineation of promising ways to apply innovations, development of specific measures and technologies for their practical implementation, and create methods for their evaluation in modern conditions.

After receiving weighted estimates of key criteria, the next stage of Space-analysis is to build a vector of the recommended innovation strategy of the enterprise in the coordinate system Space. According to the matrix, the following innovative strategies for the tourism sector are recommended [21–22]:

- Aggressive strategy. This situation is typical in an attractive industry with little uncertainty. Businesses in the industry gain a competitive advantage that they can maintain and increase through financial capacity. Risks are insignificant, it is necessary to concentrate on securing interests. The mechanisms are aimed at expanding production and sales. Price war with competitors, development of new market sectors, brand promotion.
- Competitive strategy. This condition is typical of an attractive industry. Industry enterprises gain a competitive advantage in a relatively unstable environment. The critical factor is financial potential. The risks of losing funding need to be minimized. The main mechanisms are the search for financial resources and the development of sales networks.
- Conservative strategy. This situation is observed in stable markets with low growth rates. In this case, efforts are focused on financial stabilization. The most important factor is the competitiveness of the product. The main mechanisms are cost reduction while improving product quality, reducing production, and entering more promising markets.
- Protective strategy. This situation arises in a situation where the company operates in an attractive industry, but it lacks the competitiveness of products and funds. Particular attention is paid to mechanisms to minimize threats. The key strategy is to exit the market.

The beginning of the vector enters at the origin, and the end of the vector is at point A with coordinates (x; y):

$$X = IA - CA, \tag{3}$$

where IA – industry attractiveness (Industry attractiveness), CA – competitiveness of the tourism sector (Competitive advantage);

$$Y = FS - ES, \tag{4}$$

where FS – financial strength of the tourism sector (Financial strength), ES – stability of the tourism sector (Environmental stability)

Accordingly, for the tourism sector of Ukraine – the object of evaluation, these coordinates are equal to:

$$X = 0.82 - 0.508 = 0.312$$
; $Y = 0.48 - 0.71 = -0.227$

Thus, the vector of the recommended strategy by the method of SPACE-analysis is built on two points: O (0; 0) and P (0,312; -0,227). It is seen that the

strategy to increase the level of innovation in the tourism sector of Ukraine is a strategy of competition. Ukraine's tourism sector has certain competitive advantages, and the main efforts of tourism policy should be aimed at its preservation using the available financial potential. The financial condition of the industry can be identified as unsatisfactory. As a result, the low competitiveness of the tourism sector is caused by internal factors: low liquidity and turnover, unprofitable activities, and incomplete use of resources.

Conclusions

Therefore, based on the above, conclusions can be drawn. The study confirms the ineffectiveness of state policy to ensure the development of tourism based on strategic documents of the country's development because for a long time a significant problem in forming a holistic economic strategy in Ukraine is the lack of understanding that lack of innovation in the strategic perspective slows down economic dynamics. This necessitates a comprehensive innovative reform of Ukraine's tourism policy, which would link the results of scientific and technological development with human development.

The innovative strategy of the tourism sector is one of the economic levers of its development and competitiveness. The innovative strategy in the field of tourism is aimed at creating a new or changing an existing product, improving transport, hotel, and other services, developing new markets, introducing advanced information and telecommunications technologies, and modern forms of organizational and managerial activities. This conclusion justifies the need for different methodological approaches for its formation, implementation, and evaluation of effectiveness.

The above methodological approach to determining the innovation strategy of enterprises in the field of tourism makes it possible to fully assess the impact of major innovation factors on the level of development of the industry.

The conducted expert-evaluation analysis of the tendencies of the introduction of innovations by tourist enterprises allows us to state that the problems of innovative activity should be considered from the standpoint of their division into causal and consequential. A critical analysis of the nature of the identified problems showed that the first group covers such problems as the incompetence of business leaders, lack of appropriate qualifications; lack of opportunities for the implementation of innovation strategies; the presence of negative impact of environmental factors, in particular the legal unregulation of certain aspects of innovation, financial instability, etc. In turn, the second group of problems includes late and incomplete implementation of tasks provided by the developed plans; inefficient organizational management structure; inconsistency, and fragmentation of the strategic innovation planning process.

As a result, at the current stage of development of the tourism market and to transform it to a qualitatively new level of development, it is necessary to significantly expand and strengthen the implementation of innovation, which should serve as a link between science, tourism, government, and local government. The practical application of such a proposal in the innovative development of the tourism sector will not only increase the level of competitiveness of the enterprise but also assess the feasibility of introducing new types of tourism products and services.

In the course of our research, the concept of «innovation in tourism» was identified as the most optimal, which reflects the essence of this category with the definition of the benefits of their implementation for both businesses and customers. It was found that the listed and analyzed types of innovations are closely intertwined and interconnected, namely: product, resource, technical and technological, marketing, organizational and managerial, service, and logistics innovations.

References:

- 1. Pankiv, N.Y. (2020). Prospects for the use of tourist and recreational resources of Ivano-Frankivsk region for the development of green (rural) and ecological tourism in the region. Collection of scientific and technical works. Lviv: RVV NLTU of Ukraine, no. 30(5), pp. 59–66. (in Ukrainian)
- 2. Pankiv, N. Y. (2022). Characteristics of ecotourism potential of Ukraine in war condition. Creative space of Ukraine and the world: col. monograph. Kharkiv: SG NTM «New Course», pp. 154–162. (in Ukrainian)
- 3. Henderson, I. L., Avis, M. and Tsui, W. K. T. (2018). Testing Discontinuous Innovations in The Tourism Industry: The Case Of ScenicAirship Services. *Tourism Managemen*, no. 66, pp. 167–179.
- 4. Wikhamn, W., Armbrecht, J. and Wikhamn, B. R. (2018). Innovation in Swedish Hotels. *International Journal of Contemporary Hospitality Management*, no. 30(6), pp. 2481–2498.
- 5. Sipe, L. J. (2017). Leadership, Innovation Outputs, and Business Performance: A Mixed Methods Study of Senior Managers in The Attractions Industry. *International Journal of Hospitality and Tourism Administration*, no. 19(4), pp. 440–463.
- 6. Thomas, R. and Wood, E. (2014). Innovation in Tourism: Re-Conceptualizing and Measuring the Absorptive Capacity of the Hotel Sector. *Tourism Management*, no. 45, pp. 39–48.
- 7. Verreynne, M. L., Williams, A. M., Ritchie, B. W., Gronum, S. and Betts, K. S. (2019). Innovation Diversity and Uncertainty in Small and Medium Sized Tourism Firms. *Tourism Management*, no. 72, pp. 257–269.
- 8. Charkina, T. Yu. Martseniuk, L. V. Zadoia, V.O. and Pikulina, O. V. (2021). Strategic directions of hotel and restaurant business management in the conditions of crisis. *Ekonomika ta derzhava*, no. 2, pp. 19–23. (in Ukrainian)
- 9. Smyrnov I., Liubitseva, O. (2020). Tourist business in the age of COVID-19: international and ukranian experience. *Bulletin of Kyiv National University of Culture and Arts*, vol. 3(2), pp. 196–207. (in Ukrainian)
- 10. Kulinyak, I. Ya., Zhigalo, I. I., Yarmola, K. M. (2021). Tourism industry in the conditions of the COVID-19 pandemic: tendencies and measures of support. *Business Inform*, no. 1, pp. 177–184. (in Ukrainian)
- 11. Hrebeniuk, H., Charkina, T., Martseniuk, L., Pikulina, O. (2021). An Innovative Approach to the Development of Tourism and Hotel and Restaurant Business in Ukraine in a Crisis. *Agrosvit*, no. 5-6, pp. 57–62. (in Ukrainian)

- 12. Schumpeter, J. A. (Ed.), Theorie der wirtschaftlichen Entwicklung. *Printed in Industry and Innovation*, no. 9(7), pp. 93–145.
- 13. Lee, C., Hallak, R. and Sardeshmukh, S. R. (2016). Innovation, Entrepreneurship, and Restaurant Performance: A Higher-Order Structural Model. *Tourism Management*, no. 53, pp. 215–228.
- 14. Dotsenko, V. F. (2020). Information technologies in the hotel industry of Ukraine: realities and prospects. Available at: http://www.investplan.com.ua/?op=1&z=6972&i=7 (in Ukrainian)
- 15. OECD/Eurostat (2018). Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation, 4th Edition, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris/Eurostat, Luxembourg. DOI: https://doi.org/10.1787/9789264304604-en
- 16. The Community Innovation Survey (2020). Methodological recommendations. Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/inn_esms.htm#stat_pres
- 17. Yakushev, O. (2020). Innovative technologies in the management of business processes of enterprises in the field of hotel and restaurant and tourist services. *Restaurant and hotel consulting. Innovation*, no. 3(2), pp. 195–208. (in Ukrainian)
- 18. Booyens, I., Rogerson, C. M. (2016). Tourism innovation in the global South: Evidence from the Western Cape, South Africa. Int. J. Tour. Res., no. 18, pp. 515–524.
- 19. Grigoruk, P. M., Tkachenko I. S. (2012). Methods of constructing an integrated indicator. *Businessinform*, no. 4, pp. 34–38. (in Ukrainian)
- 20. Chorna, M. V., Glukhova, S. V. (2012). Evaluation of the effectiveness of innovative activities of enterprises. Kharkiv: KhDUHT. (in Ukrainian)
- 21. UNWTO World Tourism Barometer (2020) Available at: http://mkt.unwto.org/barometer
- 22. Dikhtyarenko, K. V. (2012). The impact of innovative changes on the susceptibility of the enterprise. *Businessinform*, no. 3, pp. 100–103. (in Ukrainian)