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(Dziedzina nauk medycznych i nauk o zdrowiu).© The Authors 2024; This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland

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INNOVATIVE SOLUTIONS IN THE LOGISTICS OF TOURIST SERVICES

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Abstract

The article is devoted to the study of logistics innovations in the tourism industry. A number of functions performed in the framework of logistics activities by tourism and hospitality enterprises are analyzed. The component structure of tourism lLogistics is considered. The market of digital technologies used in tourism is analyzed.

Keywords: tourism; logistics operations; logistics system; digital economy; tourism enterprises

Інноваційні рішення в логістиці туристичних послуг

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Стаття присвячена дослідженню логістичних інновацій в туристичній галузі. Проаналізовано ряд функцій, здійснюваних в рамках логістичної діяльності

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туристичними підприємствами та підприємствами сфери гостинності. Розглянуто компонентну структуру логістики туризму. Проаналізовано ринок цифрових технологій, що використовуються в туризмі.

Ключові слова: туризм; туристична логістика; логістична система; цифрова економіка; туристичні підприємства

Problem statement

The tourism sector, which is an important component of the economy of many countries, is constantly searching for new forms and models for managing the activities of tourism enterprises in order to increase their efficiency and maintain competitiveness at the regional and international levels as a whole. Logistics occupies a special place among the relevant management options in the field of tourism – theory and practical activities for organizing and managing the movement of a single set of material, financial, labor, information and legal flows in a market economy system.

The fundamental novelty of the logistic approach in organizing the activities of tourism enterprises is to ensure effective interconnection of various structures for the formation of tourist services, their promotion and sale, as well as for managing tourist flows through innovative information technologies.

The component structure of tourism logistics includes: logistics of recreational resources; logistics of material and technical base of tourism, including logistics of tourist accommodation and food; logistics of information infrastructure; logistics of transport infrastructure of tourism; logistics of excursion services; logistics of related services in tourism; logistics of production and sale of tourist goods [2].

The tourism sector is an information-rich activity, the effective functioning of which is impossible without the active use of information technology. Information technology is an important production factor in modern tourism, and an effective information technology infrastructure is an important element of tourism development. It is difficult to imagine the organization of tourism activities in the absence of the possibility of constant and intensive information exchange, prompt response to the needs of the modern tourist market. «On the other hand, many tourism organizations in Ukraine sometimes lack the functionality to use and analyze the characteristics of innovative digital systems to use them for business purposes. Consequently, they do not achieve the expected benefits even after they are put into a regular operating schedule. From this point of view, using organizational management solutions under martial law and successfully applying new digital solutions have become urgent management tasks» [11]. So, the **purpose** of the study is to identify the features of the use of digital technologies in logistics management in the tourism sector in modern conditions of globalization of society.

Analysis of recent research and publications

Theoretical and practical aspects the following researchers have devoted their research to the relationship between innovation and logistics in the tourism industry scientists like Smirnov I. G. [10], Prochan A. O. [8], Kozhukhivska R. B. [4], Marusey T. [5], Negoda A., Rusak D. [6], André Jansson [1], Pogrebny V. [7] and others.

Presentation of the main material

In the tourism sector, the links of the logistics system are the tour operator, travel agent, suppliers of a tourist product (that is, accommodation enterprises, cultural and leisure organizations, sightseeing organizations), and tourists, as well as infrastructure facilities (transport, insurance, financial organizations), which are economically or functionally separate objects. At the same time, each of them strives to achieve a local goal that is associated with certain logistical operations or functions. The ideal option is the desire of all participants in the system to achieve a system-wide goal, however, a large number of links; their isolation and the presence of their own interests in all elements of the system complicate the possibilities of forming such a system in tourism.

A logistic operation is a separate set of actions aimed at transforming material and information flows. Each operation can be considered in logistics as a potential object of rationalization, standardization of execution. At the same time, financial, time and labor costs should be attributed to each logistics operation, which is the basis for rationing the cost of resources in the company and allows effective monitoring of the logistics plan indicators. Logistics operations in the field of tourism are quite extensive and diverse, for example, transportation of tourists, data collection, sighting, etc. Obviously, reducing the company's costs is possible through the effective organization of logistics operations, which will reduce time, labor and financial costs, that is, by managing business processes in the logistics system. Tools that contribute to the rationalization of operations in the field of tourism are information technologies that are actively used by the companies of the tourist complex.

According to the Law of Ukraine "On innovation activity" of 04.07.2002, innovation is newly created (applied) and/or improved competitive technologies, products or services, as well as organizational and technical production, administrative, and commercial solutions or other nature that significantly improves the structure and the quality of production and/or the social sphere. According to the Davydova O. [3], innovations in tourism are the result of

applying new products in the tourism industry with an increase in its productivity. efficiency and obtaining, first of all, commercial an effect that should ensure stable functioning and industry development.

With the transition to the digital economy, which is a fundamentally new level of economic development, and with the introduction of the latest digital technologies, production and trade relations, the structure of the economy, communication processes, computing power, information systems, and technologies are changing extremely susceptible to new requirements.

It should be noted that for the organization of logistics data flows accompanying a tourist product (supply, production and sales), it is advisable to use information logistics, the essence of which is to collect data and their primary processing, control of accuracy, storage and transmission of Information, its updates, adjustments, and presentations. One of the innovative forms of logistics processes in the activities of enterprises in the sphere of there is a logistics provider. Logistics provider-a company that performs part of the or the entire logistics complex for your client.

Digitalization is one of the most striking trends in modern society. Analyzing the trends of future development, it can be accurately stated that humanity has entered a stage of its development in which digital technologies play a decisive role in all spheres of activity and become the most important factor for sustainable development and economic growth.

Digitalization is a new form of communication interaction between producers and consumers of tourist services, becoming a source of competitive advantages in the tourism sector as a whole.

Despite the fact that the tourism sector is developing rapidly, like other areas of the modern economy, it is characterized by a number of problems, one of which is the extremely uneven distribution of tourist flows among tourist destinations, leading to a variety of negative consequences of tourism's impact on the social, economic and environmental sustainability of local communities, the environment and the quality of life of the population and increased tension between tourists and locals. This phenomenon is described by the recently coined term "overtourism."

Tourism is characterized by the seasonality factor, and tourist activity is very often concentrated on a limited number of tourist sites and activities, significantly affecting tourist attractions and the very habitat of people – the local population and tourists. At the same time, there are no adequate mechanisms for regulating and balancing the economic, socio-cultural and environmental consequences of overtourism.

Thus, the main problems associated with supertourism become obvious, expressed by: alienation of local residents and significant deterioration of their living conditions; deterioration of the quality of the tourist experience; overloading of transport and tourist infrastructure; damage to the natural and cultural heritage.

For a long time, logistics did not stand out as an independent field of economics. Like most other social sciences and scientific fields, the development of logistics has come a long way, during which a set of rules, concepts and techniques has been tested experimentally and has earned recognition as a separate scientific discipline.

Logistics as a science was formed only in the 70s of the twentieth century, and the expansion of its use occurred significantly by the 1990s. This was mainly facilitated by the development and improvement of flow management methods: material and information.

Logistics in tourism has its own peculiarities. Let's formulate them, and also analyze these features in comparison with generally accepted approaches. Ukrainian researcher Igor Smirnov presented in his scientific works the following definition: logistics of a travel agency is "a specific logistical activity in tourism, the essence of which is the planning, management and control of operations carried out in the process of developing a tour, its formation and bringing finished products to the consumer in accordance with the interests and requirements" [10]. The main tasks of logistics in tourism should be represented by the formation, promotion and sale of tourist services; optimization of routes and improvement of methods of transportation of tourist flows and tourists; organization of operational information exchange between suppliers and consumers of tourist services; as well as planning, forecasting and control of tourist flows. The use of logistics in the field of tourism makes it possible to combine disparate elements into a single system, effectively manage tourist flows in the destination and communication technologies into the activities of the tourism sector to improve all tourist logistics services.

Currently, global changes are taking place in the world community due to the penetration of information technology into all spheres of our lives, therefore, most local enterprises, including the tourism sector, require highly effective ways to build their business processes based primarily on innovative logistics concepts, on the use of the latest digital technologies, which is not It only practically guarantees a positive synergetic effect, but also meets the strict requirements of market relations and the development of the country's economy.

A particularly important role for tourism logistics is given to information, the purpose of which is to ensure effective servicing of tourist flows in the logistics chain "travel agency –

tour operator – material and technical base - recreational and tourist resources" by monitoring and accounting for both the flow of tourists, which is the main one in tourism logistics, and the material, financial, and personnel flows serving it.

Based on international standards and the level of development, it can be noted that Ukraine has a fairly high tourism potential, and it is especially important to make proposals for the introduction of innovative technologies in the field of tourism logistics and their rational use. Digitalization in tourism is aimed at making the tourism business not only more flexible and relevant to modern realities, but also more competitive in the developing "digital world".

Despite the novelty of the trend of digitalization of tourism logistics, in Ukraine, as well as in international practice, there is an increasing awareness of its importance for economic and social development. This trend can be explained by the fact that digital technologies can radically change the business models of tourism enterprises, increasing their efficiency by reducing the number of intermediaries and optimizing logistics services in the provision of tourist services.

It should be noted that the tourism sector is indeed characterized by an increase in the need to use Internet technologies online. Moreover, with the tools offered by the Internet, from booking websites to describing destinations and hands-on user experience, travel choices in tourism are no longer limited to recognizable brands or specific destinations.

Speaking of world-class tourism, in confirmation of the above about the increase in tourist needs for the use of online Internet technologies, it can be noted that in most countries online tourist sales are steadily growing every year.

If previously the traditional economy was based on the replication by most tourism enterprises of the same type of tourist services provided, then in the digital economy, thanks to the possibilities of digitalization, there are more opportunities to create new types of tourist services and enter new markets, while maximally and promptly satisfying consumer needs, taking into account the individual characteristics of each consumer of tourist services, in other words, providing more high-quality logistics service.

The digital economy in the tourism sector is characterized by features that reveal its capabilities: the economic activity of tourism enterprises is concentrated mainly on the Internet, which helps to save money for both manufacturers of tourist services and consumers; the possibility of maximum satisfaction of the individual possible needs of any consumer of tourist services, regardless of age and gender differences; a significant reduction in

intermediaries providing tourist services, and, as a result, an increase in the speed of customer service; Information is the main and most expensive commodity on the economic market.

Tourism enterprises invest in unified (integrated) information bases for collecting customer information in order to comprehensively understand various market segments and the level of satisfaction of consumers of tourist services with logistics services. Digital media and social media can also be used.

In order to improve communication opportunities with consumers of tourist services, the use of digital technologies is envisaged. For example, digital advertising presentations on large monitors in places of mass concentration of potential consumers, as well as mobile applications for information collection and remote logistics services.

A significant increase in the number of working contacts with real and potential consumers of tourist services has been appeared. For example, creating an online account to provide prompt answers to customer questions and complaints, the ability to quickly inform them, as well as ordering certain types of services that is possible and convenient online.

By automating the internal and external processes of logistics services at tourism enterprises, the staff frees up time and resources to develop new and optimize existing areas of the tourism business. Automation can reduce the time of the service delivery process by 30%.

It is planned to introduce a remote work mode. All the main document flow of tourism enterprises takes place in electronic and remote format; working materials are grouped into virtual unified databases. Therefore, any participant in the process of providing tourist services has the opportunity to use the results of another participant's work. This significantly contributes to improving the quality of logistics services.

Through the introduction of electronic logistics services, as well as statistical information accumulation and task setting systems, the management staff of tourism enterprises will be able to make decisions based on real statistical data. By receiving data from various fields, the management of tourism enterprises will be able to compare the effectiveness of different management practices in order to apply the most successful solutions.

By applying digital technologies in the logistics of the tourism sector, tourism enterprises united in a global integrated network and having the necessary amount of information and data quality are given the opportunity to make operational decisions.

In the modern digital technology market of the tourism sector, there are several information systems that also automate the internal activities of tourism enterprises and

integrate their internal processes. As a rule, these systems provide reference databases for clients, partners, hotels, transport, embassies, as well as tour management and payment accounting, accepting orders and working with clients, drafting various documents, etc. Such integrated information systems include, for example, specialized accounting programs for the formation of accounting statements, the use of logistics distribution systems GDS (Global Distribution System), CRS (Computer Reservation System), etc. The joint effective use of these software complexes provides a positive synergetic effect in improving the logistics services of the tourism sector and in the economic activities of tourism enterprises in general.

Currently, the digital services market has turned significantly towards the tourism sector and shows good development prospects. Modern digital logistics services such as TripAdvisor, Booking.com, AirB&B, Uber, HiltonHonors, Google Maps and many others are in high demand among tourists and are becoming a powerful tool that allows them to solve many tasks: create the image of travel companies, optimize the communication processes of tourists and subjects of the tourism sector, create a certain information space, save time and money significantly facilitates travel and opens up many opportunities for tourists. It is difficult to imagine modern travel without using such digital logistics services.

The use of digital logistics services in the tourism sector helps to increase the competitiveness of travel companies and travel agencies. Today, new technologies are used mainly in the booking system, the integration of communication networks, multimedia systems and information systems interconnected with marketing and management.

Thus, with the rational use of logistics tools in the field of tourism, as well as through continuous monitoring of the tourism market and improving the quality of logistics services in the process of providing tourist services through the use of digital technologies, Ukraine will be able to achieve an appropriate level in the tourism market, and as a result, in the international economic market.

Conclusions. Thus, tourism logistics may double-sided: on one side, one side is aimed at optimization the use of tourism resources, and otherwise - for the optimization of tourist flows from by ensuring a harmonious and socially-ecologically-economically balanced development of the region. We can say, that the introduction and use of logistics technologies in the tourism industry allows achieving high results mainly due to the fact that the implementation process does not contradict the internal economic policy of tourism organizations, but complements it. This makes it possible to bring the company to a higher level of development, which ensures the strengthening of the financial condition, as well as the improvement of the atmosphere and microclimate in the team. The result should be an increase in the level of manageability and mobility of resource potential enterprises of the tourism industry, optimization and rationalization of all economic flows and, as a result, the formation of an efficient tourist complex.

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