

Logistics Management of Health Resorts and Tourism Facilities¹

Avaz Kazakov^{1,*}, Hanna Mashika², Stefaniia Mosiuk³, Serhii Voitovych⁴, Hennadii Sorokoumov⁵ and Viktor Saichuk⁶

¹*Vice-Rector for External Relations and Development, "Salymbekov University" Institution, Bishkek, Kyrgyzstan.*

²*Doctor of Geography, Professor, Head of the Department of Tourism, Uzhgorod National University, Uzhhorod, Ukraine.*

³*Ph.D. in Economics, Associate Professor, Associate Professor of the Department of Hotel and Restaurant Business and Tourism, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine.*

⁴*Ph.D. in Economics, Professor, Professor of the Department of Marketing, Lutsk National Technical University, Lutsk, Ukraine.*

⁵*Ph.D. in Military Sciences, Senior Researcher, Associate Professor of the Military Training Department, Sumy State University, Sumy, Ukraine.*

⁶*Ph.D. in Geographical Sciences, Associate Professor of the Department of International Tourism and Country Studies, National Aviation University, Kyiv, Ukraine.*

Abstract: The logistics management of health resorts and tourism facilities plays a crucial role in ensuring the functioning of the domestic tourism market and supporting its operation in the context of the global economic crisis and political instability. The main aspects of the research in this article are the practice analysis of logistics management to improve the operational work of an enterprise and develop its own potential opportunities in the market. Using such principles can improve the further commercial activities of an enterprise and affect the general aspects of its functioning. In addition, improving logistics management involves forming an uninterrupted supply chain, which is very important for health resorts and tourism companies. This article analyzes logistics management and its implementation's fundamental principles. Attention is paid to modern digital infrastructure to improve the enterprise's operating results and further development. The article outlines the current prospects for logistics management in health resorts and tourism facilities based on technologies aimed at improving functional units and their operational work. An important direction in the study is to analyze logistics management as a core tool for mastering new product markets. In addition, the principles of using public cloud services for designing tourist routes and their use in increasing the role of economic activity digitalization are characterized. The obtained results can be used to improve the quality of health resorts and tourism facilities' activities.

Keywords: Logistics management, logistics, tourism industry, tourism facilities, digital technologies, smart logistics.

INTRODUCTION

The specifics of the logistics management of health resorts and tourism facilities are based on the use of digital technologies and the formation of an effective management policy. The use of modern tools for designing tourist routes and the possibility of access to them are essential for the operation of a tourism enterprise. However, using the supply chain in the context of economic instability is a priority for any health resort facility, as it will affect its ability to operate under

geopolitical challenges. Due to the spread of the Coronavirus pandemic in 2019 and to date, a considerable part of the tourism market has experienced a significant decline, which has strengthened the role of the state's presence and the use of additional funding to support the tourism industry. The effectiveness of this policy implies the possibility of using high-quality financing and lending tools, most of which are aimed at increasing the use of digital technologies to ensure the efficiency of the tourism enterprise in an unstable environment.

Furthermore, developing specialized infrastructure is a priority, as it will affect the quality of its operations in today's unsafe environment. In addition, logistics management includes several features related to developing its own internal

*Address correspondence to this author at the Vice-Rector for External Relations and Development, "Salymbekov University" Institution, Bishkek, Kyrgyzstan; E-mail: a_kazakov@salymbekov.com

¹*Research of Avaz Kazakov, Hanna Mashika, Stefaniia Mosiuk and Serhii Voitovych was performed within the framework of the international research project of the scientific and technical organization Teadmus OÜ (teadmus.org) «Improving Logistical Management of Sanatorium-Resort and Tourist Facilities».

infrastructure, maintenance, provision of warehouses and premises with special equipment, etc. Ensuring the operational activities of the functional sections of logistics management should be based on CRM and ERP systems, which can improve the functions of monitoring and controlling the company's operational activities. Consequently, modern tendencies towards using digital technologies in logistics management are the fundamental principles for achieving the company's activities. The use of cloud technologies can improve the quality of sustaining resources by using the features to enhance their functioning based on the rental infrastructure. The logistics management practice also involves introducing a company's integrated management system, which will follow the goals and objectives of the company's activities.

LITERATURE REVIEW

Researchers have studied the logistics management issues of health resorts and tourism facilities from the standpoint of forming an effective distribution policy and supply chain, the availability of warehousing, and route design. Babenko (2020) notes that it is necessary to use several tools to improve the logistics management system in the context of the modern development of digital technologies, which aim to improve the logistics management policy and the possibility of developing operational activities. According to Capocchi (2019), the availability of digital technologies makes it possible to build a complex supply chain for the enterprise, which will include several intermediary companies, as well as to introduce more complex supply stages, which is a primary need for health resorts due to the need for high-tech equipment. With the help of a matrix approach and based on the concept of "demand-driven technologies", the logistics management of the enterprise has been developed (Kryvoviazuk, I., 2013). Business processes are optimized with the help of logistics concepts, technologies and embedding KR in global sustainable supply chains (Prokopenko, O., Dikiy, A., Butenko, N., Naumenko, M., Dedilova, T., & Miroshnyk, R., 2020) and localized management risks of logistics systems using information technologies (Vakhovych I., Kryvovyazyuk I., Kovalchuk N., Kaminska I., Volynchuk Y., Kulyk Y., 2021). The use of intelligent logistics technologies in the organization of multimodal cargo delivery (Orozonova, A., Gapurbaeva, S., Kydykov, A., Prokopenko, O., Prause, G., & Lytvynenko, S., 2022) and taking into account the cold chain logistics network transportation of goods taking into account the ecological aspect (Matskul, V., Kovalyov, A., Saiensus, M., 2021). Furthermore, Chulanova (2019) believes that the availability of vehicles is equally important; as operation requires exceptional maintenance, the possibility of their placement and storage and infrastructure availability at the location of tourism facilities will be significant. According to Sudomyr (2020), logistics management aims to improve the implementation of route design for tourism needs and enhance the performance of the creation of this activity following the market needs. The sustainable development of tourism in the world is formed based on strategic management (Parfinenko, A., Sokolenko, L., Bielialov, T., Karpenko, N.G., Tolubyak, V., 2019), which helps to model and minimize the cost of accommodation during construction tourist route (Novakivskyi, I., Kulyniak, I., Bondarenko,

Y., Dziurakh, Y., Rachynska, H., 2022). The latter affects the competitiveness of both the tourist business and the hotel-restaurant business and allows, with the help of certain factors and tools, to minimize costs (Mashika, H., Kudrina, O., Nurgaliyeva, A., Berkova, O., Metil, T., Novichkov, V., 2021). Such an example is the consequences of the COVID-19 pandemic in Ukraine, a timely cluster analysis made it possible to reduce tourism business losses in all regions of Ukraine (Kulyniak, I., Novakivskyi, I., Karyy, O., Halkiv, L., Ohinok, S., 2022). According to Iwan (2017), the current practice of developed countries indicates an active public position of corporate entities, as the state's role in the formation of high-quality logistics infrastructure is of great importance, as it will facilitate the inflow of tourism customers to this market. The development of agribusiness in the context of the worsening climate crisis (Dvigun, A. O., Datsii, O. I., Levchenko, N. M., Shyshkanova, G. A., & Dmytrenko, R. M., 2022), and the impact of green entrepreneurship on changes and factors affecting AMO (Mia, M. M., Rizwan, S., Zayed, N. M., Nitsenko, V., Miroshnyk, O., Kryshnal, H., & Ostapenko, R., 2022). Also, the definition of social sustainability of the population (Mulska, O., Vasylytsiv, T., Shushkova, Y., Kloba, L., & Parfenyuk, Y., 2022) on the main paradigms of quality management in the field of tourism (Bayev, V. V., Bakhov, I. S., Mirzodaieva, T. V., Rozmetova, O., & Boretskaya, N., 2022) regions.

Moreover, the practice of logistics management demonstrates the effectiveness of implementing these principles and the possibility of improving the basic tenets of using control and monitoring staff activities. Mahindroo (2018) states that using such technologies will be necessary for improving the operational performance of the enterprise. According to Hacia (2017), route design involves cloud technologies and their implementation based on financial resources savings. Due to the tourism market instability, according to Keller (2017), any modern health resort company should use the intermediary services of transportation and logistics organizations. Yakhneeva (2020) notes that the need to form logistics resources for a tourism facility is complex due to the global market decline and unfavorable business conditions. As a result, an effective means should be to diversify its corporate strategy and use some intermediary companies in its activities. According to Małecky (2017), the critical advantage of logistics management is using digital technologies, which can improve the basic principles of the company's operational processes. In addition, Zaucha (2015) believes that the interaction of corporate institutions of the tourism industry and the public sector will improve the current company's operations in the market. Thus, scholars' beliefs about logistics management could be more precise, which determines the feasibility and importance of conducting this study and identifying key results regarding the distribution and use of logistics management in the context of the current development of digital technologies and digitalization processes.

AIMS

This article aims to analyze the logistics management of health resorts and tourism facilities under the current economic situation and to strengthen the role of the presence and use of digital technologies. An important area of re-

search is the analysis of the supply chain formation principles, provision of warehouses' equipment, and bringing the operational activities of a tourism company to the highest efficiency level through the introduction of public cloud services and innovative technologies. The main tasks of the study are to analyze the theoretical and practical aspects of logistics management and to characterize the core principles of its implementation in the context of the modern development of digital technologies. Furthermore, the practice of developed countries in logistics management indicates the widespread integration of the public sector into the tourism market through improved financing and preferential crediting, which can affect the efficiency of commercial activities and be of strategic importance in the long term.

METHODS AND MATERIALS

When writing this article, the author used scientific research methods to analyze the specific features of logistics management formation and their use following the core principles of the company's operating activities. Based on the search method, periodicals, and analytical reports were analyzed, which indicate the current features of logistics management development. In particular, this method was used to analyze the experience of developed companies, to implement the practice of logistics management, and to improve the principles of its development per operational activities. In addition, the problems of tourism facilities and health resorts' functioning were analyzed regarding the formation of the supply chain and the possibility of ensuring its smooth operation. As a result, the article provides a mechanism for ensuring the operation of such a chain and the possibility of its improvement following the tourism market needs. Finally, the synthesis method was implemented to outline the core principles of logistics management and prospects for its development. In addition, scientific research methods were used to characterize the basic principles of logistics management development. The formation of project activities is essential for a company's functional and structural units dealing with the principles of building logistics routes, warehouses' placement, and the possibility of using modern infrastructure to improve the company's operations. The research methodology is based on the theoretical, methodological, and practical aspects of logistics management formation and prospects for its further development. Namely, the issue of modern prospects of logistics management and the possibility of its control and monitoring was carried out based on implementing an induction and deduction method. The article focuses on the development of logistics management based on the use of intermediary companies and considers the experience of developed countries. The proposed methodology makes it possible to present the study's results on the logistics management of tourism facilities and health resorts.

RESULTS

Modern logistics management of health resorts and tourism facilities involves using many technologies that can improve the quality of tourism routes and the possibilities for their design. Due to the rapid global digitalization process and the increasing role of digital technologies, transport infrastructure has changed the principles of designing and using spe-

cialized routes. First, it is necessary to consider such factors as the ability to manage logistics with the help of unique, innovative technologies that allow the distribution of routes, vehicles, traffic flows, etc. The main features of health resorts and tourism facilities are the ability to obtain uninterrupted supplies, as these facilities must use innovative means to provide medicines, transportation, and tourist logistics. The importance of introducing innovative technologies in logistics management will include promptness and the ability to increase efficiency in healthcare and tourism activities.

Tourism facilities play a critical role, as the number of tourists has dropped significantly in the global market due to the spread of the Coronavirus pandemic, which has led to extreme competition for customers, not only in the domestic tourism market but also in global commodity markets. Therefore, any factor that improves the quality of competitiveness can ensure the viability of a particular institution in the short and long term. For this reason, using digital technologies will serve as a qualitative means to improve the overall performance of health resorts and tourism facilities. In addition, the use of modern technology and the possibility of its implementation in business will serve as a means of developing a tourism company. The practice of developed countries shows that the quality of logistics and transport policy includes several specific features for implementing management policy, which involves defining a development strategy. The vast majority of facilities should have a high-quality transport infrastructure, which can be ensured through public administration and active participation in active participation in road construction programs.

The concept of logistics management involves implementing management activities that should form and ensure the smooth operation of the supply chain, the possibility of its functioning, and the consideration of all options for the products' transportation. In addition, logistics management also involves using a range of technologies to build tourist routes at the destination. The availability of specialized equipment and non-standard approaches to organizing tours will be a factor only for hotels and specific tourist destinations. For health resorts, the main factor in logistics management will be the supply chain in adverse conditions. It requires the use of digital accounting and analysis systems, which, when applied to digital logistics, significantly improve the ability to receive and supply medicines, food, and other equipment.

In the practice of developed countries, there is also a feature of using logistics and transportation routes at the international level when obtaining special equipment imported from a particular country. Forming a high-quality logistics system can provide an opportunity to get it in the short term, thereby improving the competitiveness of your own institution. Such a policy will serve as a factor in improving and quality of the digital logistics concept development. Its principles are to build automation of analytics, use big data technologies, and many tools that enhance the company's operational work. This approach can significantly improve business efficiency and minimize the risks associated with human factors. Logistics management of health resorts and tourism facilities is carried out based on top management. Still, it should be borne in mind that in countries such as Norway, Sweden,

Germany, etc., there is a question of the legal use of transport and road infrastructure for tourist transportation or visits. Such a policy is used due to many special reserves and other culturally significant sites that can be visited or engaged in tourism activities only with a special license. In such circumstances, when managing health resorts and tourism facilities logistics, it is necessary to consider the specifics of the country's regulatory and legal nature and approaches to implementing tourism, recreational activities, etc.

In addition, several independent factors affect the logistics management of health resorts and tourism facilities. First, it refers to state financing of transport infrastructure, renovating and modernizing transport hubs, and improving transport interchanges. Due to the increasing number of transport vehicles, the issue of regulating the efficiency of infrastructure construction and regulating tourist traffic is of great importance for public administration. Therefore, an essential factor is to ensure the corporate sector's participation in government policy and promote active public engagement in road construction. In particular, most tourism facilities can be located near essential transportation facilities, so funding for transportation infrastructure to cultural attractions is needed. The use of private funds for logistics management is often prohibited by law. Therefore, the problem lies in the quality of cooperation between private enterprises and local governments.

In general, using modern digital technologies in the administration of health resorts and tourism facilities is popular due to their advantages and the ability to create high-quality inputs to improve business efficiency. Big Data technology allows using various analytical materials to make analytical forecasts and complex calculations, which will play a leading role in managing health resorts and tourism facilities. In particular, introducing touch-sensitive and special sensors will improve the quality of using special equipment and improve the logistics management policy of tourism or recreational companies. An important direction for the further development of the booming sector is the use of innovative technologies and unique tools to improve the quality of logistics management, the characteristics of which are shown in Table 1.

Table 1. Characteristics of Smart-Logistics Implementation in the Health Resorts Management.

Technology	Description
Cloud computing	Used for building transport and logistics routes
Blockchain	Developed to build an effective supply chain and ensure its proper implementation
Detectors and sensors	Possibilities of application for improving the logistics infrastructure of tourism facilities
Digital routing	Implementation of tools for creating and building digital routes for further realization
Big Data	The technology is used to improve the design of logistics and transportation routes, perform analytical calculations, etc.

Artificial intelligence	Innovations in logistics implemented in operational management and quality management tools
Advanced route design	Using modern technologies is aimed at improving the design features for organizing the work of health resorts and tourism facilities

Source: compiled by the author.

The technologies depicted in Table 1 are used in logistics to improve the management quality of health resorts and tourism facilities. It allows many competitive advantages and improves cultural activities and interest in these facilities. An essential practice in developing such technologies is the active involvement of the state, as the formation of a robust tourism industry will be the prerogative not only of these institutions but also of the public sector in general. Moreover, revenue from the tourism industry is an important share of the gross domestic product. Therefore, the need to create investment projects and provide grants and opportunities to improve the management of health resorts and tourism facilities will be necessary.

In addition, in the context of modern development, the logistics management of health resorts and tourism facilities involves using several tools to improve the quality of operational process management. For example, introducing modern CRM systems can help carry out activities based on digital technologies to communicate with logistics intermediaries or specialized company departments. In addition, there is a common practice of using technologies aimed at data analytics, which help to calculate the current traffic flow and assess own transportation capabilities, which is crucial for developing a tourism company. Such principles can help create a modern, highly competitive enterprise based on digital technologies and specialized infrastructure. This practice is used in many European Union countries, as it can help resolve the tourism crisis that began in 2019 and continues to this day.

The issue of logistics management primarily involves the effectiveness of route design policy and the ability to take into account some factors that depend on location, equipment availability, and transportation costs. As a result of the war in Ukraine, access to energy and oil products has become a heavy financial burden for most logistics and transportation companies. As a rule, managing health resorts and tourism facilities involves using these companies' services to support their business activities. Therefore, a qualitative tool that can improve the principles of functioning should be using alternative energy, as it will enhance the principles of the tourism business and reduce the financial burden. In addition, using alternative energy can help build high-quality transportation infrastructure and reduce air pollution, which will be of the utmost importance for cultural reserves and unique recreational facilities. Therefore, the green policy aims to reduce raw material dependence on oil products and protect the environment.

Forming tourist destinations includes using their own private transportation routes to relevant tourism and cultural sites of historical or spiritual value. The design of transportation routes should provide for the tour quality, including the distribution of the tour program on the relevant days. It should

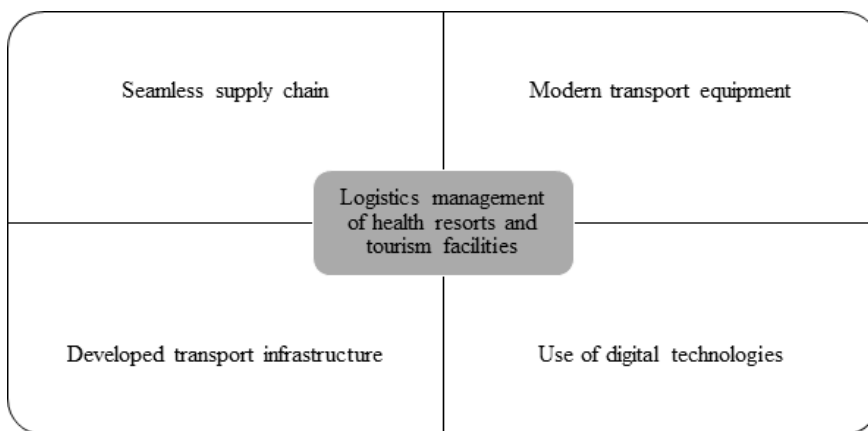


Fig. (1). Principles of logistics management of health resorts and tourism facilities.

Source: compiled by the author.

include several additional entertainment activities. The organization of a sightseeing tour should take into account the company's logistical capabilities and vehicles. Any tourism facility should also be prepared for seasonality since, as a rule, there is an increased demand for tourism services at a particular time of the year, which causes a need for logistics management.

The formation of a supply chain in logistics is vital for most recreational facilities, as the ability to obtain medicines and special equipment for treatment can serve as a factor in patient recovery. For this reason, creating a supply chain should be a top priority for recreational facilities. Moreover, the planning and design of such facilities should be carried out at the earliest stages and consider the possible quantities of supplies of unique means for treatment and prevention. The planning stage should take into account the geographical location, the cost of such work, and the possibility of using transport and logistics routes. Calculations for attendance and marketing activities should be pre-planned to ensure effective work.

The spread of automatization drives logistics management tendencies in the health resorts and tourism facilities market. Its use helps minimize human risks and improve the quality of management decision-making. In particular, using Big Data technologies makes it possible to make decisions based on statistical analysis and can be used to forecast and evaluate current business activities. This practice will be most important for a modern approach to logistics management, as well as the possibility of introducing innovative technologies into the activities of a tourism company or institution.

The packaging and warehousing system also plays an essential role in ensuring the effective management of health resorts and tourism facilities, as the availability of specially prepared premises and the ability to conduct operational activities will be a means of improving the quality of the company's activities and ensuring its viability in the market. In particular, the formation of a warehouse facility should usually be located at a distance of at most 5 km from the central health resort facility and have backup equipment for transportation or logistics. The use of this principle in the context of the Coronavirus pandemic is of priority importance, as it

allows for a quick response to possible complications and the implementation of management policies following modern norms and standards of the hospitality business.

Another critical issue is the aging of specialized equipment used for tourism purposes. As a rule, auto insurance and spreading this practice to rental vehicles can help create many conditions for ensuring financial stability, reducing property damage, etc. In addition, using insurance plans is a mandatory practice in almost any country. However, vehicle insurance is carried out based on the internal company policy, although the most effective basis for such a policy would be implementing compulsory insurance. In general, such a practice is present in the United States, where the insurance market is a priority in the country's financial system. Such a practice can help stabilize the market and help transport and logistics companies maintain their operations even during a crisis.

Navigation surveillance technologies and their innovative development can be used to improve the performance of logistics maintenance, which will directly impact the company's financial sustainability. A significant part of the costs for ensuring the supply chain and vehicle quality can be avoided through effective means of monitoring and quality control of transport and route construction. The introduction of remote monitoring and control systems will be a means of ensuring effective logistics management. They will also help to consolidate the key principles of logistics management in the context of the modern development of digital technologies. A general description of these logistics management principles for health resorts and tourism facilities is shown in Fig. (1).

The described principles of logistics management of health resorts and tourism facilities are used to ensure the competitiveness of these facilities and improve the efficiency of operational departments' performance. Their functioning includes forming the fundamental activity principles and the possibility of improvement per current needs.

Thus, it can be concluded that logistics management involves:

- the use of modern technologies;

- the introduction of automated processes;
- the creation of an effective supply chain and tourist route design.

Using developed countries' practices will stabilize the tourism market's overall situation. It can improve the logistics management principles and their implementation specifics. Transport infrastructure development is crucial for the state, as it will foster the tourism market.

DISCUSSION

Our research shows the specifics of the development of logistics management of transport infrastructure, supply chains, and operational activities of health resorts and tourism facilities. The need to conduct analytical studies concerning digital technologies remains relevant due to the growing popularity of implementing these technologies in business automation. Particular studies on the feasibility and effectiveness of using these technologies can help improve the tourism business's efficiency and ensure its viability in the face of market uncertainty. In particular, using digital technologies affects the management policy quality, as it affects the design of logistics routes and their service to optimize the company's operations. The research will serve as a means of improving processes and may have a qualitative impact on future activities. Analytical studies can help improve the functioning of the tourism market and contribute to constructing a rationally distributed transportation infrastructure. As a result, public policy can support infrastructure and strengthen its role in the current economic downturn.

An important factor in the study on the logistics management of health resorts and tourism facilities should be using digital technologies to improve the quality of company performance and existing infrastructure. The use of digital technologies and automation can enhance both the work of the logistics department staff and introduce control and monitoring of key processes at the company. Using such technologies indicates the spread of public cloud services, as they provide enhanced digital technology infrastructures without adequate funding. Furthermore, any tourism business can save money using digital technologies by renting special technical equipment. Therefore, the issue of developing and using cloud technologies in enterprises should become a key means of building an effective logistics policy. The management of these processes should also consider the specifics of logistics management formation and its use of the core principles to improve the quality of the tourism companies' activities. In the context of the modern development of digital technologies, process automatization at the company can minimize the risks and avoid them by using analytical technologies.

Analyzing the involvement of state authorities in the policy of building transport infrastructure and supporting the tourism business can qualitatively help improve the main processes and principles of this business development. For logistics management, the most critical is ensuring an uninterrupted supply chain, transport infrastructure availability, and government attention's focus on its support. In addition, such activities will effectively improve the further development of modern technologies and the ability to conduct business in a volatile market. In general, state participation in the compa-

ny's logistics policy should support digitalization and practical tools to expand to global commodity markets to ensure the functioning and operation of the tourism market within the country. Therefore, the interaction between such institutions and local governments and the definition of the legal aspect of their activities remains an open question for further research.

CONCLUSION

Logistics management, therefore, involves a set of tools aimed at improving the distribution of the load on the company's transport infrastructure, designing routes, using transport vehicles and their distribution, and ensuring operational logistics activities. Management decision-making uses technologies to design and build transport routes and form a supply chain. Considering these aspects will be critical for any health resort and tourism facility. In today's environment, due to the shrinking tourism market, these companies tend to focus on global commodity markets, which is a significant challenge for them to use and formulate their own policies to attract new customers from the international market. Only with a practical approach and digital technologies can a business carry out its activities with a positive commercial result. The company's logistics policy should address the implementation of the supply chain, providing it with warehousing and packaging facilities. As a rule, using intermediaries is a tool for improving one's operations, as it reduces the burden on the company and provides more opportunities for developing its own logistics infrastructure. In addition, the issue of government involvement in building a rationally distributed tourism infrastructure will be necessary for the development of the domestic tourism market. The share of gross domestic product in the tourism market can reach significant levels for countries whose economic policies are focused on tourism. However, building investment projects and using some grant programs for tourism companies engaged in logistics activities is necessary under such conditions. They are implementing the digital logistics concept and using its fundamental principles: artificial intelligence, cloud technologies, and automation. Such tools will serve as a factor in improving the quality of the company's operations and provide many competitive advantages in today's unstable market. In addition, the logistics management should include the instability of oil products use, which stimulates the introduction of environmentally friendly transport and the formation of support for it per the capabilities of the current market. Thus, building logistics management following current market conditions is an important basis for successfully functioning a tourism or health resort company.

REFERENCES

- Babenko, V. (2020). *Enterprise Innovation Management in Industry 4.0: Modeling Aspects. Emerging Extended Reality Technologies for Industry 4.0: Early Experiences with Conception, Design, Implementation, Evaluation and Deployment* Collective monograph. Ed. by Jolanda G. Tromp et al. A John Wiley & Sons, Inc., Publication, pp. 1-24.
- Bayev, V. V., Bakhov, I. S., Mirzodaieva, T. V., Rozmetova, O., & Bo-retskaya, N. (2022). *Theoretical and methodological fundamentals of the modern paradigm of quality management in the field of tour-*

- ism. *Journal of Environmental Management and Tourism*, 13(2), 338-345. doi:10.14505/jemt.v13.2(58).04.
- Busyoo. (2013). A project to study the logistics and supply chain system to increase capacity Competition of tourism industry groups in Thailand. Supported by the office National Research Council of Thailand (NRCT) and Thailand Research Fund (TRF)
- Capocchi, A., Vallone, C., Amaduzzi, A., & Pierotti M. (2019). Is 'overtourism' a new issue in tourism development or just a new term for an already known phenomenon? *Current Issues in Tourism*, 1- 5.
- Chulanova, V., & Serguchenkova, M. (2019). First coming: How digitalization will change the Russian logistics market?
- Dvignun, A. O., Datsii, O. I., Levchenko, N. M., Shyshkanova, G. A., & Dmytrenko, R. M. (2022). Rational use of Fresh Water as a Guarantee of Agribusiness Development in the Context of the Exacerbated Climate Crisis. *Science and Innovation*, 18(2), 85-99. doi:10.15407/scine18.02.085.
- Hącia, E (2017). Turystyka jako determinanta rozwoju regionów nadmorskich w Polsce. *Rozprawadoktorska (maszynopis)*. UniwersytetGdański, WydziałEkonomiczny, Sopot, 240.
- Iwan, S., & Małecki, K. (2017). Utilization of cellular automata for analysis of the efficiency of urban freight transport measures based on loading/unloading bays example. *Transportation Research Procedia*, 25, 1021–1035.
- Jhavar A., Garg S. K., & Khera S. N. (2017). Improving logistics performance through investments and policy intervention: a causal loop model. *International Journal of Productivity and Quality Management*, 20(3), 363
- Keller, B., Möhring, M., & Toni, M. (2017). Data-centered platforms in tourism: Advantages and challenges for digital enterprise architecture, *Lecture Notes in Business Inf. Processing*, 263(1), 299-310.
- Kryvoviazyuk, I. Implementation of matrix approach to management of enterprise's logistic development based on a concept of «demand driven techniques». *Economic Annals-XXI*, 2013, 9-10(1), 60-64.
- Kulyniak, I., Novakivskyi, I., Karyy, O., Halkiv, L., Ohinok, S. (2022). Cluster Analysis as an Assessment Tool of the Impact of the COVID-19 Pandemic on the Development of Tourism in the Regions of Ukraine. *International Scientific and Technical Conference on Computer Sciences and Information Technologies*, 2022-November, pp. 305–308.
- Lapko, A. (2016). The use of auxiliary electric motors in boats and sustainable development of nautical tourism – cost analysis, the advantages and disadvantages of applied solutions. *Transportation Research Procedia*, 16, Elsevier, 323–328
- Mahindroo, A., Samalia, H. V., & Verma, P. (2018). Information systems road map to enhance economic and operational reverse logistics performance. *International Journal of Logistics Systems and Management*, 29(2), 215-240
- Małecki, K. (2016). The importance of automatic traffic lights time algorithms to reduce the negative impact of transport on the urban environment. *Transportation Research Procedia*, 16, 329–342.
- Małecki, K., & Wątróbski, J. (2017). Cellular Automaton to Study the Impact of Changes in Traffic Rules in a Roundabout: A Preliminary Approach. *Applied Sciences*, 7(7), 742
- Mashika, H., Kudrina, O., Nurgaliyeva, A., Berkova, O., Metil, T., Novichkov, V. (2021). Competitiveness of hotel, restaurant and tourism business: factors and tools. *Geo journal of Tourism and Geo sites* this link is disabled, 36, pp. 681–687. DOI: 10.30892/gtg.362spl16-698
- Matskul, V., Kovalyov, A., Saiensus, M. (2021). Optimization of the cold supply chain logistics network with an environmental dimension. *IOP Conference Series: Earth and Environmental Science* this link is disabled, 628(1), 012018.
- McFarlane, D., Giannikas, V., & Lu, W. (2016). Intelligent logistics: Involving the customer. *Computers in Industry*, 81, 105-115
- Mia, M. M., Rizwan, S., Zayed, N. M., Nitsenko, V., Miroshnyk, O., Kryshthal, H., & Ostapenko, R. (2022). The impact of green entrepreneurship on social change and factors influencing AMO theory. *Systems*, 10(5) doi:10.3390/systems10050132.
- Mulska, O., Vasylytsiv, T., Shushkova, Y., Kloba, L., & Parfenyuk, Y. (2022). Assessment of the Population's Social Resilience Environment (the Case of the Carpathian Region of Ukraine). *Problems and Perspectives in Management*, 20(1), 407-421. doi:10.21511/ppm.20(1).2022.33.
- Nicolaides, A. (2015). Tourism Stakeholder Theory in practice: instrumental business grounds, fundamental normative demands or a descriptive application? *African Journal of Hospitality, Tourism and Leisure*, 4(2).
- Novakivskyi, I., Kulyniak, I., Bondarenko, Y., Dziurakh, Y., Rachynska, H. (2022). Modeling the Minimization of Accommodation Costs while Developing a Tourist Route. *International Scientific and Technical Conference on Computer Sciences and Information Technologies*, 2022-November, pp. 309–312.
- Orozonova, A., Gapurbaeva, S., Kydykov, A., Prokopenko, O., Prause, G., & Lytyvnenko, S. (2022). Application of smart logistics technologies in the organization of multi modal cargo delivery. *Transportation Research Procedia*, 63, pp. 1192–1198.
- Parfinenko, A., Sokolenko, L., Bielialov, T., Karpenko, N.G., Tolubyak, V. (2019). Sustainable development of world tourism based on the strategic management. *Academy of Strategic Management Journal*, 2019, 18(SpecialIssue 1), pp. 1–7.
- Prokopenko, O., Dikiy, A., Butenko, N., Naumenko, M., Dedilova, T., & Miroshnyk, R. (2020). Business process optimization based on logistics concepts and technologies. *International Journal of Advanced Research in Engineering and Technology*, 11(6), pp. 184-196.
- Sedatwat Prommasit, & Narasri Vaivanijkul. (2016). Factors affecting to tourism logistics management in Bangkok metropolis. *Humanities and Social Sciences Journal*, 35, 138-147.
- Sudomyr, S., Niziaieva, V., Lutay, L., Prodanova, L., Havryliuk, O., & Sherstyukova, K. (2020). Methods and Techniques Of Motivation Of Subjects Of Regional Economy For Innovative Improvement. *International Journal of Scientific & Technology Research*. 9(3). 1196-11200.
- Vakhovych I., Kryvovyazyuk I., Kovalchuk N., Kaminska I., Volynchuk Y., Kulyk Y. (2021) Application of Information Technologies for Risk Management of Logistics Systems. *ITMS 2021 - 2021 62nd International Scientific Conference on Information Technology and Management Science of Riga Technical University, Proceedings*, Riga, Latvia, 2021, pp. 1-6, doi: 10.1109/ITMS52826.2021.9615297.
- Yakhneeva, I. V., Agafonova, A. N., Fedorenko, R. V., Shvetsova, E. V., & Filatova, D. V. (2020). On collaborations between software producer and customer: A kind of two-player strategic game. In S. Ashmarina, A. Mesquita, M. Vochozka (Eds.), *Digital Transformation of the Economy: Challenges, Trends and New Opportunities*. *Advances in Intelligent Systems and Computing*, 908 (pp. 570-580).
- Zaucha, J., Brodzicki, T., Ciołek, D., Komornicki, T., Mogiła, Z., Szlachta, J. & Zaleski, J. (2015). *Terytorialnywymiarwzrostuirozwoju*. Difin, Warszawa, 90–97.