MAKING MANAGEMENT DECISIONS ON THE DEVELOPMENT OF THE TOURISM INDUSTRY IN THE CONTEXT OF DIGITALIZATION

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Abstract

Formulation of the problem. This article discusses the principles of making management decisions in the tourism business. The key factors that influence the final decision are analyzed and systematized. Currently, the tourism business is undergoing significant changes. This is due, first of all, to the influence of challenges dictated by economic, political and, most importantly, biological factors. Experts predict a number of changes and transformations for the tourism business, which in the coming years can seriously change the structure of the global tourism market. Digital solutions are considered as a factor that has a significant impact on the transformation of the tourism industry at present, and in the future, as experts predict, its influence will only increase. Digital services are called one of the most promising tools for the sustainable development of the tourism sector and the comprehensive promotion of tourism products. It is predicted that digital solutions will accompany tourists at all stages - from vacation planning to exchanging impressions after its completion. At the same time, despite a significant number of scientific studies devoted to digitalization, issues of digital support of business processes in the tourism sector are insufficiently covered in scientific circles. This is due to the high level of uncertainty in the tourism market, the rapid pace of development of innovative digital technologies and the impossibility of ensuring a high level of forecast reliability.

The purpose of the study. The hospitality and tourism industry currently includes many services, which in turn requires the use of digital technologies. Currently, digital systems are considered as a strategic resource for the development of entrepreneurial activity. This is especially important in the tourism and hospitality industry, where the activity is the most information-rich. Digitalization in tourism introduces modern digital technologies into business, improving existing processes. The purpose of the study is to identify new opportunities for the development of tourism and hospitality services in the context of digital transformation, identify problems and trends in the digitalization of the hotel and tourism business.

The object of the study. The object of the study is the benefits of using digital transformations in increasing innovation activity and efficiency in the tourism and hospitality services sector.

Research methods. In the process of writing the article, the works of foreign and domestic authors, as well as electronic resources, were used. The following methods of scientific knowledge were used to write the article: synthesis, comparison, generalization, content analysis of scientific works and electronic resources.

The main hypothesis of the follow-up.. Digital transformation has allowed hotels to implement databases that keep track of all ongoing processes, accumulating information about clients. The emergence of aggregators, services that allow you to book accommodation in any hotel in the world, has dramatically simplified the process of reserving hotel rooms. Today, it has become possible to

consider offers from different tour operators, airlines and other suppliers of tourist services on one digital platform. In our modern world, technology plays an important key role in improving and promoting tourism and hotel products.

Present of the main material. Modern conditions dictate new requirements for digitalization of various sectors of the economy, including tourism. This is due to the fact that digitalization as a process of using digital resources in the activities of an organization to improve the work of the enterprise, radically changes approaches to business processes. Today, in the context of actively developing information and digital technologies, it is impossible to name any industry that would not be affected by these changes. If we talk about the tourism industry - about tourism, hotel, restaurant services, about the activities of travel agencies and tour operators, then we can safely say that these areas have long stepped towards digitalization. The hospitality and tourism industry currently includes many services, which in turn requires the use of digital technologies.

Conclusions and prospects for further research. In digital transformation, it is important to understand the essence and technologies of digitalization, clearly set goals, look at the scale of the entire business: use analytics, set performance indicators, eliminate losses in business processes and remove system limitations. These are important conditions for the successful implementation of digital and business transformation. The role of digital transformation in the tourism industry is obvious. Thanks to the digitalization of the tourism services sector, vacations in hotels become more comfortable, safe, and of higher quality; purchasing tours quickly, satisfying the needs of the client; visiting tourist sites information-rich. Digital transformation takes the industry to a completely different level of development and it is important not to stop in this process.

Keywords: management decision; methods of developing; management decisions tourism; tourist; mountain tourism; mountains; landscape.

JEL Classification: R11, Z32.

Introduction

Formulation of the problem. The tourism sector throughout the world is increasingly becoming a key indicator of socio-economic development of both regions and individual municipalities, exerting a significant influence on key sectors of the economy: transport, trade, communications, construction, agriculture, and production of consumer goods. Tourism development ensures an influx of investment and funds into budgets at all levels, the creation of jobs, the development of infrastructure, the improvement of public health, the preservation and rational use of cultural, historical and natural heritage, the stimulation of the development of local industry, and the increased interest of the local population and the younger generation in the culture and history of the tourist region (center). A management decision is a natural result of the manager's activities and is implemented in the form of a directive, targeted impact on the management object. "A management decision is an act of purposeful change in a situation, problem resolution, an option for influencing a system and the processes occurring in it. Management decisions involve management actions that lead to the resolution of a contradiction and a change in the situation." Methods for developing management decisions are the ways and means of performing the operations required in the process of making them. These include methods of analysis, processing information, choosing options for action, etc. Developing management decisions in tourism organizations has certain specifics. The art of communication and acting on the situation are especially in demand here. Tourism organizations will experience an acute shortage of workers, qualified specialists in the field of tourism management and hotel business. Concluding an agreement with a wellknown tour operator, preparing a package of documents for a tourist, purchasing furniture and equipment, sending employees on a familiarization tour, increasing advertising costs, creating your own website - all these are examples of making management decisions in tourism. This area of activity requires special knowledge and skills from managers. Requirements for the professional competence of managers in the field of tourism include:

- 1) Knowledge of the technology of selling a tourist product.
- 2) Business communication skills and knowledge of customer psychology.
- 3) Knowledge of the basics of regional studies and the main areas of tourism.
- 4) Ability to work with documents and databases.
- 5) Knowledge of the legal basis for tourism.
- 6) Free command of Internet technologies, skills in sales and online booking.
- 7) Use of positive behavior models.

Many factors influencing tourism demand have formed a new socio-cultural phenomenon – the "smart tourist", for whom digital communications have become the main attribute of a quality vacation. The smart tourist is characterized by new behavioral habits (moving away from mass and passive tourism), new consumption models (using intelligent platforms aimed at developing tourist experiences), new business models (personalized services to meet specific needs) and a close connection with digital technologies and sustainable development. The smart tourist carefully prepares for the upcoming trip and its organization, carefully selects the tour and its components, and often organizes the trip independently. To do this, he uses multiple services and sites, reads articles and reviews, studies the possibilities of tourist destinations, including digital ones. Analysis of Google search queries shows that on average, one user makes about 400 queries when planning a trip. At the present stage, more than 75% of travelers prepare their trips using online services, such as: booking hotel services Booking.com, renting out housing AirBnB, cheap flights, hotels and car rental SkyScanner, online booking of airline tickets AviaSales, the community of independent travelers CouchSurfing, etc. The smart tourism direction combines tourism planning in the territory, the application of sustainability principles to the value chain, the introduction of digital technologies in tourist impressions and the provision of services, effective resource management and the ability to respond to the needs and behavior of tourists. With the help of digital channels, smart tourism creates an innovative space accessible to everyone, simplifies the interaction and integration of the environment and the guest, improves the quality of services and at the same time preserves tourist attractions with the help of balanced decisions on traffic and demand forecasting, i.e. it contributes to the sustainable development of the tourist territory with the help of digital technologies.

Literature review

Our analysis of scientific publications on the topic of the study allows us to note that the digital transformation taking place in modern society is reflected in the field of tourism and hospitality. The works of domestic and foreign scientists are devoted to the study of digital technologies and innovative processes in the field of hospitality and tourism. The following scientists were engaged in these issues: Bogolyubova V.S., Makrinova E.I., Sotnik A.P., Khaidarova I.S., Sobolevskoy T.G., Khamirzova S.K., Kumpilova A.R., Kalashnikova S.V., Khachemizova E.A. and others. Despite the large number of studies on this scientific topic, the issue of using digital communications in the tourism and hospitality industry and their impact on the economic growth of enterprises in this industry remains open.

In addition, the scheme of economic relations between all participants in the tourism market is fundamentally changing in the context of digitalization, including between government agencies regulating tourism activities, between producers and consumers of tourism and hotel services. Thus, the process of developing a new economic business model for the hospitality and tourism industry in the form of an ecosystem seems particularly relevant. Thus, the key driver of changes in the new era are digital technologies that stimulate accelerated innovative development of the economy, management and society, thereby influencing almost all spheres of society.

Methodology, data, results and discussions

The purpose of the article. Digital transformation has brought the tourism sector to high positions in the use of modern information and communication technologies. Among the leaders of digital

transformation, the tourism sector stands out not only for its wide application of digital technologies in management, marketing, implementation of many business functions and production operations, but also for increasing the activity and interest of potential consumers and tourists in independent travel planning and their direct implementation in all the variety of constituent elements (development of travel routes and selection of attractive places to visit, booking of transport tickets and accommodation facilities, insurance services, entertainment, etc.). At the same time, the process of digital transformation is uneven: large organizations and enterprises of tourist intermediaries and the hotel industry, located in cities and industrially developed regions, are joining it more quickly. For small and medium-sized businesses, this process is constrained by high costs, difficulties in hardware and software, and a shortage of qualified personnel.

The purpose of this study is to reveal the features of the formation of digital tourism in general and outline measures to support its further development. To achieve this goal, the following tasks were solved: the evolution of approaches to defining the concepts of "e-tourism", "smart tourism", "digital tourism" was shown. The main areas of using digital technologies in the tourism sector were characterized; the features of the formation of new models of entrepreneurial activity of tourist intermediaries were revealed. The regional and industry aspect of the development of digital tourism and the forms of its support were analyzed. Research methodology The rapid development of tourism, its high significance in the modern standard of living of people, the intensification of relevant types of entrepreneurial activity attract the attention of both practitioners and scientific researchers. This led to the formation of various methodological approaches to the study, as well as to the emergence of various terms and their ambiguous interpretation. The spread of such terms as "e-tourism", "smart tourism", "digital tourism" in Russian and English occurred due to the penetration of information and communication technologies into the tourism sector. Electronic tourism (e-tourism), or online tourism, as a term reflects primarily the use of the Internet in the management and marketing of tourism products and services for more complete interaction with the consumer. At the same time, online tourism is also associated with virtual tours, virtual walks, online travel, for which various Internet resources are used (travel agency websites, travel blogs on social networks, travel TV channels, etc.).

Management decisions made in a tour operator organization:

- 1) Conclusion of contracts with regional representatives; 2) Provision of material support for the organization,
 - 3) Carrying out advertising campaigns and promotions;
 - 4) Concluding contracts with individual clients;
 - 5) Developing new areas of tourism activity;
 - 6) Entering new markets;
 - 7) Concluding contracts with foreign partners;
 - 8) Creating a reserve fund;
 - 9) Creating an electronic sales system and improving it;
 - 10) Creating conditions to ensure the safety of tourists, etc.

Management decisions made in a travel agency organization:

- 1) Concluding contracts with tour operators, owners of famous brands,
- 2) Registration of a package of documents for a tourist;
- 3) Provision of material support for the company, decoration of premises and supply of office equipment;
 - 4) Sending employees for training;
 - 5) Creating a website for the organization and promoting it to the market;
 - 6) Using an electronic booking system;
 - 7) Organizing an effective system of working with clients (by phone and in person);
 - 8) Solving unforeseen situations and problems.

A manager in the tourism business spends most of his time on communications and interaction with the consumer, so special attention should be paid to the creation of an adequate corporate culture with a high management context. Culture is a set of traditions, norms, values, meanings, ideas, and sign systems characteristic of a social community.

The culture of tourism organizations is characterized by a pronounced focus on consumer needs and includes:

- 1) A special culture of communication with clients (understanding, information content, decency)
- 2) Traditions and atmosphere of travel and vacation
- 3) Group norms of joint, conflict-free, effective activity
- 4) Philosophy of satisfying comprehensive customer needs
- 5) Favorable socio-psychological climate
- 6) Skillful operational skills in working with office equipment and databases
- 7) Basic metaphors embodied in the office design, interior design, aimed at potential tourists (comfortable furniture; modern office equipment; souvenirs reminiscent of travel; brochures and magazines informing about vacation destinations, etc.)
 - 8) Openness to the world and other cultures.

The social aspects of making management decisions in the tourism business can be characterized as follows.

- 1) High demands are placed on the competence of managers, their growth in initiative and responsibility
 - 2) The role of communications increases, feedback from consumers is necessary
- 3) The behavioral characteristics of managers and the organizational culture are characterized by a focus on consumers
 - 4) A democratic management style, conflict-free and joint problem solving prevails
 - 5) HR methods are focused on continuous training and development of personnel
 - 6) Achieving efficiency is possible provided that a special organizational culture is created

So, the development of management solutions in tourism is an initiative, creative work, an innovative approach to work, goodwill and activity according to the situation.

Presentation of the main research results

"Smart tourism" ("smart tourism") as a term is used to describe the interaction of modern information technologies and sustainable development of the tourism industry, is interpreted as a type of tourism using smart technologies to create additional travel value for tourists. "Smart tourism" involves the convergence of technologies and tourist experience, leading to a more complete satisfaction of the needs and expectations of new youth types of tourists. In the process of its formation, "smart tourism" has absorbed elements of e-tourism, which developed on the basis of innovations, the introduction of information technologies that led to the creation of global centralized booking systems, social networks, and mobile technologies.

"Smart tourism" includes several components:

- firstly, intelligent technologies associated with the principles of a "smart city", taking into account the needs of both residents and tourists in supporting the availability and mobility of resources for a certain quality of life;
- secondly, a social phenomenon based on the personalized intellectual experience of tourists; a complex business ecosystem, including public-private partnerships, combining the exchange of tourism resources and the widespread creation of tourism experiences.

The Chinese experience in developing "smart tourism" shows that this is a long-term process of long-term planning and implementation, combined with the development of "smart cities" projects.

Since 2019, the European Commission, in order to promote "smart" and sustainable tourism practices, has been competitively selecting a European Capital and a European "Green Pioneer" of

"smart tourism" as tourism destinations in four categories: sustainability, accessibility, digitalization, cultural heritage and creativity. In 2023, these capitals are Paphos in Cyprus and Seville in Spain.

"Smart tourism" is defined as tourism supported by integrated efforts at the destination to collect and aggregate/use data obtained from physical infrastructure, social media, government/organizational sources and human bodies/minds, combined with the use of advanced technologies. Subsequently, this data is transformed into operational information and value propositions for businesses focused on efficiency and sustainability.

Further advancement of digital transformation has led to new forms of communication between producers of tourism products and services, which has led to the emergence of digital tourism. Since digital tourism is a new concept that has not yet received a specific generally accepted definition, it is considered as a stage of digital transformation, during which the attraction of people as active users of modern information and communication technologies in the sphere of real tourism is increased. This is due to the fact that digital technologies in the Russian tourism sector currently perform limited functions. Nevertheless, world experience shows an increase in the efficiency of tourism management using digital technologies. The Tourism Development Strategy provides for a set of measures to introduce digital technologies in the tourism sector, including the use of digital solutions made on the basis of interaction between state information systems and the business and expert community during the development and implementation of projects, the formation of a tourism ecosystem to ensure the best customer experience for all market participants on an online platform integrated with external sources and social platforms, as well as the creation of various services and mobile applications for the promotion of tourism products. Digital tourism is aimed at using digital technologies and online tools to manage the tourism sector, create, promote and sell tourism products, attract consumers and provide them with access to the necessary information for planning trips and booking services. The process of continuous improvement of digital technologies in tourism is forming a relatively new Travel Tech industry that improves travel opportunities, since it "allows you to seamlessly plan a trip online using platforms and applications for booking full-fledged tours or accommodation and tickets separately," which generally improves the perception and experience of tourists and increases the efficiency of entrepreneurial activity. At the same time, the development of digital tourism requires increased attention to the issues of data security, financial payments, and Internet accessibility in remote areas.

Digital technologies are constantly evolving and improving, which contributes to the expansion of their application in the tourism industry (Table 1). Artificial intelligence creates conditions for travel personalization, as opportunities for a more representative consumer choice appear while saving time on searching for the desired tourist product, route or service. With the help of artificial intelligence technologies, tourists can find out about the dates of the most advantageous purchase of tickets, about the conditions for booking accommodation. Facial recognition technologies simplify check-in for a flight. Using mobile applications, it is convenient to plan trips, simultaneously issuing and paying for tickets, hotel reservations, insurance, transfers, excursions, etc. The use of voice support when booking hotels, car rentals and other services is gaining popularity. Chatbot allows you to receive consultations in real time 24/7.

Virtual reality technology reveals the features of a tourist route, demonstrating the most interesting sights. Using Internet of Things technology, you can remotely control the unlocking of a rented car and control the movement of luggage. Big data serves as the basis for business analytics built on information about electronic commercial transactions, recommendations are developed, and management decisions are made to improve customer service, promote the brand and specific products, find ways to increase the efficiency of the company, develop infrastructure, and form tourist clusters. Possible consolidation of big data in the ecosystem of Russian domestic and inbound tourism will allow raising the forecasting of the scale and directions of tourist flows to a higher level, which will significantly affect the development of the tourism sector.

Most tourists begin to plan their trip in advance, in some cases focusing on new attractions and routes. At the same time, they would like to understand in advance what impressions they can get, what level of comfort certain features of the trip create, which can be preliminarily assessed with the help of virtual tours, storytelling, information from social networks, advertising videos. Presentations of hotels, hotel rooms, restaurants, attractions, created on the basis of virtual reality technology, can provide such a complete understanding of the features of the upcoming trip, making the consumer choice reliable and justified.

Directions for the use of digital technologies in the tourism sector

Table no. 1

intelligence □ booking improvement; □ consu □ business analytics; forecastin □ service price forecasting; □ dynamic pricing; improvement; □ improvement; □ consu □ service price forecasting; □ service price forecasting	booking eent; sion for each pricing; ng loyalty
□ business analytics; forecastin □ service price forecasting; □ □ dynamic pricing; improvem □ finding the best deals for tourists; □ conver □ using mobile applications; request; □ tagging luggage to track its location; □ optimal □ 24/7 tourist support through virtual using assistants; □ data privacy and payment security; □ using □ optimization of functional processes, social mediant.	booking sent; sion for each pricing; ng loyalty
□ service price forecasting; □ improvem □ dynamic pricing; improvem □ finding the best deals for tourists; □ conver □ using mobile applications; request; □ tagging luggage to track its location; □ optimal □ 24/7 tourist support through virtual using assistants; □ data privacy and payment security; □ using □ optimization of functional processes, social mediant.	booking eent; sion for each pricing; ng loyalty
□ dynamic pricing; improvem □ finding the best deals for tourists; □ conver □ using mobile applications; request; □ tagging luggage to track its location; □ optimal □ 24/7 tourist support through virtual assistants; programs; □ data privacy and payment security; □ using □ optimization of functional processes, social mediant	ent; sion for each pricing; ng loyalty
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□ tagging luggage to track its location; □ optimal □ 24/7 tourist support through virtual assistants; □ data privacy and payment security; □ using □ optimization of functional processes, social mediane.	ng loyalty
☐ 24/7 tourist support through virtual ☐ usi assistants; programs: ☐ data privacy and payment security; ☐ using ☐ optimization of functional processes, social median.	ng loyalty
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☐ data privacy and payment security; ☐ using ☐ optimization of functional processes, social med	
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employees; applicatio	-
	ome systems;
analysis to prevent fraud;	
	keting and
	of services;
	advertising
technolog	ies;
\square RMS s	stems (remote
administra	ntion)
	management
analysis region; software;	
\Box Analysis of tourist flow; \Box gues	1
	hen booking;
	booking from
☐ Forecasting and assessment of target the websit	
markets;	
☐ Development of a tourist "portrait"; marketing☐ Analysis of the structure of tourist advertisin	
	g; vebsite metrics
expenses; □ hotel w □ Development of a behavioral profile (indicator	
of a tourist;	/ ·
☐ Determination of points of attraction (guest	card/key
for tourists; replacement	•
☐ Storage of various types of content ☐ hot	* *
(documents, photos, presentations, managem	1 1 2
etc.);	
☐ Justification of management managem	
decisions;	

	☐ Development of ratings based on	□ social media
	various indicators, including consumer	management and
	reviews	monitoring;
		□ hotel performance
		analysis
Virtual reality	☐ Familiarization with attractions when	☐ Familiarization with
	planning a travel route;	the comfort of the room,
	□ virtual tours of cities, attractions,	the interior of the hotel
	natural sites, museums, exhibitions;	when choosing a
	☐ use in marketing and promotion of	reservation;
	tourist products and services;	□ presentation of the
	☐ development of unique programs to	advantages of the hotel
	stimulate tourists' interest in new	in a 360-degree
	routes;	panoramic video;
	☐ reduction in advertising costs;	use in marketing and
	☐ use of helmets/glasses to enhance	promotion of the hotel
	tourists' impressions of the proposed	brand.
	routes and trips	

It seems that the current stage of digital transformation of Russian tourism should be considered as a transition period from "smart tourism" to digital. This is manifested in the fact that individual digital technologies are being introduced to solve the most pressing problems of management and organization of tourist services. This is the goal of government support measures for the development of tourism infrastructure, including the development of new tourist routes and navigation systems to them, tourist information centers, electronic guides, mobile applications and audio guides. Big data technology is increasingly used in the creation of online accounts by tour operators and travel agents for booking accommodation, transport, excursions and other services. Blockchain technology ensures the security of payments, identification of the traveler's identity, is used in the preparation of documents, check-in at airports and hotels. In the course of the digital transformation of the tourism sector, cloud technologies, the Internet of Things, virtual and augmented reality and other modern technologies are increasingly used, which allows for more efficient building of partnerships and improving the quality of service to tourists. Digital technologies are used to improve the quality of service to tourists.

Digitalization processes will significantly affect the further development of the tourism market. Many countries are adopting the "Tourism 4.0" development course, which, like "Industry 4.0", implies the transition to digitalization of most business processes in the industry. Examples of best practices in the use of digital tools and applications in tourism include:

- 1. Implementation of sensor technologies at locations that create information, help to remember and transmit data.
- 2. Creation of an integrated solution to increase mobility, designed to facilitate and interact with the tourist with the destination.
- 3. Free, cost-effective and stable Wi-Fi connection for tourists and citizens in order to improve tourism management.
- 4. Production of mobile applications for smartphones and tablets to search for goods and services at destinations.
 - 5. Use of QR codes that help tourists quickly and easily interact with the location.
 - 6. Geolocation systems that help tourists determine the location of all attractions.
 - 7. Video mapping and holography methods that enrich the tourist's cultural experience.
 - 8. Effective management of the intermodal transport system.
 - 9. Real-time traffic management systems supplemented by optimal route suggestions.
 - 10. Marketing systems and a centralized booking system (CRS).

- 11. Customer relationship management system (CRM).
- 12. Video surveillance systems in metro tunnels and in unsafe areas.

Thus, digitalization can accompany almost all stages of the formation and promotion of a tourism product. Underestimating the importance of introducing digital technologies into all areas of the tourism market in modern conditions means missing a competitive advantage and weakening the competitiveness of not only a specific tourism organization, but also the entire region (country). It can be concluded that at present there are a number of objective prerequisites for the formation of a Russian digital smart tourism platform. First of all, this is the currently achieved high level of digitalization of the main business processes in the tourism and hospitality industry. In addition, the emergence of smart tourists and digital travellers entails the need for changes in the information and communication infrastructure and business models of the tourism industry.

The digital transformation is leading to far-reaching changes in the tourism industry, which have both a quantitative impact on the expected future development of employment and a qualitative change in job profiles and skills. At the same time, digital change in tourism also offers opportunities for new areas of employment, a more humane working environment and greater autonomy for employees. The main challenge is therefore to help shape digital change in tourism rather than simply react to it. The digital world is characterized in many ways by a new quality of digitalization. Firstly, advances in IT and software continue to drive exponential growth in processor performance. In addition, the penetration of mobile devices and the use of cloud applications are increasing. The collection and systematic evaluation of large volumes of data (Big Data) and the development of learning algorithms are also leading to an increasing prevalence of artificial intelligence. Secondly, improvements in IT are reducing the size and cost of systems, while expanding the scope of application and usability. Thirdly, developments are moving towards larger networks, resulting in the emergence of cyber-physical systems (the "Internet of Things"). Although tourism is not considered a pioneer in terms of digitalization, technological progress has long since taken hold of the tourism industry.

The use of digital technologies in tourism has become indispensable. The reasons are the changed customer needs, which are increasingly changing due to the use of the Internet for information and booking purposes and therefore entail corrective reactions on the part of tourism service providers, creating the technical and organizational prerequisites for digital communication with customers. Also, the spread of digital technologies is based on the cost-benefit ratio, since rationalization effects can be achieved through standardization and centralization with the help of digital applications.

Conclusions

Further development of domestic and inbound tourism, increase in tourist flows, growth of requirements for service quality require more active pace of digital transformation of the tourism sector. In accordance with this, it seems necessary: to develop and implement standard technical and technological solutions, provide loans and subsidies for these purposes; create online courses on training personnel skills for micro, small and medium enterprises for which the acquisition and installation of appropriate technical equipment and software is highly expensive; it is advisable to expand the practice of small businesses to use the services of tourist marketplaces to enter the market and promote their products and services; to intensify the dissemination of best practices in the introduction of digital technologies in the management and organization of tourist services in both large and medium and small tourism businesses. Since the bulk of organizations and enterprises in the tourism sector are micro, small and medium enterprises for which the acquisition and installation of appropriate technical equipment and software require large additional costs, it seems necessary to develop and implement standard technical and technological solutions, provide loans and subsidies for these purposes, create online courses on training personnel skills. At the same time, it is advisable for small businesses to use the services of tourism marketplaces to enter the market and promote their products and services. The importance of state support and support at the regional level at this stage of digital tourism development

will increase, which poses a whole range of tasks for the dissemination of best practices for the introduction of digital technologies in the management and organization of tourist services in both large and medium-sized and small tourism businesses. It is advisable to create a digital smart tourism platform on the terms of a public-private partnership, taking into account the interests of both commercial structures and the state, as well as citizens traveling and living in tourist destinations. To do this, it is necessary to achieve coordinated cooperation and integration of the interests of government organizations, private companies and local governments, as well as local representatives of government structures and communities. This will stimulate and control general participation at various stages of the development of the tourism destination. Only in this case can we talk about creating prerequisites (in terms of digital solutions) for the effective development of tourism at the international, national and regional levels.

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Credit Authorship Contribution Statement

Ulviyye Huseynova: Writing – review and editing, Methodology, Supervision, Project administration;

Ismayilova Hecer Qafar: Writing – original draft, Investigation, Visualization;

Gasimzadeh Akrami: Writing – original draft, Methodology, original draft, Data curation, review and editing, Formal analysis.

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Declaration of Use of Generative AI and AI-assisted Technologies

The authors declare that they have not used generative AI and AI-assisted technologies during the preparation of this work.

References

- Abdel Wahed, E.A.M. (2016). The Impact of Modern Technologies on the Development of Electronic Tourism // Service in Russia and Abroad
- 2. Aksyonov, V.A., Nosakov, I.V., Aksyonov, S.V. (2022). Digitalization of the Economy and the Development of Electronic Services in the Sphere of Tourism and Hospitality, *Hotel Business*, 6
- 3. Avazli, K. (2016). Socio-Economic Consequences of Tourism. Azerbaijan State University of Economics, Baku, 81 p.
- 4. Bogomazova, I.V., Anoprieva, E.V., Klimova, T.B. (2019). Digital Economy in the Tourism and Hospitality Industry: Trends and Prospects // Service in Russia and Abroad, 13 (3)
- 5. Budagov, B. (2021). Tourism in Azerbaijan. Baku: "Nafta-Press" publishing house. 32 p.
- 6. Burlacu, S., Ciobanu, G., Radulescu, C.V. (2018). Regional Development in Romania in the Context of Economic and Social Digitization, Conferinta Internationala de Administratie si Management Public, 14, 165-178
- 7. Burlacu, S., Ciobanu, G., Troaca, V., Gombos, C. (2021). The Digital Finance-opportunity of development in the new economy. In *Proceedings of the International Conference on Business Excellence*, 15 (1), 392-405, Sciendo
- 8. Ciobanu, G., Pană, A., Diaconu, A. (2015). Digital economy--growth factor in job creation in Romania. *Quality-Access to Success*, 16
- 9. Ciobanu, G., Dinu, M., Iacob, O.C., Constantinescu, V.G. (2022). Digital labour market model and financial opportunities in the context of sustainable development in the EU countries. *European Journal of Sustainable Development*, 11(3), 15-15
- 10. Eyvazov, E.T., Balabeyova, N.Sh. (2019). International transport operations, Baku, *Science and education*, 336 p.
- 11. Ibrahimov, I.H. (2022). Development directions of regions and liberated territories. Baku
- 12. Kocherli, Y.A., Kocherli, L.R. (2018). Economic bases of tourism and efficiency indicators. ATI. *Scientific-Practical conference materials*. Baku, 135 p.
- 13. Hsu, A.Y., King, B., Wang, D., Buhalis, D. (2017). Entrepreneurship in the contemporary tourism ecosystem: The case of incoming tour operators in Taiwan. In R. Schegg, B. Stangl (Eds.), *Information and communication technologies in tourism*, 101–113, Rome, Italy: Springer
- 14. Rahmanov, F.P., Suleymanov, E.B., Gojaeva, E.M. (2020). Consequences of the influence of the corona virus pandemic

- on the development of tourism in Azerbaijan. Tourism and hospitality, 2, 76-91
- Perelygina, M., Kucukusta, D. (2022). Law Digital business model configurations in the travel industry. Tourism Management, 88, 104408
- 16. Viglia, G., Werthner, H., Buhalis, D. (2016). Disruptive innovations. *Information Technology & Tourism*, 16(4), 327–329
- 17. *** Decree of the President of the Republic of Azerbaijan on the approval of "Azerbaijan 2030: National Priorities for socio-economic development", Baku, 02.02.2021
- 18. *** Law of the Republic of Azerbaijan on Tourism. Baku, 27.12.2021
- 19. *** State Statistics Committee of the Republic of Azerbaijan. Statistical Indicators of Azerbaijan. Baku, 2021
- 20. *** https://www.ceeol.com/search/article-detail?id=993488
- 21. *** https://www.shahdag.az/az
- 22. *** https://link.springer.com/article/10.1007/s10668-022-02401-8
- 23. *** https://wttc.org/research/economic-impact