Article

Improvement of The Organizational and Economic Mechanism of Smart Tourismi In Uzbekistan

Yusubova Makhliyo Ikromovna

1. Doctoral student at Tashkent State Institute of Economics (TSIE)

*Correspondence: mahliyo0730@mail.com

Abstract: This article examines ways to improve the organizational and economic mechanism of SMART tourism in the Republic of Uzbekistan. An analysis of the current legislative framework regulating digitalization and SMART tourism is conducted, with an emphasis on regional coverage of all territories of the country. Domestic and international sources are analyzed - scientific publications, statistical data, regulatory legal acts, reports of international organizations and successful cases of implementing SMART solutions in the field of tourism abroad. Key institutional barriers to the digital transformation of the tourism industry of Uzbekistan are identified. The main part presents an in-depth study of the legal framework for the development of digital tourism, as well as examples of existing digital solutions (national tourism portal, electronic visa system, QR codes, etc.). Based on the analysis, recommendations are proposed to improve the organizational and economic mechanisms of SMART tourism, including proposals for reforming legislation, strengthening interdepartmental coordination and stimulating innovation. A conclusion is made about the need for an integrated approach combining technological innovation and institutional reforms to ensure sustainable growth and competitiveness of the tourism industry of Uzbekistan in the digital era.

1. Introduction

Relevance of the topic. In recent years, Uzbekistan's tourism sector has demonstrated dynamic growth. After a sharp decline in 2020 caused by the pandemic, the flow of travelers is quickly recovering. In 2023, about 7 million foreign tourists visited Uzbekistan, making this year one of the most successful - almost at the level of the pre-pandemic 2019 record (6.7 million visitors). For comparison, in 2020, against the backdrop of global restrictions, the inbound tourist flow fell to 1.5 million people, but by 2022 it reached 5.2 million, and in 2023 it almost returned to its previous maximum (6.6 million visitors).In 2024, the country received 8.2 million foreign tourists, an increase of 1.6 million compared to 2023. At the same time, domestic tourism is rapidly developing: according to the Tourism Committee, in 2023, over 21 million domestic tourists traveled to different regions of the country. The growth of the industry is facilitated by government initiatives to simplify the visa regime and promote the rich historical and cultural heritage of Uzbekistan in the international arena[1].

In the context of global digitalization, there is a need to move from traditional forms of tourism industry management to the concept of SMART tourism – the use of modern

information and communication technologies (ICT) to improve the tourist experience and effectively manage destinations[2].

"Smart tourism is a model of the integrated development of the tourism industry and innovative S&R technology, which is not only a future trend in the development of the tourism industry, but also a key to the transformation and modernization of the modern service sector. The new stage of the global technological revolution, one of the driving forces of which is the Internet, is changing the course of global economic development, human life and production, which leads to new changes in the development of the global tourism industry. Deep integration of the development of the tourism industry with the Internet is becoming an increasingly common trend of our time[3].

Smart tourism is defined as tourism in which the constant and systematic use of smart elements leads to the creation of additional travel value for the tourist. The proposed definition of smart tourism emphasizes the acquisition of additional value of the tourist service for the consumer through the use of smart technologies."

The concept of SMART tourism is closely linked to the idea of smart cities and involves the implementation of digital solutions in all areas of tourism. For Uzbekistan, which has a rich historical and cultural heritage and diverse tourism resources in all regions - from the ancient cities of Samarkand and Bukhara to ecological routes in Karakalpakstan - the digital transformation of tourism is relevant to ensure competitiveness in the global market and improve the quality of service for travelers[4].

The topic is particularly relevant in the context of the state policy of Uzbekistan aimed at developing tourism and innovation. The country's leadership has adopted a series of measures to liberalize the visa regime, improve the business climate and introduce digital technologies. Thus, since 2018, an electronic visa system (E-Visa) has been introduced, simplifying the entry of foreign citizens, and in recent years, the list of countries with visa-free entry has been expanding. The Digital Uzbekistan - 2030 strategy is being implemented, aimed at the digital transformation of the economy, and tourism is considered one of the priority areas for the application of IT innovations. However, there remain issues of coordinating the efforts of various institutions, updating legislation, eliminating infrastructure restrictions, especially in remote regions. All this necessitates a comprehensive study of the organizational and economic mechanism of SMART tourism and the development of recommendations for its improvement[5].

2. Materials and Methods

The study uses various scientific methods to provide a comprehensive analysis of the problem. First of all, the method of analysis and synthesis of the regulatory framework was used: legislative acts of the Republic of Uzbekistan regulating the sphere of tourism, digitalization, entrepreneurship and innovative development were studied. A content analysis of state programs and strategies (for example, the concept of tourism development, the strategy of the digital economy and innovative development) was carried out in the part related to the digital transformation of the tourism industry[6].

In addition, the comparative analysis method was used - the international experience of implementing SMART tourism in various countries was studied (using the example of a number of developed tourist destinations in Europe and Asia), which made it possible to identify best practices and compare them with Uzbek conditions. An analysis of statistical data was carried out: tourist flow indicators, data on the implementation of digital services, the level of Internet coverage and the use of mobile technologies in the regions, etc. An important stage of the work was the analysis of literary sources - scientific articles, reports of international organizations (UNWTO, World Bank, etc.) devoted to the digitalization of tourism, the development of smart tourist destinations and institutional aspects of innovation[7].

A systems approach was used to identify institutional barriers and features of the organizational and economic mechanism - the tourism industry was considered as a complex system where government agencies, the business community, tourists and the local population interact. Using the method of expert assessments (based on secondary

research data), bottlenecks in the existing management model were identified (for example, insufficient coordination or gaps in legislation)[8].

Literature analysis. The concept of SMART tourism has received wide coverage in modern scientific literature, reflecting the global trend of digitalization of the hospitality industry. According to the definition formed by a number of researchers, SMART tourism implies the use of information and communication technologies (ICT) by analogy with the concept of "smart cities" to develop innovative tools and approaches to improve tourism services and industry management. In essence, this is the integration of physical tourism infrastructure, digital data and human capital into a single intellectual complex. U. Gretzel, M. Sigala and others note that SMART tourism relies on such key technologies as mobile communications, cloud computing, artificial intelligence and the Internet of Things (IoT). These technologies make it possible to collect and process large volumes of data from various sources - from sensors and mobile devices to social networks and booking systems - in order to improve the efficiency of resource use, personalize tourist experiences and ensure sustainable development of destinations. Thus, the literature emphasizes that the principles of SMART tourism include: improving the tourist experience through interactive services, optimizing management (for example, through real-time analysis of tourist flows) and ensuring the competitiveness and environmental sustainability of the destination through innovation[9].

The literature review confirms that the successful development of SMART tourism requires an appropriate technological basis, a well-thought-out strategy supported by the state, and the active participation of all stakeholders. The following sections of the article are devoted to assessing the extent to which these principles are being implemented in Uzbekistan, what potential the country has, and what steps should be taken to improve the organizational and economic mechanism of SMART tourism[10].

3. Result and Discussion

Legal analysis and current initiatives in the field of SMART tourism in Uzbekistan

Legislative framework. The development of tourism in Uzbekistan is regulated by a whole range of regulatory documents. The basic act is the Law of the Republic of Uzbekistan "On Tourism", first adopted in 1999 and updated in a new edition in 2019. This law defines the basic concepts and principles of state policy in the field of tourism, the rights and obligations of participants in tourism activities. In particular, the new version of the Law takes into account modern requirements related to the safety of tourists, the classification of tourist zones, and, in part, the implementation of electronic services. However, direct mention of the concept of "smart tourism" or digital technologies in tourism in the current legislation is still insufficient. The current regulations are of a framework nature, and their detailing is carried out through by-laws and state programs[11].

In recent years, the government has adopted a number of important resolutions and decrees aimed at digitalizing the industry. One of the important moments was the resolution of President Sh. Mirziyoyev dated July 4, 2018 "On further measures to optimize the procedure for entry of foreign citizens into the Republic of Uzbekistan"). This regulation introduced a system for processing and issuing electronic entry visas (E-VISA) through the E-visa.gov.uz Internet portal, eliminating the need for foreigners to personally apply to diplomatic missions. Since July 15, 2018, foreign tourists have been able to obtain an Uzbek visa online by paying the consular fee with a bank card and receiving a ready electronic visa by e-mail. This has significantly simplified visa procedures and made Uzbekistan more open to tourists. In parallel, this resolution introduced a 5-day visa-free transit entry for citizens of 101 countries through international airports, as well as visa-free entry for children of foreign tourists under 16 years of age. These measures, supported by the creation of digital services, immediately affected the growth of tourist flow and received a positive assessment from international experts.

Another area of legislative support for SMART tourism is the digitalization of public services and entrepreneurial activity. Uzbekistan has adopted the Law "On Electronic Government", which created the basis for the provision of public services in electronic form. Within its framework, the Unified Portal of Interactive Public Services operates, through which, for example, the registration of foreign citizens at the place of stay is automated (previously, foreign tourists were required to register with the Department of Internal Affairs, now hotels and guest houses can do this online through the E-mehmon system). Legislation on electronic documents and electronic commerce is also developing - important elements for online booking of tours, electronic tickets to museums and transport. The Law "On Electronic Commerce" (2015, with subsequent amendments) and the Law "On Electronic Document" ensure recognition of the legal force of electronic transactions, which makes it possible to develop the online tourism business. To protect the personal data of tourists, the Law "On Personal Data" has been introduced, establishing requirements for the processing and storage of data collected by tourist portals, hotels, etc.

In the field of innovation and entrepreneurship support, there are also regulations that affect the development of SMART tourism. The Law "On Investment and Entrepreneurial Activity" guarantees the rights of investors, including in the field of tourism infrastructure and start-ups, and the Law "On Public-Private Partnership (PPP)" opens up opportunities for attracting private IT companies to create digital products for tourism on a partnership basis. For example, regions can, on the basis of PPP, implement systems of tourist information centers with elements of augmented reality developed by the private sector. The Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021, approved by Presidential Decree No. UP-5544, set the goal of becoming one of the leading countries in a number of areas, including by increasing the contribution of innovation to tourism. As part of this strategy, pilot projects were financed - for example, the creation of mobile applications for tourists, digital museums, etc. An Innovation Support Fund was also established, through which start-ups in the field of tourism can receive grants.

Regional coverage of SMART initiatives. All administrative units of Uzbekistan are included in the process of digitalization of tourism to one degree or another. The national tourism portal Uzbekistan.travel provides information about all regions of the country - the site has sections on cities (Tashkent, Samarkand, Bukhara, Khiva, etc.), as well as by types of tourism (eco-, cultural, gastro-tourism, etc.). This portal operates in several languages and contains interactive maps, lists of attractions, an event calendar, which in itself is an element of SMART tourism, since it combines data and helps tourists plan their routes online. Specific digital projects are being implemented in key tourist centers of the republic. Thus, in the historical cities of Samarkand, Bukhara, Khiva, signs with QR codes are installed at the main cultural heritage sites, by scanning which visitors can get information about the site in different languages on their smartphones (text, photos, audio guides). Interactive tourist information kiosks have been opened in Tashkent and regional centers, allowing you to get information about hotels, restaurants, and routes around the clock. A number of museums (for example, the State History Museum in Tashkent) are introducing audio guides and mobile applications for self-guided tours of exhibits.

The project "Uzbekistan. Safe travel GUARANTEED", launched during the COVID-19 pandemic, is worth mentioning separately. This is a digital platform for certifying tourism industry facilities (hotels, museums, transport) for compliance with sanitary and hygienic requirements. Certified facilities are placed on a digital map, and tourists can find out which places are safe to visit through the Uzbekistan.travel website. Although this project initially had a sanitary and epidemiological focus, it demonstrated the effectiveness of using digital tools to increase tourist confidence and can serve as a basis for further SMART initiatives, for example, for monitoring the quality of services.

Despite the above steps, the level of implementation of SMART solutions varies significantly by region. Traditional tourist regions (Samarkand, Bukhara, Khorezm, Tashkent city) have advanced the furthest: they have the best Internet infrastructure, pilot projects are being implemented with the support of donors (for example, the creation of a "smart city" in Samarkand for the 2022 SCO Summit, which included intelligent lighting, surveillance cameras, free Wi-Fi in tourist areas). At the same time, remote regions - mountainous areas, part of Karakalpakstan - are still poorly covered by digital services. For example, natural tourist sites (Chimgan, Lake Aydarkul) often do not have stable mobile communications and access to online information for tourists. Thus, the regional aspect indicates the need to align the digital infrastructure and adapt the SMART strategy to the specifics of each region so that all territories of Uzbekistan can benefit from the development of smart tourism.

International cooperation and cases. Uzbekistan actively cooperates with international organizations to implement best practices. The World Tourism Organization (UNWTO) supported seminars on digital marketing in tourism in Uzbekistan. In 2021, the European Union, within the framework of the Switch Asia program, financed a project to develop ecotourism and digital skills in rural communities of the republic. Successful cases of neighboring countries are being studied: for example, the experience of Kazakhstan in creating a single electronic register of tourist services and the Kazakhstan Travel mobile application, the experience of Azerbaijan in introducing the BakuCard tourist card with digital infrastructure. At the national level, the Center for Islamic Civilization in Uzbekistan has been created, which plans to use the latest digital technologies (VR / AR) to demonstrate cultural heritage, which will attract pilgrimage tourism and youth.

In general, the legal analysis shows that the foundations for SMART tourism in Uzbekistan have been laid - key laws and programs have been adopted, individual digital services have been launched. However, for a systemic effect, further improvement of the regulatory framework and organizational mechanisms is required, which will be discussed below.

Despite positive developments, there are a number of institutional barriers and problem areas on the path to the implementation of full-fledged SMART tourism in Uzbekistan:

1. **Incompleteness of the legislative base.** The current Law on Tourism and related acts do not yet contain clear provisions stimulating the digitalization of services. There is no regulatory definition of a "digital tourism product" or a "smart tourism destination". There are no standards for the provision of electronic tourism services (for example, requirements for online audio guides, for the quality of QR code content, etc.). The legislation does not fully take into account new business models in tourism that have emerged thanks to technology: for example, the sharing economy (housing rental services such as Airbnb, shared transport) is actually outside the legal field or is regulated by general rules that are not adapted to the digital environment. This creates uncertainty for innovative start-ups in tourism and hinders their development.

Duplication of functions and coordination. Organizationally, the Tourism Committee under the Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan is responsible for the development of tourism, while the Ministry for the Development of Information Technologies and Communications oversees the digitalization of the economy, and the Ministry of Higher Education, Innovation and Science oversees innovation issues. Individual aspects (for example, the protection of monuments - the Ministry of Culture, ensuring the safety of tourists - the Ministry of Internal Affairs and the State Security Service, transport provision - the Ministry of Transport). The lack of an effective interdepartmental mechanism sometimes leads to the fact that digital initiatives are implemented fragmentarily. For example, the

information systems created by the Tourism Committee may not be compatible with national e-government platforms. Investment projects in the regions are implemented by khokimiyats, which do not always have sufficient expertise in IT. A single coordinator or council for SMART tourism is needed, which would combine the efforts of different bodies.

1. **Infrastructure limitations.** Most SMART services require reliable internet connection and electricity. In some tourist locations (mountains, desert areas, remote fortresses), the infrastructure is still weak. According to official data, the penetration rate of broadband internet and 4G in some areas is below the national average, which complicates the implementation of mobile applications and online services for tourists on the ground. The development of 5G networks in pilot mode has only begun in Tashkent, while the potential of 5G (for example, for real-time AR/VR) in tourism is huge. The open data infrastructure for tourism is also in its infancy - there is no single open data database on museum schedules, site occupancy, events available to app developers.

2. **Personnel and educational barrier.** The transition to SMART tourism requires new competencies from the staff of tourism organizations and industry managers. Not all employees of hotels, museums, and travel agencies can be quickly trained to work with new systems (for example, how to use the online guest registration system, how to administer an organization's profile on a tourism portal, analyze reviews from social networks). In the regions, there is a shortage of specialists in digital marketing and product management in the tourism sector. Existing educational programs in tourism at universities do not yet sufficiently integrate courses in digital technologies, and IT specialists rarely focus on the tourism industry. This leads to the fact that even if technologies are available, they can be used ineffectively.

3. **Financial restrictions and business incentives.** The implementation of SMART solutions requires investment - both public (in infrastructure, platforms) and private (in modernization of services, application development). Not all participants in the tourism market, especially small businesses (guest houses, small museums, artisans), have the means and motivation to connect to digital platforms. Existing benefits and preferences for IT companies (for example, tax breaks in the IT Park) do not yet cover projects in the tourism sector, since startups in tourism often do not meet the criteria of the IT industry. Bank lending for innovative projects is difficult due to high requirements and the lack of collateral for young teams. Thus, the business environment needs additional incentives: grants, preferential loans, training programs on digitalization for entities in the tourism business.

4. **Cultural and behavioral aspects.** Some industry workers and managers may show resistance to change – unwillingness to switch to new digital systems, habit of working in the old way. In addition, a significant part of tourists visiting Uzbekistan are older people (traditional groups from Europe, CIS countries), who are not always ready or able to use mobile applications and electronic services. It is necessary to take into account their needs, maintaining "analog" duplicate options (for example, the presence of cash desks with live people, printed booklets) even with the active implementation of digital innovations.

5. **Security and trust issues.** Digitization of services carries risks of personal data leakage, cybercrime (fraud with bank cards when paying for tours online), and the dissemination of false information (fakes in reviews and ratings). Until a fully reliable cybersecurity system is created in the tourism sector, some consumers (especially foreign ones) may be distrustful of new Uzbek digital platforms. It is necessary to improve not only technologies, but also cybersecurity legislation, protective measures, and inform tourists about the safe use of official services.

The identification of these barriers shows that the transition to SMART tourism is not only a technological but also an organizational and managerial task. To solve it, a set of measures is needed, which will be discussed in the next section.

Ways to improve the organizational and economic mechanism of SMART tourism

Based on the analysis, a systematic approach is needed to accelerate the development of SMART tourism in Uzbekistan and overcome existing barriers, including the improvement of both regulatory and organizational and economic instruments. Below are the key recommendations and proposals:

1. **Improvement of legislation and regulations.** It is necessary to update the Law "On Tourism" and related acts taking into account the digital agenda. It is necessary to introduce into the legislation the concepts of "electronic tourism services", "smart destination", "tourist information portal", etc., securing their legal status. This will create a basis for the standardization of such services and the possibility of their certification/licensing, if necessary. In addition, it is necessary to develop state standards (GOST or ST RUz) regulating the quality of electronic audio guides, multimedia materials at tourist sites, requirements for dubbing information materials in foreign languages and accessibility for persons with disabilities (which is also part of the SMART concept - accessibility). Legislative support must also be provided to new business models: clarify the regulation of crowdsourcing platforms and shared consumption services in tourism in order to, on the one hand, stimulate their development, and on the other - protect the rights of consumers (for example, oblige hostels and private accommodation providers to register in a special online register).

▪ There is also a pressing need to adopt a State Program for the Development of SMART Tourism, which would become a by-law combining various activities. Within the framework of such a program, it would be advisable to approve a roadmap of legislative changes (including, perhaps, developing a separate law on tourist information systems or expanding the law on electronic government with a section on tourist services), identifying responsible executors and performance indicators (for example, the share of attractions equipped with QR codes; the number of electronic visas issued per year; Uzbekistan's position in international tourism competitiveness ratings according to the "ICT readiness" subindex, etc.)[12].

2. **Institutional reforms and coordination.** To eliminate the fragmentation of efforts, interdepartmental coordination should be strengthened. One option is to create an Interdepartmental Council for the Development of SMART Tourism under the Government, which will include representatives of the Ministry of Tourism and Cultural Heritage, the Ministry of Digital Technologies, the Ministry of Innovations, as well as the committees on transport, security, regional administrations and industry experts. Such a council could develop uniform standards, review the progress of implementing digital solutions in the regions, and monitor the implementation of the program. It is also possible to appoint a responsible deputy minister or agency (for example, the Agency for Digital Solutions in Tourism as a specialized structure).

▪ It is also necessary to establish horizontal connections: for example, to combine data from the Tourism Committee, the Ministry of Culture and local authorities into a single database. The creation of a Unified Information and Analytical System of Tourist Services is an important step. Ideally, all data on tourists (questionnaires, reviews), on movements (aggregated, by mobile operators), on the operation of facilities (hotel occupancy, museum tickets) should be consolidated (taking into account the law on personal data) in a single system available for analysis by the state. This will allow data-driven decision making, as is done in advanced smart cities.

3. **Investments in infrastructure and technology.**The state, together with the private sector, needs to continue investing in digital infrastructure: expanding broadband Internet, installing Wi-Fi hotspots in tourist locations (and it would be appropriate to provide key cultural heritage sites and tourist areas with free Wi-Fi for visitors), and developing 4G/5G mobile communications on routes between cities. Separately, it is worth funding the creation of modern digital products: for example, a national mobile application for tourists that combines the functions of a guide, map, purchase of electronic tickets, taxi call, translator and reviews. Such an application, integrated with the Uzbekistan.travel portal, will become a "single window" for guests of the country. Similar applications are successfully operating in Singapore and Dubai, simplifying traveler communication with the destination.

▪ A promising direction is the introduction of AR/VR technologies. It is possible to develop virtual tours of museums in Uzbekistan, 3D reconstructions of historical sites (for example, ancient settlements) and provide access to them through applications or VR zones in tourist centers. Grants from international funds for the preservation of cultural heritage can be attracted for this[13].

4. **Stimulating business and innovation.**To encourage the private sector to more actively implement digital solutions, economic incentives are needed. It is proposed to implement a mini-grants program for tourism startups - annual competitions from the Ministry of Tourism or the Innovation Fund, where young teams receive funding to develop applications, online services or gadgets for tourism (for example, audio guides in several languages, chat bots for consulting tourists). In addition, tax breaks or subsidies can be provided for tourism companies investing in digitalization. For example, the costs of a hotel for installing electronic keys, online booking systems or interactive information screens can be partially offset by reducing income taxes or providing a preferential loan for these purposes.

▪ An important incentive could be the inclusion of the tourism industry in the ecosystem of IT-Park Uzbekistan – a technopark of information technologies. If startups developing products for tourism become residents of IT-Park, they will receive tax holidays and access to investors. To do this, it is necessary to adapt the selection criteria, recognizing tourism technologies as part of the ICT sector[10].

5. **Education and training of personnel.**Special educational programs on digital tourism should be initiated. In universities that train tourism specialists (economic, management), introduce courses on the basics of SMART tourism, digital marketing, and data analytics in tourism. Conduct regular trainings and seminars for employees of museums, hotels, and guides - for example, how to use new applications, how to promote services via the Internet. The Tourism Committee, together with the IT community, could organize hackathons and accelerators in the TravelTech sphere, where talented young people ready to offer industry solutions could be identified and trained. It is also worth adopting the experience of other countries through internships: send managers and specialists to countries that are leaders in SMART tourism for training (South Korea, UAE, Singapore).

▪ It is necessary to improve digital literacy among small businesses in tourism. For example, to train artisans and guesthouse owners to work with online platforms (Airbnb, TripAdvisor), which will increase their audience reach and integrate them into global chains[11].

6. **Marketing and attracting tourists through digital channels.**Digital transformation should be accompanied by active e-marketing of the country in foreign markets. It is recommended to strengthen the presence of Uzbekistan in social networks and on tourist sites, use big data and targeted analysis for advertising campaigns. The creation of a single Smart Uzbekistan brand - the image of Uzbekistan as a modern, technological tourist destination - will help attract a new audience, including the younger generation of travelers accustomed to gadgets. To do this, you can release

virtual tours and 360° videos of attractions on platforms like YouTube, organize online broadcasts from festivals and cultural events, introduce game elements (gamification) - for example, a mobile quest application for the cities of the Great Silk Road with bonuses for users[14].

7. **Taking into account socio-economic effects and sustainability.**It is important that the development of SMART tourism contributes not only to the industry's income, but also to sustainable development. It is recommended to implement systems for monitoring the impact of tourism on objects (sensors on popular monuments to record the flow and prevent overload), environmental initiatives (digital solutions for waste management in tourist areas), as well as feedback tools with the local population. The latter is especially important - residents of the regions should participate and benefit from SMART tourism (through new jobs, access to information, the ability to promote their products to tourists via the Internet). Organizationally, it is worth creating mechanisms for involving local communities - for example, platforms for crowdsourcing ideas: residents can suggest through a special application which objects in their area need better navigation or information, where to install Wi-Fi, etc.

8. **Ensuring security and trust.**It is proposed to strengthen cybersecurity components in tourism systems: certify software, use secure protocols for online payments, regularly conduct security audits of the Uzbekistan.travel portal and other key systems. It is also important to increase user confidence: for example, to indicate all official services on the portal, explain how to check the authenticity of QR codes (so that tourists do not scan fraudulent ones), introduce a hotline for tourist support on the use of digital services[15].

Implementing these measures will require effort and investment, but will bring significant dividends. According to experts, the implementation of SMART solutions can increase average tourist spending, extend their stay (due to better information about available entertainment), and attract new segments of visitors. In addition, digitalization will increase the transparency of the industry (all transactions are recorded, statistics are more accurate), which facilitates management and planning.

4. Conclusion

The development of SMART tourism in Uzbekistan is a complex multifaceted process associated with the modernization of technologies, institutions and business processes in the tourism industry. The study showed that Uzbekistan has significant potential for successful digital transformation of tourism: the country has a rich cultural and historical heritage and a variety of natural attractions in all regions, there is support from senior management in matters of innovative development, the first important steps have already been implemented (electronic visas, a national tourism portal, local SMART initiatives). At the same time, the analysis also revealed serious challenges - from shortcomings in legislative regulation and institutional inconsistency to infrastructure and personnel limitations.

To move to a qualitatively new level of tourism industry management based on SMART principles, it is necessary to undertake a set of coordinated measures. These include updating and detailing the legal framework (taking into account digital realities), creating an effective mechanism for interdepartmental coordination, investing in IT infrastructure and digital products, stimulating innovative business activity and training a new generation of personnel. International experience shows that countries implementing SMART tourism gain a competitive advantage: they attract more tourists, distribute flows across regions more effectively, increase guest satisfaction and sustainability of development.

In the context of Uzbekistan, improving the organizational and economic mechanism of SMART tourism will contribute to achieving ambitious goals for increasing tourist flow and developing regions. The implementation of the recommendations proposed in the

article - from developing a state SMART tourism program to supporting startups - will create a modern, innovation-oriented tourism ecosystem in the country. Such an ecosystem will unite attractions, travel agencies, transport, hotels and tourists based on digital platforms and data, ensuring real-time interaction and high quality service.

It can be expected that in the coming years, the introduction of SMART tourism will bring specific results: the share of electronic services in the total volume of tourism services will increase significantly, Uzbekistan's position in world tourism competitiveness rankings will improve, and most importantly, every guest of the country, traveling from the Fergana Valley to ancient Khorezm, will feel comfortable thanks to digital assistants and intellectual infrastructure. Thus, Uzbekistan will strengthen its brand as a country harmoniously combining the great heritage of the past with the technologies of the future, which is fully consistent with the strategic concept of the republic's development in the 21st century.

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