THE IMPORTANCE OF THE DEVELOPMENT OF DIGITAL INFRASTRUCTURE IN COMPETITIVE REGIONAL TOURISM

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Abstract. *This article analyzes the role and importance of digital economy infrastructure in increasing the competitiveness of regional tourism. It highlights that the use of information and communication technologies in the tourism sector, the widespread introduction of digital services, the development of e-commerce and online marketing tools serve to increase the tourism potential of regions. It also scientifically substantiates the impact of digital transformation on the quality of tourism services, tourist flows and regional economic development.*

Keywords*: tourism, digital economy, digital infrastructure, tourism competitiveness, e-services, innovations, information and communication technologies, digitalization.*

Annotatsiya. *Mazkur maqolada mintaqaviy turizm raqobatbardoshligini oshirishda raqamli iqtisodiyot infratuzilmasining o'rni va ahamiyati tahlil qilinadi. Turizm sohasida axborot-kommunikatsiya texnologiyalaridan foydalanish, raqamli xizmatlarni keng joriy etish, elektron tijorat va onlayn marketing vositalarining rivojlanishi hududlarning turistik salohiyatini oshirishga xizmat qilishi yoritilgan. Shuningdek, raqamli transformatsiyaning turizm xizmatlari sifati, turistlar oqimi va mintaqaviy iqtisodiy rivojlanishga ta'siri ilmiy jihatdan asoslab berilgan.*

Kalit so'zlar: *turizm, raqamli iqtisodiyot, raqamli infratuzilma, turizm raqobatbardoshligi, elektron xizmatlar, innovatsiyalar, axborot-kommunikatsiya texnologiyalari, raqamlashtirish.*

Introduction

In today's globalization and digitalization processes, the effective development of the tourism industry directly depends on the level of formation of the modern digital economy infrastructure. Digital technologies are creating new opportunities for the organization, management and promotion of tourist services, increasing the competitiveness of regions in the domestic and international tourism market. Therefore, the development of digital infrastructure in regions with tourism potential is of great importance.

Literature review

The importance of developing the digital economy infrastructure in increasing the competitiveness of regional tourism is important in that it serves not only as a decisive factor in improving the quality of tourist services, but also as a key factor in increasing the socio-economic potential of regions (Rakhimov Z.O., 2022).

The implementation of smart infrastructure, in particular IT monitoring systems and digital marketing tools, along with optimizing management processes, significantly improves the dynamics of tourist flows and indicators of regional economic development (Akromova M.S., 2025).

In addition, the introduction of electronic payment systems and online booking platforms based on international experience will serve to expand the volume of regional tourism exports

(Mamurov S. 2025). Also, the systematic introduction of data analysis and innovative marketing approaches will create an opportunity to increase the attractiveness of regional products in the international market and accurately forecast customer needs using digital technologies (Kurbanova, 2026). This technological transformation will serve as an important fulcrum in modernizing regional tourism policy and ensuring sustainable economic growth (Toshev, 2026).

Research and results

Digital economy infrastructure is understood as a set of technical, software and organizational tools that allow organizing economic activity based on digital technologies. It includes Internet networks, data centers, cloud technologies, electronic payment systems, mobile applications, artificial intelligence, big data (Big Data), block chain technologies and other innovative tools.

The development statistics of tourism sector in the national economy

	2019 y.	**2020 y.**	**2021 y.**	**2022 y.**	**2023 y.**	**2024 y.**
The share of gross value added created in tourism sectors in the country's GDP	8	6.7	7.5	8.7	9	9.2
Gross fixed capital formation in the tourism sector (by legal entities), billion sums	10037.7	8158.9	8243.3	11538.8	16394.4	23344.0

Source: The National Statsitics Committee of The Republic of Uzbekistan https://stat.uz/uz/rasmiy-statistika/national-accounts-2.

In the tourism sector, this infrastructure allows simplifying relations between tourists and service providers, providing fast and high-quality services, and increasing management efficiency. The development of digital infrastructure ensures transparency and openness of the tourism services market.

The tourism industry in developed countries is undergoing significant transformation due to digital advancements. Today, many travelers independently organize and reserve their trips using online travel agencies, search and meta-search platforms, as well as mobile applications and technologies. Travelers also increasingly share their experiences through social media, travel blogs, and review websites such as Tripadvisor. Recognizing these shifts in consumer behavior, most tourism-related businesses have adapted by introducing a range of digital and automated services. Nevertheless, certain developments—particularly the rise of online platforms that allow individuals to temporarily offer their homes, services, or other assets to tourists—have presented greater challenges for businesses and regulators to accommodate.

The competitiveness of regional tourism largely depends on the quality of services provided to tourists. Modern tourists demand convenient, fast and safe services. Digital technologies are an important tool in meeting these requirements.

Digital deference factors by income group average of economies



Source: Travel and Tourism Development index 2024, WEF. // https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf

For example, online booking systems allow you to book hotels, airline tickets, train tickets and excursions in advance. This allows tourists to save time and money. Electronic payment systems serve to carry out financial transactions safely and conveniently.

In addition, mobile applications and GPS technologies allow tourists to find destinations, get information about tourist attractions and plan routes. Digital maps, audio guides and virtual tours further enrich the travel experience of tourists.

In the digital economy, the bulk of marketing activities are moving to the online space. Websites, social networks, video platforms and search engines play an important role in promoting tourist destinations.

Today, most tourists search for information on the Internet before traveling. Therefore, the digital image and online appearance of regions directly affect their competitiveness. High-quality websites, professional photo and video materials, virtual 3D tours and active promotion on social networks are effective tools for attracting tourists.

Also, with the help of digital marketing tools, it is possible to identify the target audience and organize advertising campaigns tailored to them. As a result, marketing costs are optimized and advertising effectiveness increases.

The use of big data and artificial intelligence technologies in the tourism sector is creating new opportunities. By analyzing data on tourists' searches, purchases, travel destinations and interests, services can be individualized.

Chatbots based on artificial intelligence allow tourists to provide advice and information 24 hours a day. Recommendation systems offer users tourist attractions and services that are relevant to their interests.

Such technologies not only create convenience for tourists, but also increase the efficiency of tourism organizations. Data-based management decisions contribute to the rational use of tourism resources.

The development of the digital economy infrastructure creates broad opportunities for small businesses related to tourism. Hotels, family guesthouses, restaurants, transport companies and craftsmen can offer their services to the international market via the Internet.

Through e-commerce platforms and online booking systems, the number of customers increases, the export of services expands and incomes increase. This leads to the creation of new jobs in the regions, an increase in incomes of the population and an increase in economic activity.

The promotion of tourist attractions located in remote areas, in particular, via the Internet allows for the effective use of their economic potential.

In the future, digitalization processes in the tourism sector are expected to accelerate further. Virtual and augmented reality technologies, smart tourism, digital identification systems and artificial intelligence-based services are becoming the main directions of tourism development.

To develop digital infrastructure in the regions, it is important to expand Internet coverage, modernize information systems, increase digital literacy and support innovative projects. At the same time, it is possible to form a modern digital ecosystem in the tourism sector by strengthening public-private cooperation.

Conculision

In conclusion, the development of digital economy infrastructure is one of the important factors in increasing the competitiveness of regional tourism. Digital technologies improve the quality of tourism services, create a favorable environment for tourists, increase marketing efficiency and improve management processes. In addition, digitalization serves to develop local entrepreneurship, attract investments and create new jobs.

Therefore, the formation of modern digital infrastructure in regions with tourism potential, the introduction of innovative technologies and the acceleration of digital transformation processes remain one of the priority areas of regional economic development. The integration of the digital economy and tourism serves to strengthen the country's position in the international tourism market and ensure sustainable economic growth.

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