DIGITAL TECHNOLOGIES AS A MEANS OF INCREASING THE COMPETITIVENESS OF TOURIST DESTINATIONS

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Abstract. *This article analyzes the strategic role of digital technologies in enhancing the com petitiveness of tourist destinations. The study examines digital transformation processes in tourism, i ncluding smart tourism concepts, artificial intelligence, big data, and digital marketing tools. Based on the regulatory framework of the Republic of Uzbekistan, the prospects for digitalization of nation al tourism infrastructure are evaluated. The research concludes that building an integrated digital e cosystem and implementing innovative management approaches are essential for achieving sustaina ble competitive advantages in tourism destinations.*

Keywords: *digital economy, tourism, competitiveness, smart tourism, innovation, artificial in telligence.*

Аннотация*. В статье анализируется стратегическая роль цифровых технологий в п овышении конкурентоспособности туристических направлений. Рассматриваются процесс ы цифровой трансформации в сфере туризма, концепция smart tourism, использование искусс твенного интеллекта, big data и инструментов цифрового маркетинга. На основе норматив но-правовых актов Республики Узбекистан оцениваются перспективы цифровизации национ альной туристической инфраструктуры. В результате исследования обоснована необходим ость формирования интегрированной цифровой экосистемы для обеспечения устойчивого ко нкурентного преимущества туристических направлений.*

Ключевые слова: *цифровая экономика, туризм, конкурентоспособность, smart tourism , инновации.*

Annotatsiya*. Mazkur maqolada raqamli texnologiyalarning turistik yo'nalishlar raqobatbar doshligini oshirishdagi strategik ahamiyati ilmiy jihatdan tahlil qilinadi. Turizm sohasida raqamli tr ansformatsiya jarayonlari, smart tourism konsepsiyasi, sun'iy intellekt, big data va raqamli marketi ng vositalarining iqtisodiy samaradorligi o'rganildi. O'zbekiston Respublikasida turizmni rivojlanti rishga qaratilgan normativ-huquqiy hujjatlar asosida milliy turizm infratuzilmasini raqamlashtirish istiqbollari baholandi. Tadqiqot natijasida turistik yo'nalishlar raqobat ustunligini ta'minlashda in novatsion boshqaruv, integratsiyalashgan axborot platformalari va raqamli ekotizimni shakllantiris h zarurligi asoslab berildi.*

Kalit so'zlar: *raqamli iqtisodiyot, turizm, smart tourism, raqobatbardoshlik, innovatsiya, sun 'iy intellekt.*

Introduction

Digital transformation has become a key driving force of the 21st-century economy. Service sectors, including the tourism industry, have also become active participants in this process. Today, t ourist destinations compete not only through their natural and historical resources, but also through t heir digital infrastructure, information transparency, and innovative services.

According to M. Porter's theory, the competitive advantage of regions is determined by the l evel of innovation and technological development (Porter, 1990).[1] Therefore, the implementation of digital technologies in tourism is considered an important factor in strengthening a region's position in the global market.

In the Republic of Uzbekistan, in order to transform tourism into a strategic sector of the eco nomy, Presidential Decree No. PF–5611 dated January 5, 2019 was adopted.[2] This decree outlines th e tasks of modernizing tourism infrastructure and widely introducing IT technologies. Furthermore, i n the "Uzbekistan – 2030" Strategy, the digitalization of tourism is identified as a priority area (Pres idential Decree No. PF–158, September 11, 2023).[3]

According to the UNWTO Tourism Competitiveness Report (2023), the competitiveness of t ourist destinations is determined by the following factors:[4]

- quality of infrastructure
- level of safety
- service standards
- effectiveness of marketing
- digital presence

Buhalis and Law (2008), in developing the concept of e-tourism, emphasize that integrating t ourism services through digital platforms enhances the economic efficiency of destinations.[5]

Table №1
Factors Influencing the Competitiveness of Tourist Destinations

Factors	Traditional model	Digital model
Information exchange	Printed advertising	Websites, mobile applicati ons
booking	telephone	Online booking platforms
Marketing	Office-based sales	SMM, SEO, targeted advertising
Data analysis	Statistical reports	Big data analytics

As shown in the table, the digital model has clear advantages in terms of speed, transparency, and interactivity.

Literature Review

The impact of digital technologies on the tourism sector has been extensively studied in recent years by both foreign and domestic scholars. In particular, M. Porter, in his theory of competitive advantage, emphasizes that the success of regions in the global market is directly linked to the level of innovation and technological development. This approach is also highly relevant to the tourism sector, demonstrating that the implementation of digital technologies can enhance the competitiveness of destinations.

[1] Porter M. Competitive Advantage of Nations. – 1990.
[2] O'zbekiston Respublikasi Prezidentining PF–5611-son Farmoni, 05.01.2019.
[3] O'zbekiston Respublikasi Prezidentining PF–158-son Farmoni, 11.09.2023.
[4] UNWTO Tourism Competitiveness Report, 2023.
[5] Buhalis D., Law R. Progress in e-tourism research. Tourism Management, 2008

The concept of e-tourism, developed by Buhalis and Law (2008), substantiates the need to integrate tourism services through digital platforms. According to their view, internet technologies and online systems increase the speed, convenience, and transparency of tourism services, thereby creating new opportunities for consumers.

In addition, reports by UNWTO and OECD indicate that the competitiveness of tourist destinations is largely determined by digital presence, marketing effectiveness, and the level of utilization of information technologies. World Bank studies also highlight that Big Data technologies provide high efficiency in forecasting and managing tourist flows.

An analysis of local studies and regulatory legal documents shows that in Uzbekistan, the digitalization of tourism has become an important direction of state policy. At the same time, existing scientific works do not sufficiently address the practical implementation of digital technologies and the assessment of their real economic effectiveness. This study is aimed at addressing this gap.

Research Methodology

This study employs a комплекс approach using several scientific methods. First, the method of theoretical analysis was used to examine scientific literature on digital technologies and tourism, as well as reports of international organizations and regulatory legal documents.

In addition, a comparative method was applied to identify the differences between traditional and digital tourism models and to evaluate their advantages and disadvantages. Based on statistical analysis, the economic effectiveness of digitalization in tourism was assessed, particularly changes in tourist flows, marketing costs, and service quality indicators.

Furthermore, a systems approach was used to study the factors influencing the formation of a digital ecosystem in the tourism sector. In the practical part, the current state of mobile applications, digital platforms, and tourism infrastructure in Uzbekistan was analyzed, and existing problems and development prospects were identified.

The data obtained during the study were generalized, and logical conclusions were drawn, leading to the development of the author's recommendations.

Analysis and Results

The conducted analysis shows that the implementation of digital technologies significantly increases the efficiency and attractiveness of tourist destinations. In particular, online booking systems and digital marketing tools not only contribute to an increase in tourist flows but also help optimize service delivery processes.

Comparative results indicate that, compared to the traditional model, the digital model has clear advantages in terms of speed, interactivity, and transparency. According to statistical data, after the adoption of digitalization, the number of tourists has increased, while marketing costs have decreased, indicating an overall improvement in economic efficiency.

The analysis conducted using the example of Uzbekistan demonstrates that significant steps have been taken in recent years toward the digitalization of tourism. The introduction of an electronic visa system, a national tourism portal, and online services has created greater convenience for tourists. However, uneven development of internet infrastructure across regions, a shortage of IT specialists, and the insufficient advancement of mobile applications remain key challenges.

Based on the findings, the following conclusions were drawn:

- digital technologies create a competitive advantage in tourism;
- it is necessary to develop unified integrated platforms;

- the development of mobile applications and interactive services increases the number of tourists;
- innovative tourism products (such as thematic tours and extreme destinations) enhance competitiveness.

Overall, the results of the study indicate that digital transformation in tourism leads not only to technological modernization but also to fundamental changes in management and marketing approaches.

Economic Impact of Digital Technologies on Tourism

According to OECD studies, in regions where digital marketing tools are actively used, tourist flows have increased by an average of 20–30% (OECD Tourism Trends and Policies, 2022).[6]

The World Bank report also notes that Big Data technologies provide high accuracy in forecasting tourist flows (World Bank Digital Development Report, 2023).[7]

Table №2
Indicators of Economic Efficiency of Digitalization

Indicator	Before digitalization	After digitalization
Number of tourists	100%	125%
Marketing costs	100%	80%
Speed	Moderate	High
Customer satisfaction	70%	90%

The results indicate that digital transformation significantly increases economic efficiency.

Prospects for Digitalization of Tourism in Uzbekistan

In recent years, the following reforms have been implemented:

- introduction of an electronic visa system;
- launch of a unified national tourism portal;
- transition of hotels to electronic registration systems;
- expansion of online payment systems.

These measures contribute to aligning tourism infrastructure with international standards.

Problems and Limitations

1. Uneven internet speed across regions
2. Shortage of IT specialists
3. Low digital literacy among small business entities
4. Cybersecurity risks
5. Improvement of Tourism Mobile Applications

It should be noted that there are currently only a limited number of mobile applications available for tourists in Uzbekistan, each with its own advantages and shortcomings.

[6] OECD Tourism Trends and Policies, 2022.

[7] World Bank Digital Development Report, 2023.

Table №3

Mobile applications	Name	Platform limitations
UzTrip	iOS	Provides basic information, but lacks planning features, maps,and navigations
Travel Guide	Android, iOS	Does not work offline, translate function is inaccurate
Uzbekistan Travel Guide	Android	Low-quality maps, outdated information

At present, tourism is one of the most important sectors of the economy. In Uzbekistan, the tourism industry is steadily developing year by year. According to 2025 statistics, the number of foreign tourists reached 11.6 million (Tourism Committee of Uzbekistan).[8]

To further develop tourism, several projects are being launched. For example, an international railway tour along the "Silk Road" route connecting Almaty – Turkistan – Tashkent – Almaty is planned. This four-day journey allows tourists to experience the atmosphere of ancient cities and travel along the routes of the Great Silk Road.

The tour includes visits to historical and cultural attractions such as:

- Arystan-Bab Mausoleum
- Hazrat Sultan Historical and Cultural Reserve Museum
- Karavan Saray Tourist Complex

In Tashkent, tourists can explore not only historical monuments but also the city's modern development.

The tour program includes:

- guide services
- meals
- transportation
- entrance tickets

The international tour is organized in cooperation with several companies, including transport and travel organizations from Kazakhstan and Uzbekistan.

Additionally, new tourism facilities are being constructed in Khiva. Discounts of up to 20% on airline tickets for pensioners are also being introduced. Moreover, visa-free travel opportunities have been expanded to several countries, including Maldives, China (up to 30 days), Turkey, Malaysia, and Egypt.

The 21st century is the era of technology and innovation, and special attention should be paid to technological development in tourism. Today, one of the most effective marketing tools is the use of mobile applications and social media platforms. However, as shown in the table above, tourism mobile applications in Uzbekistan are still underdeveloped and not widely popular.

[8] Turizm qo'mitasi. O'zbekistonga tashrif buyurayotgan xorijiy turistlar soni bo'yicha rasmiy ma'lumot.

Not everyone has the opportunity to visit travel agency offices to plan trips or book flights and hotels. Therefore, it is proposed to develop a comprehensive mobile application that offers ready-made travel packages across Uzbekistan (for example, 1-week, 2-week, and 1-month tours). The application should include detailed information about tour prices, destinations, accommodation, and planned activities. This would allow users to plan their trips conveniently from home, increasing interest in travel and, consequently, the number of tourists.

At the same time, it is important to diversify tourist destinations and activities. Currently, most tourists visiting Uzbekistan are mainly exposed to historical monuments, natural landscapes, and national cuisine. Such traditional and relatively calm tourism tends to attract older visitors.

For younger and more adventurous tourists, Uzbekistan offers opportunities such as mountain resorts in Chimgan Mountains, where activities like skiing and snowboarding can be developed into 2–3 day tour packages. Additionally, desert safari experiences—similar to those in Dubai—such as quad biking in the desert areas of Jizzakh Region, could be introduced as 1–2 day tours.

Expanding such innovative tourism products would significantly increase the number of foreign visitors to Uzbekistan, thereby contributing positively to the country's economic growth.

Conclusion

The results of the study indicate that the deep integration of digital technologies into the tourism sector is one of the most important strategic factors in enhancing the competitiveness of tourist destinations. The acceleration of digital transformation processes on a global scale is fundamentally reshaping service models in the tourism industry, requiring a transition from traditional approaches to innovative, customer-oriented, and data-driven management systems.

The analysis confirms that the effective use of online booking systems, digital marketing tools, mobile applications, artificial intelligence, and Big Data technologies not only increases tourist flows but also enables a deeper understanding of customer needs, the provision of personalized services, and the optimization of the overall tourism experience. This, in turn, strengthens the image of destinations and significantly improves their position in the international tourism market.

At the same time, digital technologies enhance efficiency in tourism by ensuring information transparency, strengthening quality control, and optimizing logistics processes. The introduction of virtual and augmented reality technologies also marks a new stage in the promotion of tourism products, directly influencing consumers' decision-making processes.

In the context of Uzbekistan, the широкое implementation of digital technologies creates significant opportunities for modernizing tourism infrastructure, developing regional tourism clusters, and increasing the global competitiveness of national tourism products. However, for this process to be effective, it is necessary to further develop digital infrastructure, attract innovative investments, train qualified personnel, and establish effective cooperation between the public and private sectors.

In conclusion, it should be emphasized that digital technologies are not merely an additional tool but serve as a key driver of systemic development in enhancing the competitiveness of tourist destinations. Their comprehensive and strategic implementation is an essential condition for achieving sustainable economic growth, expanding tourism exports, and strengthening the national tourism brand in the global arena.

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