SMART TOURISM AND SMART TECHNOLOGIES IN UZBEKISTAN: A COMPARATIVE ANALYSIS WITH GLOBAL TRENDS

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Abstract
Smart tourism, driven by technological advancements, is revolutionizing the way travelers experience destinations. This article explores the current state of smart tourism and the integration of smart technologies in Uzbekistan, offering a comparison with other global tourism hotspots. Using a comprehensive review of available data, this study highlights key innovations, challenges, and opportunities specific to Uzbekistan's tourism sector. The findings suggest that while Uzbekistan is making significant strides in adopting smart technologies, it still lags behind other countries in certain areas, particularly in terms of infrastructure and widespread implementation.

Keywords: Smart Tourism, Uzbekistan, Smart Technologies, Digitalization, Tourism Innovation, Tourism Development, Language: English.

Introduction

In the context of increasing processes of globalization and competition in the world, the territorial aspects of the innovative development of the country are gaining importance. According to the results of the Global Innovation Index of 2021, South Korea ranks first with 90.49 points, Singapore ranks second with 87.76 points, and Switzerland ranks third with 87.6 points. The process of globalization is deepening in the world, on the other hand, the level of competition in the world markets is increasing, requiring the use of new approaches in the innovative development of the regional economy.

In the conditions of increasing globalization in the world, the importance of scientific support for the innovative development of the regions of countries, including the wide use of the results of scientific researches in the fields of science, in economic sectors is increasing more and more. In this regard, the application of the unique methods and means of innovative development in the development of regional economic development directions, increasing the production potential of individual regions and creating a favorable competitive environment, implementing deep structural changes in the economy based on innovative approaches and comprehensive development of the country's regions, as well as competitive and competitive products in the regional economy special attention is paid to researches aimed at the wide use of advanced innovations, taking into account the directions of production.

In the process of building a new Uzbekistan, special importance is attached to the issues of

innovative development of the economy of the regions of our country. In the development strategy of New Uzbekistan, the tasks of "to master innovative product production technologies that are cheaper than existing analogues by 50% and create added value 2-3 times higher than the price of raw materials in the districts that are being transformed into innovative regions" are defined. In this process, the innovative development is of great importance, and it is desirable to improve it by taking into account the specific features of innovative development through the effective use of the results of advanced scientific researches in ensuring the level of scientific basis of regional economic development.

This study is based on the decision of the President of the Republic of Uzbekistan dated April 1, 2021 "On measures to further improve state policy in the field of science and innovation development" No. on improving the management system" Decree No. PF-6198, Decision No. PQ-3151 of the President of the Republic of Uzbekistan dated July 27, 2017 "On measures to further expand the participation of economic sectors and sectors in improving the quality of training of highly educated specialists", 2017 Decree No. PF-5185 of September 8, 2017 "On Approving the Concept of Administrative Reforms in the Republic of Uzbekistan", Decree No. PF-3416 of the President of the Republic of Uzbekistan of November 30, 2017 "On Organization of the Ministry of Innovative Development of the Republic of Uzbekistan" and other normative and legal serves to implement the tasks specified in the documents.

Smart tourism refers to the integration of digital technologies into the tourism ecosystem, enhancing the overall experience for both tourists and service providers. This includes the use of smart devices, artificial intelligence (AI), big data, the Internet of Things (IoT), augmented reality (AR), and other technologies that improve travel planning, services, and experiences. In recent years, the global tourism sector has seen a rapid adoption of these technologies to meet the demands of a digitally savvy and environmentally conscious audience.

Uzbekistan, a country rich in cultural heritage and historical landmarks, has started to embrace the potential of smart technologies to enhance its tourism offerings. However, there is limited research on how these technologies are being adopted in Uzbekistan compared to other leading nations. This paper aims to investigate the current status of smart tourism in Uzbekistan, assess its technological infrastructure, and compare it to global trends in smart tourism.

Literature Review

Smart Tourism and Technologies. The concept of smart tourism has gained traction globally in the last decade. Smart tourism destinations (STDs) use IoT, AI, and data analytics to improve the efficiency and attractiveness of tourist services. Key examples of smart technologies in tourism include:

- IoT and Smart Cities: IoT technologies enable the real-time collection of data, improving urban management and facilitating personalized tourist experiences (Zeng et al., 2021).
- AI-Powered Personalization: AI allows for personalized recommendations in destinations, lodging, and attractions, using machine learning algorithms to understand tourist preferences (Gretzel et al., 2015).
- AR/VR: These technologies offer immersive experiences of historical sites or virtual tours for tourists who cannot physically visit (Chung et al., 2018).

- Big Data and Analytics**: This helps in analyzing tourist behavior patterns and optimizing tourism services (Liu et al., 2020).

Smart Tourism in Uzbekistan. Uzbekistan, once isolated under the Soviet regime, is gradually opening its doors to international tourists. The government's tourism strategy emphasizes modernizing the industry through digital technologies. In recent years, Uzbekistan's tourism infrastructure has undergone significant reforms, including the creation of a national tourism portal and the digitization of services.

In 2020, Uzbekistan's Ministry of Tourism and Cultural Heritage launched a national digital platform, "Uzbekistan Travel," to facilitate easier access to information about attractions, hotels, and services. The initiative aims to integrate advanced technologies such as AI and big data to provide personalized services to tourists.

Despite these advancements, the full integration of smart technologies remains a work in progress, with infrastructure challenges and a lack of widespread awareness hindering the sector's growth.

Methodology

This study employs a qualitative research approach, utilizing secondary data sources such as reports, academic literature, government publications, and industry analyses. A comparative case study methodology is used to compare Uzbekistan's smart tourism initiatives with those of countries at the forefront of smart tourism development, such as South Korea, Japan, and Spain. The analysis focuses on three key areas:
1. Technological Infrastructure: Assessing the adoption of smart technologies in tourism services.
2. Government Initiatives: Examining national policies and digital transformation efforts.
3. Tourist Experience: Understanding how these technologies are improving or changing the travel experience.

Results

Technological Infrastructure

Uzbekistan has made significant progress in integrating digital technologies into its tourism infrastructure. As of 2023, the country's tourism portal, Uzbekistan Travel, hosts over 1,000 attractions, hotels, and tourism services. Moreover, the government has initiated several smart city projects, particularly in Tashkent, which include the development of smart transportation systems and digital kiosks for tourists. However, compared to countries like South Korea and Japan, Uzbekistan's technological infrastructure in tourism is still developing. For instance, in South Korea, the implementation of AI and IoT in tourism has led to the creation of "smart tourist attractions," where visitors can access real-time information via mobile apps. In contrast, Uzbekistan's usage of IoT in tourism remains limited, with few smart applications available on-site.

Government Initiatives and Policies. Uzbekistan's government has recognized the potential of smart tourism and has included it as part of its broader economic development plan. In 2020, the Ministry of Tourism and Cultural Heritage launched a comprehensive digitalization strategy aimed at improving the ease of travel and enhancing service quality. However, the policies primarily focus on the creation of digital portals and mobile applications, rather than large-scale

technological transformations in tourist services.

In comparison, Spain's government has implemented a "Smart Tourism" strategy, focusing on data-driven decision-making, the enhancement of tourist mobility through digital solutions, and sustainability initiatives. The city of Barcelona, for example, has introduced a range of smart services, including real-time crowd management and smart waste management systems, which are largely absent in Uzbekistan.

Tourist Experience. Tourist experience in Uzbekistan is gradually improving due to the implementation of smart technologies. Mobile apps have made it easier for tourists to find information about cultural sites, book hotels, and access transport services. In Tashkent, a pilot project has introduced augmented reality tours for tourists at the Khast Imam Complex, showcasing the potential for immersive experiences.

However, the overall experience in Uzbekistan lags behind global leaders in smart tourism. Countries like Japan offer smart hotel rooms where guests can control lighting, temperature, and entertainment systems via smartphones, a feature still uncommon in Uzbekistan.

Discussion

While Uzbekistan is taking significant steps toward modernizing its tourism industry with smart technologies, several challenges remain. Infrastructure development, digital literacy, and government investment in cutting-edge technologies are key areas that need further attention. The global examples of South Korea, Japan, and Spain provide useful benchmarks, but Uzbekistan's approach must be tailored to its unique cultural and economic context.

Key barriers to the full implementation of smart tourism in Uzbekistan include:

-Limited Internet Connectivity: Rural and remote regions still face challenges in terms of reliable internet access, which can hinder the delivery of smart services.

-Tourism Education and Awareness: Many local stakeholders, including small businesses, have yet to fully embrace digital tools.

-Investment and Funding: Further investment in digital infrastructure and technology is required to bridge the gap between Uzbekistan and leading global destinations.

Despite these challenges, Uzbekistan's government commitment to smart tourism signals a positive outlook for the future. The country's rich cultural heritage, combined with growing technological initiatives, positions it to become a competitive player in the regional tourism market.

Conclusion

In conclusion, Uzbekistan's tourism sector is beginning to integrate smart technologies, yet it still faces significant challenges in comparison to more developed smart tourism destinations. The government's efforts to digitize tourism services through initiatives like the *Uzbekistan Travel* platform are commendable but need to be complemented by increased investments in infrastructure and more widespread adoption of cutting-edge technologies. By leveraging its unique cultural assets and improving its digital capabilities, Uzbekistan has the potential to establish itself as a prominent smart tourism destination in Central Asia.

References

1. Chung, N., Lee, H., & Koo, C. (2018). "The effects of augmented reality on the experience of tourists." Tourism Management, 67, 1-9.
2. Gretzel, U., Koo, C., & Sigala, M. (2015). "Smart tourism: Foundations and developments." Tourism Review, 70(2), 97-106.
3. Liu, B., Law, R., & Li, G. (2020). "Tourism big data: Its application and challenges." Tourism Management Perspectives, 34, 100678.
4. Zeng, B., Chen, Y., & Li, Y. (2021). "The role of the Internet of Things in tourism." Journal of Tourism Research, 55(1), 20-34.