

DOI <https://doi.org/10.30525/978-9934-26-277-7-235>**DIGITALIZATION OF TOURISM IN UZBEKISTAN****Tursunova S. N.***Student**Branch of ISMA Higher School
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In the pre-pandemic global economy, tourism was one of the most important high-income sectors. It has been called a phenomenon of the 20th century, and after years of the 21st century, tourism makes a significant contribution to development at the regional, national and global levels, generating export earnings and infrastructure development. International organizations that form cultural policy, in particular UNESCO, are striving to solve such problems as creating a new model of the territorial cultural system, improving the management of museum collections, access to cultural heritage and creation of central territorial services with a single international portal. The aim of these projects is also to develop cultural tourism and stimulate trade in directions by creating mechanisms for interaction between museums.



Fig. 1. Gross domestic product of Uzbekistan for 2008–2020 and the contribution of the tourism industry to it for 2008–2020

Formation of the tourism branch in 2017–2019 (three-year pre-pandemic period) demonstrates the positive dynamics of the rise of its leading characteristics. Thus, the export of proposals from this branch increased from USD 546.9 million (2017) to USD 1313 million (2019), or 2.4 times (table). The number of foreign tourists who visited Uzbekistan has also increased, as the proper figures admit. If in 2017 the number of these tourists was 2.7 million people, then by the end of 2019 their number increased to 6.7 million people. However, with the advent of the coronavirus, the number of those eager to visit Uzbekistan has dropped rapidly, almost 78% less than in 2019.

Number of hotels and similar tourist accommodation facilities for 2017–2019 increased by 1.5 times, and the number of rooms in them – by 1.4 times. The number of tour operators in the republic has increased from 561 to 1482.

Now the formation of the economy as a whole and its sectors of the economy, in what quantity and tourism, is determined in the strategic and program management documents adopted in the republic. The Action Strategy for the Future Development of the Republic of Uzbekistan for 2017–2021 includes measures to accelerate the development of the tourism industry, increase its role and contribution to the economy, diversify and improve the quality of tourism offers, and expand tourism infrastructure.

The leadership of Uzbekistan attaches great importance to the development of culture. In addition, the cultural heritage of Uzbekistan is a source of national identity and pride, and the protection and promotion given the attention of the state. Thus, out of the total artifacts by 2021 the whole country will account for 8138 artifacts of material and non-material culture. Among them 4 732 architectural monuments, 682 objects of monumental art, 580 places of pilgrimage and others. Saving all these objects for posterity years is the main task not only of the state, but also of the citizens of the republic.

Restoration of the tourism industry and tourist exchange after the coronavirus pandemic President of the Republic of Uzbekistan Sh.M. Mirziyoyev as one of the important appeals. At the Fifteenth Summit of the Economic Cooperation Organization, held on November 28, 2021 as part of the video summit in The President of Ashgabat initiated a proposal to develop and adopt a regional program for the development of safe tourism in the post-pandemic period (2022 in Bukhara). Particular attention in the program will be paid to the development of pilgrimage tourism and other tourism products, expanding the geography of air travel and improving tourism infrastructure. Uzbekistan began to prioritize the

development of information and communication technologies (ICT) and digitalization in the early 2000s. The country initiated a comprehensive program for the development of national information and communication technologies of the Republic of Uzbekistan for 2013–2020, the National Action Strategy for five priority areas of development of the Republic of Uzbekistan for 2017–2021, the Strategy "Digital Uzbekistan – 2030" and the Development Strategy of New Uzbekistan for 2022–2026 to implement digital transformation in the national economy, industry and society as a whole.

In Uzbekistan, the Ministry for the Development of Information technologies and communications, Center for the development and implementation of computer and information technologies UZINFOCOM introduce "Wi-Fi" zones with high-speed Internet access in such major tourist cities like Tashkent, Khiva, Bukhara, in Kashkadarya and Tashkent areas with a large number of ancient settlements. Since 2019, a scientific-educational project in which a team of specialists researches and forms the concept of "smart museum" and its strategy digital development, shares accumulated knowledge and reflections in within the framework of this work. The solutions that are already being laid down are largely can be called an attempt to visualize the ancient settlements that are national treasure of Uzbekistan. Uses the latest Smart technologies that actively interact through IT systems: Internet of Things (IoT), augmented, virtual, mixed reality (VR/AR/MR), use and prediction based on large data (Big Data), iBeacon and other technologies of local interactions (Bluetooth, WiFi, Push, NFC).

Apart from this, since the stage of creation of IT parks in Uzbekistan, the export volume of the branch has increased by 50 one and reached \$ 46 million. The number of park residents has increased from 147 to 500, more than 300 fresh firms have not yet closed and 8500 highly paid working spaces have been created. In real time, more than 11 thousand young people work in IT parks. The total length of fiber-optic communication lines in the country has been increasing since 2017. For example, in 2017–2022, it increased by almost 6 times and reached 118 thousand km in January 2022. Agency introduced the Office for the Operation of Facilities, digitalization and the introduction of public-private partnerships. Not to mention such, in accordance with the road map for the protection of objects of material cultural heritage, the development of museums and digitalization sphere, the creation of the "Museum brand book" of any museum is taken into account; placement in the well-known open encyclopedia Wikipedia – information about any museum in 6 universal languages; absolute updating

the official websites of any museum, creating them mobile application; creation and maintenance of verified museum accounts on YouTube, Facebook, Twitter and other public networks; buying a special server and making it work effectively applications for collecting and processing all information about objects cultural heritage, in what quantity about museum exhibits and collections, cultural values; development and implementation of the project plan "Virtual Museum" (virtual museum), a study of the modern skill of the International Council museums (ICOM) for virtual museums and the preparation of services for its application in Uzbekistan; collection accumulated during the forecast video and photo materials in a single information base; creation on based on innovative technologies 3D models of the most significant monuments; conducting a repeated historical and cultural expertise, developing digitalized passport and catalog of 8,210 real estate objects material cultural heritage in 2021–2022 and compiling Municipal.

At the same time, in connection with the identified vulnerabilities and challenges in the IT sector under the influence of a massive pandemic, the government revised and modernized its own national digitalization strategy.

Uzbekistan has embraced the power of digitalization in transforming society. In this vein, by decree of the leaders of our country dated October 5, 2020, the Strategy "Digital Uzbekistan – 2030" was approved. According to the document, all municipal mandatory payments in the form of fees and fines are executed using the provided online payment services. Apart from this, more than 400 information systems, electrical services and other software products in various areas of socio-economic development are executed automatically.

The "Digital Uzbekistan – 2030" strategy takes into account the announcement of 2 programs: digitalization of areas and digitalization of sectors of the economy, as well as a "road map" for its implementation in 2020–2022. Thus, 2 layouts are considered: territorial and sectoral. Without a doubt, this will provide a more absolute coverage and effective implementation of the document, which connects these priority areas, such as the development of digital infrastructure, electric government, the state market for digital technologies, education and increasing qualifications in the field of information technology. Important criteria and guarantees for the successful implementation of the "Digital Uzbekistan – 2030" Strategy are considered to be the provision of funding and an increase in the digital literacy of the population. In this regard, according to the document, the Ministry for the Development of Information Technologies and Communications, together with other relevant municipal authorities, will

take measures to complete the digitalization of preschool education, healthcare and general education secondary schools by the end of 2022. It should be noted that, in fact, on the basis of the grant plan of the National Agency for development of information technology of South Korea joint a digital photograph of the mausoleum was created at the cost of 150 thousand US dollars Ismail Samani in Bukhara with the introduction of Digital Twin technologies (digital twin), 3D and geographic data which is included to the Google maps system. General work is being carried out at the end pilot plan to create a 3D copy of the mausoleum of Ismail Samani. For implementation of the main plan – the launch of the platform "Uzbekistan Digital Heritage Planform" with the creation of 3D copies of the historical part of Bukhara and establishing an online monitoring system, at cultural inheritances will be prepared and submitted orders for grants from the Ministry land, infrastructure and vehicles of the Republic of Korea. total amount plan – 6 million US dollars.

Ensuring free access to information about national heritage, presenting the state cultural heritage in the disclosed information location and wide range transmission information proposals based on progressive telecommunications infrastructure, creation of electrical public online – catalogs on collections of key custodians of cultural property – museums, galleries, libraries and archives helps to increase cultural significance of people, popularization of state culture. While maintaining a measured pace of growth, by 2030 it is planned to achieve a GDP per capita equal to \$ 4,000 and enter the group of states with an income above the average. In connection with the data, the formation of the digital economy with an increase in its share by at least 2.5 times by the end of 2026 is still determined as the main driver. At the same time, it is planned to increase the size of the production of software products by 5 times, and their exports by 10 times, up to \$ 500 million, and also to bring the degree of digitalization of production and operational processes in the real sector of the economy – in the economic and banking sectors – up to 70%. Apart from this, the value of digitalization of urban planning and construction, their formation within the framework of the concept of "Smart City" is given.

Absolutely, after the gradual lifting of restrictions, the tourist branch will begin to revive. As a result, it is important to consider what tools to stimulate its formation and tourism potential are available at the moment and subsequently the pandemic. This is necessary for this, in order to create a systematic layout for managing the effects of the pandemic for the subsequent development of tourism and its tourism potential. It is important

to perceive what tools for managing tourist jets and stimulating the non-hazardous energy of people are available to the participants of the branch. In this regard, the task of the subsequent formation of the tourism branch modified as a result of the pandemic and the ability to effectively respond to challenges is considered a priority, the conclusion of which urgently asks for fresh alignments.

Absolutely, digital technologies are central to post-pandemic recovery, as well as building a resilient economy. As a result, expanded digitalization and digital modification are bound to freeze as leading values for developing states such as Uzbekistan. Over the past decade, the state has achieved outstanding results in the field of digitalization and the development of ICT, especially in the provision of electric municipal proposals. At the same time, along with the ongoing cooperation with South Korea, the Russian Federation, Estonia, China, it is necessary to attract more technologically advanced states into the IT sector of the state, such as Germany, England, the USA, Singapore, Japan and others, diversifying the geography of international partners. Investments in the digital ecosystem, IT infrastructure and electric power supply will contribute to the subsequent modernization of the state economy and accelerate the inclusive recovery in all areas.

References:

1. Tourist results of 2020: they began to travel like 30 years ago. URL: <https://www.kp.ru/russia/novosti-turizma-v-rossii/kak-pandemiya-izmenila-puteshestviya> (date of access: 07.07.2021).
2. Speech by the President of the Republic of Uzbekistan Sh. M. Mirziyoyev at the fifteenth summit of the Economic Cooperation Organization. November 28, 2021, Ashgabat.
3. Keller P. Influence of world crises on tourism. *Vestnik RMAT*. 2013. No. 3. P. 17–20.
4. Valiev S., Rakhimov K. Application of smart technologies in the ancient cities of Uzbekistan. *Jamiyat va innovation – Society and innovation*. URL: <https://inscience.uz/index.php/socinov/index>.2021
5. Farmanov E. A., Kadyrov D. Kh., Khodjaeva F. N. The role of tourism of the cultural heritage of Uzbekistan in the development of tourism. *Herald of science and Education*. 2020. No. 2(80). Part 3.
6. Ergasheva Yuldduz, Eralov Azamat. The importance of Kashkadarya Region in the Development of Pilsrimage Tourism. *Eurasian Scientific Herald*. March, 2022. No. 6.