

## DIGITALIZATION OF THE TOURISM INDUSTRY: PROBLEMS AND PROSPECTS

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### *Abstract*

*The article discusses the problems and prospects of the development of digitalization in the tourism industry in the Kyrgyz Republic. The analysis of the dynamics of gross value added and investment in fixed assets in the tourism sector in the Kyrgyz Republic, the number of payments made by credit cards in the Kyrgyz Republic, the number of POS-terminals, the number of Internet access points, ATMs in the Kyrgyz Republic for 2014-2018 years.*

**Keywords:** *tourism, tourism services, digitalization, digital technologies, GDP in the field of tourism, fixed capital investment in tourism, Digital Kyrgyzstan Digital Transformation Concept, bank cards, POS terminal.*

**JEL Code:** *O11*

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**Relevance:** Inadequate level of development of tourism digitalization in the Kyrgyz Republic, Increasing Tourism Development in Kyrgyzstan, Tourism development in the Kyrgyz Republic as part of the Great Silk Road.

**The goal** is to consider problems and suggest directions for the development of tourism digitalization in the Kyrgyz Republic

The topic of digitalization is very relevant today. Digitalization affects every person from the layman to the entrepreneur, scientific and political figure. Digitalization as a direction of economic development was also chosen by the President of the Kyrgyz Republic, who announced 2019 as the “Year of the Development of Regions and the Digitalization of Kyrgyzstan.” And today the Kyrgyz Republic is implementing the Digital Transformation Concept “Digital Kyrgyzstan” - 2019-2023, which gives direction to domestic tour companies - “tourism-related enterprises should become one of the first beneficiaries of building digital infrastructure and digital platforms”.

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The benefits of digitalization are obvious today. It, as a technology for the collection, storage, transmission, processing and analysis of information, helps accelerate all economic processes, especially on a global scale. In this regard, public administration can use digitalization to effectively control and regulate all socio-economic processes.

However, there are opinions that total digitalization is aimed at limiting human freedoms. “Order without freedom and freedom without order are equally destructive,” said Theodore Roosevelt (Quotes and phrases about freedom. <https://metodorf.ru/citati/svoboda.php> <https://cyberleninka.ru/article/n/tsifrovizatsiya-turizma-formy-proyavleniya/viewer>). “Necessity is blind until it becomes conscious. Freedom is an awareness of necessity,” Karl Marx wrote (Quotes and phrases about freedom. <https://metodorf.ru/citati/svoboda.php> <https://cyberleninka.ru/article/n/tsifrovizatsiya-turizma-formy-proyavleniya/viewer>).

A tourist’s freedom of movement should be accompanied by its safety, which depends on the introduction of modern technologies: the use of unmanned drones for assessing travel routes in hazardous areas, real-time weather analysis, placement of sensor systems, and a quick alert system will reduce the risks associated with natural phenomena and cataclysms, sudden changes in weather conditions, registration of individual tourist routes will help coordinate the work of rescue services.

Currently, in connection with the coronavirus pandemic, restrictions and sometimes the cessation of tourist flows cause inhibition and termination of travel agencies. Tourism carries the most damage. Basically, all transport links and tourist flows stopped, hotels and guest houses were empty, customers refused tours, countries restricted entry, airlines stopped selling tickets. But the need for travel and new experiences will not disappear. How quickly humanity can recover business processes after the global epidemiological crisis depends on the introduction and development of digital technologies.

Kyrgyzstan has great prospects for tourism development.

2018 - I place in the category “Developing Direction” (“Wanderlust”)

2019 - entered the list of the best places in the world for selfies (“Daily Mail”)

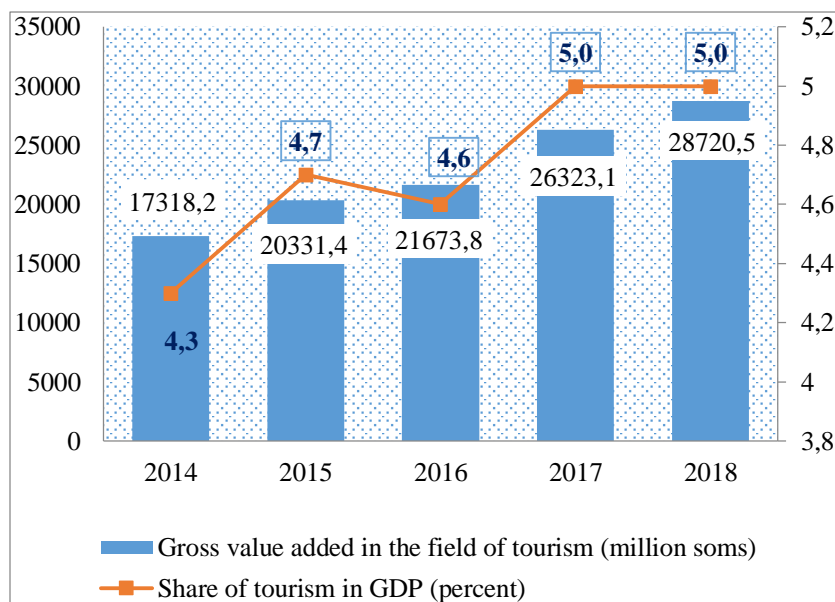
2019 - entered the TOP 10 best countries for travel (“Lonely Planet”)

2019 - entered the TOP 3 best countries for travel (“Forbes”)

- The best country for horseback riding

Tourism development in the Kyrgyz Republic is favored by unique natural resources, a favorable geographical location at the junction of the Great Silk Road, a wide variety of flora and fauna, hospitality of the Kyrgyz people and preserved authentic national traditions (Akylbekova, 2020). Moreover, tourism development has great potential due to its multiplier effect on other sectors of the economy and attractiveness for investors, especially foreign ones. However, the contribution of tourism to GDP in 2018 was only 5% compared to 4.3% in 2014 (Fig. 1) ([www.stat.kg](http://www.stat.kg); Tourism in Kyrgyzstan, 2019; Tourism development indicators, <http://www.stat.kg/ru/statistics/turizm/>; Akylbekova, Kanatbekova, 2018; Akylbekova, Dzhumabaeva, Neevina, Ryskulova, 2020). At the same time, it can be stated that the gross value added in the tourism sector in 2018 increased to 28720.5 million soms, which is 65% more than in 2014, when it amounted to 17318.2 million soms (<http://www.stat.kg>; Tourism in Kyrgyzstan, 2019; Tourism development indicators, <http://www.stat.kg/ru/statistics/turizm/>; Akylbekova, Kanatbekova, 2018; Akylbekova, 2020) (Fig. 1).

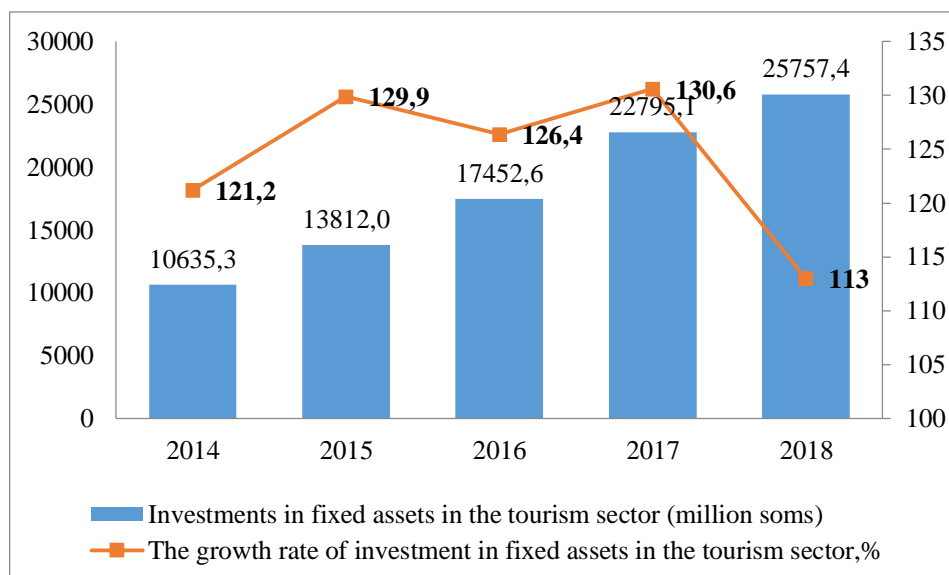
**Fig. 1.** Dynamics of gross value added in the field of tourism in the Kyrgyz Republic



Source: [www.stat.kg/ru/statistics/turizm/](http://www.stat.kg/ru/statistics/turizm/)

The prospect of tourism development is provided by the growth of investments in fixed assets, as they increased by 2.4 times, amounting to KGS 25,757.4 million in 2018 compared to KGS 10,635.3 million in 2014. However, their growth rates in 2018 decreased compared to the previous five-year period, amounting to 113% in 2018 against 130.6 in 2017 and 121.2% in 2014 (www.stat.kg; Tourism in Kyrgyzstan, 2019; Tourism development indicators, <http://www.stat.kg/ru/statistics/turizm/>; Akyzbekova, Dzhumabaeva, Neevina, Ryskulova, 2020) (see. fig. 2).

**Fig. 2.** Dynamics of investment in fixed assets in the tourism sector in the Kyrgyz Republic



**Source:** [www.stat.kg/ru/statistics/turizm/](http://www.stat.kg/ru/statistics/turizm/)

Thus, investment in tourism provides the basis for the development of the industry (Akyzbekova, Kanatbekova, 2018, January).

In addition to investment, a significant role in the development of tourism and the entire economy is played by modern information technologies. (The concept of digital transformation “Digital Kyrgyzstan” 2019-2023. Akyzbekova, Dzhumabaeva, Neevina, Ryskulova, 2020; The National Development Strategy of the Kyrgyz Republic for 2018-2040).

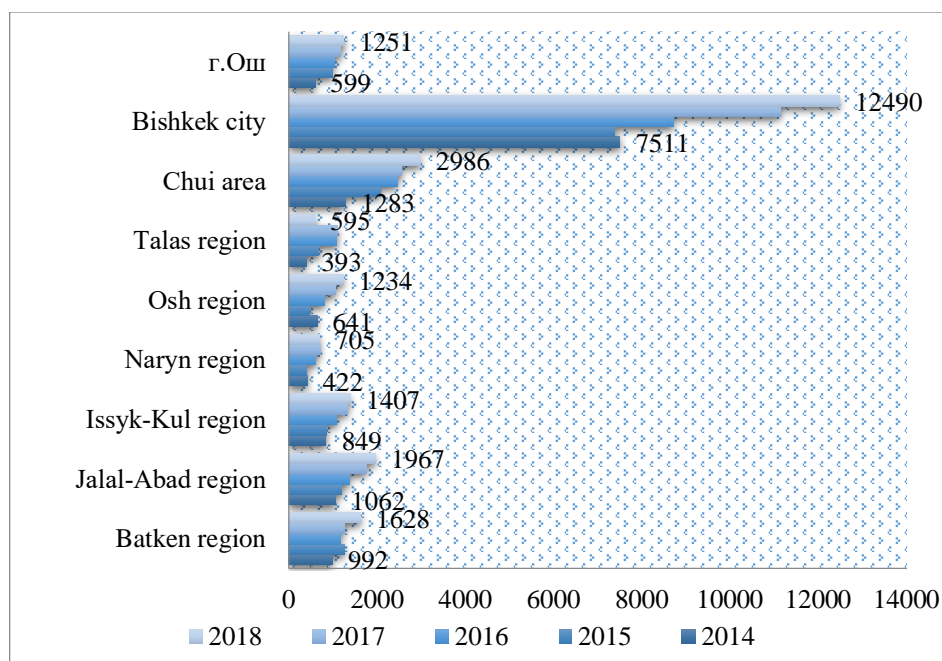
In the digital age, the most important factor in a successful tourism business is Internet access. Internet access at every point of the tourist route is a

requirement of a modern tourist to maintain business and personal communications. However, access to the Internet in our republic is not provided in all regions.

An analysis of the dynamics of the number of Internet access points across the Kyrgyz Republic showed their growth. So in the city of Bishkek for 2014-2018, their growth amounted to 66.3%. Moreover, their number in the city of Bishkek is 20 times more than in the Talas region, 17 times more than in the Naryn region and 10 times more than in the Osh region (www.stat.kg; Tourism in Kyrgyzstan, 2019; Akyzbekova, Bayguttiev, Bobakanova, 2019, December; Akyzbekova, 2020, April) (Fig. 3).

Thus, the regions are poorly provided with the Internet, which is an obstacle to attracting tourists. Bridging the digital divide between regions will increase the accessibility to digital technologies of tourists and entrepreneurs from remote areas to expand tourism services (The concept of digital transformation “Digital Kyrgyzstan” 2019-2023).

**Fig. 3.** Dynamics of the number of Internet access points throughout the Kyrgyz Republic for 2014-2018, units

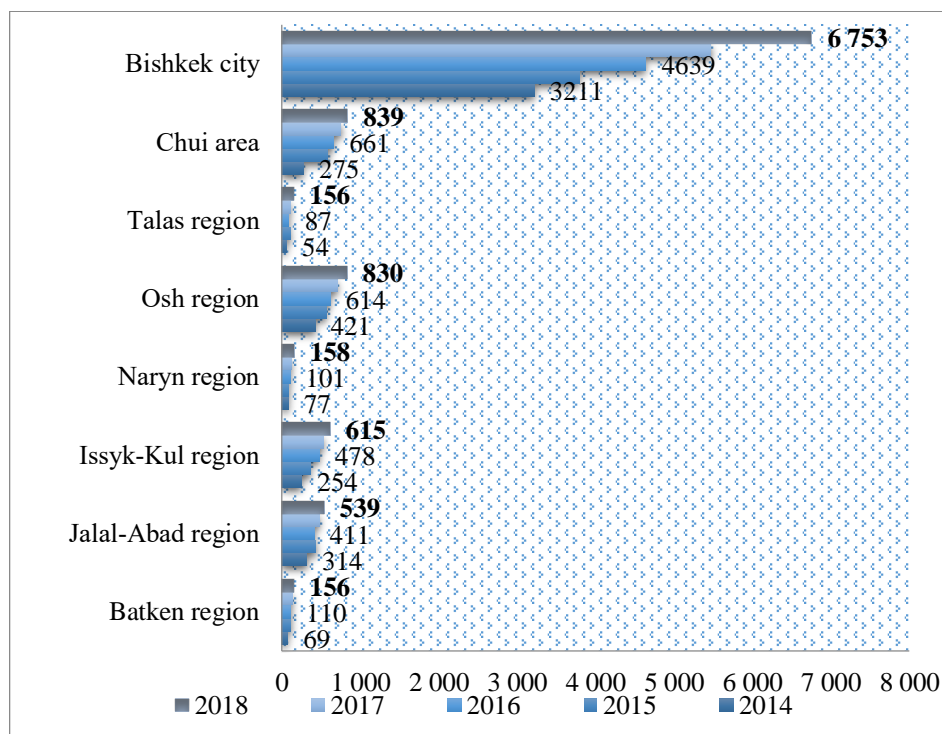


Source: www.stat.kg/ru/statistics/turizm/

The Internet is also important for the safety of tourists. The safety of tourists is based on the formation of a system for registering and tracking tourists on routes, which is not yet applied in our republic, and which can be created on the basis of digital technologies.

The use of cashless payments is another significant factor in the quality of tourist services and ensuring their safety. The number of POS terminals for 2014-2018 has grown significantly. So, in the city of Bishkek for 2014-2018, their number has more than doubled. However, in 2018 in Bishkek, the number of POS-terminals is many times greater than in the regions of the country. So, in comparison with Talas, Batken and Naryn regions, the number of POS terminals in Bishkek is 43 times higher (see Fig. 4) (www.stat.kg; Tourism in Kyrgyzstan, 2019; Tourism development indicators,; Akyzbekova, Bayguttiev, Bobakanova, 2019, December). Thus, it is necessary to introduce POS-terminals in the regions, since it is there that the main flows of tourists go.

**Fig. 4.** Dynamics of the number of POS-terminals on the territory of the Kyrgyz Republic for 2014-2018, units

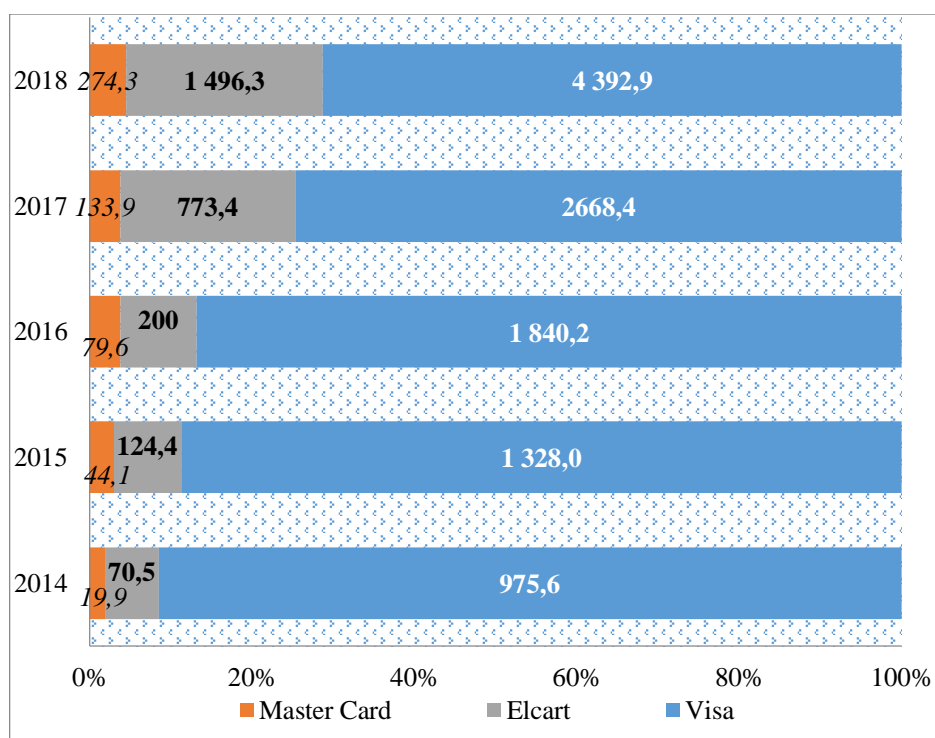


Source: [www.stat.kg/ru/statistics/turizm/](http://www.stat.kg/ru/statistics/turizm/)

An important aspect of tourist services is electronic payments for goods and services. Currently, the development of the banking system is at such a level that it can provide Internet banking, mobile banking and electronic wallet. The republic has a large number of ATMs, where tourists can use international payment cards.

The most popular and widespread payment card is Visa, the number of transactions on which increased by more than 4.5 times during 2014-2018 and amounted to 4,392.9 thousand transactions in 2018. While the number of transactions on the Master Card, although it increased by 13.8 times, in 2018 it amounted to only 274.3 thousand transactions (Fig. 5) (www.stat.kg; Akylbekova, Bayguttiev, Bobakanova, 2019, December; Akylbekova, 2020, April).

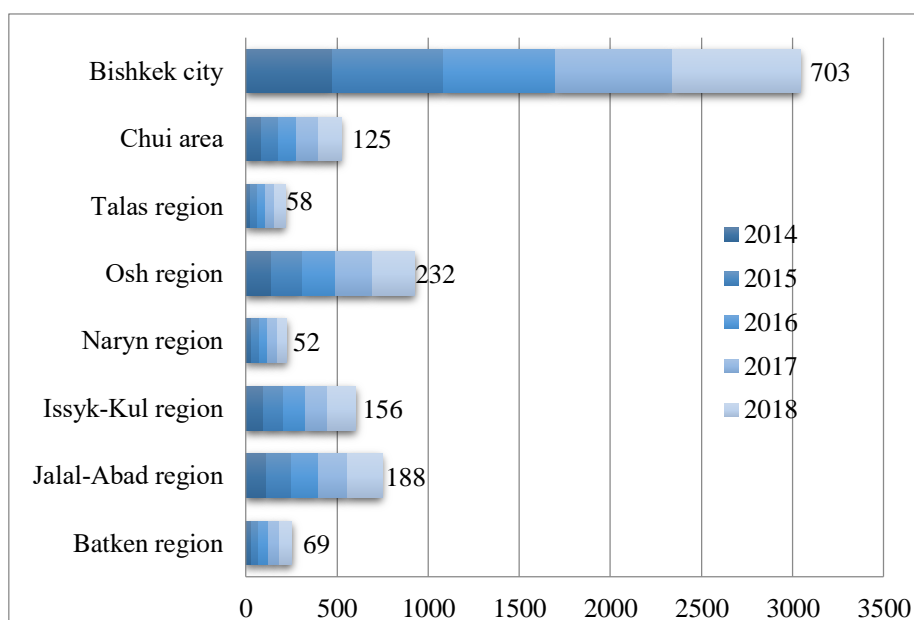
**Fig. 5.** Dynamics of the number of payments made by bank cards in the Kyrgyz Republic for 2014-2018, thousand transactions



Source: [www.stat.kg/ru/statistics/turizm/](http://www.stat.kg/ru/statistics/turizm/)

An analysis of the dynamics of the number of ATMs for 2014-2018 showed their significant growth. So, in the republic as a whole, their number in 2018 amounted to 1583 units against 998 units in 2014, or an increase of 58.6%. Moreover, in Osh oblast in 2018 their number was 3 times, in Jalal-Abad oblast 3.7 times, in Chui oblast 5.6 times, in Issyk-Kul oblast 4.5 times, in Talas oblast 12.1 times less than in Bishkek (Fig. 5) ([www.stat.kg](http://www.stat.kg)).

**Fig. 6.** Dynamics of the number of ATMs in the territory of the Kyrgyz Republic for 2014-2018, units



**Source:** [www.stat.kg/ru/statistics/turizm/](http://www.stat.kg/ru/statistics/turizm/)

The restoration of tourism after the expected crisis today should be ensured by planned actions, both by individual entrepreneurs and government agencies. Digital technologies should be actively introduced into the system of ensuring the safety of tourists, especially mountain and extreme. Planning tours, providing complete information about them, about living conditions, climatic features of Kyrgyzstan, a system of quick alerts about weather changes and emergencies will reduce the risks of tourists and increase the attractiveness of the



country for tourists (The concept of digital transformation “Digital Kyrgyzstan” 2019-2023).

Among the main problems of tourism development should be noted:

- insufficiently developed communication and transport network that does not meet the requirements of a modern tourist;

- insufficient level of use of digital technologies in ensuring security and insurance when organizing tourism activities, which also negatively affects the influx of foreign tourists into Kyrgyzstan;

- poor development of rural tourism and its digitalization;

- weak marketing and inadequate use of digital technology in event tourism

- the lack of highly qualified specialists in the information support of the tourism business, etc. (Akyzbekova, Neevina, Kanatbekova, 2019; Akyzbekova, Kanatbekova, 2017; Akyzbekova, Neevina, 2018; Akyzbekova, Neevina, 2019).

The National Development Strategy of the Kyrgyz Republic for 2018-2040 noted that it is necessary to develop infrastructure using universal digitalization to realize the country's competitive advantages (The National Development Strategy of the Kyrgyz Republic for 2018-2040).

In order to accelerate the development of tourism in the Kyrgyz Republic, special attention should be paid to:

– ensuring the high quality of individual digital tourist services through informational support from tour planning to its implementation,

– ubiquitous provision of high-speed Internet access;

– increase the level of safety and life insurance, health and property of tourists using digital technologies;

– activities to promote the national tourism product of the Kyrgyz Republic in the global and regional tourism markets using Internet marketing, re-analyzing advertising offers;

– the formation of online stores of tourism products and travel services;

– improving transport services for tourists using transport payment cards;

– the development of electronic payments in the regions, an increase in the number of ATMs, POS-terminals, regional bank branches;

– the development of digitalization in the regions and others (Akyzbekova, Kanatbekova, 2017; Akyzbekova, Bulanbek, Mambetalieva, 2019; Akyzbekova, Neevina, 2019; Akyzbekova, 2020, April).

In conclusion, the impact of digitalization on freedom can be summarized in the words of Stephen Covey: “Each person has four abilities - self-knowledge,

conscience, independent will and creative imagination. This gives us absolute human freedom” (Quotes and phrases about freedom. <https://metodorf.ru/citati/svoboda.php> <https://cyberleninka.ru/article/n/tsifrovizatsiya-turizma-formy-proyavleniya/viewer>), which should be used by entrepreneurs in the tourism sector.

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