

BLOCKCHAIN TECHNOLOGY IN THE TOURIST SPHERE: REALITIES OF TODAY

An important feature of today is the rapid growth of information and communication technologies (ICT), the digitalization of all spheres of life and society. The tourism sector is no exception, in the development of which in recent years innovative technologies have played a crucial role, including blockchain technology.

Some aspects of the introduction of blockchain technology in tourism in general and in individual tourism enterprises are reflected in the works of T. Marusei, M. Grabar, Yu. Felenchak, I. Shevchuk, O. Tokarenko, T. Cheremisina, N. Babina and al.

Blockchain is a database of all operations performed in the system. It is organized in the form of a chain of blocks of information, each of which records a certain number of operations. Each subsequent block contains part of the information of the previous block. One of the most important aspects of blockchain technology is that data is decentralized and information is shared on a peer-to-peer basis. Each block contains transaction information and a timestamp. Blocks are also permanent and cannot be changed without consensus with the entire network and without changing all subsequent blocks. The decentralized, constant, time-bound and unchanging nature of the data recorded in the blockchain means that the data is more secure, traceable and transparent [1, 2].

The spread of blockchain in tourism, according to T. Marusei, is an evolutionary breakthrough in the development of information technology. Blockchain, according to the scientist, shows great potential in terms of forming a fundamentally new digital mechanism for exchanging "valuable" data [3].

According to M. Grabar, in the tourism industry, the blockchain helps to automate financial transactions, reduce the time of preparation and execution of contracts, reduce paperwork, reduce the cost of travel services (by reducing intermediary services), automate identity and company verification, accumulate bonus points when buying tours loyalty card, which accumulates points of all hotel chains, airlines, car rental services) [4].

Other authors, in particular Yu. Felenchak and I. Shevchuk, carefully assess the introduction of blockchain in tourism, although they do not rule out that with its

introduction will change the mechanism of online payments for travel goods and services [5].

There is already some practical experience in the world of using blockchain technology in tourism. Thus, one of the largest travel companies TUI Group (Germany) has introduced tracking of internal contracts for hotel resources in real time based on this technology. In the long run, TUI is considering moving to a system in which the company will manage all the information about its objects in the distributed network, as provided by blockchain technology. This will reduce the cost of providing information and services, increase productivity and competitiveness of the company [6].

Other examples of blockchain applications are the LockChain and BeeToken platforms. The first covers payment, property management and various other aspects of the hotel reservation process. The second platform is used to connect customers with hotels to pay for accommodation [2].

Among the areas of blockchain use in tourism in the near future may be the identification of tourists at all stages of travel, baggage tracking, expanding the network of consumers of travel services and the introduction of a system to encourage them, development of a new tourism product (eg cryptocurrency development).

In the longer term, the introduction of blockchain technology will allow:

- optimize costs, primarily by reducing the cost of information retrieval, identification and measurement of transaction costs, the cost of promoting goods and services; costs of concluding and conducting negotiations, etc .;
- to accelerate all business processes, including by reducing the time of communications, reducing the reaction time to market changes, reducing the time of development of tourist services and bringing them to market;
- better understand their consumers,
- increase the quality and flexibility of services and their adaptability to new expectations and needs of consumers.

Thus, scientific generalizations and practical experience show that the use of blockchain in tourism has many advantages, and investment in the asset of this technology is more profitable than in other already known and implemented travel technologies.

Keywords: *blockchain; digitalization; tourism*

References

1. Vdovichenko Yu.V. (2018). Digital technologies as the basis and driving force of modern global economy. *Economy and state*. № 1. pp. 79–82.
2. Tokarenko O.I., Cheremisina T.V., Babina N.I. Digital technologies in the international tourism and hotel industry. URL: <https://doi.org/10.32843/infrastruct44-21>
3. Marusei T.V. (2020). Digitalization of the tourism sector as a tool for development in modern conditions. *Efficient economy*. № 8. - URL: <http://www.economy.nayka.com.ua/?op=1&z=8116>.
4. Grabar M.V. (2020) Information systems and technologies in the tourism market: present and future. URL: <https://doi.org/10.32843/infrastruct39-5>
5. Felenchak Y.B., Shevchuk I.B. (2020). New directions of using information and communication technologies in the field of tourism. *Efficient Economy*, №8. URL: <https://doi.org/10.32843/infrastruct36-11>
6. German tour operator TUI Airs intends to move all data to the blockchain URL: <https://bits.media/nemetskiy-turoperator-tui-air-s-nameren-peremestit-vse-dannye-na-blokcheyn/>