

OPPORTUNITIES AND PROSPECTS FOR USING SMART CITY IN TOURISM

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Abstract: The article deals with different opportunities that bring digitalization to tourism industry.

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Smart City - is one of the key urban trends of our time. The essence of the "smart" city includes many elements - from caring intelligent traffic lights, redirecting traffic so as to reduce traffic congestion, to regulation of waste, water supply systems, monitoring of urban transport, at the expense of current communication channels. The degree of development of a smart city can be determined by the number of management industries covered by intellectual technologies. The implementation of the smart city concept usually begins with the introduction of technologies in some unrelated areas, including e-government systems that improve the communication of the city administration. This contributes to improving the collection and processing of data on the city.

To date, two main approaches to the implementation of the concept are identified: 1) includes the introduction of Smart City technologies, through the design and construction of new cities. This helps to think through the infrastructure of the future city and ensure that all urban systems are integrated as much as possible. Examples of such an approach are developed or implemented projects of cities in South Korea, UAE, China.

In most cases, these are relatively small, compact settlements, where infrastructure is built from the beginning to pre-developed, usually strict standards. Often, the improvement of such a city is considered as a single mega-project, which is detailed into some projects and sub-projects, and its performance from the

beginning is considered in terms of economic effects; 2) provides for implementation of Smart concept.

City in already existing cities, where on the basis of the existing infrastructure local or complex programs for the introduction of intelligent technologies are implemented, which are further integrated into systems. The leaders of this direction - Amsterdam, Stockholm, Barcelona, Singapore - connected with the help of intellectual technologies significant areas of urban economy, many times increasing the efficiency of urban systems and the quality of life of the population.

The extensive interest in Smart City is associated with the likelihood of acquiring a variety of positive effects (economic, social, environmental). The use of information and communications technology and infrastructure makes it possible to adapt urban systems to real needs and pressures. For transport - it is increased mobility, reduced time, for health care - Reduction of costs due to better diagnosis of diseases, least burden on institutions, facilitation of access to medical care, quality control of services, improvement of public health, for education - Verification of the training process, personalization of programs, improvement of access to knowledge, for finance - Reduce costs, increase transparency, security and simplify transactions, new payment systems, for habitat - Quality control of environment and buildings, introduction of new efficient materials, for production and construction - optimization of production processes, verification of resource expenditures. The acquisition of significant effects is confirmed by the experience of cities working on the implementation of Smart City for a long time. The use of intelligent technologies contributed to the reduction of energy consumption - by 30%, street crime - by 30%, traffic - by 20%, water loss - by 20%.

Microsoft developers are actively working on a CityNext that will allow authorities and businesses to effectively develop urban services and infrastructure, meeting the ever-growing needs of citizens. The project is already based on about 400,000 different technologies and services, including the use of Microsoft cloud products and Big Data tools.

A member of the CityNext initiative from Microsoft in our country is Moscow, among other cities - Barcelona, Buenos Aires, Manchester, Philadelphia, Auckland, Hamburg, Zhengzhou and Hainan Province (China).

Examples of Microsoft CityNext solutions for tourism and recreation include mobile applications for tourism, travel portals, travel planning services and library and museum management systems.

Of course, the list of presented technologies and tools Smart City, which can be implemented today for the development of tourism in Russian cities, is not exhaustive, except they are a kind of separate solutions. While the Smart City concept itself implies the development of not separate intelligent systems, but an integrated approach to the development, interconnection of a large number of different subsystems, combining the results of the work of the team of architects and engineers, manufacturers of equipment and communication systems. It is also true that the number of technologies introduced is not as important as the creation of a model that addresses most of the issues caused by rapid urbanization.

Of course, within the framework of the Territory 's tourism development based on Smart City technologies, it is not possible to replace all existing infrastructure. It is possible both because of the cost and the limitations of other resources. In addition, the comprehensive development of tourism in the territory of the municipality on the basis of Smart City technologies, if the city itself does not plan to "become smart" in the near term, is not possible at all.

It should also be said that tourism, on the one hand, as an area of the economy, is as adaptive as possible to innovative technologies, on the other hand, being already a kind of "integrated" into urban space, allows for the introduction of Smart City technologies (not directly intended for the development of tourism) to maximize the opportunities and benefit from them in terms of economic and social efficiency and environmental safety.

An example of an integrated approach to the development of the city, including taking into account the development of tourism based on Smart City

technologies, is the introduction of several complexes into the infrastructure of the city:

- Bright city - LED lighting with intelligent control.
- Intelligent transport system - photo-video recording of violations and weight and size control with a single control center.
- Safe city - video monitoring and notification of the population about emergency situations with a single operational response center.
- Eco-monitoring - environmental monitoring using sensors and sensors, as well as a fleet of unmanned aerial vehicles and copters.
- Development of tourism - aggregator of information on attractions of the region, a single tourist smart card with a transport application.

Such an approach will improve the technological infrastructure, which will eventually lead to an improvement in the quality of life of the residents and guests of the city. Thus, the use of Smart City technologies is already planned within the framework of tourism development of several Russian territories, and therefore, it is possible to study it and if there are positive results of replication for tourist and recreational centers of our country.