PROSPECTS FOR INNOVATIVE SMART URBANIZATION IN THE RUSSIAN FEDERATION

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Abstract: The article considers the possibilities of using smart city technologies for territory management and socio-economic development. It will also analyze the possibilities of digitalization of urban management, such as the experience and preparation for the implementation of smart city programs, the level of digital infrastructure development, the availability of the necessary organizational base for innovation, the level of human capital development, and the nature of technological solutions used.

Keywords: smart city, digital economy, digital transformation, information and communication technologies, human capital.

The beginning of digital technologies is considered to be the fourth industrial revolution, in which there was a mass introduction of cyber-physical systems in the production and maintenance of human needs, including life, work and leisure. Thanks to the use of end-to-end digital technologies, the Smart region platform was formed [1]. Thus, because of this, the Smart city program has become widely used in many Russian cities, which makes it easier for citizens to live by using advanced technologies. In the process, the role of cities, urban culture and "urban relations" in the development of society is increasing, which in itself is smart urbanization [2]. Now you can see innovative stops, traffic lights, pedestrian crossings, and even garbage cans on the streets. The basis of such a city is smart transport, which combines all types of vehicles that use modern communication technologies for effective movement of people, location monitoring, interaction between vehicles and other traffic elements, reducing emissions, and road safety in general.

A smart city is the concept of integrating information and communication technologies and the Internet of things to manage city property; the city's assets include schools, local information systems departments, transportation, libraries,

hospitals, water supply systems, power plants, and waste management, law enforcement, and other public services [3]. The goal of creating a "smart city" is to improve the quality of life through technology, to improve the efficiency of service and meet the needs of citizens of the Russian Federation. In the future, all information will be taken from sensors integrated in real time, and the accumulated data from urban residents and devices will be processed and analyzed. The collected information will help solve various problems of the city.

The development of intelligent systems in a smart city can lead to an agglomeration effect and can be used as a source of economic development in the region. This idea is becoming more common in the context of urbanization, as they are able to provide a basis for the solution of social problems. In the context of the considered transformation of the Russian Federation, a significant role is played by the digital infrastructure that provides the necessary level of telecommunications and computing power for the introduction of digital technologies [4].

The regional innovation system is a complex of organizations located on the territory of the region, starting and implementing the production of new knowledge, their distribution and use, contributing to the financial, economic, legal and information support of innovative processes, dependent on each other and having a stable permanent relationship [5].

Regional authorities manage the activity of the innovation system and direct it, determine the goals, strategy and priorities of its development [6]. The formation of a regional innovation system is a complex and long-term process, during which the policy of state and local authorities should be implemented, which determines the strategy for the formation of this system, and encourages private capital to participate in the innovative development of the region [7]. In a knowledge-based economy, even those regions that were strongly linked by the industrial paradigm can make the transition to an innovative economy in a more or less short time [8]. The success of this transition is possible on the basis of a common focus and network interaction of regional authorities, scientific and educational institutions and infrastructure organizations that support innovative

economic development [9].

The Russian experience of creating a smart city is represented by the SKOLKOVO innovation center and Innopolis in the Republic of Tatarstan. These are the only and most complete examples of the concentration of the latest technologies both in the organization of city life and in the product produced by its population [10].

Thus, a "smart" city is a digital technology that includes comfort and security, which also contributes to saving resources, optimizing road traffic, having public Wi-Fi, distributing gadgets among the population, and developing the Internet of things.

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