

themselves are beginning to use artificial intelligence. AI can notice that someone is trying to access a server at 3 a.m. from another country and block them before a real hack happens. Of course everyone need to do regular software updates, because weakness in older software are like «open doors», but updating closes these «holes».

Secondly, the government should play a main role in protecting critical information infrastructure. This includes establishing strict mandatory requirements for the protection of systems that control power plants, banks and sharing threat information between government agencies, private companies or international partners to quickly respond to new types of attacks.

Also it is important to investing in staff training. Regular training, phishing simulations and improving employees «digital literacy» are the foundation of our security measures.

Digital transformation is a success for our society. But it also brings new security challenges. Cybersecurity is not just a job for IT professionals. It is the key to stability of our economy and society. To live successfully in the digital age, we must not only introduce new technologies, but also know how to protect them. Only by working together we can take advantages of digital transformation while minimizing the risks of being deceived.

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## **SMART-CITY TECHNOLOGIES AND THEIR EFFECT ON THE QUALITY OF THE URBAN ENVIRONMENT**

### **Смарт-городские технологии и их эффект на качество городской среды**

Modern cities face a number of challenges, including population growth, pressure on infrastructure and environmental issues. The concept of the «smart city» has become a key focus in modernizing urban areas. Smart urban technologies consist of digital tools that enhance city administration, increase citizen well-being, encourage the sustainable consumption of resources and increase the variety of available urban services. This research focuses on the consequences of integration these technologies for living standards, ecological health and service affordable.

The introduction of smart technologies has the potential to create a new and improved urban environment through various interconnected components.

1. The Internet of Things (IoT) and data analytics. These technologies use sensor networks to collect real-time data about the state of urban infrastructure, such as street lighting and waste management. For example, in Barcelona, street lights can control their

brightness based on pedestrian activity to save energy. In San Francisco, smart trash cans inform when they're full, helping to optimize collection routes and reduce operating costs.

2. Sustainable urban infrastructure. In smart cities, attention is given to energy-efficient buildings and the use of renewable energy sources. This helps reduce the environmental impact of urban areas and makes cities more vitality.

3. Intelligent transportation systems. Transport is one of the most problematic areas of metropolises such as traffic jams and air pollution. Smart technologies offer the introduction of electric vehicles, intelligent traffic management systems and innovative public transport. Integrating these technologies with transportation systems can boost their efficiency and reduce their environmental impact.

4. Urban Digital Twins (UDTw). These are dynamic virtual models of physical urban environments, enable sophisticated risk analysis and strategic planning. The deployment of these twins increases the sustainability of cities against natural disasters and economic disruptions, by that directly strengthening public safety and citizen quality of life.

5. Citizen engagement. Smart city technologies engage residents in city management through various applications, but this may lead to a potential digital divide. While more people will be actively involved in city life, increasing their satisfaction uneven access to technology among different groups could increase social inequality.

The study showed that modern technologies can greatly improve life in cities. They affect the economy, the environment and society itself. Crucially, these technologies are most effective when they form part of an overall city-wide strategy. This approach requires engaging residents in the process and prioritizing investments in infrastructure, including transportation and communication networks as well as fostering cooperation between the public and private sectors.

Achieving a smart city that is both user-friendly and just for all requires resolving data protection issues and overcoming the digital divide to include all segments of the population.

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## **PROSPECTS FOR THE DEVELOPMENT OF THE DIGITAL ECONOMY IN THE CONTEXT OF GLOBAL COMPETITION**

### **Перспективы развития цифровой экономики в условиях глобальной конкуренции**

Digitalization is becoming a key factor in economic development and the transformation of entrepreneurial activity. The purpose of this work is to study the features