



## THE ROLE OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE DEVELOPMENT OF THE NATIONAL ECONOMY

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**Аннотация.** В данной статье анализируется влияние современных информационно-коммуникационных технологий (ИКТ) на национальную экономику, их применение в различных отраслях и вклад в экономический рост. В статье обсуждаются способы повышения эффективности, рационального использования ресурсов и инновационного прогресса с помощью цифровых технологий.

**Ключевые слова.** Информационно-коммуникационные технологии (ИКТ), Цифровая экономика, национальная экономика, инновации, цифровизация, технологии, развитие, эффективность, индустриализация, электронное правительство, ИКТ-инфраструктура, ИКТ в сельском хозяйстве, промышленная цифровизация, экономика Узбекистана, интернет-технологии, ИКТ стратегия.

**Annotation.** This article analyzes the impact of modern information and communication technologies (ICT) on the national economy, their application in various fields and their contribution to economic growth. The article discusses ways to improve efficiency, use resources wisely and achieve innovative progress with the help of digital technologies.

**Keywords.** Information and communication technologies (ICT), digital economy, national economy, innovation, digitization, technology, development,



efficiency, industrialization, e-government, ICT infrastructure, ICT in agriculture, industrial digitization, economy of Uzbekistan, internet technologies, ICT strategy.

**Annotatsiya.** Ushbu maqolada zamonaviy axborot-kommunikatsiya texnologiyalarining (AKT) milliy iqtisodiyotga ta'siri, ularning turli sohalarda qo'llanilishi va iqtisodiy o'sishga qo'shgan hissasi tahlil qilinadi. Maqolada raqamli texnologiyalar yordamida samaradorlikni oshirish, resurslardan oqilona foydalanish va innovatsion taraqqiyotga erishish yo'llari muhokama qilinadi.

**Kalit so'zlar.** Axborot-kommunikatsiya texnologiyalari (AKT), raqamli iqtisodiyot, milliy iqtisodiyot, innovatsiya, raqamlashtirish, texnologik, rivojlanish, samaradorlik, sanoatlashtirish, elektron hukumat, AKT infratuzilmasi, qishloq xo'jaligida AKT, sanoat raqamlashtirish, O'zbekiston iqtisodiyoti, internet texnologiyalari, AKT strategiyasi.

In the age of globalization and digital technology, ICT has become an important factor in the economic development of each state. Today, ICT plays an important role not only as a means of communication, but also as a means of managing the economy, automating production, digitizing financial services and developing human capital. Therefore, the effective use of ICT is of urgent importance in the sustainable and innovative development of the national economy.

The development of the national economy is a priority goal of any state. In particular, in the 21st century, in the context of accelerated globalization, digital transformation, climate changes and economic crises, many strategic tasks are emerging before national economies. And the effective solution of these tasks requires the development of carefully thought out, scientifically based and practice-oriented strategies [1].



The National Economic Strategy is a long-term planning document aimed at determining the priorities of the country's economy, effective use of resources, ensuring competitiveness and promoting sustainable growth [3].

National reforms implemented in recent years in presidential decrees and resolutions (2017-2024), especially the Strategic Program "Uzbekistan – 2030", a set of official decisions on digital transformation, territorial development and industrial policy. The practical basis of the strategy was used, relying on new directions and strategic decisions of the government. Connects scientific theory with political-practical foundations.

Abdurahmanov Q. Abdurahmanov Q.X. "Strategic management", the textbook is one of the most important and deeply studied works on Strategic Management in Uzbekistan, illuminating the principles of planning at the enterprise and macroeconomic levels. Strategic analysis techniques (SWOT, PEST, Benchmarking) and systematic approach have been used as the main theoretical source in parts. Provides a localized theoretical base of methodology.

Porter M. Porter M.E. Competitive Advantage of Nations. This work by Porter offers modern concepts of a strategic approach based on the theory of national competitiveness. Innovative development has been used as a source in the theory of industries and clusters. Provides an international theoretical base of scientific strategy.

Dunning J. Dunning J.H. "Global Capitalism at Bay?". Dunning provides an in-depth analysis of the capital movement in the global economy and the activities of transnational enterprises. In the global risks and opportunities assessment, SWOT is cited in the context of analysis. Helps to understand global threat and integra

Strategy "digital Uzbekistan-2030". Official document on digital transformation of Uzbekistan. Digital services, IT infrastructure, electronic



management are illuminated. Cited as a key strategic document in the Department of innovation and digital economics. Defines a strategic stage in the transition to an innovative economy.

National Development Strategy-2030. The main strategic document aimed at the long-term socio-economic development of Uzbekistan. The long-term strategic approach has been used to describe the basics and directions. A framework document that defines strategic directions nationwide.

This article will consider methodological approaches, methods of analysis, Practical Examples and modern approaches to the example of Uzbekistan, which are used in the process of developing this strategy.

The economy is a complex system consisting of different subsystems, with networks, regions, and sectors functioning in an interrelated way [3].

Strategic decisions are made based on statistics, forecasts, modeling and analysis. According to the recommendations of the World Bank and the International Monetary Fund, such an approach will increase the reliability of economic policy [4], [5].

Modern strategies are formulated taking into account digital transformation. The use of digital technologies, artificial intelligence and Big Data Increases the effectiveness of strategic analysis.

Several techniques are widely used in the development and formation of economic strategy. For example, SWOT-analysis – is used to identify strong, weak aspects of the economy, opportunities and risks, PEST-analysis-to assess political, economic, social and technological factors, Scenario planning – to develop various development scenarios, Benchmarking – to study Advanced International experience, adapt to national conditions, mathematical modeling – to make forecasts based on economic indicators.



Several basic techniques are used to formulate a national strategy:

For example, consider SWOT-analysis. This method determines the Strong (s), weak (w) aspects, capabilities (O), and risks (T) of the economy. Through this method, the strengths, weaknesses, opportunities and risks of the economy are identified. Dunning specialises in the importance of internal resource and risk assessment in national strategy [7].

To more effectively implement a national economic strategy, proposals are put forward such as strengthening economic forecasting institutions, creating a system of scientific research and expertise-based decision-making, developing separate strategies in cross-regions, introducing digital platforms for real-time socio-economic analysis, monitoring strategy and improving assessment mechanisms.

Strategic planning, based on a scientifically based, modern and systematic approach, is an important factor for the sustainable growth of the economy of Uzbekistan. As Dunning and Porter cite, the basis of competitiveness goes back to an innovative approach and strategic potential [6], [7].

Agrotechnical processes are digitized through ICT. For example, satellite monitoring of land, cost-effective management of water resources, productivity analysis, and quick market pricing information were provided.

Digital control systems (ERP, IoT) are being introduced in factories and factories. This increases production efficiency, reduces errors caused by the human factor, and controls product quality.[8]

Real-time management of Transport movements, reducing costs through automated passenger and freight systems, allows you to optimize the logistics chain.



The possibilities of using financial services through electronic payments, online banking services, digital currencies (CBDC) and financial technologies (fintech) are expanding.[9]

Distance education, online courses, digital libraries and AI-based education platforms are serving to improve the quality of Education.[10]

Modern ICT is an important backbone for the sustainable and innovative development of the national economy. With them, it is possible to achieve efficiency in various areas, create new jobs, increase international competitiveness. Therefore, the promotion of the act as a priority of national development is a strategic task of each state.

#### **Foydalanilgan adabiyotlar ro'yxati:**

1. O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev. "Raqamli O'zbekiston – 2030" strategiyasi va uni amalga oshirish chora-tadbirlari to'g'risidagi qaror. // Lex.uz, 2020-yil.

2. O'zbekiston Respublikasi Statistika agentligi. "Axborot-kommunikatsiya texnologiyalarining iqtisodiyotdagi o'rni" statistik ma'lumotlari. // <https://stat.uz>

3. Jahon banki. "Digital Development Overview" – World Bank Report, 2023. // <https://www.worldbank.org>

4. Xamidov, B. R. (2021). "Axborot-kommunikatsiya texnologiyalari va iqtisodiy taraqqiyot." – Toshkent: Iqtisodiyot va innovatsiyalar nashriyoti.

5. Karimova, D. M. (2022). "Raqamli iqtisodiyot sharoitida milliy iqtisodiyotni rivojlantirish omillari." – O'zbekiston iqtisodiyoti jurnali, №4, 45–52-betlar.

6. UNCTAD (United Nations Conference on Trade and Development). "Digital Economy Report 2023." // <https://unctad.org>

7. OECD (Organisation for Economic Co-operation and Development). "ICTs and Economic Growth: Evidence from OECD Countries." – OECD Publications, 2022.



8. “E-Government Development Index” – United Nations E-Government Survey, 2022. // <https://publicadministration.un.org>
9. Axmedov, S. Q. (2020). “Innovatsion iqtisodiyot va AKTning roli.” – Samarqand iqtisodiyot universiteti ilmiy ishlari to‘plami, №2.
10. Ministry for Digital Technologies of the Republic of Uzbekistan. “AKT sohasidagi islohotlar va raqamlashtirish dasturlari.” // <https://mitc.uz>