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IMPROVING THE QUALITY OF ECONOMIC GROWTH THROUGH THE TRANSITION TO THE DIGITAL ECONOMY

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Abstract: The article emphasizes that the digital economy is rapidly developing across all countries of the world and highlights the urgent need to expand and strengthen the digital transformation process in Uzbekistan. It substantiates the relevance of accelerating the transition to a digital economy as a strategic priority for ensuring competitiveness, improving public services, and modernizing economic sectors. Special attention is given to assessing the impact and contribution of the digital economy to sustainable economic growth, including its role in increasing productivity, enhancing innovation capacity, expanding market accessibility, and improving the efficiency of resource allocation. The findings show that the digital economy is becoming a key driver of long-term economic development and a fundamental component of national economic security.

Key words: digital economy, digital transformation, innovation, sustainable economic growth, competitiveness, digital infrastructure, information technologies.

Annotatsiya: Maqolada raqamli iqtisodiyotning dunyo mamlakatlarida jadal rivojlanayotgani ta'kidlanadi hamda O'zbekistonda raqamli transformatsiya jarayonlarini kengaytirish va kuchaytirish zarurligi asoslab beriladi. Raqobatbardoshlikni ta'minlash, davlat xizmatlarini takomillashtirish va iqtisodiy tarmoqlarni modernizatsiya qilishda raqamli iqtisodiyotga o'tish jarayonini tezlashtirish strategik ustuvor yo'nalish sifatida ko'rsatib o'tiladi. Tadqiqotda raqamli iqtisodiyotning barqaror iqtisodiy o'sishga ta'siri, xususan, mehnat unumdorligini oshirish, innovatsion salohiyatni kengaytirish, bozorlar kirish imkoniyatini yaxshilash va resurslardan samarali foydalanishni kuchaytirishdagi ahamiyati baholanadi. Olingan natijalar raqamli iqtisodiyot uzoq muddatli iqtisodiy rivojlanishning asosiy drayveriga va milliy iqtisodiy xavfsizlikning muhim tarkibiy qismiga aylanib borayotganini ko'rsatadi.

Kalit so'zlar: raqamli iqtisodiyot, raqamli transformatsiya, innovatsiya, barqaror iqtisodiy o'sish, raqobatbardoshlik, raqamli infratuzilma, axborot texnologiyalari.

Аннотация: В статье подчеркивается, что цифровая экономика стремительно развивается во всех странах мира, и обосновывается необходимость расширения и усиления процессов цифровой трансформации в Узбекистане. Отмечается, что ускорение перехода к цифровой экономике является стратегическим приоритетом для обеспечения конкурентоспособности, повышения качества государственных услуг и модернизации экономических отраслей. Особое внимание уделяется оценке влияния и вклада цифровой экономики в устойчивый экономический рост, включая её роль в повышении производительности труда, укреплении инновационного потенциала, расширении доступа к рынкам и повышении эффективности распределения ресурсов. Полученные результаты показывают, что цифровая экономика становится ключевым драйвером долгосрочного экономического развития и важнейшим компонентом национальной экономической безопасности.

Ключевые слова: цифровая экономика, цифровая трансформация, инновации, устойчивый экономический рост, конкурентоспособность, цифровая инфраструктура, информационные технологии.

INTRODUCTION

The main strategic task of economic transformation in the Republic of Uzbekistan is to deepen structural changes and ensure sustainable economic growth based on the country's competitive advantages. In this context, it is not sufficient to achieve only high quantitative growth rates; the key priority is to secure a qualitative shift in favor of processing and high value-added sectors. This, in turn, requires intensifying the search for new and efficient sources of growth that can support long-term structural modernization of the national economy. Such strategic directions include:

- expanding the production of non–raw material goods aimed at export growth and import substitution;
- stimulating the emergence of new economic sectors and accelerating innovation-driven diversification;
- improving the investment climate and expanding the scale and quality of investment inflows;
- strengthening analytical research on issues of sustainable and high-quality growth, which is especially crucial for countries with a low-diversified economic structure, including Uzbekistan.

REVIEW OF LITERATURE ON THE SUBJECT

The relationship between the quality of economic growth and the digital economy is one of the most relevant scientific areas in the modern world economy, and its theoretical and practical aspects have been widely studied by foreign and domestic scientists. The works of leading scientists who have scientifically analyzed the phenomenon of the digital economy, D. Tapscott, E. Brynjolfsson, A. McAfee, K. Schwab, R. Bukht and R. Heeks, are of particular importance. They scientifically substantiated how digital technologies, «big data», Internet platforms and artificial intelligence increase the efficiency of economic processes, transform labor productivity and, as a result, affect the quality of economic growth. In particular, Brynjolfsson and McAfee (2016) emphasized that digital technologies create a «quality phase» of economic growth by changing the model of value creation in the labor market, increasing productivity and innovative activity. Schwab (2018) interprets the digital economy as the main driver of the Fourth Industrial Revolution and considers that digitalization creates the basis for the transition of the economy to a new structure.

Internationally studied models of the digital economy and the quality of economic growth are widely covered in reports by ITU, OECD, UNCTAD and the World Bank. In particular, the ITU Digital Development Index and the OECD Digital Economy Outlook report assess the development of digital infrastructure, the share of digital services, digital trade and digital competencies as key indicators of the quality of economic growth. According to UNCTAD's Digital Economy Report (2023), the development of the digital economy has a direct positive impact on the quality of growth through diversification of the industry structure, efficient use of resources and increased innovative capacity.

Researchers from the CIS and Europe - A. Aptekar, V. Inozemtsev, D. Belov, Ya. Kuzmin et al. studied the impact of digital infrastructure on economic growth using an institutional approach. They emphasize that the effectiveness of digital transformation is closely related to the political and legal environment, digital inequality, cybersecurity, and the level of digital literacy.

In Uzbekistan, important scientific work has been carried out on the issues of digital economy and economic growth by Nazarov K., Yusupov M., Usmonov B., Mamashev A., Isakov A. and other local researchers on the improvement of digital infrastructure, the development of digital public services, and the impact of changes in the digital trade and IT services market on economic growth. The identification of the digital economy as the main driver of improving the quality of economic growth in the “Digital Uzbekistan – 2030” strategy also strengthens the practical importance of scientific research in this area.

Thus, the topic of increasing the quality of economic growth through the transition to a digital economy is well studied internationally, but for transformation economies, especially in the conditions of Uzbekistan, it is one of the most relevant research areas that requires comprehensive scientific and practical solutions.

The formation of a new economic model requires a balanced approach that integrates both traditional and modern drivers of economic development. On the one hand, material resource accumulation, demographic dynamics, technological progress, and productivity growth remain essential sources of expansion. On the other hand, stable and long-term economic advancement demands an effective combination of human capital, natural resources, and physical capital. These factors must interact within a coherent institutional framework capable of generating innovation, enhancing competitiveness, and supporting structural upgrading of the economy.

Thus, the challenge for Uzbekistan is not only to accelerate growth but also to transform its qualitative foundations by strengthening industrial potential, modernizing production capacity, and developing new technological competencies that meet global standards.

Studies indicate that in the near future the digital economy will encompass a substantial share of global economic activity, fundamentally reshaping production, consumption, and governance models. With the rapid expansion of digital media — including the Internet, mobile communication devices, cloud systems, and all other technologies that enable the collection, storage, analysis, and transmission of data — information can now be reproduced, processed, and distributed quickly, accurately, and at minimal cost. Consequently, digital technologies have become the core instrument for managing socio-economic “diffusions,” accelerating innovation cycles, and transforming entire sectors of the economy.

In its broadest definition, the concept of digitization refers to a comprehensive socio-economic transformation driven by the mass introduction, adoption, and integration of digital technologies — technologies that support the creation, processing, exchange, and transmission of information. This transformation is fundamentally

shaped by advances in microelectronics, information technologies, and telecommunications and represents a natural evolutionary stage in the development of human civilization. From this perspective, the transition of the modern economy toward a digital format is no longer an anomaly or an experimental phase, but a global and irreversible trend.

Empirical observations further demonstrate that leading economies have already entered a stage in which digitalization constitutes a core component of economic growth. Current global practice shows that “on average, digitalization accounts for 18% of IT expenditures, while for market leaders this figure ranges from 34% to 44%, and projections indicate that it may reach 28% by 2021.” These indicators confirm that the digital transformation of the economy is not only objective and inevitable but also a competitive necessity for all countries aspiring to sustain economic growth and integrate into global value chains.

E. Toffler, in his influential works, emphasized that “computers, mobile phones, and similar technologies undermine traditional notions of infrastructure priorities.” According to Toffler, in the digital economy the primary driving force is no longer electricity, transportation networks, or physical assets, but data. Information — its quality, accessibility, speed of processing, and security — becomes the principal strategic resource of modern development. This paradigm shift means that solutions to economic problems increasingly lie not in expanding physical capacities, but in enhancing data systems, digital competencies, and technological connectivity.

The study of the relationship between economic growth and the directions of socio-economic development has long occupied a central place in the works of economists from various theoretical schools. Classical and neoclassical scholars emphasized capital accumulation, labor resources, and technological progress as the fundamental drivers of growth. J. Schumpeter made a significant contribution by demonstrating that economic dynamics and long-term growth rates are determined primarily by innovative activity, entrepreneurial behavior, and technological “breakthroughs.” Likewise, F. List highlighted the role of state policy and national economic strategies in stimulating structural development, considering the active involvement of national institutions as a key prerequisite for sustained growth.

Institutional economists further developed Schumpeter’s approach, emphasizing that technological change is not only a factor of production but also an institutional process shaping the trajectory of economic evolution. They argued that the emergence and diffusion of basic technologies — from industrial mechanisms to digital systems — fundamentally influence the structure, direction, and quality of economic development within society. In this context, economic growth is viewed not simply as a quantitative increase in output but as a qualitative transformation rooted in modernization and innovation.

In Uzbekistan, key aspects of economic growth have been actively studied in the scientific works of I.I. Iskandarova, A.M. Kadyrova, N.M. Makhmudova, A.F. Rasuleva, G.K. Saidova, S.V. Chepel, I.S. Tukhlieva, T.Sh. Shodieva, M.M. Irmatova, D.V. Trostyansky and other researchers. These scholars explored structural transformation, investment policy, human capital development, technological modernization, and institutional reforms affecting national economic growth. Their studies enriched the understanding of the mechanisms and priorities of sustainable development within the context of Uzbekistan’s transition economy.

Despite these contributions, a number of issues remain unresolved. Many foreign studies focus primarily on the cyclical development of advanced industrial economies and therefore fail to reflect the specific conditions of transition economies, where market institutions, innovation systems, and structural policies are still evolving. On the other hand, certain CIS-based research restricts its analysis to national peculiarities and socio-cultural features, without offering comprehensive answers to the deeper challenges associated with the quality of economic growth within transformational systems.

RESEARCH METHODOLOGY

The research methodology is based on the collection of empirical and analytical data from international databases, national statistical reports, and regulatory documents, complemented by findings from academic literature. The study applies comparative analysis, trend evaluation, and structural assessment methods to examine the relationship between digital transformation and the quality of economic growth, enabling the identification of key patterns and determinants shaping Uzbekistan’s developmental trajectory.

ANALYSIS AND RESULTS

Important aspects — such as the conceptual content of “quality of growth,” the relationship between qualitative and quantitative dimensions of development, the prioritization of state policy in achieving optimal long-term growth, and the mechanisms for improving economic efficiency while ensuring inclusiveness — remain insufficiently studied. This points to the need for more holistic and interdisciplinary research capable of integrating macroeconomic analysis with institutional, technological, and social factors influencing the sustainability and quality of economic development.

In order to fully utilize the potential for national economic development, it is essential for Uzbekistan to establish a qualitatively new mechanism capable of ensuring both the potential and real opportunities for achieving high and sustainable economic growth rates. Such a mechanism must integrate structural modernization, technological renewal, and the efficient use of human and natural resources. Naturally, this process is not without shortcomings and systemic constraints. One of the key issues in formulating new strategic directions is that their economic dimensions remain insufficiently explored, which increases the need to clearly define growth priorities, identify relevant indicators, and apply modern forecasting models capable of capturing long-term development trajectories.

The most important determinants of the quality of economic growth in Uzbekistan are the socio-economic benefits derived from growth itself, especially those gains that directly improve the welfare of the population. In assessing growth quality, it is therefore advisable to consider not only aggregate GDP expansion but also the increase in household disposable income — that is, the income consumed in the current period rather than the portion deferred to the future. This approach enables a more adequate evaluation of how economic development translates into improved living standards, social stability, and long-term prosperity.

Within this context, Uzbekistan's transition to a digital economy serves as an essential catalyst for enhancing the quality and sustainability of economic growth. The widespread introduction of digital technologies — including electronic services, digital payments, modern information systems, and automated management tools — expands economic efficiency, strengthens institutional transparency, and accelerates productivity growth across sectors. As a result, digital transformation provides a new impulse for ensuring stable, inclusive, and innovation-driven economic development, reinforcing the structural foundations necessary for the country's long-term growth model.

The impact of digital technologies is evolving significantly, both globally and locally. On the one hand, the digital economy as a new industrial complex is a rapidly growing part of the global economy in the traditional sense, and the development of new technologies in recent years has led to the emergence of huge markets for mobile communications, Internet services, online gaming industry and more (Figure 1).

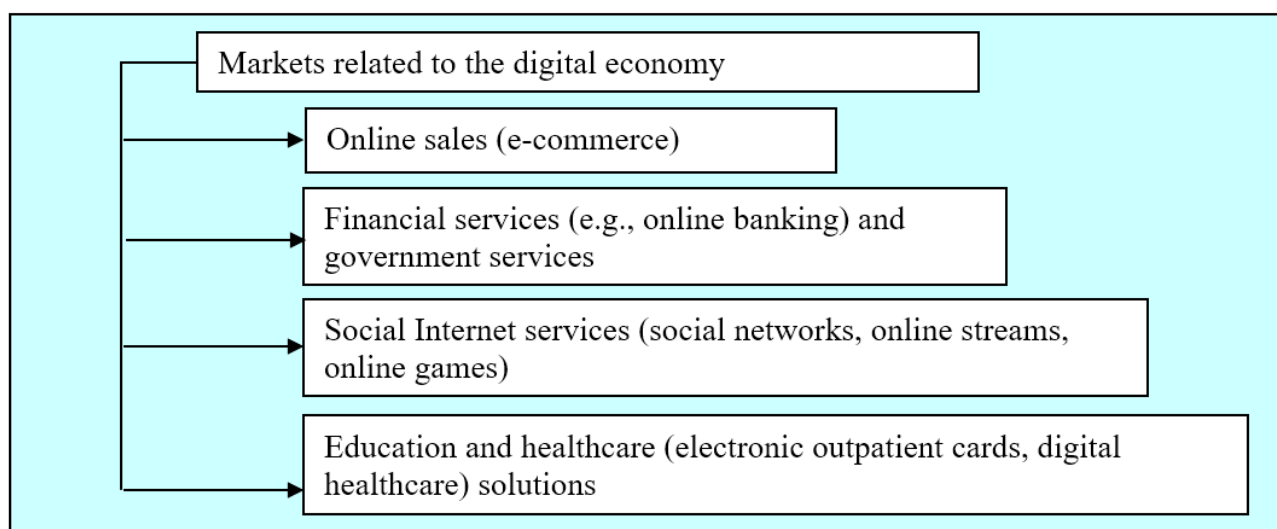


Figure 1. Markets related to the digital economy¹

The digital economy is expanding at an exceptionally rapid pace, with annual growth averaging around 10 percent — a rate three times higher than the overall global economic growth. According to international assessments, the global digital economy accounted for more than USD 24 trillion in e-commerce turnover in 2015, representing nearly 30 percent of all global economic transactions, the majority of which were conducted via mobile digital technologies. In advanced economies, the digital sector contributes approximately 4–7 percent of GDP, while countries such as Ireland (11.9%), South Korea (9.6%), and Japan (8.1%) rank among the global leaders. Meanwhile, Austria (3.8%) and Norway (3.9%) demonstrate comparatively lower digital value-added shares, illustrating the significant divergence in digital development levels across nations.

Expanding access to an open and globally integrated Internet environment is expected to accelerate economic growth, stimulate the creation of new high-skilled jobs, and enhance opportunities in e-commerce and digital trade. Achieving such outcomes largely depends on government-led initiatives — regulatory frameworks,

¹ Source: Created by the author

digital infrastructure modernization, cross-border ICT cooperation, tax incentives, and policies aimed at fostering innovation ecosystems. These measures enhance the absorptive capacity of national economies and support their transition toward more productive, knowledge-based development models.

The formation of a modern information-telecommunication system is fundamentally reshaping management paradigms. Its conceptual core involves shifting from fragmented, network-type control mechanisms to targeted, data-driven management approaches based on digital technologies. This shift requires revisiting and updating traditional criteria for business success, particularly in the context of digital transformation. Global estimates suggest that the digital economy will introduce transformational changes to more than 50 percent of all major economic sectors, including finance, transport, industry, healthcare, and education.

The digital economy is simultaneously generating an entirely new digital space — one that functions as a key driver of economic growth and dramatically expands access to large volumes of structured and unstructured data. “Big data” is becoming a strategic national asset, equivalent in value to technological, financial, and natural resources. For the state, it enhances governance efficiency; for businesses, it improves competitiveness and innovation capacity; and for civil society, it facilitates transparency and participation. Digital platforms, as the core infrastructure of the new economic model, make it possible to address complex global and social challenges, from optimizing logistics flows to improving public service delivery, environmental monitoring, and socio-economic forecasting (Figure 2).

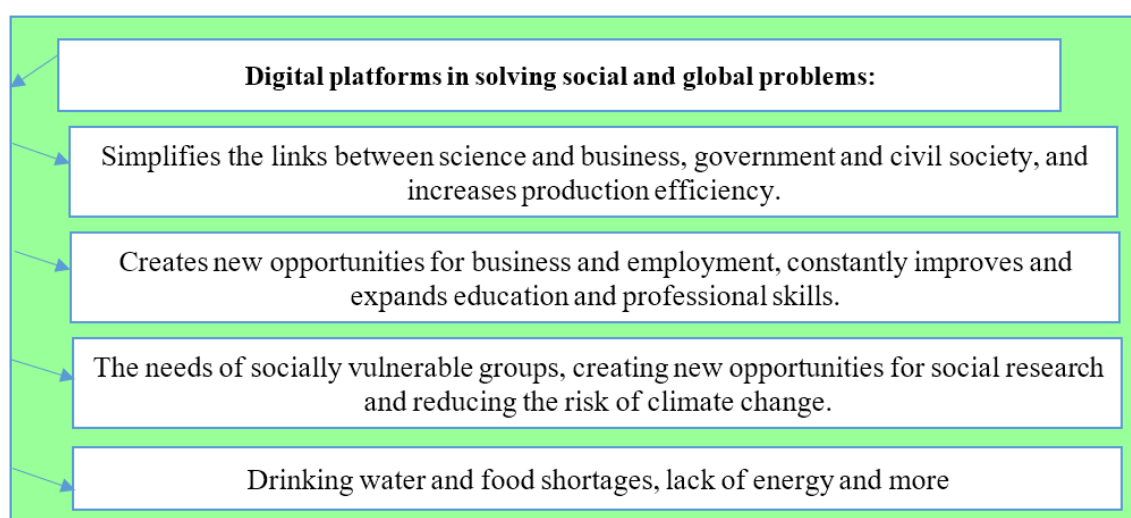


Figure 2. The role of digital platforms in solving current social and global problems²

Uzbekistan is also working to introduce a digital economy. In particular, Uzbek scientists say: «Great work is being done in our country to develop the digital economy In the digital economy, digital data is a key element of production in all socio-economic spheres, and the gradual transition to such an economic system It will further increase, create new jobs, accelerate economic growth and ensure national independence».

However, in the process of introducing the digital economy, special attention should be paid to the following:

- trade barriers;
- protection of personal data;
- transmitted data;
- new risks associated with payment mechanisms.

The Concept of Socio-Economic Development of Uzbekistan until 2030 outlines several strategic priorities aimed at ensuring long-term macroeconomic stability and sustainable economic growth. These priorities include strengthening the competitiveness of key sectors of the national economy, expanding investment and export potential, creating a favorable and protected environment for business development, reducing labor market tensions, increasing incomes, and effectively addressing poverty. Achieving these objectives requires deep structural reforms, modernization of production capacities, and the introduction of innovative mechanisms capable of increasing economic resilience in the face of global challenges.

It should be emphasized that the rapid expansion of the digital economy is closely linked to the emergence, improvement, and transformation of various markets directly associated with digital and mobile technologies. Digital platforms, e-commerce ecosystems, fintech services, and mobile applications are reshaping the architecture of modern markets, increasing their transparency, dynamism, and integration into global value

² Source: Created by the author

chains. These changes significantly influence productivity, transaction costs, competition, and overall economic efficiency, thereby reinforcing the role of digitalization as a critical component of Uzbekistan's future economic model.

The accelerated production of new knowledge, the expansion of digital competencies, and the integration of digital economic activity with traditional industries are becoming a decisive new economic force. The convergence of digital and real sectors creates hybrid economic models — combining technology, data management, and traditional production — that can generate high added value and enhance the country's global competitiveness. Therefore, the formation of a knowledge-based and digitally oriented economy requires special attention, coordinated public policy, and targeted investment in human capital, innovation infrastructure, and technological modernization.

CONCLUSIONS AND SUGGESTIONS

The analysis demonstrates that the long-term sustainability and quality of Uzbekistan's economic growth depend on the country's capacity to implement deep structural modernization, accelerate technological renewal, and systematically integrate digital transformation into all sectors of the economy. While traditional growth factors such as capital accumulation, labor dynamics, and productivity remain important, they are no longer sufficient to ensure competitiveness in a rapidly changing global environment. The transition to a digital economy — supported by modern infrastructure, data-driven governance, and advanced technological competencies — emerges as a decisive driver capable of enhancing efficiency, expanding value creation, and strengthening institutional transparency.

International experience and empirical evidence confirm that digitalization generates substantial positive externalities, including higher productivity, reduced transaction costs, improved innovation capacity, and increased inclusiveness of economic development. For Uzbekistan, these effects are particularly significant given the country's ongoing transformation toward a diversified, knowledge-based economic model. The adoption of digital platforms, the expansion of ICT services, and the development of human capital form the core foundation for achieving a qualitative shift in economic growth.

At the same time, the study highlights the need to address systemic constraints related to institutional readiness, digital inequality, regulatory capacity, and cybersecurity challenges. Ensuring the effective implementation of digital reforms requires coherent public policy, strategic investment in innovation ecosystems, and the modernization of legal and infrastructural frameworks. Strengthening these foundations is essential for translating digital transformation into tangible socio-economic benefits, particularly in terms of higher household incomes, improved welfare, and expanded opportunities for participation in global value chains.

Overall, the successful integration of digital technologies into Uzbekistan's development trajectory will determine the country's ability to sustain high growth rates, enhance competitiveness, and build a resilient and adaptive economic structure. The digital economy thus represents not only a technological shift but a strategic pathway for improving the quality, inclusiveness, and long-term stability of Uzbekistan's economic growth model.

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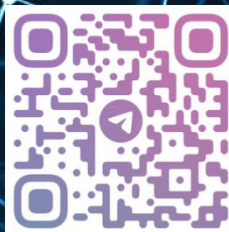
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