http://www.moderntechno.de/index.php/meit/article/view/meit36-00-044
DOI: 10.30890/2567-5273.2024-36-00-044

UDC 338.9

DEVELOPMENT OF DIGITAL STRATEGIES FOR EFFICIENT BUSINESS OPERATIONS IN UKRAINE

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Abstract. *The article examines the importance of modern digital strategies as a key tool for stimulating socially significant business development, especially in the context of the functioning of national innovative enterprises. In today's environment, digital technologies are not only a means of optimizing business processes, but also a basis for creating new business models that help to increase the competitiveness of enterprises in global markets. Businesses are increasingly focused on achieving the end result, which includes not only economic performance but also the social value of their activities. This creates the main conditions for the active implementation of innovative processes, the development of new products, services, and technologies, as well as the implementation of large-scale projects on digital platforms.*

Keywords: *digital transformation of enterprises, assessment of the digital economy, innovative business development.*

Introduction.

The global economy is experiencing intense competition for leadership in digital technologies, and lagging behind in this area can have serious negative consequences for any country. This applies not only to the economic sphere, but also to social and political development, as digital technologies are increasingly influencing all aspects of social life.

Digitalization is driving innovation, competitiveness, and sustainable economic growth. The integration of digital technologies allows businesses to reduce costs, optimize production processes, enter new markets, and create products and services that were previously unattainable. This is especially important for entrepreneurs and small and medium-sized businesses, which can use digital tools to scale their business without significant capital investment.

Small and medium-sized businesses (SMEs) are gaining tremendous growth potential thanks to digital technologies. E-commerce tools allow them to enter global markets, and business process management platforms automate key functions such as financial accounting, inventory management, or customer communication. The use of big data analytics and artificial intelligence enables entrepreneurs to better understand their customers and make informed business decisions.

Countries that are unable to adapt to digital challenges risk being left on the periphery of the global economy. This can lead to a decrease in investment attractiveness, a decline in exports, job losses, and a general deterioration in economic performance. Lack of access to digital technologies also creates inequalities between regions and social groups, which can exacerbate existing social problems.

To compete successfully on a global scale, countries need to invest in the development of infrastructure, provide quality education for IT professionals, stimulate innovation, and support entrepreneurs. In addition, creating a favorable legislative environment for the development of digital solutions, such as e-commerce, cloud services, and artificial intelligence, is critical.

Main text.

Ukraine's National Digital Strategy reflects the country's economic development, innovative enterprise creation, employment growth, and public sector modernization. Approved by the Cabinet of Ministers on October 28, 2020 (Order No. 1353-r), the strategy outlines the integration of digital innovations into the economy and social life, fostering digital transformation in governance and business to enhance global competitiveness [1]. Its comprehensive approach focuses on sustainable development, international competitiveness, and improving citizens' quality of life.

1. Digitalization of the economy. The transition to digital technologies in all sectors of the economy will help optimize production processes, increase efficiency, and reduce costs. In agriculture, this may include the introduction of precision farming, in the energy sector – smart grids, in transportation – automation of logistics processes and the creation of smart transportation systems. The financial sector is already actively using digital solutions, such as mobile banking, e-commerce, and blockchain technologies, which are becoming the basis for the development of new business models.

2. International integration. Ukraine seeks to become an active participant in the global digital market by integrating its business processes into international production and trade chains. This requires creating unified standards, harmonizing legislation with international norms, and developing cooperation with the world's leading technology companies. Such steps open up access to new markets and facilitate the export of innovative solutions.

3. Development of digital infrastructure. Modernization of digital infrastructure is the basis for successful digital transformation. Priority tasks include providing access to high-speed Internet in every corner of the country, including rural and remote areas, developing 5G networks and building data centers. This will create equal opportunities for all citizens and businesses, help attract investment in the regions and develop smart technologies.

4. Digitalization of public administration. E-government simplifies the interaction of citizens and businesses with government agencies. The creation of intuitive and convenient online services, such as business registration, paperwork, and filing declarations, will reduce bureaucracy and increase transparency. Open data, in turn, stimulates the development of innovative startups that use this data to create socially useful products.

5. Development of digital skills and education. Training qualified personnel for the digital economy is a key element of the strategy. This involves the introduction of digital technologies in school and university education, the development of online courses to improve the skills of employees, and the promotion of digital literacy among the population. In addition, the development of professional retraining

programs will help to adapt employees to the new realities of the digital economy.

6. Cybersecurity and data protection. In the digital age, cybersecurity is one of the key factors of stability. Ukraine is working to build a strong cyber defense infrastructure, introduce artificial intelligence technologies to detect and counter cyber threats, and ensure the protection of citizens' personal data. Investments in this area will help prevent losses and increase trust in digital services.

7. Favorable environment for investment. Stimulating investment in innovative technologies involves creating a transparent legal framework that regulates digital markets, supporting startups through government grants and financing, and developing mechanisms to attract foreign investors. This will contribute to the development of high-tech sectors and increase Ukraine's export potential.

8. Improving the efficiency of public administration. The digitalization of healthcare, education, and social welfare can significantly optimize processes. For example, the introduction of electronic medical records reduces the time spent on patient care, and digital platforms for online learning expand access to education, even in remote areas.

Ukraine's National Digital Strategy seeks to integrate digital technologies, enhance citizens' quality of life, drive sustainable growth, and foster a competitive business environment. Its implementation aims to position Ukraine as a regional leader in digital transformation, promoting innovation, global cooperation, and development. However, challenges such as the COVID-19 pandemic and a full-scale invasion have accelerated digitalization, enabling some industries to adapt while others faced closures.

Ukraine is integrating information systems in key sectors like healthcare, education, public services, and tourism. In education, modern pedagogical and information technologies have led to new teaching methods, including distance learning. Future plans include expanding broadband networks, fiber-optic communication lines, and base stations nationwide, as well as creating multimedia studios, reference centers, and data processing centers.

According to the UN, in the 2024 E-Government Development Index (EGDI) ranking, Ukraine was ranked first in the world in terms of citizen engagement in government online services, which is a great achievement for the country [2]. The last five years have been a period of significant progress, with Ukraine rising from 102nd to 5th place in terms of digital services. This success is the result of a targeted digitalization policy, including initiatives such as Diia, which have become powerful tools for state transformation.

The concept of the “State in a Smartphone”, which used to seem like a distant dream, is now a reality, and Ukraine is at the top of the global digitalization rankings. The success of this project is underlined by the high level of public trust in government services – more than 21 million Diia users are already actively using its capabilities. Digitalization has become one of the most successful reforms in Ukraine, providing citizens and businesses with access to convenient and fast public services through mobile applications [3].

A special place among these services is occupied by the Diia. Business platform, which was developed to support entrepreneurs and simplify their interaction with

government agencies. The platform is focused on the digitalization of business processes and provides opportunities for doing business with minimal time and resources.

The main areas of Diia. Business development include:

1. Digitalization of Business Processes: The platform enables entrepreneurs to register businesses, submit tax and reporting documents, pay taxes, and access administrative services online. This significantly reduces the time and costs associated with traditional document management, allowing businesses to focus more on growth rather than administrative tasks.

2. Support for Small and Medium-Sized Enterprises (SMEs): Diia. Business offers a variety of tools to help SMEs optimize and automate their processes. It also provides access to free online resources and consultations, which are particularly useful for new entrepreneurs or those facing challenges in managing their businesses.

3. Support for Startups: A key goal of Diia. Business is to assist startups and new businesses. The platform allows for quick business registration and offers access to funding opportunities, grants, and partnerships that help foster innovation and business growth in Ukraine.

4. Information and Consulting Support: Diia. Business keeps entrepreneurs updated on changes in legislation, new opportunities, and business requirements. The platform also provides resources for training, ensuring business owners stay informed about evolving rules and standards in the digital economy.

5. Integration with Other Government Services: The platform integrates with other e-services such as Diia for Citizens, offering entrepreneurs easy access to additional government services, including pensions, social benefits, and various licenses and permits.

6. Expanding Functionality: Diia. Business is continuously expanding with new features aimed at improving business operations. These include automated reporting, the ability to obtain licenses and permits online, and integration with financial systems, facilitating smoother data exchange between government agencies and businesses, making the business process more transparent and efficient.

The development of Diia. Business not only simplifies business processes but also significantly impacts the Ukrainian economy. It boosts efficiency, competitiveness, attracts investment, improves the business climate, and supports Ukraine's integration into the global economy.

Post-war global transformation and the pursuit of the 2030 Sustainable Development Goals will require a shift in social governance approaches, redefining the role of government and its collaboration with civil society and the private sector. Information and communication technologies, along with e-government, can provide all population segments access to sustainable development opportunities. As data processing methods evolve, society benefits from increased efficiency and resource conservation (Table 1).

Employment criteria are crucial in the digital economy, influencing job structures and the development of new professions and skills. Researchers like D. Bell, K. Ledbetter, and P. Drucker examined labor market changes driven by new technologies. They highlighted that the knowledge and technology industry reshapes

qualification requirements and introduces new employment forms, such as remote work, freelancing, and part-time jobs.

Table 1 – Criteria for Analyzing the Digital Economy

Criteria for analyzing the digital economy	Details
1	2
Employment criteria	- Employment rate in digital sectors of the economy - Creation of new jobs in technology companies - Skills and qualifications of the labor force for work in the digital economy
Spatial criteria	- Geographic access to digital technologies - Availability of Internet infrastructure in different regions - Distribution of digital resources at the national and international levels
Economic criteria	- Contribution of the digital economy to gross domestic product (GDP) - Level of investment in digital technologies - Efficiency of using digital technologies to increase profits and reduce costs
Technological criteria	- Degree of development of infrastructure for digital technologies (networks, servers, etc.) - The level of implementation of innovative technologies (artificial intelligence, blockchain, Internet of Things) - Availability of the latest technologies for businesses and consumers

Authoring

Spatial criteria are crucial in the digital economy, as geographic location impacts access to technology and resources. Many digital economy concepts analyze spatial factors, such as varying levels of Internet access, technological infrastructure, and educational opportunities across regions and countries. This is especially important for rural and remote areas, where digital resource access is limited. Spatial criteria also examine how regions attract investment in digital technologies, influencing their economic development and opportunities for businesses and residents.

Economic criteria are vital for evaluating the digital economy's effectiveness, as they reflect the value generated by data creation, processing, storage, and transmission. Data is a key resource for business development, optimizing production, improving services, boosting competitiveness, and attracting investment. The economic impact of digital technologies can be amplified through effective data monetization, including new business models like subscriptions, data exchange platforms, and the use of big data and analytics to predict trends and optimize processes.

Technological criteria in the digital economy focus on how new technologies impact business and society. Information and communication technologies (ICT)

drive digital economy development, offering new opportunities for businesses and citizens. Innovations like artificial intelligence, blockchain, IoT, and big data analytics enable process automation, improved decision-making, and the creation of new products and services. These technologies reduce production costs, enhance service and product quality, and create new business models on digital platforms. Their accessibility allows small and medium-sized enterprises to compete effectively.

Despite the importance of research and innovation, R&D investments are often insufficient, limiting the development and implementation of high technologies in the economy. At low TRL stages, companies can engage in R&D with minimal costs, as innovations are tested in labs or pilot projects [4]. However, as technologies advance to higher TRL levels, significant investments are needed for scaling, testing, and commercialization, with potential failures requiring additional resources.

In such circumstances, private enterprises are often unwilling to invest in high-risk research, as such investments may not pay off in the short term. This creates a situation where innovative technologies do not develop at the proper level, and the country loses its competitiveness in the global high-tech market.

The state has strong reasons to invest in R&D, as it helps address market imbalances. Joint investment by the state and businesses overcomes financial barriers, ensures technological readiness, and accelerates the commercialization of innovations. Public funding at high TRL levels reduces risks for private companies and supports the innovation process. The government can also promote infrastructure for testing new technologies, offer tax incentives and subsidies for startups, and create innovation zones for quick product introduction. Government support is crucial for ensuring access to big data and technological resources for research, enabling widespread innovation.

Digital transformation offers great opportunities but also presents challenges, such as adapting to rapidly changing technology, ensuring data security, developing new skills, integrating new technologies, and overcoming staff resistance to change. It is outpacing the development of relevant rules and regulations. Governments should regularly review and update legal and regulatory frameworks to keep pace with the digital world.

Conclusions.

Despite the rapid growth of the ICT sector, integrating information technologies in business remains challenging due to slow adoption of electronic services, lack of mechanisms for document digitization, technical and organizational issues, and varying digital literacy levels. A key issue is the generational gap in digital skills, with younger employees adapting more easily to new tools, while older or more conservative employees struggle. Additionally, many businesses, especially small and medium-sized enterprises, face outdated IT infrastructure that requires costly upgrades.

A conservative attitude and fear of job loss due to automation are major barriers to digital transformation. To address these, businesses should focus on staff training to improve digital literacy, facilitating quicker adaptation to new technologies and reducing resistance. Partnering with leading technology providers can help access advanced solutions and minimize risks. Using modern software for business process

automation and resource management optimizes operations and boosts efficiency.

An essential step is creating or integrating electronic document management systems to reduce paper costs, increase transparency, and simplify document handling. Additionally, fostering a culture of innovation that supports new technologies and encourages change is crucial. Incentive programs, such as bonuses for active participation in digitalization, can help. Successful ICT integration requires a comprehensive approach combining technical investments, employee skill development, and process adaptation, enabling businesses to stay competitive and efficient in the digital age.

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Article sent: 27.12.2024