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DIGITAL ECONOMY TRANSFORMATION MODEL: EXAMPLE OF UK AND OBSTACLES IN UZBEKISTAN'S CASE

Abstract

The digital economy currently covers all spheres of life, so the question of its study is relevant for all countries' economies, and the transition from the existing model of the economy to a new model of the digital economy helps to increase economic freedom, increase income and living standards of the population. In this regards, studying transformation model of developed countries is much emphasized in developing countries.

Objective: to study digital transformation model of UK and discuss barriers for its development in Uzbekistan, as well as presenting some recommendations to enhance the transformation process.

Methods: generalization, observation and data grouping.

Results: as a result of this research, deep understanding of UK's digital transformation can be imagined. Also, some recommendations has been identified to envisage Uzbekistan's future digital transformation way.

Scientific novelty: this article uses the decree of the Republic of Uzbekistan "On Measures for the Development of Digital Economy in the Republic of Uzbekistan" to figure out solutions to accelerate digital transformation.

Practical significance: article can be used to learn from Great Britain's digital economy transformation strategy and recommendations as well as conclusions can give practical ideas to advance Uzbekistan's current digital transformation.

Keywords: digital transformation, internet, strategy, model, information communication technologies, digital economy.

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Introduction

The established definition of the term "digital economy" does not exist, and various scientists approach the interpretation of this concept from different perspectives. In particular, the authors of many studies [1] define the digital economy as a combination of technologies that transform the system of socio-economic relations. Other scientists [2; 3] identify the digital economy as a system of high-tech elements that can stimulate innovative economic growth.

To understand the structure of the economic model, the strategies of Great Britain were considered. Based on the index of "economic freedom", the data of which were provided for the annual study of an independent company, in relation to other countries, the relationship between the freedom of the economy and the success

of its development was examined. Therefore, the prerequisites for the transition to a digital economy can be considered a rapidly growing innovation in the field of IT around the world. Countries pursuing the policy of economic freedom create favorable conditions for trade, entrepreneurship and innovation, which generate economic growth. In the "free" countries, innovations in the field of IT technologies are more developed. Such countries have a larger national income, therefore [4]. The policy of economic freedom creates favorable conditions for the development of the IT industry, which is considered the fast-growing industry in recent years in many countries of the world. Thanks to digital telecommunications, which include modern digital innovations, a model of the digital economy is often called the digital future [5].

Another undoubted driver of the digital economy is new technologies, including cutting-edge robotic technology, autonomous vehicles, three-dimensional printing, renewable energy, new materials and substances, blockchain technology, cloud computing, the Internet of things, data analytics, etc. [6; 7]. At the same time, innovative information and communication technologies enable non-stop connectivity, online presence and high-speed operation. Thus, in the following, the UK's transformation into digital economy will be illuminated.

Main idea of the research

Digital economy in Great Britain. Great Britain has always been an absolute world leader in the level of development of information technology. Relying on them and having a solid foundation laid down by the long development of industry, as well as thanks to the special attention and support from the government, the digital economy has helped the country overcome difficulties after the financial crisis and has given rise to rapid economic growth. The Digital United Kingdom plan set clear goals for the introduction of modern technologies, defined concrete measures in terms of financial investments, construction of infrastructure, establishment of governing bodies, accelerated the pace of implementation. Major investments in infrastructure and architecture, digital security have laid a solid foundation for the subsequent development of the digital economy. Particular attention was paid to “creating an environment for innovation in digital culture” and “providing digital content to the public”. They became the main catalyst for the development of the cultural industry and the shared economy. Therefore, the publication of the “Digital UK” plan can be considered as the official starting point for the development of the digital economy in the country.

Information Economy Strategy 2013: Four main development goals. In 2013, the government proposed the Great Britain's Information Economy Strategy. Being aimed at building a booming information economy, she identified four main goals:

- 1) to form a strong innovative branch of the information economy and spread it around the world;
- 2) to stimulate the country's enterprises, especially small and medium-sized businesses, to use information technologies;
- 3) provide the population with the benefits of digital technology;

4) guarantee the development of the information industry through the training of qualified personnel and the creation of infrastructure.

This strategy is closely related to the “Digital UK” strategy, but here, among other things, the digital economy is analyzed with a focus on the changes that digitalization has brought to the development of the industry. The document set goals for the development of the information economy for the coming period based on an analysis of current development, future opportunities and challenges.

In March 2017, a new UK Digital Strategy was released. The document contains a comprehensive and thoughtful plan to transform the country after Brexit into a leading global digital economy. According to the strategy, the contribution of digitalization to the UK industry should increase from £ 118 billion in 2015 to £ 200 billion in 2025, which indicates great expectations.

The UK strategy can be divided into seven parts, each of which contains activities and decisions on their implementation.

First – is communication network. The strategy is aimed at creating a world-class digital infrastructure, accelerating full network coverage, creating a high-speed optical network and 5G network, as well as ensuring that every citizen has access to broadband communications.

Second – is a strategy in terms of digital skills and inclusiveness, aimed at improving the information literacy of the population, training people to work with new technologies. As part of the strategy, learning opportunities are provided for each person, staff is trained with the skills necessary for the development of the digital economy, and the search for the most suitable education model is carried out. All this implies fundamental reforms in the existing educational system.

Third – is a digital economy strategy that embraces investment and policy, supporting innovation and technology entrepreneurship. Development in this area is accompanied by the search and adjustment of the regulatory system, stimulating economic growth and innovation.

Fourth – is a digital transformation strategy. The UK government in many ways provides support and assistance to enterprises in introducing the latest technologies and improving production efficiency.

Fifth – an online space strategy. Investing in network security and training relevant specialists, attention to network security for children.

Sixth – is a digital government strategy. Deepening and stimulating the digital transformation of the govern-

ment, the formation of government platforms, the provision of better municipal services to the population.

Seventh – is a data economy strategy. Unlocking the potential of data in the UK economy through various activities, strengthening the protection and transparency of information.

The UK has developed a number of policies in other areas of the digital economy. For example, in the financial sector, to support the development of the country's economy and international trade through the use of digital currencies created using the latest accounting technology, the country's Central Bank issued RSCoin. The government has introduced a number of measures to take advantage of future financial reforms and make the UK an international financial center.

In this regards, it can be said that digital strategy is "umbrella" in nature and in UK it is aimed at accelerating the digitalization of the country's economy and achieving a number of ambitious goals in 7 priority areas [8]:

- Communication (creating a world-class digital infrastructure).
- Training and inclusion (providing inclusive access to essential professional knowledge).
- Digital sectors (creating the best conditions in the world for the creation and growth of digital business).
- Expansion of the digital economy (assisting businesses in restructuring on a digital basis).
- Cyberspace (ensuring the world's greatest security of "life" and work in on-line space).
- Digital government (turning the British government into a world leader in providing electronic services to its citizens based on digital platforms).
- Economics of data (using the potential of databases in the economy and increasing the confidence of citizens in their use).

Currently, in many developed countries, digitalization is being implemented in all industries, targeted laws and programs are being developed and approved that will serve as a springboard for the development of the digital economy. With the help of the digital economy, opportunities will open up for the creation of new innovative models of production, trade, healthcare, education, economy and society as a whole.

Digital economy transformation in Uzbekistan. Like other countries, in Uzbekistan also digital economy is developing. Digital economy is not something else that needs to be created from scratch. This means mov-

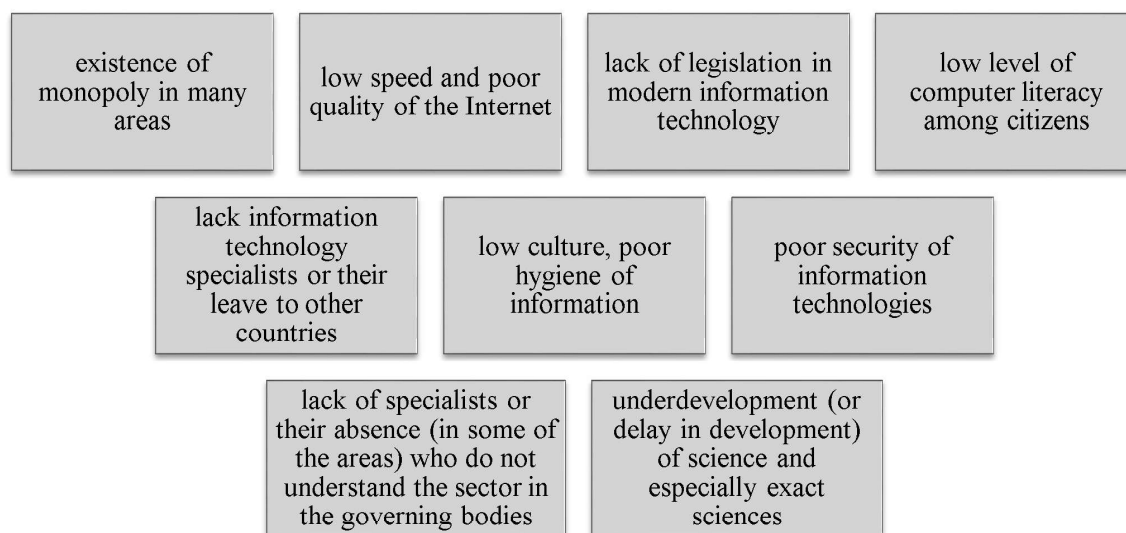
ing the existing economy to a new system through the creation and implementation of new technologies, platforms and business models. With the introduction of information technology into our daily lives, many opportunities are created for ordinary people. We can now order a lot of groceries and food without leaving the house and bring them home. Development of the digital economy is one of the strategically important issues for the Republic of Uzbekistan, which determines its global competitiveness. This means that we need to create conditions for the development of the digital economy, to direct it to the most important sectors, and to stimulate this process to the maximum extent possible. Another important peculiarity of our national economy is that the bulk of GDP is created by state-owned corporations (*or companies with a large state-owned share*). Under these conditions, the creation of an industrial digital platform under the guidance of professional ministries or state-owned corporations is considered as the smartest step. Such platforms provide the infrastructure needed for the rapid development of the digital economy and the widespread use of related technologies. In our opinion, the creation of digital economy platforms should focus on the following areas: telecommunications, energy, transport, health, tax and taxation, drug logistics, data processing, tourism, foreign economic activity, real estate sales and production. Development of these areas will allow to create the necessary infrastructure and appropriate technological platform. Subsequently, it will be possible to form the Uzbek economy as quickly as possible by relocating it to other sectors of the economy. This approach seems to be the most feasible for our country today, but it is certainly not without flaws. However, the choice of the appropriate strategy must take into account both the predicted road risks and the risks of the digital economy in order to formulate a digital economy concept that should be based on it. Currently, in many developed countries, digitalization is being implemented in all industries, targeted laws and programs are being developed and approved that will serve as a springboard for the development of the digital economy. With the help of the digital economy, opportunities will open up for the creation of new innovative models of production, trade, healthcare, education, economy and society as a whole. Many programs in the digital economy of developed countries (USA, Austria, Australia, UK, Korea and others) focus on the social dimensions of "digital

medicine” and *“smart city”* The direction of developing such projects is not economically viable, but this choice can be substantiated by a number of facts.

Who will develop the digital economy? The National Project Management Agency under the President of the Republic of Uzbekistan is the authorized body for the introduction and development of the digital economy. In addition, the Ministries of Economy, Finance, Information Technology, Justice and other government agencies

have specific responsibilities and responsibilities for the development of the digital economy.

It should be noted that the digital economy in Uzbekistan is developing much slower than it could be in terms of the potential of Uzbekistan. That is, there is the opportunity, the resources available, but the development is much slower. The following picture describes some of the barriers to the development of the digital economy in Uzbekistan:



Picture 1. Obstacles to the development of digital economy in Uzbekistan

Prepared by authors based on research materials

An important criterion for the digital economy is to improve the quality of state and municipal services, and reduce the cost of the state in providing them. At the same time, the state must guarantee the stability and security of the infrastructure, ensure a high level of education of the population, including digital literacy, connect the digital economy with all industrial spheres, and most importantly, integrate the international digital industry into the national infrastructure business sector, in cooperation with citizens, has long been using digital technologies, including digital currency. The government's commitment to develop the digital economy opens up new dimensions in the field of information technology and, in general, electronic document management. The shift to digital technology has been driven by the development of worldwide Internet and high-quality communication.

I am of the opinion that, first of all, particular attention should be paid to the development of ICT. Based on the analyzed literature, it can be concluded that the target indicators for the further development of infor-

mation and telecommunication systems in a long-term perspective will be [9]:

- the establishment of modern infrastructure in the field of telecommunications and information;
- ensuring the availability of infrastructure in every single region of the Republic of Uzbekistan;
- informatization of the economy of the Republic of Uzbekistan;
- increase the competitiveness of information and communication technologies;
- raising the level of education, providing high-quality medical services, developing science, social protection based on information and communication technologies.

In order to improve the public administration system, create conditions for the introduction and development of the digital economy, improve the investment environment, as well as implement the Strategy of Action in five priority areas of the development of the Republic of Uzbekistan for 2017–2021 [10], followings should be

considered as the most important tasks for the further development of the digital economy [11]:

- implementation and development of activities in the field of crypto-asset turnover, including mining (activities to maintain the distribution platform and create new blocks with the ability to receive remuneration in the form of new units and commission fees in various cryptocurrencies), smart contracts (electronic agreement. exercise of rights and responsibilities for which is carried out by automatically making digital transactions), consulting, issue, exchange, storage, distribution, management, insurance, crowd-funding (to effective financing), as well as technology “blockchain” diversification of various forms of investment and entrepreneurial activity;
- training qualified personnel in the development and use of blockchain technologies with practical skills using modern information and communication technologies;
- comprehensive development of cooperation with international and foreign organizations in the

field of activities on crypto assets and blockchain technologies, attracting highly qualified foreign experts in the field of developing blockchain technologies for joint implementation of projects in the digital economy;

- creating the necessary legal framework for the implementation of blockchain technologies, taking into account the best practices of foreign countries;
- ensuring close interaction between government bodies and business entities in the field of introducing innovative ideas, technologies and developments for the further development of the digital economy.

Conclusion

It is clear from the aforementioned ideas and opinions that practical measures are of great importance for acceleration of digital economy transformation and the following table, with the example of UK, gives conclusion for recommended digital economy development directions in both Uzbekistan:

Table 1. – Digital economy development areas of UK and recommended directions for Uzbekistan

Highlighted areas of digital economy development in UK	Recommended areas for digital economy development in Uzbekistan
• Communication; • Training and inclusion; • Digital sectors; • Expansion of the digital economy Cyber-space (ensuring the world's greatest security of “life” and work in on-line space). • Digital government; • Economics of data.	• Professional services – on-demand professional services – accounting, design services, consultants, translators and others; • Online banking (Banking); • Blockchain tax and tax services; • Collaborative finance, crowd-funding, peer-to-peer lending; • Financial market operations and e-commerce; • Real estate sales and tenders; • Domestic and international tourism; • Corporate and personal transport services; • On-demand household services; • Peer-to-Peer Accommodation; • Peer-to-peer transportation); • Introduction of 3D printers in all areas; • Introduction of a publicly accessible online education service (MOOC – massive open online courses).

Prepared by authors based on research materials

Other trends in the digital economy, including big data, artificial intelligence, machine learning, crowd-sourcing, crowd-funding, blockchain and cloud tech-

nologies, are clearly showing that they are also of great importance for the future economy and corporate governance.

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