

Digital Finance as a Part of the World Economy

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Abstract. The article is devoted to the modern stage of development of the world community, the urgent issue of which is the concept of “digital economy”. The tasks of the work are to study the individual elements of the development of digitalization. Consideration of economic results leads to the analysis of digital finance, as new segments of market relations in the global economy. The future lies in technological progress. The contribution of world countries to digital activities is also an important aspect of the objectives of this work.

The methodology of the work is to use the dialectic and knowledge of the system approach, the synthesis and generalization of logical modeling, as well as mathematical and statistical parameters.

The main conclusion of the work was the conclusion that for the more efficient functioning of states, more attention should now be paid to the development of the digital economy.

1. Introduction

At present, human society is at a stage of tremendous development of the technological process. The speed of data storage and processing increases in geometric progression. Already today there is a radical acceleration in the pace of the spread and penetration of digital technologies, the emergence of more and more digital innovations.

Gradually, a new era in the development of social life came in—digitalization. The past stage of the use of information resources has ended, but now millions of people on the planet are integrating into a huge network of digital systems [8]. The users of digital services are not only people, but also various machines and mechanisms, there are about ten billion of them—devices, sensors and devices.

About twenty years ago, Sergey Brin and Larry Page founded Google. Over the years, digital technology has changed dramatically. The world is changing every day in an irreversible way under the influence of the digitalization process. Infrastructure continues to grow at an enormous rate. Currently, the volume of mobile connections has already exceeded the global population. The number of interstate digital information flows has increased several times, which provided more than a third of world GDP in 2018. The number of users of digital communications is also increasing. Huge digital resources for introducing innovations are possessed by such companies as Apple, Alphabet, Microsoft, Amazon and Facebook; they are included in the list of the most expensive corporations in the world by market capitalization. The most expensive digital company is the Chinese Internet trading giant Alibaba Group. Their success is due to economies of scale and a dominant market position.

Based on data from a literature analysis, it was found that the term “digital economy” was introduced into science in the nineteen ninety-fifth year by Nicholas Negroponte, who claimed that the digital economy is the future, as it represents a “new” economy in which physical weight is replaced by information volume, production costs are significantly reduced, electronic goods do not need material storage facilities, which reduces logistics costs and solves many transportation problems, which is associated with intensive development information and communication technologies.

The World Bank defines the digital economy as a special system of economic relations, which is at the junction of social and cultural relations based on the use of modern information and communication technologies [4, p. 12].

To study this economic issue in the modern context, an analysis of digital finance on an internal basis of the economic complex accounting of compensation and the relationship of various indicators and indicators is required. Consider of the direction vector characterizing the state of the digital economy, which has already covered all spheres of society. The interaction of this phenomenon, both at the level of different countries of the world, and at the standard of living of an individual, since any modern person cannot imagine his life without mobile networks and the Internet [9, p. 40]. Throughout the whole time, a positive climate has been observed for the development of the Internet and the network, which are the basis of the digital economy.

It should be noted that the economy of the future is a new mechanism for managing financial resources in a new format. The functioning of the entire economy will be as transparent as possible, which will enable digital finance to track their movement, ranging from small enterprises to the public sector. It is important to establish a smooth transition from the traditional economy, which considers finances as part of the material base of subjects, to the digital economy, where finances are presented as a new indicator of economic relations [7, p. 219].

Digital technology has completely changed the life of the world's population. Automation of production, big data and artificial intelligence, the use of which was made possible thanks to digital technology, affected more than fifty percent of the global economy. More than a million professions are likely to disappear, representing \$ 14.6 trillion in salaries. The digital economy opens up new ways of using human potential, which allows us to leave monotonous work in the past and reduce the level of social inequality. Undoubtedly, in the twenty-first century, finance has become digital. Each organization, regardless of ownership, monitors the activities of its and competitive enterprises [6, p. 851]. The balance sheet and financial statements have become digital, which greatly simplified the work of corporate staff. The ability to use the digital finance service allows you to solve a number of problems:

- reporting and analytics strategy: improving the quality of management reporting, metrics, analytics and decision-making by managing finances online;
- optimization of the investment portfolio: increasing return on investment and managing cash flows and costs;
- integrated planning and forecasting: defining operational models for financial planning;
- “budgeting from scratch” and a decision-making system based on cost analysis in order to improve the efficiency of investment of enterprise resources;
- financial data strategy: the integration of structured, unstructured, internal and external data to improve the quality of forecasting and reporting;
- the strategy of financial technology: the definition of value propositions and business models for the financial technology platform and operating model;
- the ability to manage the enterprise in real time: reliable business analytics, a full cycle of performance management capabilities, skills and modern digital technologies.

New technologies to a large extent determine the structure of the enterprise, ways of interaction and efficiency management and value creation [5, p. 89]. High technologies are beginning to increasingly determine the face of the economy of the future: they can save society from financial and legal intermediaries, and allow payments to be made with intangible currency.

We can say that every person is faced with the concept of "digital finance." The Internet banking system dates back to the eighties of the last century. In the United States of America, the concept of Home Banking was created and implemented—“home bank”, that is, a system that allows you to control bank accounts by connecting to a computer [11, p. 152]. In 1994, the first money transfer from

the account was made. This date marked the birth of digital finance. Currently, the system of "online finance" is available, which is implemented by almost all banks in the world:

- statements of accounts;
- providing information on banking products;
- applications for opening deposits, obtaining loans, bank cards;
- internal transfers to the bank card;
- transfers to accounts in other banks;
- conversion of funds;
- personal account for managing services;

Consider the Digital Evolution Index, which is based on an analysis of the pace of development of the digital economy in different countries of the world. Digital finance was evaluated on more than a hundred indicators. The Digital Evolution Index saw the study as an answer to the following questions:

- Which countries have the most competitive digital economies?
- Which organizations are the main drivers of the economy, and do they belong to the private or public sector?
- How do countries boost their digital economy?

Having measured the current state of development of the digital economy and the pace of its development, a map of the "digital planet" was compiled [10]. The countries on it are divided into four groups: leaders, countries with a slowing growth rate, promising and problematic. Some countries are located on the borders of these areas.

The two largest world economies—the United States and Germany, are located on the border between the leading countries and slowing countries. Next to them is the third largest economy in the world, Japan.

It is absolutely necessary for them to realize the risk of being in a “digital impasse” and, using the example of smaller, more dynamic countries, to study which political measures can increase the country's competitiveness.

To accelerate the digital development in such an environment, we need larger and more systemic changes.

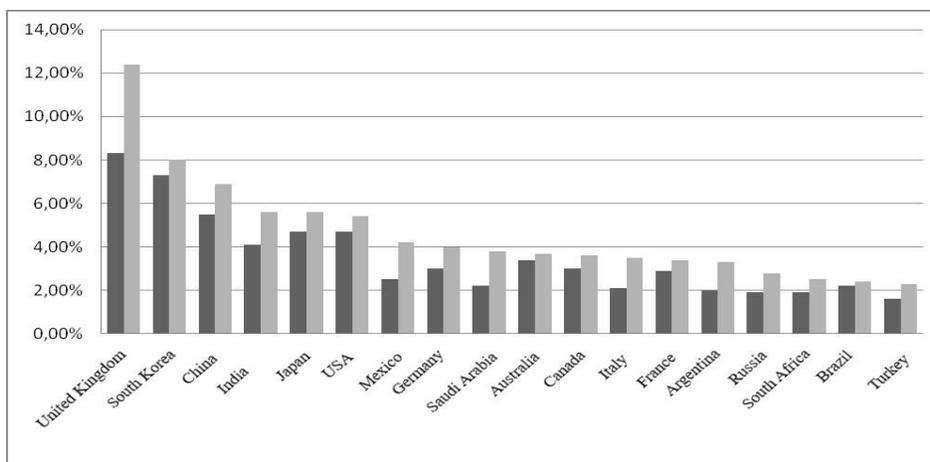
It should be noted that in 2030 the pace of the global digital economy will grow more than twice. This is due not only to an increase in population in the future, and an increase in revenue and an increase in the level and quality of life. Representatives of the middle class in China and India will become the largest consumers in the world, which means that the market will largely be guided by them.

Despite the differentiation of countries, we can say that all States recognize that improving the quality of digital resources -priority. More efficiently it will operate the economy of the state, which at the time and fully embraced the full potential of infrastructure development. All spheres of public life dedicated to digitalization, which leads to transparency, flexibility and rhythmic operation [1, c. 16]. Every day create a future economy, a few years ago, it was impossible to imagine, it is possible to carry out monitoring of bank accounts without visiting a financial institution. Infrastructure simplifies the lives of all segments of the economy.

Therefore, the digital investment attracts more and more attention. Of particular importance in this regard is the financial policy of the countries. More and more countries in the world recognize the need for digitization. Developed and developing countries have an active policy of increasing the money circulation in the digital economy, and the digital finances remain a number of important tasks. Consider the dynamics of growth the digital economy in GDP from 2015 to 2018:

Table 1. Comparison of the Dynamics of Digital Finance in the World.

A group of countries	Characteristic	Examples of states
The country's leaders	Possess highly developed digital economy and the development of powerful dynamics. They stimulate innovation, leveraging its advantageous position. However, it is difficult to maintain high growth for a long time, and innovation is often unreliable foundation for expanding economic influence. In order not to lose their positions, these countries need to create a new demand, and the development of innovative solutions should go into them at full speed. Otherwise, they risk to go into the category of countries slowed down.	United Kingdom, United Arab Emirates, New Zealand, Singapore
Countries with a decelerating rate of growth	It has a developed digital economy, but loses the dynamics of development. Five countries in our ranking with the highest scores (Norway, Sweden, Switzerland, Denmark and Finland) are in this category, which shows how difficult it is to sustain growth. To overcome the "digital plateau", these countries will have to make a conscious effort to rethink its economic model to put all those digital technologies and technological areas in which they are in the lead, and remove any obstacles in the way of innovation. How to support the development of innovative, they can learn from the leading countries. Using its expertise, scale and network effects, the country with the decelerating pace of development can be transformed and start to increase again.	Denmark, Sweden, Ireland, South Korea, Belgium, Canada, the Netherlands
Promising countries	At the moment, we are at a low level of digitalization, but developing rapidly. The essential dynamics of development and great potential can make them very attractive to investors. They constrain poor infrastructure and low quality of the institutional environment. The best solution for them-to create new high-quality institutions, which would help to stimulate innovation. Promising the country have the potential to become future leaders.	China, Malaysia, Kenya, Russia, India, Cameroon, Nigeria, South Africa
Troubled countries	At a low level of digitalization and have low dynamic that creates great difficulties for them. In some of them the pace of digital development at all reduced. Some of the problematic countries creative approach to the problems of lack of essential infrastructure, institutional constraints and inexperience of the consumer. The most reliable way to increase the dynamics of development for them will be to improve access of the population to the Internet by reducing the gap in the use of mobile Internet, ie the difference between the number of mobile phones and mobile phones connected to the network.	Egypt, Hungary, Peru, Pakistan, Greece



Picture 1. Dynamics of Digital Investment in GDP Around the World from 2015 to 2018.

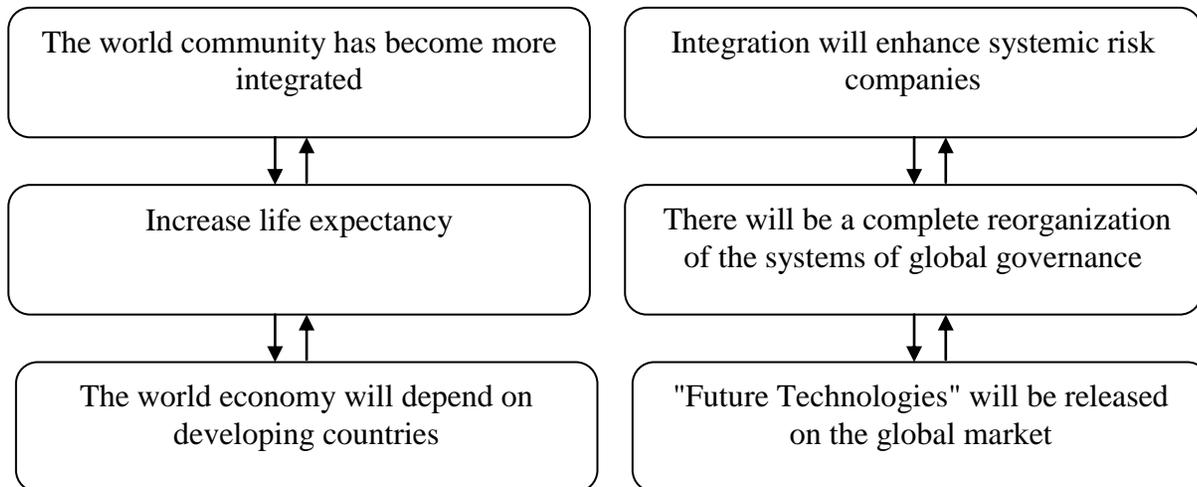
Based on the chart data, you can say that the role of the digital economy in developed countries is increasing every year, so with the 2015-2018 biennium, generally from 6.1 to 8.9%. In developing countries over the same period is from 5.7 to 8.9%. The UK is a leader in terms of GDP in the economy - 13.1%. Based on the study the total global costs digitalization in 2018, the researchers - analysts carried forecast that the transformation of technology costs will increase by twenty percent annually, which in 2021 will be about two and a half trillion, US dollars. At the same time, the dynamics of the digital development in the UK is greater than that of most European Union countries, and thus it believes that the future digitalization. It should be noted that the state supports the digital sector. Most of the world of finance is concentrated in the banks, so the stable position of these institutions, creating a favorable climate for the effective functioning of the country. Finance companies form the rating of the most reliable and successful banking companies in the world. These rankings are based on various indicators, the most important indicator of the amount of assets. We estimate the market for financial services in the world, using as indicators of banks with different amounts of assets [2].

Table 2. The World Bank and the Volume of Their Assets.

	Name of the bank	The volume of assets in billion. \$
1	Industrial and Commercial Bank of China(China)	4009
2	China Construction Bank Corporation (China)	3400
3	Agricultural Bank of China(China)	3235
4	Mitsubishi UFJ Financial Group (Japan)	2780
5	JPMorgan Chase (USA)	2533
6	HSBC Holdings plc (United Kingdom)	2520
7	BNP Paribas (France)	2357

Based on the data it can be noted that the three leaders is China, this is due to the fact that the annual economic growth and productivity in this country is enormous. European countries are also included in the ranking, having a significant amount of assets. However, no Russian bank is not included in this estimate, Savings Bank has in its assets of about 25 trillion rubles, which is translated at the current exchange rate is about \$ 350 billion.

Digital Finance as part of the economy of the future will radically change the world, therefore, identified six areas in which to determine the result of the introduction of digitization [3, p.11]:



2. Conclusions

Thus, positive results implementation technologies are invaluable educational and motivational effect to scale solutions. An important step in the development of digital finance advocates the gradual introduction of the new infrastructure. The transition to deep transformation of all spheres of life from initiatives and projects on digitalization of individual sections of activity. The final stage of digitalization is changing its "outer" loop. At this stage, Digital technologies are a full part of the international community aimed at the creation of new systems. Digital transformation -it is not only the evolution of the devices is to integrate huge databases in all aspects of life. Radically Digitalization changes the traditional aspects-the use of home appliances to the state administration. Digital object will finance everything from workflow to the flow of personal information. The interaction of this phenomenon, as the level of the different countries of the world, and at the level of life of a single individual, as any modern man cannot live without a mobile network and the Internet. Throughout time there are positive climate for the development of the Internet and the network, which are the foundation of the digital economy.

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