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THE ROLE OF COMMERCIAL BANKS IN THE DEVELOPMENT OF THE DIGITAL ECONOMY

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Abstract: The article describes the theoretical and practical foundations of the use of innovative technologies in commercial banking services, the factors influencing this and practical measures taken in this direction. There are also conclusions and suggestions to enhance the role of commercial banks in the development of the digital economy, based on international experience and innovative ideas.

Keywords: digital economy, banking system, electronic money circulation, payment systems, banking, customer, remote servicing, innovation, supervision, international practice.

Introduction

In the era of development of the digital economy in the world, there is a growing focus on issues such as the study of the provision of banking services through the use of modern technologies. The main trends in this area are the introduction of modern integrated information systems for effective management of banking services, ensuring the transparency and protection of system data, the use of digital economy technologies and improving the methodology of effective information integration of information systems. The widespread development of the digital economy and innovation requires commercial banks to improve information systems for various types of services.

The development of banking services in Uzbekistan, in particular, the introduction of new types of banking services with the widespread use of information and communication technologies, is relevant today. In particular, "artificial intelligence" and digital technologies are widely used by banks to improve the services provided to small and large financial technology companies. Because new competitors in the market began to threaten old financial institutions of all sizes. At the same time, new technologies open the door to great opportunities in the banking services market.

In recent years, the country has been working hard to develop modern information and communication technologies, the introduction of new mechanisms for the provision of services by commercial banks. In particular,

the Presidential Decree "On measures to further improve the field of information technology and communications" (Decree, 2018), "On measures to develop the digital economy in the Republic of Uzbekistan" (Resolution, 2018), "2020 - Science and Education The year of the economy" and the development of the concept of "Digital Uzbekistan" until 2030 (Mirziyoyev, 2019) lead to a number of tasks for the banking system in this regard.

Based on the above conceptual ideas, it can be argued that the topic of this article is relevant.

LITERATURE REVIEW

In the process of development of information technologies in the world, the term digital economy emerged, and this term was first used in 1995 in the book "Electronic digital society: advantages and disadvantages of the network age." According to Don Tapscott (2016), the development of a digital culture is a key factor in the digital transformation of the activities of market participants.

The term "digital economy" was coined by the American programmer Nicholas Negroponte (1995). Today, the term is used by politicians, economists, journalists and entrepreneurs around the world. In 2016, the World Bank published its first report on the state of the global digital economy.

The term "digital economy" was introduced into scientific practice by Manuel Castels (1999), a Spanish and American sociologist and leading researcher in the information society. In this regard, he published his three-volume monograph "The Information Age: Economy, Society and Culture." According to him, the term digital economy represents two different types of concepts:

- First, the digital economy is a modern stage of development, which is characterized by the priority of creative labor and the benefits of information.

- Second, the digital economy is a unique theory, the object of study of which is the information society. The theory of the digital

economy is in the early stages of its development, as the transition of civilization to the digital information phase began decades ago.

The unifying factor of these concepts is the leading role of information technology in the globalization of economic processes.

The term digital economy has also been defined by a number of local economists. In particular, Umarov (2018) - "Digital economy is a system of economic, social and cultural communication based on the use of digital technologies. It is sometimes referred to as the Internet economy, the new economy or the web economy.

In our opinion, the digital economy is not a separate type of activity. It actually means business, industrial facilities, services. The term "digital" means the active use of information technology in all these areas. If in a simple economy material goods are the main resource, in the digital economy it will be information and data that can be processed and transmitted. After their analysis, a solution for proper management is developed.

To date, the following local scientists on scientific and practical issues of innovative technologies in the development of the digital economy V.Q. Qobulov, A.N. Aripov, S.S. Gulomov, BA Begalov, AA Musaliev, OT Kenjabayev, K.Alimov, RADadabaeva and conducted research on the role of digital technologies in the development of the national economy. However, important aspects such as methods of introducing information systems in the activities of banks, the principles of modeling based on automated information systems, the effectiveness of the use of automated information systems in banking, their interconnectedness, the conditions of digital economy have not been studied in depth. In the development of the digital economy, the scientific development of innovative technologies and ideas and, on this basis, the improvement of the legal and regulatory framework is cyclical, but the development of reforms is constant. Any

economic practice that gave good results yesterday may not meet today's requirements, which may require improving that practice or creating a new one. This further enhances the relevance of the research topic.

RESEARCH METHODOLOGY

The study revealed that the following positive results of overcoming the financial problems of businesses operating through innovation and information technology through loans from commercial banks, including a positive impact on GDP growth, income growth and employment. To do this, using the data of the State Statistics Committee for the last 10 years, a correlation-regression analysis of the number of people employed by businesses operating in the country and the correlation of loans to businesses by commercial banks to the share of businesses in GDP.

According to the sample correlation coefficient, the impact of the number of people employed in this sector on the share of business entities in GDP was high, $R = 0.9597$, and the share of bank loans to businesses on the share of business entities in GDP was high, ie $R = 0.7686$.

We performed regression analysis using Excel's Data Analysis feature. The bond density is $r = 0.992474054$ based on the scale. Hence, based on this scale, the correlation coefficient between the indicators has a very strong correlation level.

According to the data, $a_0 = -157331$, $a_1 = 8.056$, $a_2 = 0.00075$, the straight-line formula of the regression took the following form:

$$KBYU(y) = 8,056KBBS(x1) - 0,00075KBBKR(x2) - 15,7331$$

Hence, the regression coefficient a_1 determines the relationship between the resulting sign (u) and the factor sign (x). This indicates how many units the resulting character increases when the factor character increases by one unit.

We use the F-criterion to check the adequacy of the regression equation ($Y = 8,056-0x1-0,00075x2$).

According to the observed data, the calculated F_p (calculated, observed F) index was compared with the corresponding critical index F_k , (F critical, tabular).

$$F_{\text{account}} = 4.25, F_{\text{table}} = 295.595$$

Since $F > F_k$ in the calculation, the econometric model (1) is considered adequate.

$$T_k = 2,262, \quad Ta_0 = -3,9, \\ Ta_1 = 15,38, \quad Ta_2 = -6,19.$$

Since $Ta_1 > T_k$ in the calculation, a_1 means that the regression coefficient is significant.

From the above regression analyzes the following conclusions can be drawn: increase in the number of employed by 1 percentage point in existing business entities will lead to an increase in the share of business entities in GDP by 8,056%.

Analysis and results

Digital technologies are changing the look and structure of the economy, disrupting traditional business models, increasing competition and competitiveness between individual businesses and the country as a whole, and leading to the expansion of markets and opportunities. An example of this is the share of traditional flows of goods, services and goods in world GDP, which fell from 53% in 2007 to 39% in 2014, based on data from the McKinsey Global Institute (2015) report. During the period from 2005 to 2014, the volume of cross-border data exchange increased 45 times. Since 2014, about 12% of global trade in goods is carried out through international e-commerce.

According to The Boston Consulting Group (2016), the high level of e-commerce development in China is noteworthy. At the same time, China's e-commerce turnover is \$ 18 billion, during which time Chinese consumers spend about \$ 750 billion to buy the Internet. In general, according to the Chinese Ministry of Commerce, by the end of 2016, the country's share in international e-commerce was 39.2%. At the same time, according to the network development program adopted in the country in 2016-2020, the volume of e-commerce in 5 years will

reach 5.8 trillion. U.S. dollars. According to the McKinsey & Company (2016) Institute, digital technologies will increase China's GDP by 22% by 2025 and by 34% for Russia. It has been shown that by 2025, the expected cost of creating digital technologies in the U.S. could reach \$ 1.6-2.2 trillion.

According to Table 1, South Korea, Norway and Iceland are in the top three. Russia lags behind leading South Korea by 27.7 points, but ranks higher than China, Chile, Turkey, Brazil and Mexico. In general, Russia today is recognized as a country with high potential in the process of introducing the digital economy.

Table 1 I-DESI subindexes for 2020

Countries	Digital (I-DESI) index	Connectivity level	Human capital	Use of the Internet	Integration of digital technologies	Digital government services
South Korea	75,2	79,8	75,6	74,5	63,8	83,0
Norway	73,0	75,8	69,1	85,2	65,8	72,5
Iceland	72,7	72,4	80,2	75,9	75,7	53,7
Japan	68,5	72,5	69,7	73,9	53,0	75,0
Australia	67,8	56,8	80,5	57,8	57,3	88,9
Canada	67,0	59,6	67,3	66,2	65,4	81,5
United States	66,7	71,3	56,2	71,0	61,8	79,0
New Zealand	65,8	55,4	79,3	58,2	55,6	81,6
28 EU countries	58,9	62,9	58,0	59,7	51,3	63,1
Israel	55,6	54,3	57,4	58,5	45,2	65,4
Russia	47,5	38,9	64,1	48,7	29,8	56,8
China	45,3	47,8	40,5	45,3	40,7	58,6
Chile	44,9	47,8	42,6	32,9	40,5	61,4
Turkey	41,5	43,3	53,1	35,9	27,7	43,2
Brazil	39,7	39,5	39,2	33,8	27,8	62,4
Mexico	43,1	45,5	41,6	30,0	33,7	67,2

The role and importance of digital technologies in the development of the world is growing every year. In particular, the widespread introduction of technical transformation processes in the financial sector further increases the efficiency of banking systems, payment operations, lending and other similar services. This type of technology,

which improves and optimizes financial services, is a financial technology called "Fintex" ("Fin Tech").

According to Accenture Consulting (2019), a total of \$ 27.4 billion was spent on fintex starts worldwide in 2019, up 18 percent from 2018. The Forbes Fin Tech 50, which compiles a list of the most successful financial technologies expected, notes that financial services and market capitalization in the U.S. is a serious competitor to the \$ 8.5 trillion domestic banking sector. It should be noted that financial technologies are able to change not only the individuals and legal entities dealing with financial capital, but also the image of the financial market itself. These types of developments allow you to analyze data, monitor the situation on the stock exchange, and choose investment strategies.

Today, the government is doing a lot of positive work on the development of the digital economy in our country, in particular, in the Address of the President to the Oliy Majlis (2020) "It is necessary and necessary to acquire digital knowledge and modern information technologies. This allows us to take the shortest path to the ascent. After all, today in the world, information technology is penetrating deep into all areas, and digital technologies not only improve the quality of products and services, reduce unnecessary costs. At the same time, they are also an effective tool in overcoming the scourge of corruption - the most serious flaw that worries and annoys me so much. We all need to understand this," he said. "Unfortunately, the banking system lags behind modern requirements for the use of digital technologies, the introduction of new banking products and software for 10-15 years. From 2020, a large-scale transformation program will be implemented in each bank.

As an advantage of the digital economy in the activities of banks, we can cite the reduction of costs for payments (for example, travel to the bank and other resources saved), the acquisition of more and faster information about goods and services. In addition, the great

opportunities for goods and services in the digital world to enter the world market and the rapid improvement of goods and services due to the rapid acquisition of Feedback (consumer opinion).

It is known that in the digital economy, the number of users of the global Internet plays an important role in the provision of banking services by commercial banks with the widespread introduction of innovative technologies to the population.

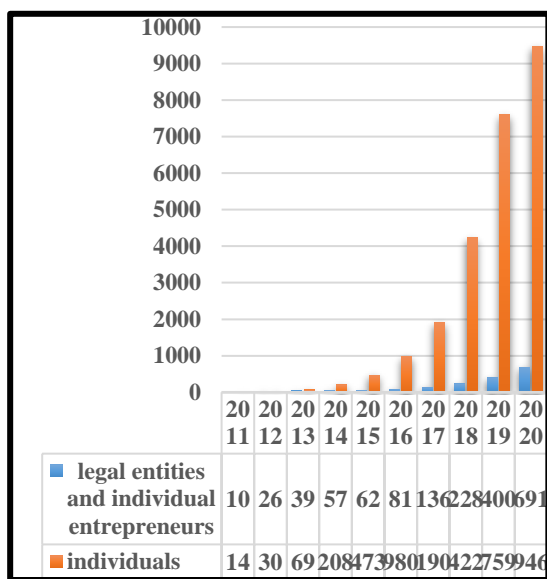


Figure 1. Number of users of remote banking services (by type) as of January 1, 2020.

According to the Ministry of Information Technologies and Communications of the Republic of Uzbekistan, the total number of Internet users in the country at the beginning of 2019 exceeded 20 million. This represents an increase of 36% compared to the beginning of 2018. The number of mobile Internet users reached 3.504 million. Mobile phones allow the population to use the Internet, regardless of the situation (whether on the move, stationary). All users of the Internet and mobile communication are potential customers for banks. Therefore, it has become a strategic task for commercial banks to expand the range of remote banking services and demonstrate their advantages. Remote service systems for bank accounts are technologies for providing banking services based on the customer's

remote assignments (without visiting the bank).

According to Figure 1, as of January 1, 2020, the total number of users of remote management of bank accounts in the country is 10,153.4 thousand. The number of legal entities and individual entrepreneurs amounted to 691 thousand, and the number of individuals - 9.4 million. As of January 1, 2019 (compared to 7959.1 thousand), the total number of users of remote management of bank accounts increased by 127.6%, respectively, the number of legal entities and individual entrepreneurs (compared to 359.7 thousand) by 186.6%. and the number of individuals (compared to 7599.3 thousand) was 124.5%.

At present, given that the main goal of banking reform is to train commercial banks to work for the customer, it is important to build public confidence in the banking system and limit foreign interference in banking.

At present, given that the main goal of banking reform is to train commercial banks to work for the customer, it is important to build public confidence in the banking system and limit foreign interference in banking. To this end, to radically update the software of banks through the widespread use of information technology, to continue the process of attracting qualified specialists from leading foreign financial institutions to management positions for the introduction of modern banking practices, management and services in state banks in cooperation with foreign experts. and the need to fully launch the "credit history" information system in lending practice.

Research methods such as correlation-regression analysis, analysis and synthesis, induction and deduction, statistics and comparison were used in the research. Brief description of the results of the research:

- It was found that an increase in the number of people employed in business entities operating through innovative and information technologies by 1 percentage point could lead to an increase in the share of business entities in GDP by at least 8%;

- In order to ensure national growth in the Republic of Uzbekistan, the quantitative growth of the country's GDP by 2025 will reach 350 trillion. Assuming that the amount of loans required from banks to achieve this result is 25.543 trillion soums. it was determined that it should be UZS;

- Scientific views of some economists on the application of innovative technologies in the computer system in the digital economy;

- Recommendations were made to create conditions for the development of the digital economy in order to accelerate the widespread use of innovative technologies in the accounting system. For example, the development of a regulatory framework for the system of incentives for businesses that develop, recommend and apply innovative products, the optimal organization of innovation-based services and pricing policy, etc .;

- Recommendations were made on the creation of the necessary conditions to increase the number and volume of remote financial services provided to the population in the digital economy, including the need to introduce an ID card system and the mechanism of its use in financial transactions.

CONCLUSION/RECOMMENDATIONS

Coexistence of Uzbek commercial banks with world banks paves the way for the intensification of integration and globalization. On the one hand, the development of integration processes necessitated the use of modern ICT, on the other hand, it created a business transformation. The study of these processes from the economic and political point of view and drawing scientific conclusions is a requirement of the time. The digital economy is a major ally of corruption and the "black economy". Because numbers seal everything, store it in memory, and provide information quickly when needed. In such circumstances, it is impossible not to hide any information, to make secret transactions, not to give full information about this or that activity, the

computer will show it all. The abundance and structure of the data prevents lies and deception, because it is impossible to deceive the system. As a result, it is impossible to launder "dirty money", steal funds, spend them inefficiently and aimlessly, exaggerate or hide.

In our opinion, special attention should be paid to the implementation of the following measures by commercial banks for the development of business entities operating through innovation and information technology:

1. It is necessary to introduce innovative online lending services in the banking practice of Uzbekistan.

Lending practices are widely used online in banking practice in developed countries. In order to improve this type of service, it is necessary to improve the speed and quality of the Internet, increase the computer literacy of businesses. This is because innovative online lending can be characterized by meeting the demand of businesses for lending practices without spending a lot of effort and time.

2. In order to eliminate the possibility of artificial credit dependence in the activities of economic entities in the credit practice of commercial banks, it is necessary to establish a "credit vacation" for businesses operating through innovative and information technologies.

In our opinion, the determination of the terms of repayment of principal and interest on loans to commercial banks by businesses operating through innovation and information technology, based on the period of their production, would contribute to the development of its future activities.

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