http://innovatus.es/index.php/ejbsos

# Transformation of Commercial Banks Under the Development of Digital Technologies

#### Matluba Makhamadaminovna Abdurakhmanova

Associate Professor of the Department of Banking and Investment of Tashkent State University of Economics

**Abstract:** The relevance of the study of transformation, the trajectory of development of commercial banks is determined by a combination of environmental factors, characterized at this stage by instability and increased risks. The article pays special attention to the banking sector and digital transformation in this particular industry; it also examines the stages and general trends in the development of digitalization of the banking sector in the Republic of Uzbekistan. The result of the study is to assess the significance of the digital transformation of the banking sector in the Republic of Uzbekistan.

**Key words:** digitalization, transformation, remote banking services, digital economy, banking sector, IT - technologies.

## Introduction

Today, revolutionary changes are taking place in the global financial system, and such elements of the digital economy as electronic payment services, cryptocurrencies and lending without intermediaries are playing an increasingly significant market share. Digital transformation is an inevitable process that the global business is going through, adapting to the new conditions and preferences of the digital economy society. The introduction of technologies for the digitalization of the economy, which allow the state, business and society to effectively interact, is becoming an increasingly large-scale and dynamic process.

In the context of globalization, political events and their economic consequences, the transition to a new technological order, a tough regulatory burden and increased competition pose a challenge to all financial and credit organizations. The processes of digitalization are most clearly seen in the banking sector as the dominant segment of the economy of any country. The banking sector has undergone major changes in recent years, from the automation of daily processes to the rapid development of Internet banking and complex mobile applications with the widest range of online services. The key factor determining the change in the concept of banking activity is the changed needs of customers. The development of commercial banks determines a set of environmental factors, characterized at this stage by instability and increased risks. In the context of the digitalization of the economy, there are cardinal changes in the conduct of the banking business. The development of modern banking technologies is already having a revolutionary impact on the global banking industry. Banks that use innovative technologies in their work attract more customers and get more prospects and opportunities to scale their activities.

Today, we are witnessing an active transformation of the innovative activities of commercial banks in the context of the global digitalization of the economy. In order for a bank to remain competitive, it is necessary to modernize its intraorganizational innovation processes. At present, one of the main factors of successful banking activity is the policy of constant innovation. The transformation of banks took place throughout the entire period of their development, however, in

recent years, changes in the banking business under the influence of digital technologies have become the most radical. The digitalization of the financial market is also changing the business processes of banks and their approaches to customer service. Familiar banking products are turning into flexible services available 24/7, which can be used from anywhere in the world. The creation of a digital bank is about process optimization, a new organizational culture and flexible IT solutions that provide the ability to maintain the speed of bringing products to market and personalize offers. Digitalization tasks are accumulated within a single banking platform that meets the challenges of the new digital economy. Banks are investing heavily in the development of the Digital Bank business model.

## Literature review

The development of theoretical and methodological provisions of innovative banking services is a relatively new area of applied science. The work of foreign authors, such as M. Usoskin, E.A. Utkin, I.A. Reznik, V.E. Cherkasov, G.A. Titarenko, O.I. Lavrushina, L. J. Mauer, J. Moutet, S. Raimes-Martinsen, O. Toffler, X. Toffler, M.E. Gorchakov and others.

Certain issues of introducing innovative services and remote banking services in Uzbekistan are covered in scientific publications by O.Yu. Rashidova, I.R. Toymukhamedova, Sh.Z. Abdullayeva Rakhimova H.U., Yuldasheva F.A. and etc.

And also, scientific articles in periodicals and publications in the media give an idea of the latest developments in the development of the business reputation of banking services, as well as highlight the latest changes that have taken place in the assessment and management of the business reputation of commercial banks in Uzbekistan.

# Methodology

The article discusses scientific works devoted to the analysis of sources that ensure the implementation of the development of methods of financial and economic analysis in order to increase the efficiency of enterprises. As a research methodology, a comparative analysis of the literature and methods of substantiating hypotheses were used.

## **Analysis and results**

The unlimited possibilities of modern technologies, their availability for many participants in the financial market, become full-fledged competitors of commercial banks in the field of creating and promoting innovative financial services and products. The impact of the development of technological drivers is inevitably transforming banking in a globally volatile environment that is becoming an extension of the digital life of the consumer and the ubiquity of banking services and embedding in the life of the client to meet their financial needs (see Table 1.)

Table 1 Technological drivers and transformation of banking services

		_	_
Concept	Period	Technology drivers	Banking services
			<ul> <li>Withdrawing cash and perform</li> </ul>
			standard banking operations at an
	1970-	. 577. 5	- ATM spread in cities The mass

	Concept	Perioa	recnnology arivers	Banking services
				<ul> <li>Withdrawing cash and performing</li> </ul>
Bank 2.0.	1970- 1980	ATMs	standard banking operations at an ATM	
			<ul> <li>ATM spread in cities The masses are</li> </ul>	
			beginning to interact with a machine	
			instead of a person to receive banking	
			services	
	2.0.			<ul> <li>It becomes possible to use remote</li> </ul>
	1990s	Internet	access to accounts	
			<ul> <li>Reliable and user-friendly interfaces</li> </ul>	
			appear	
			Eliminates the need to leave home for	
				multiple banking services and transactions
	Bank	2000s -	Smartphones supporting	<ul> <li>Applications for payments, transfers and</li> </ul>
	3.0.	present	banking transactions Cloud	account access (details)

	tense	technologies, Big data,	- Some banks offer deposits by providing
		Internet of things	a photo from a mobile camera
			<ul> <li>Applications act as ATMs</li> </ul>
			Further elimination of the need to visit
			bank branches to use banking products
			and services.
	Future tense (next decade)	Artificial intelligence, augmented reality.	- With the help of artificial intelligence,
			banks become a financial advisor and
			assistant to their client
Bank			<ul> <li>Use of augmented reality technology in</li> </ul>
4.0.			banking.
			Full integration of banking services into a
			person's life by adding to his digital life;
			omnichannel, i.e. ubiquitous channels of
			communication with the client.

Source: Dissertation for the degree of Candidate of Economic Sciences on the topic "Bank Transformation in a Global Unstable Environment" Galper M.A.

The key trend in the development of modern banking is Internet platforms that allow you to manage the purchase (sale) of financial products without visiting a bank office. Customers today do not want to contact the bank, they include communication with the bank in the process of obtaining real products and services, focusing on the convenience of its mobile applications, access through them to specific stores, etc. when choosing a bank. [5]

In the future, the development of innovative technologies for banking services may become the main priority for the choice of banking organizations and a stimulator for the growth of the quality of banking products and services, even taking into account international standards.

In the course of the consistent reform of the financial sector of the Republic of Uzbekistan, a number of measures have been implemented, as a result of which the necessary legal conditions have been created for conducting a progressive banking business and strengthening the competitive environment in the sector. At the same time, an analysis of the current situation in the banking sector shows the existence of a number of systemic problems that hinder the development of the banking sector in accordance with economic transformations and the needs of society, such as a high share of state presence in the banking sector, insufficient quality of management and risk management in banks with the participation of the state, low level of financial intermediation in the economy.

In order to carry out a radical transformation of the banking sector aimed at stimulating the development of the private sector, increasing the investment attractiveness of banks, the availability and quality of banking services, Decree of the President of the Republic of Uzbekistan dated May 12, 2020 No. UP-5992 developed a strategy for reforming the banking sector in the Republic of Uzbekistan. The strategy defines the goals, objectives and priorities for the development of the banking system, directions for the transformation and reform of the banking system in the period 2020-2025, ways to find possible solutions based on the experience of transforming the financial sector of foreign countries and taking into account global trends in the financial sector. [1]

The priority tasks in the reform are set in the field of widespread introduction of digital technologies and the privatization of commercial banks. Particular attention is paid to the complex transformation of commercial banks with a state share and the reduction of the state's share in the banking system. Banks are divided into two groups: with a state share and privatized. The process of privatization of commercial banks is carried out in stages: at the first stage, it is planned to transform the activities of banks with a state share, and at the second stage, it is planned to sell state shares to influential foreign investors.

The country's leadership has set a clear task: as a result of the transformation, people should feel cardinal changes in banking services. The process of change included a transformation of the banking culture, putting customer service first, and making loans and other services more accessible. Fundamental changes in the financial sector of Uzbekistan will eventually contribute to the development of the economy and attract private investors.

Such initiatives help mitigate systemic risks and ensure that the banking system supports the country during the transition period by allocating capital in the economy for its most efficient use. However, this is only the first stage of the transition period in the banking sector. Much remains to be done for the gradual introduction of international experience in banking regulation and supervision in Uzbekistan.

Uzbekistan has demonstrated certain achievements in the early stages of institutional reforms and the transformation of state-owned banks. In particular, lending to state-owned enterprises from public funds on concessional terms has declined, expanding the potential for competitive financing of individuals and private businesses.

Over the past few years, Uzbekistan, as well as around the world, has been undergoing a process of digital transformation of banks. However, already from the first projects of digitalization of banks in Uzbekistan, it became clear that this process would not be easy and fast, lasting more than one year. Due to the lack of ready-made solutions adapted to the conditions of Uzbekistan from foreign integrators, it may take more than one year to adapt and integrate their developments into the IT infrastructure of the bank.

Digital transformation is a transformation of the bank's structures based on the use of digital technologies, a change in the target direction of activities that ensures the creation of new services and new market opportunities.

Leading financial and credit institutions of a global scale are actively taking measures to adapt to new conditions, which forms new standards in the banking business. All over the world, digitalization is replacing existing business models in banks, and the market for mobile and contactless payments, P2P services, digital currencies, etc. is rapidly growing.

In recent years, banks have created digital business units in their structure and strive to be in trend. They offer safe storage of deposits, transactions, acceptance at bank branches, use of a network of information kiosks and ATMs, issuance of loans, exchange services, etc. These services are provided mainly in branches, partly through Internet banking and mobile applications. The volume of non-cash payments is increasing by improving the quality of service to the population and customers, the range of financial transactions carried out at ATMs and infokiosks is expanding through the introduction of advanced digital technologies in the activities of commercial banks.

In 2018, 4,453,240 people used remote banking services, and as of January 1, 2022, their number reached 20,203,384., the use of digital technologies in the banking sector is increasing.

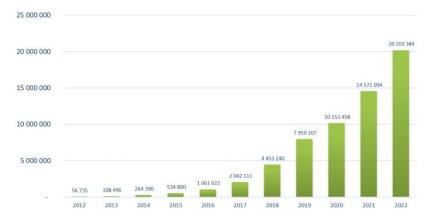


Figure 1. Number of users of remote banking services (as of January 1)

Digital banking services are developing in accordance with modern requirements. It is planned to create the necessary regulatory framework for launching a remote identification system (e-ID and e-KYC).

The Republic of Uzbekistan will develop a long-term strategy for the development of the system of cashless payments.

The Center for the Prevention of Information and Cyber Security in the Banking and Financial-Credit Sector under the Central Bank, as well as for Combating Financial Fraud and Verification (FINCERT) will be created. Of course, information security issues will be at the center of attention when it comes to building customer confidence in the payment services market, combating fraud and protecting data.

Providing a wide range of customers with access to digital banking services, especially customers in remote areas of Uzbekistan, has become a key element in the transformation of banks.

For about half of the country's population under the age of 30, the transition to online banking, digital services and new business models has been a natural progression.

Building confidence in digital banking systems could take years if the country and much of the world did not shut down in 2020 to prevent the spread of COVID-19. The COVID-19 pandemic has been a terrible event, but it has also brought a number of positive moments. In Uzbekistan, as in many CIS countries, paper is used - papers, signatures, cash. All of a sudden, those rules collapsed. The pandemic has accelerated a development that would likely have taken years.

Although changes in the financial culture of Uzbekistan have been supported by the government, as well as legislative and corporate documents defining regulatory and operational changes, the success of new banking systems always depends on the people who work in these institutions and this is the "human factor" and it starts with every bank employee.

Psychological transformation is one of the most important and difficult issues, the main problem is to change the mentality of employees so that they welcome these new systems, to make them proud of their bank and what they do.

At this fundamental level, it is difficult to change anything, because bank employees are happy with the status quo. People got used to these state-owned banks, they got paid and enjoyed stability, and now the leaders want dynamism and new ideas from these same employees. To do this, they must motivate and stimulate them. Clear and open communication with employees and other stakeholders can ease the transition.

Time will also work in favor of the banks. As digital banking and other benefits of bank privatization and the development of the Uzbek economy expand, people across the country will have the opportunity to improve their standard of living. The banking sector will offer more and more services to its corporate clients. Corporate clients will use these services to create jobs. There will be more employment opportunities, an increase in the income level of the population, which, of course, will return to the economy. More efficient banks will serve as the nation's financial arteries.

The banking sector is the driving force behind the introduction of digital and technological solutions and a supplier of personnel to other industries. Leading banks that are implementing digital transformation will be able to expand the range of products and services provided within their own created ecosystem. Medium and small banks will become segmented players outside the ecosystems of leading banks. Non-banking players will provide more and more financial services and become full-fledged competitors to traditional banks. Clients, in turn, will be able to receive additional services in their bank related to telecommunications, retail, education, and healthcare. Offers will be personalized, and the speed of banking transactions will increase significantly. [2]

The main areas of business model transformation in the banking industry are the formation of their own ecosystem, the development of partnerships with other companies, such as IT companies, and

the creation of fundamentally new business lines based on the use of end-to-end technologies, such as blockchain.

Leading national commercial banks are developing the following 4 strategic directions, which are chosen by the bank as the most important for transformation:

- > treasury ensuring the compliance of banks' assets and liabilities in terms of maturity, introduction of modern methods of liquidity management, diversification of the resource base, expansion of liquidity management methods;
- retail business formation of a retail business system, expansion of types of retail products, creation of modern centers for the provision of modern services;
- risk management creating a risk management infrastructure, managing risk appetite by limiting and restricting, training underwriters;
- ➤ HR-system optimization of staff and operating costs, attracting young professionals through coaching, the formation of corporate values and others.

Digital banking includes the introduction of an IP-telephony system and an increase in efficiency in the exchange of information, improvement of the CRM system, expansion of 24/7 customer self-service centers, creation of a Soft collection service for preventing problem loans, and creation of a corporate information database.

To increase the speed of providing banking services, it is planned to reduce the issuance of a loan from 5 days to 1 hour, pay loan payments through mobile applications and infokiosks, introduce a system for providing all banking operations through a "one window" by a universal employee, optimize costs and speed up decision-making by switching to a single MFI system, creation of a system of credit questionnaires and underwriting.

## **Conclusions**

The success of the innovative transformation of the banking sector will depend on a number of factors. Credit institutions should review their strategy and identify areas for further development. Most likely, for the leading banks, this is a full-scale digital transformation with subsequent transformation and creation of business processes in the form of an ecosystem. For other banks that do not have enough investment and competencies, the most correct solution may be to provide basic services under a foreign brand.

Within companies, it is necessary to create a favorable climate for working with innovations. Success factors can be:

- 1. Having a clear strategy and ambitious goal setting. The most winning digital transformation program should contain the following elements: ambitious goals, a process for creating and developing new business models, calculating the costs of implementing the program, digitalization activities and identifying the risks arising from digital transformation. Therefore, the strategy should include a development plan for three types of innovation: product, process and business model innovation.[3]
- 2. Conclusion of partnership agreements. The development of partnerships with banks, fintech companies, non-banking companies (telecommunications and IT companies) will complement existing competencies with new ones to gain a competitive advantage. Active cooperation with the Central Bank is also required to assist it as a regulator in developing an enabling environment conducive to innovation. Banks should closely monitor and evaluate the activities of fintech companies and startups in the market, identify the most promising ones and acquire them or create strategic partnerships with them.
- 3. Development of digital competencies. To conduct a digital transformation program, new skills are required, such as searching and collecting information using digital devices, processing a large amount of unstructured data, including using artificial intelligence. As part of human

- resources management, this is the search for young talented specialists who are ready to master digital technologies, as well as be able to deeply understand the needs of customers.
- 4. Transformation of the company's corporate culture. The culture of effective work with innovations implies an agile approach to their development, encouragement of crossfunctional interaction, providing employees with the necessary freedom of action non-material motivation factors are especially important for young promising specialists [4].

Thus, a digital bank can be understood as a bank, most of whose products and services are provided in digital (electronic) form. At the same time, its clients mainly use digital channels in their daily communication with the bank. The infrastructure of such a bank is optimized for real-time digital interactions, and the internal culture implies a high speed of decision-making and technological change.

The digital transformation process of a bank should not be viewed as a one-time project that can be fully completed with the implementation of several software products. Trying to solve the full range of digital transformation tasks by implementing several software products is a road to nowhere. On this way, dozens of projects will have to be implemented within a few years. But without clear planning and competent allocation of resources, success cannot be ensured. In fact, digital transformation is a process that, once started, will never end. This is a constant adaptation to rapidly changing conditions, the constant evolution of information systems, the eternal struggle for survival.

It should be understood that the quality of the digital transformation project implementation is weakly dependent on the chosen software solution and, on the contrary, strongly depends on the quality of planning the digital transformation project, the quality of the task setting and the quality of resource management. The main thing is not to stop halfway and not to deplete the financial resources of the bank without reaching the intended goals.

## **REFERENCES:**

- 1. Decree of the President of the Republic of Uzbekistan "On the Strategy for Reforming the Banking System of the Republic of Uzbekistan for 2020-2025" dated May 12, 2020 No. UP-5992
- 2. Azlarova A. A., Abdurakhmonova M. M. The role of commercial banking services in the development of the digital economy //Economics and Innovative Technologies. 2019. T. 2019. №. 6. C. 3.
- 3. Abdurakhmanova G. I., Vishnevsky K. O., Gokhberg L. M. et al. What is a digital economy? Trends, competencies, measurement: report for XX Apr. intl. scientific conf. on Problems of Development of Economy and Society, Moscow, 9-12 April. 2019. Moscow: HSE Publishing House, 2019. 82 p.
- 4. Akmal Ruzimamatovich Norov, Umida Xamidullayevna Elbusinova, Anvar Ruzimamatovich Norov, Luiza Mansurovna Mirpulatova, & Husniddinjon Mo'ysin o'g'li Akbarov. (2022). THE ROLE OF DIGITAL TECHNOLOGIES IN THE DEVELOPMENT OF COMMERCIAL BANKS. *Academicia Globe: Inderscience Research*, *3*(04), 507–515. https://doi.org/10.17605/OSF.IO/AQZB6
- 5. Azlarova, A. A., and M. M. Abdurakhmonova. "The role of commercial banking services in the development of the digital economy." *Economics and Innovative Technologies* 2019.6 (2019):
- 6. Makhmudov, S. (2020). IMPROVEMENT OF UNCONVENTIONAL METHODS OF FINANCING INVESTMENT ACTIVITIES. *International Finance and Accounting*, 2020(5), 22.

- 7. Haydarov, U. (2020). FINANCIAL MANAGEMENT SYSTEM, TOOLS, SOURCES OF INVESTMENT ACTIVITIES AND FACTORS. *Архив научных исследований*, *35*(1). извлечено от https://tsue.scienceweb.uz/index.php/archive/article/view/3521
- 8. Ruznyaev A. M. Digitalization of Russian banks as an inevitable requirement of the digital economy // Vector of Economics. 2018. No. 5 (23). S. 61.
- 9. Gupta S. K., Bansal A. Young Customer's Attitude towards Digital Banking with Special Reference to Public and Private Bank in Uttrakhand // The Journal of Indian Management & Strategy. 2018 No. 4. P. 23-27.
- 10. Akmal Ruzimamatovich Norov, Nodir Muratovich Shamsiyev, Anvar Ruzimamatovich Norov, Fayozjon Farxod ugli Rakhmatullaev, & Muzrof Yusup ugli Xolbozorov. (2022). Issues of Improving the Operations of Commercial Banks in the Securities Market. Indonesian Journal of Innovation Studies, 18. https://doi.org/10.21070/ijins.v18i.645
- 11. Azlarova, A. A., & Abdurakhmonova, M. M. (2019). The role of commercial banking services in the development of the digital economy. *Economics and Innovative Technologies*, 2019 (6).
- 12. Temirov, A., and S. Makhmudov. "Analysis of the dividend policy trends of corporate structures of the Republic of Uzbekistan." Трансформация моделей корпоративного управления в новых экономических реалиях. 2020.
- 13. Khaydarov I. U., ShT. B., Qudratillayev M. OPTIMAL QUADRATURE FORMULA FOR THE APPROXIMATION OF THE RIGHT RIEMANN-LIOUVILLE INTEGRAL //INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429. − 2022. − T. 11. − № 12. − C. 165-169.
- 14. Muminov N.G., Zakhirova G.M. The role of public procurement in the digitalization of the economy and adoption of e-commerce. St. Petersburg State Polytechnical University Journal. Economics Vol. 13, No. 2, 2020. R.30-39. DOI: 10.18721/JE.13203
- 15. Dissertation for the degree of Candidate of Economic Sciences on the topic "Bank Transformation in a Global Unstable Environment" Galper M.A.
- 16. Dissertation for the degree of candidate of economic sciences on the topic "Transformation of the Bank in a Global Unstable Environment" Galper M.A.7. https://asros.ru/upload/iblock/768/SBORNIK-ANALITICHESKIKH-MATERIALOV\_11.11.2020.pdf
- 17. Norov, A. R. (2023). Mechanisms for Improving Reserve Funds of Commercial Banks in the Central Bank of the Republic of Uzbekistan. *EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY*, 3(4), 101–106. Retrieved from http://www.inovatus.es/index.php/ejbsos/article/view/1594
- 18. Bakhtiyarovna Mominova M. Improving the Innovative Methods of managing active Operations of a Commercial Bank //The 5th International Conference on Future Networks & Distributed Systems. 2021. C. 370-377.
- 19. Busigin A.V. Predprinematelstvo, elementary course. M.: NIRP. 1992, p. 17.
- 20. Bakhtiyarovna U. M., Bakhtiyorovna M. M. Ways to Enhance Efficiency of Banking Services in Uzbekistan //Ann. For. Res. 2022. T. 65. №. 1. C. 4026-4032.
- 21. Norov, A. R. (2023). Mechanisms for Improving Reserve Funds of Commercial Banks in the Central Bank of the Republic of Uzbekistan. *EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY*, 3(4), 101–106. Retrieved from http://www.inovatus.es/index.php/ejbsos/article/view/1594
- 22. Тоймухамедов І., & Махкамова D. (2020). Выход банков из кризиса во время пандемии коронавируса в Узбекистане и роль в нем международных финансовых

- институтов. Экономика и инновационные технологии, (6), 296–303. извлечено от https://inlibrary.uz/index.php/economics\_and\_innovative/article/view/11859
- 23. https://www.norma.uz/nashi\_obzori/kak\_osushchestvlyaetsya\_transformaciya\_bankovskogo\_s ektora\_uzbekistana
- 24. Тоймухамедов І., & Эльбусинова U. (2020). Ўзбекистонда самарали банк инфратузилмаси ва кредитлаш жараёнлари истикболлари. *Экономика и инновационные технологии*, (3), 18–29. извлечено от <a href="https://inlibrary.uz/index.php/economics\_and\_innovative/article/view/11420">https://inlibrary.uz/index.php/economics\_and\_innovative/article/view/11420</a>
- 25. Азларова А.А. СОВРЕМЕННЫЕ ТЕНДЕНЦИИ ТРАНСФОРМАЦИИ БАНКОВСКОГО СЕКТОРА РЕСПУБЛИКИ УЗБЕКИСТАН В сборнике: Современные проблемы, тенденции и перспективы социально-экономического развития. Сборник статей X Международной научно-практической конференции Института экономики и управления СурГУ. Отв. за выпуск: О.Н. Галюта, М.А. Морданов, А.Ю. Ситникова. Сургут, 2021. С. 16-19.
- 26. Kambarov J.Kh., Makhmudova N.J. Zadachi upravleniya riskami na predpriyatii // Jurnal nauchnykh publikatsiy aspirantov i doktorantov, 2016. No. 5. S. 88-89 p.
- 27. Азларова А.А. ЦИФРОВЫЕ ТЕХНОЛОГИИ И ПРОЦЕССЫ ТРАНСФОРМАЦИИ В ДЕЯТЕЛЬНОСТИ БАНКОВ РЕСПУБЛИКИ УЗБЕКИСТАН В сборнике: Актуальные вопросы развития финансовой сферы. Сборник материалов IV Международной научнопрактической конференции. Дагестанский государственный университет народного хозяйства. Махачкала, 2021. С. 50-57.
- 28. https://www.ifc.org/wps/wcm/connect/news\_ext\_content/ifc\_external\_corporate\_site/news+an d+events/news/cm-stories/banking-reforms-uzbekistan-ru