INFORMATION TECHNOLOGY IN FINANCIAL SPHERE

Abstract: The article is devoted to information technology in financial sphere. The authors pay attention to FinTech, the influence of revolutionary innovations on customers and businesses. The benefits of Fintech such as rapid development of data analysis and processing technologies, reduced entrance fee and the use of blockchain technology are described. The analysis of integration of innovations into the fintech-users’ environment is presented.

Key words: FinTech, information technology, innovations, financial sphere, benefits.

Annotation: Статья посвящена информационным технологиям в финансовой сфере. Авторы обращают внимание на финансовые технологии, влияние революционных инноваций на клиентов и компании. Описаны преимущества «Финтех», такие как быстрое развитие технологий по анализу информации, обработке данных, снижение платы за регистрационный сбор и использование технологии блокчейн. Представлен анализ интеграции инноваций в среду пользователей финтех.
Key words: fintech, information technologies, innovations, financial sector, advantages.

Industrial revolution driven by technology, transforms the way people work and live. The development of technologies in the financial sector led to the formation of a new financial and technological ecosystem - FinTech.

Fintech is a portmanteau of financial technology. It includes emerging financial services of the 21st century such as innovations in financial education, retail banking, investment and even crypto-currencies [2].

New technological projects face the challenges in this sector: the need for innovations, the changing demands of customers and the growing pressure from regulators.

New digital technologies are now transforming the form financial products and services are offered to customers. We should not underestimate the ability of traditional market participants to assimilate innovative ideas, but we see a process of truly revolutionary changes in the financial sector. At the same time, such transformations will be more developed in the sectors of retail banking and insurance and asset management.

Revolutionary innovations in the sphere of financial services concern both interaction between companies and interaction of organizations with customers.

As for interaction between organizations, there is an emergence of new companies which develop and offer optimization technologies (for example, analysis and data management services) at a lower price and on more favorable terms than financial organizations. As for organizations and customers interaction, revolutionary technologies lead to the emergence of "mobile money", which has a significant impact on the economies of different countries.

Within the conditions of record low interest rates, a new generation of investors come to light. Regardless of who acts as an investor – an ordinary citizen
or an employee of financial organizations - they all want to know where their money is and how effectively it works. The transparency requirements are constantly growing.

At the onset of the era of digital technology, financial transactions have become even simpler, faster and more accurate, and there no time and space limitations for them.

The main innovations in financial sector are:

1. Rapid development of data analysis and processing technologies, allow investment organizations and their clients to access new data formats quickly the ability to track cash flows (SMS alerts), the implementation of chat bots
2. Investors are also offered a reduced entrance fee
3. It seems possible to use blockchain technology in the banking sector in order to reduce the costs of operating activities. Blockchain is a database that stores information concerning all transactions [1].

The advantage for the bank transfers in this case is the absence of intermediaries and decentralization. Blockchain technology will allow banks to make transactions faster, safer, more effective, and most importantly transparent. The main reasons for using FinTech services are simplicity of opening an account and round-the-clock access to services.

However, there are some disadvantages of the rise of Fintech. The risks are as follows: the lack of control and management, the anonymity. For example, financial data can be stolen by third parties. Cybersecurity risks and software-code risks can be a real challenge.

Many services have already reached a high level of integration into the fintech-users’ environment. The question is what services can provide the fastest growth? First of all, it is the online currency exchange operations: the number of users requesting such services can triple. The share of those who make payments
using a mobile phone can reach 84% of the total number of finTech users. In addition, there is a great deal of interest in cost analysis and planning tools, insurance through telematics systems, and non-traditional online banking services [3].

It should be noted that in all regions of the world most operations are still carried out in the offices. At the same time in Canada, which is one of the most advanced country, the share of customers who make financial operations in subdivisions and who use online banking services is approximately equal. Asia is the region in which the overwhelming majority of banking operations are performed in the traditional way [2]:

The penetration rate of financial services in Russia's megacities reached 43%. These are users who have been provided with two services or more for six months. More than a half of them (63%) are active fintech users, that is, they were provided with two services or more for the last three months (27% of the total number of respondents). 40% of customers have experience in using at least one fintech service within the last six months, and 5% of respondents have ever applied to one of the services. Those who have never used any of the financial and technological services refer to the group of "inexperienced" and the share of such users is 12%. We call superusers those who received more than five services over the past six
months. The share of such consumers in Russia is 9%. It is slightly less than in other countries, where the average is 13%.

Thus, traditional sectors in our economy are being disrupted by the emergence of FinTech [4]. Fintech includes a large number of various business models and approaches. Some of them, like payments, are already at a fairly advanced level, while others are just emerging. At the same time, financial organizations, despite their slowness, have already started paying attention to Fintech, understanding that new technologies, coupled with their accumulated customer base, opportunities to attract cheap loans and a well-developed regulatory framework, can lay the foundations for a new-generation of digital financial institution. Telecom operators are taking the same position and dreaming of learning how to earn money with customer services. Such companies as Google, Facebook and Apple are actively trying to get involved. Until now Fintech start-ups could easily find a niche. But the larger they become the closer to traditional financial companies they are. A new era of Fintech 2.0 is coming.

References