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INNOVATION IN ECONOMICS AND FINANCE

Abstract. It is shown that, despite a significant increase in innovation activity in the financial sector of the economy, a large number of developments in this area, some gaps remain related to the practical application, introduction of financial innovations, the use of innovative tools in the field of financial technologies in the Russian economy, the definition of the role and places of financial innovation in the overall structure of the financial sector of the economy. Studied the main trends in the development of the digital economy. It is convenient for people to exchange money in the process of communication without using any separate applications. Therefore, other companies have followed the example: options for sending money in the chat now offer, in addition to the aforementioned Apple, Facebook, Google, Vk.

Keywords: innovation, finance, economics, virtual business environment, securities, management.

Financial innovations are not planned by any centralized bodies, but result from the actions of individual entrepreneurs and firms. The main economic motives that stimulate the emergence of innovations in the financial sphere, in essence, are no different from those operating in any other areas of human activity. As Adam Smith noted, "Every individual seeks to use his capital in such a way that it brings the greatest profit. As a rule, his intentions do not include serving the public interest, and he usually does not even know how much he contributes to their satisfaction. He is only concerned with his own security and profit. But an individual seeking exclusively for his own benefit is directed by an invisible hand to a result that was not part of his intentions. Following his own interests, he often contributes to Theological Society is much more effective than if he really wanted to do it. "

The main role in the financial markets is played by the US economy, much will depend on the rate increase by the Federal Reserve. Recent investor surveys estimate the rate hike in the United States at 68%. In such circumstances, the dollar will grow, the flow of money from peripheral countries to the United States will increase. The economies of three or four of the most developed countries in the world are in recession. Over the past 6 years, the economies of China, Brazil, Russia (even despite falling oil prices and the use of Western sanctions), India looks better than other developing countries.

To illustrate this situation, compare the situation in which a college graduate found himself, going to travel abroad in 1965 (the year when the college graduated from the authors of this book), with what questions the modern young man has to solve. A few decades ago, a traveler abroad constantly had to worry about the fact that money can run out exactly where no one speaks your language. In this case, you had to telegraph home and try to organize a telegraph transfer from a bank in your country to a local one. There is no need to explain how long and costly this process was. Preliminary agreements with foreign banks on opening credit lines were available only to the richest travelers.

Nowadays, almost any purchase abroad can be paid with a credit card. Cards such as VISA, MasterCard and American Express are accepted almost anywhere in the world. To pay, for example, a hotel room, you simply give the clerk your card and he inserts it into a special device connected to the telephone line. In a matter of seconds, your creditworthiness is checked (i.e. the fact that the bank that issued you this card guarantees payment). After that, you just have to sign the receipt and go travel further.

Moreover, with this system, you can not worry about the fact that money is lost or stolen. If you cannot find your credit card, then simply go to any nearby bank connected to the bank that issued the lost card. The bank cancels it (so that someone else could not use it) and issues a new one. In many banks in this case, you can even get a loan.

The fact that thanks to the introduction of credit cards, international travel has become much more convenient and cheaper, no one doubts. Their invention and distribution have benefited millions of people and contributed to the "democratization" of finance.

But how did this happen? We suggest that you consider the main factors influencing the development of financial innovations by the example of credit cards.

The most important factor is technology. The use of credit cards became possible only as a result of the creation of telephone and computer networks, as well as other, more complex telecommunication systems, technical equipment and software for information processing. However, in order for credit cards to become an important part of the modern financial system, firms offering financial services and are constantly looking for new opportunities to make a profit should be ready to use this advanced technology. Households and firms had to be ready to purchase these cards.

In the history of innovation (both financial and in any other areas) it often happens that a company, which is a pioneer in the development of any potentially economically viable idea, does not receive the greatest benefits from this. This is also true for credit cards. The first company that offered to use credit cards for international travel was Diners Club, founded immediately after the end of the Second World War. The success of this company has prompted two other companies, American Express and Carte Blanche, to offer similar credit card programs.

Firms offering credit card services make a profit in the form of commissions, which retailers pay for them, selling goods using cards (as a rule, a certain percentage of the purchase price), and also in the form of interest paid for the use of credit by the owners of these cards (on account balance). The greatest costs of such firms are the costs of operations, losses due to card theft and the inability of their owners to repay their obligations.

When commercial banks first tried to work with credit cards in the 1950s, it turned out that they could not compete with companies providing such services due to their high operating costs. However, in the late 60s, these costs were significantly reduced due to the development of computer technology and banks could already compete with such firms. Nowadays, two large banking systems are leaders in the market of services using credit cards: VISA and Master Card, while the share of Diners Club and Carte Blanche firms has declined significantly.

Thus, due to competition among the largest credit card issuer firms, the costs of customer service are relatively small. For most people who travel today, using credit cards is not only more convenient, but also more profitable than travelers checks.

The first example of innovation in finance is Bitcoin. The first and most popular cryptocurrency is more expensive than ever. Gradually, the state and business are moving towards recognizing bitcoins as a means of payment, and a whole new mining industry has formed around their production. Bitcoin itself is not important, but the technology behind it - the blockchain. The possibility of decentralized, anonymous, encrypted transactions between system participants. This technology can change not only finances. She will be able to keep the correct data forever. They can not be hacked or changed. There will be no need for an intermediary who often violates privacy and is vulnerable to hacker attacks.

Block-chain can be used instead of a notary, to check the quality of products, anonymous voting and hundreds of other things. His supporters are not tired of claiming that block-chain today is like the early Internet.

Attracting shareholders' funds through an IPO is highly bureaucratic and occurs too late in the life cycle of companies. This method does not allow attracting funds for the development of a startup.

This led to the emergence of ICO - raising funds in the cryptocurrency to develop a startup in the very first stages. Thanks to block-chain technology, all investors receive their guaranteed share in case of success of the company. Over the past month, a new method has allowed companies to attract hundreds of millions of dollars.

Block-chain is not the only problem for banks. Previously, a start-up group in Silicon Valley, which is not interested in anyone in the field of financial technologies, suddenly flew up to the skies. Both in terms of universal attention and expectations, and in terms of funding. Not one promising market over the past 2 years has shown such a fantastic investment growth as fin-tech. For the period 2010 to 2015, venture capital investments grew 10-fold to \$ 19 billion a year. Around the world, thousands of FINTECH startups and several dozen "unicorns" have appeared. Only 0.2% of Americans pay for goods using a mobile phone

instead of cash or a credit card. But experts predict that this method of payment is the future, because it is more profitable, and everyone always has smartphones with them. 2 billion people still do not have access to banks and the ability to use a smartphone for financial transactions helps them get out of poverty.

So in Kazakhstan, the share of the population with skills of using a personal computer, smartphone, tablet, laptop and standard programs averages almost 70%.

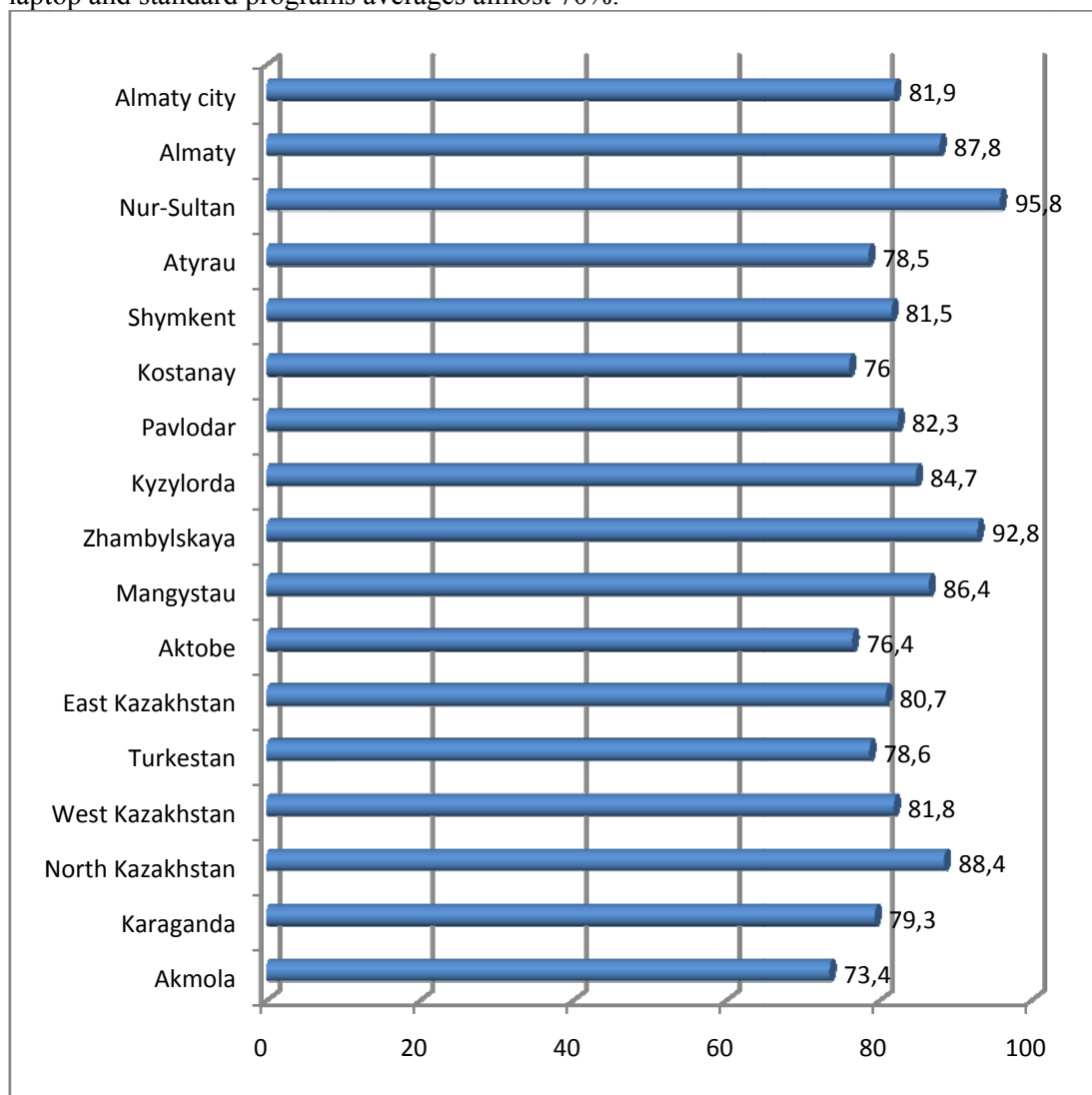


Figure 1 - Share of the population with the skills of using a personal computer, smartphone, tablet, laptop in the Republic of Kazakhstan for 2018

Thus, the Republic of Kazakhstan introduces amendments to 19 resolutions of the Board of the National Bank of Kazakhstan on issues of payments and payment systems. The changes relate to the opening, maintenance and closure of customers' bank accounts, the use of stamps, and the procedure for making cashless payments, the provision of electronic banking services and other issues. A Memo must accompany a bank loan agreement concluded with an individual borrower, in addition to the loan repayment schedule, for the borrower in an approved form.

Mobile banking applications that allow payments and transfers without visiting bank branches, including transfers only by phone number. Contactless payment cards, stimulating the growth of the use of non-cash payments. Biometric customer identification accelerates customer service and reduces fraud risks. Card delivery services or quick card issuance service in bank branches.

Another expected innovation was payments by phone number. Between the clients of the same bank, this opportunity already existed among several players and earlier, in the same year, a system of low-cost

instantaneous interbank transfers was launched using the Sunqar mobile phone number. So far, only three banks are connected to it, however, the tariffs between them differ from zero tenge to several percent.

In general, today's banks' strategy is an improvement from the point of view of the user experience of mobile versions of remote banking services, since customers began to perform most transactions on smartphones, and not in desktop versions.

According to experts, these solutions have significantly simplified customer service - in order to make payments or send money, it is enough to have a smartphone and a bankcard attached to it at hand. With it, you can pay and order a home purchase on the couch. Thus, in Kazakhstan, players create services that enable them to obtain banking services faster, more conveniently and with higher quality.

We have underfunded the sphere of applied innovations aimed at making profit at the expense of the current solutions that the market needs. At the same time, fundamental science, long-term research and old research institutes that do not work, regularly finance. At the same time, a whole pleiad of people who do not live “thanks” but “contrary to” matured, and they manage to do something. This is how e-commerce, mobile solutions and payments appeared. Depending on the industry, the process of creating innovations from basic science to product launch on the market takes from seven to 10 years, sometimes 12, while in niches related to IT, for half a year, you can roughly put 40 versions of a mobile application and market one sought-after product. \$ 50 million would be enough to finance about 1.5 thousand startups, providing teams with salaries and offices for the year of operation and stretching that amount for 3-5 years. For the year, IT professionals and coders would test several business models and launch a large number of mobile applications or some innovative solutions on the market. About 10% of them would have taken root. According to statistics, 90% of investments are unprofitable. The remaining projects are a priori innovative and popular projects. This procedure must be done annually. This scheme will be effective with the participation of professional venture investors who understand what will be in demand in the market, and not government employees, employees of development institutions, and especially not scientists.

УДК 735.29

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ЭКОНОМИКА ЖӘНЕ ҚАРЖЫЛАНДЫРУДАҒЫ ИННОВАЦИЯ

Аннотация. Экономиканың қаржы секторындағы инновациялық белсенділіктің айтарлықтай өсуіне қарамастан, осы саладағы көптеген жаңалықтарға қарамастан, Ресейде экономикадағы қаржы технологиялары саласындағы инновациялық құралдарды қолдану, практикалық қолдану, қаржылық инновацияларды енгізу, рөлді және экономиканың қаржы секторының жалпы құрылымында қаржылық инновациялар орындары. Цифрлық экономиканы дамытудың негізгі бағыттарын зерттеді. Адамдар ешбір жеке өтініштерді пайдаланбай, байланыс процесінде ақша алмасуға ыңғайлы. Осылайша, басқа компаниялар мысалды бақылап отырады: жоғарыда аталған Apple, Facebook, Google, Vk-ға қоса, чатқа ақша жіберу нұсқалары ұсынылуда.

Түйін сөздер: инновация, қаржы, экономика, виртуалды бизнес ортасы, бағалы қағаздар, басқару.

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ИННОВАЦИИ В ЭКОНОМИКЕ И ФИНАНСАХ

Аннотация. Показано, что, несмотря на значительный рост инновационной активности в области финансового сектора экономики, большое количество наработок в данной области, сохраняются некоторые пробелы, связанные с практическим применением, внедрением финансовых инноваций, использованием инновационных инструментов в области финансовых технологий в российской экономике, определением роли и места финансовых инноваций в общей структуре финансового сектора экономики. Изучены основные тенденции развития цифровой экономики. людям удобно обмениваться деньгами в процессе общения, не

используя при этом никакие отдельные приложения. Поэтому другие компании последовали примеру: варианты отправки денег в чате сейчас предлагают, кроме вышеупомянутой Apple, Facebook, Google, Vk.

Ключевые слова: инновации, финансы, экономика, виртуальная бизнес-среда, ценные бумаги, управление.

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