

Prospects For The Development Of Financial Technologies In The Financial Sector

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ABSTRACT

The article analyses and considers the tendencies of the development of financial technologies and services in the financial sphere. Moreover, it describes the main directions of developing the spectre of innovative financial services and products on the basis of the digital economy.

Keywords: financial products, digital platforms, P2P operations, financial institutions, fintech companies.

INTRODUCTION

The transition to a digital economy is a time requirement. The world's largest enterprises specializing in operations with goods and resources use digital technologies related to e-business and commerce in their activities. This makes them participants in the market of digital goods and services, where they act as consumers and customers and sometimes even create and offer new technologies.

The article written by Salvatore Moccia, Katia Passerini, and Igor Tomic, focuses primarily on the financial services industry, noting the importance of connectivity, digital assets, and regulation. The authors recognize the opportunities *and* disruptions that fintech creates. They look at how incumbents must respond opportunistically *and* defensively to fintech adoption. A key observation is the tension between “stability and innovation,” where change — regardless of how important or impactful — threatens existing processes, platforms, and regulations. The regulatory challenges are especially important since many of the new technologies — particularly blockchain and cryptocurrency — are uncharted and unregulated. Regulations will emerge that will challenge and enable fintech, and technology providers and those who adopt fintech should prepare for alternative regulatory scenarios [10].

Jumaev considered the potential of the financial services market in the context of financial technologies and highlighted in his article the existing problems in the field of financial innovations in Uzbekistan. Among these problems, he pointed out the following:

- inefficiency of the existing system of state regulation of the financial services market, as there is a significant state share in the banking, insurance and leasing sectors;
- poor marketing;
- low level of economic confidence of the population in the financial system.

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He considered it appropriate to apply the following measures to address these problems:

- reducing the participation of the state and stimulating the development of private financial institutions in the financial market;
- improving the training system for the financial sector;
- transition of all financial companies to international financial reporting standards.

To address these and other challenges in attracting investment and improving the financial sector, on February 24, 2020, the President of the Republic of Uzbekistan signed Resolution No. PP-4611" On Additional measures for the transition to International Financial Reporting Standards", which opens a new page in the history of the transition to IFRS in the Republic of Uzbekistan. This also allowed the development of financial technologies through the application of foreign experience in the financial and economic sphere of our country.

An important condition for the dynamic development of the Republic of Uzbekistan is the accelerated introduction of modern innovative technologies in the economy, social and other spheres with a wide application of the achievements of science and technology.

Rapidly developing all spheres of public and state life of the country require close support of the ongoing reforms on the basis of modern innovative ideas, developments and technologies that ensure a quick and qualitative leap of the country into the ranks of the leaders of world civilization.

At the same time, the analysis showed insufficient work on the innovative development of modernization processes, diversification, increasing production volumes and expanding the product range of competitive products in the domestic and foreign markets.

In particular, due to the lack of many indicators and inefficient coordination of work in this direction, our country has not taken part in the rating of the Global Innovation Index compiled by influential and authoritative international structures in recent years.

The low level of cooperation between the economic and social sectors and scientific institutions, the lack of coordination of ministries and departments, as well as local government in the field of innovative development do not allow achieving the priority goals and objectives in this area [12]. Financial technologies are a large segment of modern IT-technologies used in the banking sector by various financial institutions working both with retail and with the corporate segment. This concept includes various solutions, ranging from online payments to money management, cloud cash registers and mutual lending systems.

The development of financial technologies has served as an engine for the transformation of the global financial system. Uzbekistan is no exception since, at the present stage of its development, integration processes are taking place between various spheres of activity, leading to real changes. The key segment in the development of financial markets has become the introduction of new financial technologies resulting from conservative financial management when using digital technologies.

Over the past few years, the financial technology industry has developed at a significant rate, but despite the rapid development of this phenomenon, the exact definition of fintech has not yet been derived.

MATERIAL AND METHODS

The theoretical and methodological significance of the study consists in the increment and development of a number of theoretical positions and methodological aspects of the digital transformation of socio-economic systems based on a service integrator through a universal digital platform in the context of accelerating the pace of digitalization of the country's economy, as well as the advanced development of the service sector, the formation of a new quality of

PROSPECTS FOR THE DEVELOPMENT OF FINANCIAL TECHNOLOGIES IN THE FINANCIAL SECTOR

service activities due to its virtualization and digitalization. The formulated theoretical provisions and methodological aspects can be used in further fundamental and applied scientific research on the problems of effective management of economic services, digitalization and digital transformation of socio-economic systems. Of particular interest is the direction of expanding the use of digital platform services provided by the service integrator and the development of management methods for promising forms of organization of economic activity in the service sector.

Furthermore, new legal acts and documents related to the development of financial technologies and digitalization of economic processes are analyzed and based on the research way. On top of this the publications of world bank organizations considering the very aspects of financial sector also actively used during the article.

Fintech (financial technologies) is a business direction that uses new technologies and innovations in the financial services market, which involves such advanced areas as digital, mobile payments and transfers, e-wallets, online lending, P2P platforms, crowdfunding, online funds, online insurance, etc.

On the eve of the 29th anniversary of independence, Uzbekistan found itself on the verge of the fintech era. Fintech in the country, in many respects, developed in spite of the fact that both banks and the regulator represented by the Central Bank were conservative for a long time, taking any new products with hostility. For example, banks at first treated even with suspicion of p2p technology (transfers from card to card), as they thought that it carries risks.

The regulator also did not have much confidence. In addition, until 2018, there were offline DUET cards in circulation, when money had to be loaded manually at an ATM, which, by the way, was always in short supply. As for payments, for a long time they had to make them exclusively offline - through physical points, and in order to use the Internet and cellular communications, they had to stand in line and buy an express payment card, which were also often in short supply.

The authorities were happy with this state of affairs for a long time. Only in 2018 were made the first steps towards digitalization of the financial sphere, when at the legislative level they approved the course for the introduction and development of digital banks. A few months later, online deposits became available to users, then it became possible to convert currency through a mobile application. Since then, the functionality has become much wider: remotely you can not only open a deposit and change currency, but also apply for a loan, order a card, transfer funds, receive money transfers, manage accounts, pay for goods and services. The Central Bank has also radically changed its attitude towards technologies, which has now begun to stimulate banks to more actively introduce them. Market giants like PAYNET have also begun their transformation - at the end of 2017, the company acquired own application. Started actively invest in mobile and another major player - UzCard. However, despite all this, a full-fledged digital transformation of the sphere has not yet occurred. Banks are still at the beginning of their journey and are still far from being recognized as digital, which has led to the development of alternative financial institutions in Uzbekistan, which are payment services.

Their heyday began in 2016. Seeing that banks are in no hurry to go online, private services such as Payme, CLICK and OSON began to expand their range of services. Whereas previously, in order to pay for cellular communications, you had to look for a Paynet service, now it was enough open the application and click a couple of times. CLICK went ahead and launched USSD requests, through which it was possible to pay in a non-cash way. Almost all shops across the country have adopted this. By the end of 2019 by users in 8 years were committed payments for

more than 15 trillion soums. At the same time, the amount of transactions in 2019 alone amounted to about 8 trillion soums. In 2018, at the Central Bank announced that they plan to create conditions for the introduction of payment via QR codes, but in services like Payme they were for a long time, and in 2017 there was also an offline payment with a QR code. In 2019, Uzbekistan officially returned WebMoney. This was also made possible by payment services such as OSON, which acted as a local partner, which led to the fact that by 2020 payment aggregators began to service more than 50% of card transactions in local currency by processing payments from cards.

According to the publication of the global research Fintech Service Penetration Index 2019, fintech is interpreted as organizations that combine innovative business models and technologies for the provision of financial services, as well as their improvement and significant changes [4].

RESULTS

After analyzing the international practice, three approaches to understanding the essence of “fintech” can be distinguished (Fig. 1.).

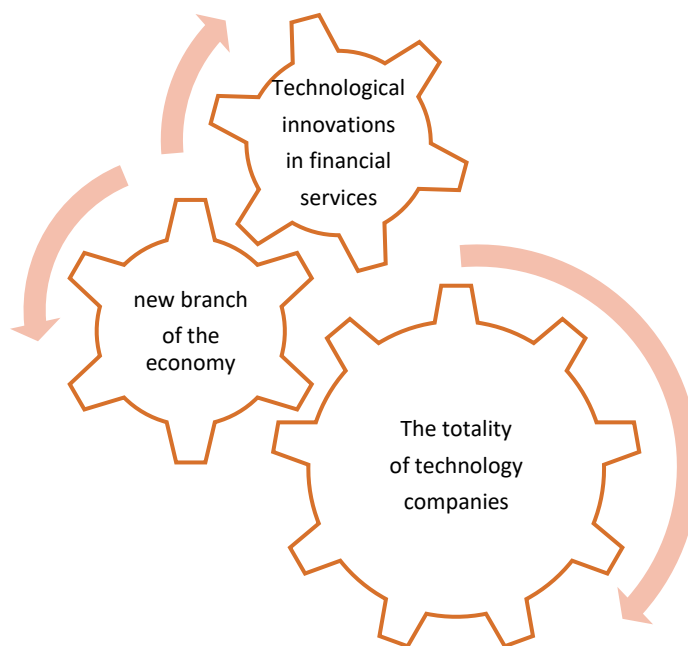


Figure 1 - Definition of "fintech" from the perspective of three approaches to understanding its essence

The first meaning of fintech is presented as a new branch of the economy composed of young companies that provide improved products and services to the financial market.

The second meaning of this concept is expressed in the aggregate of new technology companies that, on the basis of their own funds, are developing mechanisms for introducing innovative technologies into the traditional financial sector of the economy.

The third understanding of the essence of fintech lies in the practical activity based on the use of software to meet the demand for products of the financial market.

2021: 3 forecasts on fintech from IDC

PROSPECTS FOR THE DEVELOPMENT OF FINANCIAL TECHNOLOGIES IN THE FINANCIAL SECTOR

Mid February 2021 analysts IDC published IDC Future Scape: Worldwide Financial Services 2021 Predictions, which examined the possible evolution of global financial technology services over the course of the year. According to experts, risk management will once again become a key factor in investment and business decisions. Financial institutions must ensure that they can withstand high arrears and investments flow into credit decision-making, collection and repayment systems, and asset and liability management systems.

In this regard, analysts presented a number of forecasts in the field fintech that will affect the IT industry and technology buyers and suppliers:

Forecast # 1: By mid-2021, 50% of retail banking lending decisions will be driven by financial technology, indicating a rapid strengthening of collaboration between banks and fintech.

Forecast # 2: By 2024, 50% of branch transactions will be in the form of pre-arranged transactions or meetings that are initiated on digital platforms and executed using bank-owned technology.

Forecast # 3: by 2024, 75% of all consumer loans and loans to small businesses will be issued through automated processes with support AI...

However, in 2021, other trends in the activities of banks and insurers related to fintech are expected to appear. Although fintech companies faced various challenges in early 2021, many financial institutions are showing a willingness to cooperate. This can be seen even in the most traditional business transactions, such as lending and taking deposits.

By 2024, 75% of all consumer loans will be disbursed through automated processes with AI support - IDC forecast

Financial institutions face many challenges, researchers say: new competitors, demographic shifts, rising customer expectations and changing regulatory requirements. Technology offers solutions that enable banks and other financial institutions to reduce costs and become more efficient.

Global investment in fintech projects decreased by 13% to \$ 42.14 billion - CB Insights

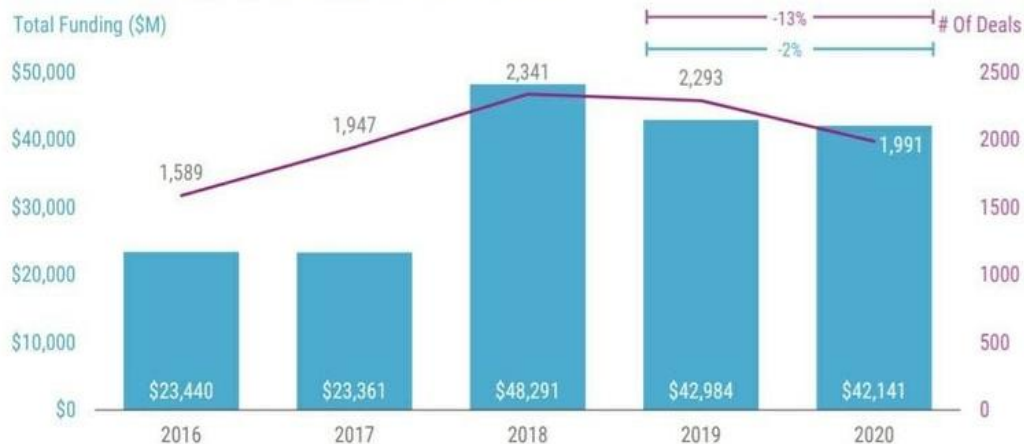
In 2020, the volume of venture capital investments in fintech projects in the world reached \$ 42.14 billion, which is 3% less than a year earlier. The number of funding rounds fell even more - by 13%, to 1991 transactions. This is evidenced by data from analysts at CB Insights.

According to their calculations, in the fourth quarter of 2020, there were 522 investment transactions in the fintech industry, which is 11% less than a year ago. The last time such weak dynamics was observed was in the third quarter of 2019. Series A, B and C rounds accounted for 90% of transactions. Higher activity in early and mid-stage deals explains why the share of mega-rounds (deals over \$ 100 million) in total funding fell from 59% to 44%, the researchers note.

The fintech industry is gaining momentum in South America. From 2016 to 2020, financing of such startups in the region grew by 64%. About 40% of transactions during this period fell on alternative credit and payment companies. In this region, access to credit, as well as receiving and sending funds by consumers and businesses, is associated with certain challenges. Some startups, including Credits and Local, have offered effective services to solve these problems, due to which they raised a significant amount of funds in 2020.

2020 deal activity fell 13% YoY, but total funding remained in line with 2019

Global VC-backed fintech financing trends, 2016 – 2020



16

Figure 2. Indicators by the volume of venture investments in fintech projects in the world, the number of rounds of financing for 2006-2020 (data from CB Insights)

Europe took over for the first time Asia by the number of transactions per quarter, Europe was last in the lead in the second quarter of 2019. Activity in Europe grew by 6%, and in Asia fell by 2%. However, financing for fintech projects in Asia increased by 10%, while financing for European companies fell by 17%.

In 2020, M&A activity grew by 25%. For instance, Visa and Stripe made purchases in emerging markets, acquiring Yellow Pepper and Paystack, respectively. Market data providers Bloomberg and FactSet bought companies to complement their own offerings - Second Measure and Truvalue Labs, respectively.

CB Insights researched global financial technology investment features in key segments:

Payment projects raised over \$ 12 billion in 2020, an increase of 3%. The number of deals during the same period decreased by 7% to 337. Notably, there were 37 mega-rounds in 2020, up from 30 in 2019.

Banking sector: With a 12% increase in financing for digital banking companies, the number of transactions did not change.

Alternative lending: Investment activity in alternative lending declined significantly in 2020 - about 35%. This applies to both the number of transactions and the volume of investments in them. The number of mega-rounds has also dropped, from 25 in 2019 to 15 in 2020.

Capital management: the number of investment deals in such companies decreased by 11% in 2020. However, funding increased 86% thanks to 10 mega-rounds, which accounted for 50% of total funding in 2020.

Activity on deals with insurtech companies during 2020 remained unchanged, but funding fell by 6%. However, in 2020, several IPO, including the Lemonade listing, Root Insurance and Metromile.

PROSPECTS FOR THE DEVELOPMENT OF FINANCIAL TECHNOLOGIES IN THE FINANCIAL SECTOR

Capital Markets: Funding increased by 21%, but transaction activity decreased by 13% as the number of rounds increased. Only mega-rounds accounting for 60% of total funding in 2020 are considered. In addition, the number of mega-funds has more than doubled from 13 in 2019 to 27 in 2020.

Small and Medium Business: Financing and deals increased by 18% and 13%, respectively. The second quarter of 2020 made the largest contribution to financing and transaction growth - 41% and 29%, respectively.

The property: Funding for real estate companies fell by 43%. On an YoY basis, transaction activity declined 23%. Quarterly transaction activity has not shown growth since the third quarter of 2019.

In 2018, banks realized that they were missing a serious market and could lose even more if they did not urgently make a digital breakthrough. Most of them began to offer their products and services through digital channels, mobile applications became more convenient, their functionality expanded significantly. products like Apelsin from "Kapitalbank" or Joyda from "Uzpromstroybank" appeared on the market. Apelsin has become not just an application for bank clients, but an independent service with a wide range of functionality. It was here at first appeared transfers from any HUMO cards to any Uzcard (the developers explained that any2any is replacing p2p - transfers anywhere and from anywhere), and then VISA Direct- Sending money from VISA cards to the CIS countries and Europe. JoydaI decided place a bet on the marketplace. Yes, in 2020, banks realized that they could not limit themselves to classic functions and began to look at neighboring markets. "The market requires banks to turn into services," the Uzpromstroybank explained. In 2020, two digital banks appeared in the country at once -TBC Uzbekistan and Anorbank. Both companies are betting on the lack of service offices and mobile technology. Forced isolation of people on the one hand, and the increased interest of the population in e-commerce (shopping in online stores, ordering groceries from supermarkets and food from stores) on the other have led to a sharp development of digital financial In particular, it became possible to remotely open a card of national and international payment systems, which the bank employees delivered to the client's home. Due to specific services like conversion, online deposits, money transfers, card delivery and lending, banks have a competitive advantage that ensures a constant flow of customers to applications.

DISCUSSION

World practice shows that for a stable and effective functioning of the financial services market, it is necessary to have such interrelated components as professional standards and ethics of employees of financial institutions, effective control and supervision by financial market regulators, ensuring a competitive environment and accessibility of financial services, protecting consumer rights and improving financial literacy of the population.

Fintech is one of the engines of the economy. And the authorities began to understand this. Nowadays in the financial sphere there have been taken a great number of measures to develop the penetration of new fintech products in almost all spheres of financial and economic sectors. The figure below describes the different sectors of economy and the forms of implementing fintech products in each of them.

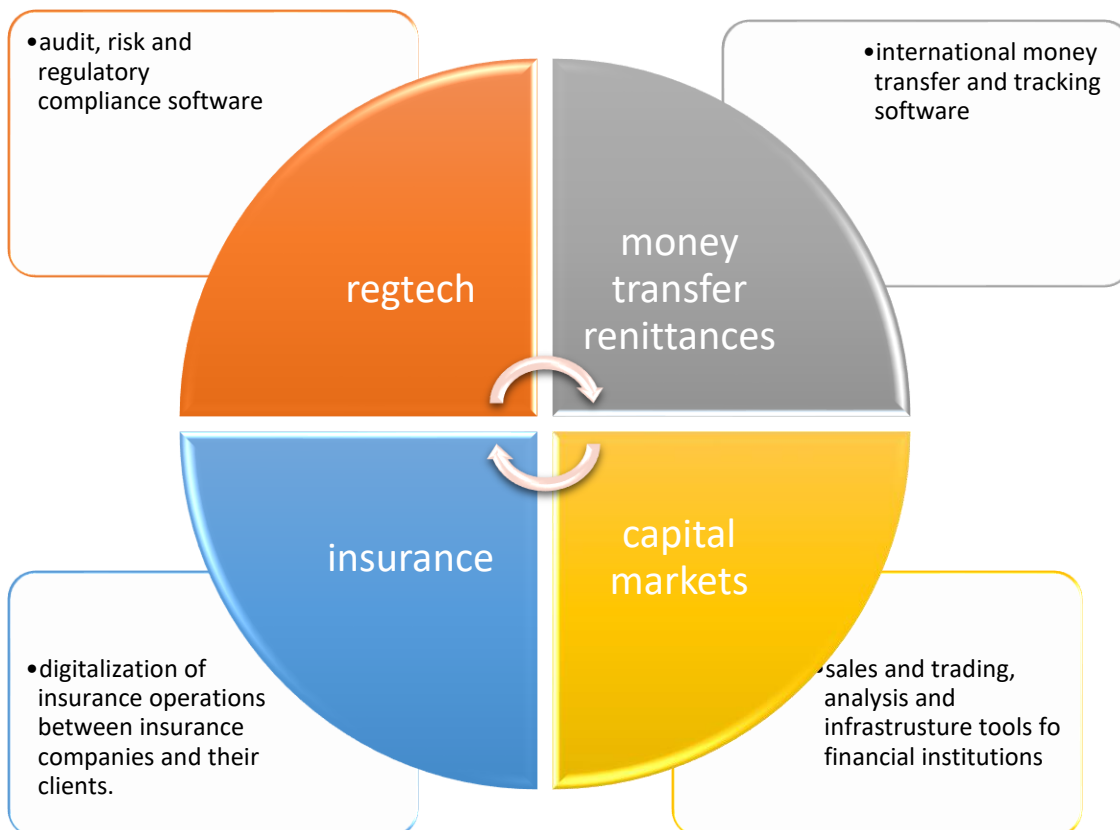


Figure 3. The different forms and ways of implementing financial technologies in 4 different spheres of financial sector.

Over the past three years, the Central Bank has made more than 10 decisions aimed at developing fintech in the country. The regulator has also created a new payment system HUMO, which began to compete with Uzcard bracelets for payment, introduces cashless payment in the metro and much more. In March, the regulator launched QR-online payment service is a universal standardized payment service based on QR codes. In June 2020, the Central Bank presented its first mobile application, where there is information about the main monetary indicators, history of exchange rates, an interactive map with exchange offices and other objects preparing launch of HUMO Pay - the domestic analogue of Apple Pay and Samsung Pay, which will allow you to pay with your phone without contacting the terminal.

After the law on payments came into force, payment services received new tools in addition to electronic money. For example, OSON is completing the integration with international Visa cards, which will allow users to link international cards (no matter where issued). it will be possible to replenish the wallet, as well as transfer and pay for services. The partners are Turkiston Bank and several foreign banks. After that, the OSON application will turn from a local service into an international and almost limitless one. New tools allow such services to grow into electronic money systems - new money, limitless money, safe money.

The efforts of the Central Bank alone would not be enough, so the authorities are trying to stimulate the development of fintech through other tools, one of which is training, because without them there will be no leap or leap. This is how IT Park appeared. Now several fintech companies, including Uzcard, OSON, Paybox and others, are residents of it. Thanks to this, they

PROSPECTS FOR THE DEVELOPMENT OF FINANCIAL TECHNOLOGIES IN THE FINANCIAL SECTOR

receive tax and other incentives, which allows them to channel more money for development. In addition, the authorities represented by IT Park support fintech various courses, trainings and programs.

CONCLUSION

One thing is known that despite the fact that the country is faced with uncertainty, the penetration of technology into financial services and in the lives of people in Uzbekistan has undoubtedly accelerated. International companies, the emergence of new banks in the country, the emergence of new start-ups in the development of financial software continue to appear due to the needs of customers, allowing banks to provide better and faster services. Uzbekistan attracts world suppliers with its high rates of economic growth and the potential of the fintech sector. The market is ready for a qualitative breakthrough: demand appears, the legislative base is being improved. People want to use convenient services, spending a minimum of time and getting the maximum benefit.

To sum up, we can highlight the following points:

1. The development of financial technologies plays an important role in the financial and economic relations of the country as the introduction of the digital economy in the financial system of the country simplifies the procedure of economic relations at the micro and macro level.
2. The use of innovative financial technologies in the digitalization of the economy provides the necessary prerequisites for the development of the digital economy. In particular, in our country, in the coming years, significant work is also being carried out on the application of the latest financial technologies in the digital economy. Over the past years, the main indicator of our state for the introduction of the digital economy on a global scale has grown significantly.
3. It can be suggested that since the role of information technologies in the digital economy of the country is invaluable, the use of information technologies, programs, as well as financial technologies in the development of the digital economy is extremely important. At the same time, one of the most important factors is the development of the necessary regulatory framework for the further development of relations of the digital economy. Taking into account the low level of trust in the market between economic entities and the insufficient development of horizontal communication practices, regulatory norms should establish essential conditions and principles for the implementation of IT rights, as well as promote the building of horizontal ties, the development of self-regulation and increase trust between participants in the digital economy. At the same time, studying the best practices of foreign countries and applying them in practice also gives effective results.

CONFLICT OF INTERESTS AND CONTRIBUTION OF AUTHORS

The authors declare the absence of obvious and potential conflicts of interest related to the publication of this article and report on the contribution of each author.

SOURCE OF FINANCING

No funding was required for this research.

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