Private FinTech as a tool for sustainable business development in Russia and Kazakhstan
FinTech Market Trends
Deloitte CIS Research Center, 2018
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Finance technologies (FinTech) are among the fastest growing markets. They beat other industries by the pace of the development both in terms of the financial performance (e.g., investments, M&A activity, etc.) and the number of end-consumers. International experts note that the number of FinTech users has been increasing by 15-20 percent annually in the past five years. The FinTech products are offered in various consumer segments. Most FinTech users cannot do without using those technologies on a daily basis. For instance, one in three residents in million-plus cities use more than two FinTech services daily. Experts estimate the FinTech penetration in Russia at 50 percent.

The key driver behind the FinTech market development are the Internet and digitalization. At the early stages, the FinTech market comprised nothing more than e-payments and e-transfers. However, presently it offers a number of new services, such as lending, personal finance management (PFM), loyalty programs, insurance, management accounting, etc. As a result, in a relatively short period of time (in less than five years) we saw dramatic changes in the infrastructure of the adjacent markets, i.e., banking, insurance, broker services and other segments.

However, FinTech-related solutions are implemented in the major companies much slower than the FinTech industry itself advances and the consumer interest grows. Hence, the fast growing consumer interest in the FinTech end products and the lack of sufficient flexibility of the business infrastructure (e.g., Financial Institutions) at the point of launching and implementing new FinTech solutions paved way to the birth of the private FinTech market.

According to international experts, this market emerged around ten years ago, with payments systems (non-bank transfers), mobile payments (via mobile phones) and online lending (e.g., P2P) being the first products launched in this segment. As soon as in two years this list increased significantly and became unique from a geographic standpoint.
Speaking about the FinTech market and FinTech service proliferation one should not ignore such development driver as trade relations between countries. Russia's key trade partners are China and Kazakhstan, which undoubtedly impacts the Russian domestic, as well as the global FinTech market. Moreover, the representatives of Kazakhstan's FinTech market are unanimous in assessing the performance of this market post-2014. Thus, in 2016 the market grew by 365 percent versus 2915 and twelvefold versus 2014, to 8.9 billion tenge.

In this report we want to provide both a snapshot of the global FinTech market, outlining its development outlook, and focus on developing FinTech markets that are essentially interrelated (for economic and social reasons).

Using the examples of Russia and Kazakhstan we are going to review the specific drivers behind supply in the FinTech market, consumer interest (the demand structure), and examine the influence of the FinTech market on the sustainable development of business in the region.

It is common knowledge that absolute leaders in the FinTech industry are the US, some EU countries and Singapore. However, there is another measure of the market development, i.e. service penetration index on which the experts differ: some of them believe that this measure is higher in developing markets, while the others think it is fully in line with FinTech development levels. The former believe that Russia ranks third by this measure among 20 major international markets. Only China (69 percent) and India (52 percent) overtake Russia by this scale. The results of Deloitte's international research support this assumption to some extent. According to that research, Russia ranks among top 5 digital banking leaders in Europe. In practical terms, it is exactly this measure which reflects the potential effect of the FinTech market development (on the adjacent industries and the society as a whole). The emergence of new FinTech technology and their direct application leads to changes in the structure of consumption, lowers costs of some functionalities (loyalty programs, client base processing), higher business process efficiency and quality (scoring, key audience targeting, loyalty programs, etc.), as well as significant impact on the business sustainability in the region, etc.
Sustainable development is the concept based on the economic, social and environmental efficiency and aimed at meeting current needs of the human society without a damage to the future of the mankind. It is one of the key topics of the modern time. The risks arising from the lack of the sustainability practices lead to serious consequences for the business and society and are as serious as the traditional microeconomic and macroeconomic risks.

Currently, the link between sustainability risks and the financial sustainability becomes more obvious for businesses. In our previous report (How CFOs can manage sustainability risks and attain long-term advantages for their companies) we corroborated this assumption by showing how the corporate social responsibility (CSR) maturity level contributes to the financial stability of companies.

Nowadays, the CSR is less often considered as a purely social activity. Instead, it is viewed more of a strategic investment in solution of social, economic and environmental problems which, if aggravated, may undermine the business and economic sustainability.

In order to prevent negative consequences, 195 UN member countries approved the Sustainable Development Goals (SDGs) and stated their adherence to collective effort of the governments, businesses and society aimed at finding solutions to global problems.

Big strides in the financial technology (FinTech) make it an important tool of sustainable development which can both increase the efficiency of the finance industry, contribute to achievement of the SDGs, and create value for society. FinTech products enable full-scale integration of various population groups in the financial system by increasing the availability of financial services. This is in line with the goals of the initiative aimed at increasing the financial integration in developing countries which is directly linked to poverty reduction campaigns led by the World Bank and other international institutions.

Although FinTech products appear to be focused solely on higher efficiency of financial systems, the financial systems are considered to be a tool for increasing the operating and environmental efficiency. FinTech ensures secure and unbiased perception of conditions in which goods are produced, as well as encourages producers to disclose information on the entire supply chain to its customers. Innovative products and services of FinTech companies may have a positive impact on availability of natural resources and their rational use. For example, this includes services enabling real-time transactions and other online solutions which are currently replacing the use of paper documents in the financial transactions.

Importantly, some initiatives aimed at attaining the SDGs through implementing FinTech solutions exist only in the form of ideas, so far. However, our analysis shows that the application of FinTech solutions for social and environmental purposes will only grow.

FinTech is a powerful tool for achieving the SDGs and improving the quality of life.

Ivan Kukhnin
Director
Risk Advisory
Sustainability Group Leader
Deloitte CIS
Key findings
The FinTech market has three fundamental evolution drivers:

- Growth in demand
- Proactive regulation
- Market agility

**Driver 1. Growth in demand**
**Top 3 reasons:**
01. A financial technology boost results in broader availability of financial services for consumers and businesses*
02. Financial technology contributes to more agile delivery of financial services to consumers and businesses*
03. Financial technology helps to improve living standards and make businesses more competitive, bringing in healthier profitability.

*The agility and availability of financial services tend to increase both geographically and also in terms of making services available to social groups requiring a more focused proposition.

**Driver 2. Proactive regulation**
**Top 3 reasons:**
01. Financial technology is one of the key tools used to strengthen transparency in business and the national economy. It also helps to reduce cyber risks in the finance industry.
02. Financial technology can be used as a way to enhance living standards and implement better financial support for businesses.
03. Financial technology underpins the development of a FinTech infrastructure. It is already a prerequisite for maintaining growth in the leading national economic sectors.

**Driver 3. Market agility**
**Top 3 reasons:**
01. Digitalisation is a trend with relevance across various industries, including agriculture, manufacturing and pharma. It has a profound impact on what businesses need and what clients expect from FinTechs.
02. FinTech is a fast-paced and highly competitive market. As a result, FinTechs have to stay aligned to both demand specificity and the behaviour of competitors.
03. With an opportunity to draw on successful international practices, the Russian FinTech market is far more dynamic, offering a broader variety of products and services to surpass other industries.

Therefore, the FinTech market as such is one of the drivers enabling a stronger national social and economic climate.
The existing pronounced positive impact from the evolving FinTech market also carries certain risks arising as potential negative consequences. Such risks can generally be divided into three groups:

**01. Infrastructural or market risks**
Volatility is a characteristic feature of the FinTech market. In addition, the demand for FinTech services is quite sensitive to market changes, including regulatory developments. Relatively weaker loyalty to FinTech services results in consumers tending to shift from the existing products to new offerings as soon as new products or regulatory constraints emerge.

This is what characterizes the financial services industry as a whole. The scale of impact from errors in automated processes is another dimension of infrastructural risk. The risk of inconsistent processes can emerge from both cyber risks (e.g., data leaks, which also involve the use of data for illegal activities) and technological failures in business processes.

Another important finding from our survey is that FinTechs have not named their potential environmental footprint as a key barrier to the development of the FinTech market. This may lead to a heavier environmental footprint as power consumption and related greenhouse gas emissions grow.

With FinTech products and data centres becoming more widespread, the lack of commercially viable power-saving and alternative energy solutions increases exposure to these risks.

**02. Economic risks**
A potential growth in debt load on businesses and consumers is one of the major economic risks as online loans are one of the key products offered on the existing FinTech market. Dropping real income would result in an increased debt load, defaults, lower living standards and a weaker economy.

However, this risk is directly dependent on the quality of financial services, and high quality hinges on the maturity of financial technology. Macroeconomically, the FinTech market needs support from the government to develop technology and build a stronger infrastructure, which inevitably requires significant public spending.

At the current stage, many private FinTechs have been on the market for less than three years, meaning that the market is still emerging and has not reached maturity. As a result, building a market infrastructure requires huge financial and labour input from the government and the business community, with potential investment returns having a minimum horizon of three to five years.

**03. Social risks**
As with many other tech companies, FinTechs have a significant transformational impact on the labour market. Firstly, the use of automation solutions and RPA technology to develop new services lays off employees who have been responsible for previously unautomated processes. Secondly, FinTechs tend to hire younger professionals, contributing to a widening inequality in terms of employment opportunities for more senior applicants aged 50+.

This could turn into a sensitive issue amid the ongoing pension reform in Russia. Even though these risks also apply to other industries, the financial services industry is one of the largest employers in Russia. Therefore, it should develop along with the transformation of the educational system to prepare professionals who will be sought after in a digital world.
Economic, social and infrastructural risks accompanying the development of the FinTech market are closely related, with the effect that growing barriers trigger risks spanning social, economic and infrastructural areas. As noted above, the FinTech market is characterised by volatility resulting from dynamic changes in offerings, with new products and services regularly launched on the market. However, when it comes to making a decision, consumers do not always have sufficient information on how FinTechs function, including product terms and conditions and the volatility of digital currencies. This leads to socio-infrastructural and socio-economic risks where consumers may face potential issues, including losses.

Even though there is a large number of risk sources, the FinTech market is not the only industry exposed to these risks. Currently, FinTechs account for less than five percent of the financial services sector. Therefore, key mechanisms for mitigating and monitoring the risks identified should and can be used. In addition, FinTechs, as any other financial service providers, are interested in a healthier market climate with a lower number of negative credit histories, reduced consumer debt burden, stronger market transparency, better data quality, higher financial literacy, etc. in a situation where regulation is tightening, providers fail to comply with business operation rules and business efficiency is becoming weaker.

According to FinTech experts, key risk mitigation mechanisms include:

- Better service delivery transparency across FinTech services
- Stronger security for personal data
- Consumer financial and technology education
- Affordable funding for Internet-focused and FinTech companies
- More efficient regulation, especially as regards legal rules and regulations underpinning the development of the FinTech industry
- Bringing private FinTechs under the regulatory umbrella of the Bank of Russia*, as well as making them part of innovation developments and providing them with remote authentication opportunities as part of the project by the Bank of Russia**
- Better FinTech products (i.e. products should become more user-friendly and help businesses and consumers minimise their costs).

These mechanisms will be further strengthened through fundamental drivers that are common across markets and that also support the development of FinTech services. This attests to the fact that this process is organic and has a mid-term potential over a period of three to five years. Accordingly, our survey takes a closer look at the development trends in the Russian FinTech market over a period until 2020. In answering this question, we used in-depth analytics to gain an understanding of the unique quality and quantity data.

* http://www.cbr.ru/fintech/regulatory_platform
** http://www.cbr.ru/fintech/remote_authentication
# A snapshot of Russia’s FinTech market — 2018

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<th>Metric</th>
<th>Description</th>
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<td>Russia’s FinTech market size, 2017</td>
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<tr>
<td>USD million</td>
<td>Total M&amp;A value, 2017</td>
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<tr>
<td>0.43</td>
<td>Consumer sentiment index*</td>
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<td>3,652</td>
<td>Number of employed in Russia’s FinTech industry</td>
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<td>3</td>
<td>FinTech company average ‘age’</td>
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<td>102,000</td>
<td>The average number of B2C clients</td>
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<tr>
<td>352</td>
<td>The average number of B2B clients</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>The average number of employees in FinTech companies</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>The number of transactions, 2017</td>
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* on the scale from -1 to 1
Drivers and barriers for development of Russia’s FinTech market

Top five development strategies for Russia’s FinTech market:
01. Implementation of new technology
02. Launch of new products in the market
03. Entry into new markets
04. Organic growth
05. Higher promotion and marketing expenses

Top five barriers for the development of Russia’s FinTech market:
01. Low appeal for foreign investors
02. Low purchasing power of the population
03. Deficiencies of government regulation of the industry
04. Geopolitical risks
05. Lack of flexibility in the tax system with respect to FinTech

42 percent of FinTech companies assessed the efficiency of the regulator’s current efforts at the average level.

38 percent of FinTech companies believe the efficiency of the regulator’s efforts is low.

20 percent of FinTech companies believe the efficiency of the regulator is low.

Regulator efficiency index with respect to FinTech support and development is at the average level (1.66 out of three possible levels).

Despite the average regulator efficiency scores, 48 percent of FinTech companies see positive changes in the regulator’s efficiency.
The Russian FinTech market development map until 2020

The growth in the market will continue at the same pace within the next two years, and there are two drivers at play. FinTechs are developing new products and services, as well as working on products for related industries.

Andrey Petkov (MFC «Chestnoe Slovo»)

First, the market is far from reaching saturation, given the fast Internet penetration rates in Russia. Second, the availability of highly qualified IT specialists in the market makes it possible to implement the most complex and nonstandard projects everywhere, in the capital and the regions. Third, both the business and the government (the Central Bank and the Finance Ministry) actively promote FinTech.

Sergey Sedov (Zaymer)

One should realize that in the past ten years Europe and the US has seen the most continuous bull market since mid-20th century which we totally missed. At all. We have had recession since 2010. The private sector contracts while the role of the state increases.

Alexander Dunaev (MoneyMan)
Today, the situation in the FinTech market is mixed while the forecast is negative. There are plenty of reasons to it, as the roots are of a systemic nature. The first and foremost, startups and smaller companies in the Russian market have no chances to compete with large players due to the lack of competition between the latter. Although the major players declare that there is competition, in fact, it does not happen in the market, which prevents smaller companies and startups from offering innovations in the market. Hence, the first reason comes from the lack of a real need in innovations from outside on the part of financial institutions. The closed nature of financial institutions is the second reason. The participants of the recently held FinTech power conference agreed that the first reaction of financial institutions to interesting ideas is contemplating the implementation on their own. This poses another obstacle for startups as its life cycle at the seed stage rarely exceeds 2-3 years (provided it is not a ‘zombie’ startup). While major players try it ‘on their own,’ startups are closing due to the lack of first clients. Stagnation in the Russian economy is the third reason. The contracting market, sanctions, rouble volatility, growing tax burden, increasing role of the state in the business, and ‘neo-feudalism’ force young and ambitious innovators to leave the country as it is easier for them launch the business of their own in indisputably more stable conditions in the West where the resources are cheaper and the market is larger and, more importantly, growing. In the West, given the need of western institutions in innovations and tough competition, startups develop faster, raise financing and attract clients easier, as well as can protect their intellectual property in a more secure way. In order to make the robust development of FinTech companies happen in Russia, a lot of reforms need to be performed which is not expected in the short-term. In such conditions, the FinTech market in Russia is destined to contract and remain a subsidized branch of government-owned companies (or a part of ‘innovation cities’ subsidized from the federal budget). There are also two significant obstacles for the Russian FinTech development. First, state companies often buy and integrate FinTech startups instead of helping them to develop, buying their products and services, and providing advice to boost their competitiveness. Second, it is difficult to access global capital markets from Russia which otherwise is vital for modern business models in order to monetize digital products and services. It would take years of work to achieve this through improving the country image which is objectively difficult to ensure in the near future. To sum up, the FinTech community does exists and tries to develop in Russia but the external factors are likely to have a negative impact on the market preventing Russian companies from full-scale competition with western FinTech communities in the mid-term.

Alexey Minin
Executive Officer
Data Analytics Institute
Deloitte CIS
The input of Russia’s FinTech in achieving the SDGs

In 2015, 195 Member States of the United Nations adopted the Global Sustainable Development Goals, which underlie a transition from the industrial era to environmentally clean development within cleaner systems. Countries, industries and companies contribute towards these Sustainable Development Goals (SDGs) by the mere fact of operation.

In Russia, FinTech is the main contributor to SDG 9 (Industry, Innovation and Infrastructure). Significant steps are also being taken to contribute towards SDG 8 (Decent Work and Economic Growth) and SDG 1 (No poverty). According to research by SDSN and Bertelsmann, SDGs 8 and 9 are among the Goals with the lowest probability of achievement. Due to the ongoing growth in the Russian FinTech market it may be concluded that there will be positive developments and progress towards SDG 8 and SDG 9.

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

1.6 Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least seven percent gross domestic product growth per annum in the least developed countries.

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead.

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

9.3 Increase the access of small industrial and other enterprises (especially in developing countries) to financial services including affordable loans, as well as expand their integration in production and supply chains and markets.

The contribution of some FinTech products to the implementation of the SDGs is reviewed in more detail.
A snapshot of Kazakhstan’s FinTech market — 2018

- **17** Tenge billion: Kazakhstan’s FinTech market size, 2017
- **42**: The average number of employees in FinTech companies
- **1,675**: Number of employed in Kazakhstan’s FinTech industry
- **58,000**: The average number of B2C clients
- **370**: The average number of B2B clients
- **5** years: FinTech company average ‘age’
- **0.08**: Consumer sentiment index

Deloitte’s calculations are based on SPARK-Interfax data with respect to companies which disclosed the revenue for 2016.
Drivers and barriers for Kazakhstan’s FinTech market

Top five development strategies for Kazakhstan’s FinTech market:
01. Launch of new products in the market
02. Cost cutting
03. Short-term capital optimization and operating model revision
04. Entry into new markets
05. Implementation of new technology

Various aspects of Kazakhstan’s FinTech market development strategies are reviewed in more detail.

Top five barriers for the development of Kazakhstan’s FinTech market:
01. Cyber threats
02. Deficiencies of government regulation of the industry
03. Currency risks
04. Weak protection of the personal data
05. Low appeal of Kazakhstan’s FinTech for foreign investors

Various aspects of Kazakhstan’s FinTech market development are reviewed in more detail.

50 percent of FinTech companies believe the efficiency of the regulator’s current efforts is low.

30 percent of FinTech companies believe the efficiency of the regulator’s efforts is at the average level.

20 percent of FinTech companies believe the efficiency of the regulator is high.

The regulator efficiency index with respect to FinTech support and development in Kazakhstan is at the average level (1.5 out of three possible levels).

Despite the average regulator efficiency scores, 40 percent of FinTech companies see positive changes in regulator’s efficiency.

Assessment of the Regulator’s involvement in Kazakhstan’s FinTech market development is reviewed in more detail.
In the first turn, we mean online lending and payments when we speak about Kazakhstan’s FinTech market. The share of pessimistic responses is attributed to tighter regulation of microfinance organizations (a new rate has been introduced). Regrettably, there is no dialog between the regulator and business, while the regulator acts mostly in an imperative and punitive manner.

Asem Nurgalieva
(First Credit Bureau)

* on the scale from -1 to 1
Kazakhstan’s FinTech market development map until 2020

Top five advanced technologies:
01. Big data
02. Predictive analytics
03. Artificial intelligence
04. Cluster analysis
05. Internet of Things

The central areas of the FinTech market’s development are reviewed in more detail.

Top five segments to expand in the future:
01. Digital banks
02. Scoring
03. Lending
04. Loyalty programs
05. Marketplace

The central areas of the FinTech market’s development are reviewed in more detail.
The input of Kazakhstan’s FinTech in achieving the SDGs

In Kazakhstan, FinTech is the main contributor to SDG 9 (Industry, Innovation and Infrastructure). Significant steps are also being taken to contribute towards SDG 8 (Decent Work and Economic Growth) and SDG 1 (No poverty). According to research by SDSN and Bertelsmann, SDG 8 and SDG 9 are among the goals that have the lowest probability of achievement or remain unachieved. Amid the growth in Kazakhstan’s FinTech market, it can be expected that these SDGs will see future progress.

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

1.6 Ensure significant mobilisation of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, in order to implement programmes and policies to end poverty in all its dimensions.

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent gross domestic product growth per annum in the least developed countries.

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

8.3 Increase the access of small industrial and other enterprises (especially in developing countries) to financial services including affordable loans, as well as expand their integration in production and supply chains and markets.

The list of top FinTech technology products which contribute the most to implementation of SDGs 2 and 9:

• Online lending;
• Crowdfunding;
• P2P lending.

The contribution of some FinTech products to the implementation of the SDGs is reviewed in more detail.
Overview of the FinTech market
### The FinTech Market Trends

**Overview of the FinTech market**

**The FinTech market geography**

The consensus rating of the global FinTech market growth

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What is the market of financial technology (FinTech)?

The FinTech is among fastest-growing markets globally. FinTech companies develop innovative technology decisions for financial companies to improve efficiency, client services, and usability (in other words, to simplify, accelerate and make financial processes more convenient). Financial technologies commonly comprise all FinTech segments ranging from retail lending to high-frequency trading, big data and robotics.

Financial organizations, in particular, banks are first and key consumers of FinTech products. However, it should not go without mention that FinTech products are applied more often in other segments, such as insurance automation, risk management, as well as in retail, telecoms, entertainments, etc. Interestingly, Russia and Kazakhstan were positioned among developing markets in the consensus rating. However, Russian banks, if taken separately, outperform most European banks (based on the results of Deloitte Digital’s internal research report). Kazakhstan’s banks have specific features of their own. Many banking FinTech solutions are grouped as ‘neo-banks’: Altyn-i, B1NK, BankofAstana, Homebank.kz, Kaspi.kz, Sberbank Online.

Hence, the consensus rating reflects the global FinTech landscape only in geographic terms. Each geographic unit (country or a group of countries) has its own specific features. For example, various FinTech segments in most countries are at different stages of development, as the economic growth in each country is uneven and is influenced by domestic factors (such as demand) and external ones (e.g. regulatory rules).

Overall, Russian banks outperform most EMEA banks with respect to regular services such as payment management, bank transfers and bank cards. However, account opening procedures, client onboarding and cross-sales still lag those of the foreign competitors.”

Ilya Etko
Partner, Deloitte CIS

The final consensus rating indices are based on the weighted data of Global Innovation Index, the Global Financial Centers Index, Doing Business (WorldBank), the ICT Development Index, GCI index (Huawei), as well as Crunch Base data and Deloitte’s experience.
Comparison of regional FinTech markets

Here we group some countries by region in order to analyze the FinTech trends on a global level. For example, North America includes the US, Canada and Mexico; the average FinTech development index is at 190 points (the maximum value of 1,000 is calculated arithmetically based on the maximum progress for each indicator).

Similarly, assessments for Europe, ASEAN and South America were obtained. The sorted country data is drawn in the Appendix.

Hence, North America is the most developed FinTech region as of today (190 points), Europe ranks second (59 points) scoring three times less than the leader. ASEAN (53 points) ranks third and South America (21 points) ranks fourth.

Source: CB Insights
Country ratings by FinTech development scores are based on the consensus ratings (GII, WorldBank, International Telecommunication Union, Global Connectivity Index, CrunchBase data, and expert assessments of Deloitte Global and Deloitte CIS.)
Comparison of regional FinTech markets (North America)

Let’s review leading regional FinTech markets in detail. North America stands out for its developed FinTech market. As of today, the total investments amount to USD 7.9 billion. According to experts, investment will continue to grow at 15-20 percent. The high level of FinTech development is based on the well-established ecosystem (i.e., the number of market participants, transparency of market relations, the scale and amount of investments, etc.), efficient state regulation, attractive banking infrastructure (in terms of attractiveness for FinTech companies whose products are in demand among bank clients), and the sufficient number of qualified personnel (human capital). However, despite the maximum rating for FinTech advancement, the North American market faces a number of difficulties which constrain the development of this market. These difficulties include tough competition (high supply, high entry barriers for new participants, etc.) and high penetration (the saturation has already peaked, so the task of attracting new clients with new technologies and products looks more challenging than in the developing markets).

**North America**
- **Average rating**: 190
- **Investments in 2017**: USD 7.9 billion
- **Developed market**
- **Number of FinTech unicorns**: **16**

**The largest market participants**: Stripe (US): USD 9.28 billion, SoFi (US): USD 4.5 billion, Credit Carma (US): USD 4 billion

**Sustainable development rating**: 67

**Trends**
- **Technology**: Development of regulatory and insurance technology
- **Investments**: In 2018, corporations expect to maintain the current investment levels as the number of M&A transactions is set to increase.

**Objectives**
- **Ecosystem**: 77%
- **State regulation**: 62% (24%)
- **Banking infrastructure**: 82% (10%)
- **Labor market**: 76% (8%)
- **Market capacity**: 96% (2%)
- **Competition**: 80% (14%)

**Opportunities**
- **Ecosystem**: 3.1
- **State regulation**: 6.2
- **Banking infrastructure**: 2.6
- **Labor market**: 7.6
- **Market capacity**: 4.0
- **Competition**: 2.4

**Trends**
- **Technology**
- **Development of regulatory and insurance technology**

**Investments**
- In 2018, corporations expect to maintain the current investment levels as the number of M&A transactions is set to increase.

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* 2018 SDG Index and Dashboards
** Unicorn is a company with a market capitalization of USD 1 billion and higher
*** at the company’s valuation price
Source: CBInsights
Comparison of regional FinTech markets (ASEAN)

The FinTech market in Asia and Australia was put in the category of developing markets. However, it outperformed the North American FinTech market in terms of investments in 2016. The undeveloped market infrastructure was the main driver behind the market explosive growth. The products that are currently in demand in Asia were sought after in the developed markets several years ago. However, such lag is an advantage, as the ‘laggards’ can use the latest technological solutions implemented in the products they need. In 2017, the total amount of investments in FinTech reached USD5.7 billion, 25 percent below that in North America. Given the strong performance in 1Q 2018, significant growth (over 20-30 percent) is expected in 2018. In 2019, China is likely to regain leadership among countries investing in FinTech. The key development drivers include market capacity and low penetration of banking products among population, as well as beneficial competitive environment which allows companies to access markets with ease, without a fear of significant competition. Positive development drivers are unlikely to be outweighed by such obstacles as undeveloped ecosystem and specific features of state regulation. As for low qualification of the labor force, it is offset by its high availability.

**ASEAN**
Average rating: **52**
Investments in 2017: USD **5.7** billion
Developing market
Number of FinTech unicorns**: **5**

**The largest market participants***:**
Lufax (China): USD **18.5** billion
One 97 (India): USD **7** billion
Tuandaiwang (China): USD **1.46** billion

Sustainable development rating*: **65.1**

**Trends**
**Technology**
In 2018: payment systems, lending; in the medium term: insurance technology

**Investments**
In 2018, large IPOs are expected in Asia, e.g. In China; the investment activity in the region is set to grow.

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**Objectives**

<table>
<thead>
<tr>
<th>Ecosystem</th>
<th>82%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State regulation</td>
<td>79%</td>
</tr>
<tr>
<td>Banking infrastructure</td>
<td>89%</td>
</tr>
<tr>
<td>Labor market</td>
<td>79%</td>
</tr>
<tr>
<td>Market capacity</td>
<td>94%</td>
</tr>
<tr>
<td>Competition</td>
<td>78%</td>
</tr>
</tbody>
</table>

**Opportunities**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Ecosystem</th>
<th>82%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State regulation</td>
<td>2.9</td>
<td>79%</td>
<td></td>
</tr>
<tr>
<td>Banking infrastructure</td>
<td>2.2</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Labor market</td>
<td>2.7</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Market capacity</td>
<td>4.1</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>2.2</td>
<td>78%</td>
<td></td>
</tr>
</tbody>
</table>

Deloitte CIS Research Center data (survey of FinTech market participants):
- the share of those who believe that this factor is positive for FinTech growth in ASEAN
- the share of those who believe that this factor slows down FinTech growth in ASEAN
- balance value — the total influence of the factor on the FinTech market development in ASEAN

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* 2018 SDG Index and Dashboards
** Unicorn is a company with a market capitalization of USD 1 billion and higher
*** at the company’s valuation price
Source: CBInsights
Comparison of regional FinTech markets (Europe)

The European market belongs to the group of developed FinTech markets, with its main hub located in London, developed banking infrastructure, and the strong regulator (ECB). Europe ranks second after North America in terms of the FinTech market development. Around 8,000 FinTech companies operate in Europe. In 2017 they raised USD 2.6 billion which twice as less compared to the US. However, given the small capacity of this market, this amount of investments looks quite decent. In 2018, the key growth drivers are likely to include changes in the FinTech market regulation in Europe which are likely to increase the European FinTech's appeal for investors. Investments are expected to grow by 20 percent.

**Europe**
- Average rating: **59**
- Investments in 2017: USD **2.6** billion

**Developed market**
- Number of FinTech unicorns**: **5**

**The largest market participants:**
- Klarna (Sweden): USD **2.5** billion
- Adyen (Netherlands): USD **2.3** billion
- TransferWise (UK): USD **1.6** billion

**Sustainable development rating**: **74.2**

**Trends**

**Technology**
- Advancement of regulation, compliance and insurance technologies

**Investments**
- In 2018, investments are expected to grow, as regulatory changes are likely to provide an additional impetus (BRexit, PSD2, etc.)

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**Objectives**
- Ecosystem: 76%
- State regulation: 71%
- Banking infrastructure: 84%
- Labor market: 78%
- Market capacity: 92%
- Competition: 85%

**Opportunities**
- Balance value — the total influence of the factor on the FinTech market development in Europe

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**Notes:**
- **2018 SDG Index and Dashboards**
- **Unicorn** is a company with a market capitalization of USD 1 billion and higher
- **at the company’s valuation price**

Source: CBInsights
Comparison of regional FinTech markets (South America)

In Latin America, the FinTech market only starts to evolve. However, despite the uncertainty around LatAm economies, it has already attracted the attention of major investors. Brazil is the key country which plays the role of a driver. South America ranks fourth (with an average rating of 21) among other regions. The weak ecosystem of high technology projects is the most critical obstacle on the way of the region’s robust development, particularly as far as FinTech is concerned. Investments in FinTech in 2017 reached approximately USD 200 million which is too little. However, fivefold growth is expected in the mid-term.

**South America**

- Average rating: 21
- Investments in 2017: USD 0.6 billion
- Developing market
- Number of FinTech unicorns**: 1

**The largest market participants***:
- NU Bank (Brazil): USD 1-2 billion

**Sustainable development rating**: 67.9

**Trends**

**Technology**

- Payments, money transfers, lending

**Investments**

Investments are set to increase, especially external investments from developed markets.

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* 2018 SDG Index and Dashboards
** Unicorn is a company with a market capitalization of USD 1 billion and higher
*** at the company’s valuation price
Source: CBInsights
Sustainable development is defined as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This concept is viewed as a prerequisite for long-term progress of mankind leading to the accumulation of capital and improvement of environmental conditions.

The contemporary interpretations highlight three key aspects of the sustainable development: economic, environmental and social. In recent years, business is considered to be a key driver of changes and is expected to play the main role in achieving sustainable development goals.

“The Financial system plays a key role in transitioning to sustainable development. Today, billions of people and millions of enterprises in developing countries have no access to saving accounts and loan opportunities. The digital financing may make financial services more equally accessible to all representatives of the entire society.”

Ivan Kukhnin
Sustainability Group Leader
Deloitte CIS
FinTech’s contribution to sustainable development (2/2)

According to research performed jointly by SDSN and Bertelsmann, in 1H 2018, the SDG Index scores for Russia and Kazakhstan were 68.9/100 and 68.1/100, respectively. Over a half of the SDGs have not been reached yet. Sweden (85.0) tops the rating. Both countries lag the most on SDGs 3, 10, 14, and 16, while performing the best on SDG 1 (No poverty).

The poverty indicator and the forecast poverty ratio (by 2030) used for measurement purposes in this goal were based on the share of population with incomes below USD 1.9 per day.

FinTech contributes the most to achieving SDGs 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, and 17. The new technology paves way for faster achievement of the SDGs, as it accelerates integration of poorer countries in the global financial system. Key segments where FinTech may impact achievement of the SDGs:

01. Financial inclusion: availability of financial services, provision of real-time services to clients in remote regions;
02. Sustainable supply chains: reducing the number of intermediaries between producers and end-consumers, as well as providing transparent data on transactions within the supply chain to the customers;
03. Preservation of resources: moving business operations online, remote monitoring of the resource use;
04. Investments in sustainability: transparency of investments and ties between donors and recipients.

FinTech’s contribution to achievement of the SDGs globally

**M-KOPA** is a pioneer company which implements a pay-as-you-go model (PAYG) by selling solar power systems to low-income households in Kenya. The company aims to provide access to energy solutions to low-income individuals and drive kerosene (which is harmful for human health) from the in-house lighting market. Such installment plan allows low-income families to access the electrification systems which are not otherwise affordable.

The customer pays a minimum connection fee and then continues to pay 40-50 cents on a daily basis until the system cost is reimbursed. Afterwards, the system can be used for free. As at January 2018, the company provided solar energy to more than 600,000 households. In order to perform payments, the company uses the M-PESA system which enables bank transactions via electronic devices without opening an account. It is a crucial condition for users, as the penetration of bank services in the country is low, and many citizens do not have saving accounts, credit cards, access to loans or non-cash bank settlements.

**Pezesha** is a microcredit marketplace which issues microloans to low-income borrowers in Kenya. Pezesha provides access to the financial system for those who previously could not access it. This marketplace redistributes investments raised from other citizens in Kenya if they agree to issue loans at acceptable rates. Pezesha performed over 10 million transactions. Pezesha’s operations contribute to achievement of three SDGs:

1. **Pezesha helps 40 percent of the Kenian population with lowest incomes to build their credit histories.** The lack of credit history is linked to the fact that the lending penetration in this category of the population is less than 10 percent. 90 percent of Pezesha’s borrowers have got a credit history after using the company’s services.

2. **Less than 55 percent of women and over 70 percent of men use financial services in Kenya.** Pezesha narrows this gap by purposefully attracting more women via the financial education program and access to affordable loans. Women account for over 85 percent of Pezesha’s clients.

3. **The contribution of small, medium and microcompanies to employment and economic growth in Africa amounts to approximately 80 percent.** The lack of affordable loans negatively weighs on the lending growth. Loans issued via the Pezesha platform may result in a 30 percent increase in the lending growth and creation of more than 10,000 jobs for youth on an annual basis, improving the quality of life in the long term.
FinTech market outlook until 2020

In developing markets, FinTech companies use advantages of the popular nut more or less new products which are more or less in demand in developed markets: China, India, Brazil, Mexico and Turkey take into account mistakes made by pioneers, as well as low penetration of banking products and receive strong financial support from local and international investors. In 2017, the total value of FinTech unicorns amounted to USD 77 billion, with developing countries accounting for 40 percent of this amount. In 2018, the share of FinTech unicorns is expected to reach 50 percent and is likely to grow further, as more economies will benefit from FinTech development. In the medium term, investments will be made in the following key technologies and products: payment systems, e-commerce, as well as online lending services.

As for developed markets, the companies will focus on the development of existing technologies and government reforms: both in the legislative and tax spheres. The government support will play a role of a major development driver. Insurance technology will remain a key investment segment and regulation technologies.

According to surveyed experts, digital banks are considered to be the most future-oriented FinTech segment.

Please, evaluate the importance of the proposed FinTech segments in the medium term (one-three years).
Overview of Russia’s FinTech market
### The FinTech market in figures

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUB billion</td>
<td>48</td>
<td>Russia’s FinTech market size, 2017</td>
</tr>
<tr>
<td>Expected market growth, 2018</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>years</td>
<td>3</td>
<td>FinTech company average ‘age’</td>
</tr>
<tr>
<td>Number of employed in Russia’s FinTech industry</td>
<td>3,652</td>
<td></td>
</tr>
<tr>
<td>The average number of employees in FinTech companies</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>The average number of B2C clients</td>
<td>102,000</td>
<td></td>
</tr>
<tr>
<td>The average number of B2B clients</td>
<td>352</td>
<td></td>
</tr>
<tr>
<td>USD million</td>
<td>289</td>
<td>Total M&amp;A value, 2017</td>
</tr>
<tr>
<td>Number of M&amp;As, 2017</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>The Optimism Index for FinTech in Russia (evaluation range: [-1;1])</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>The Optimism Index for the reviewed company (evaluation range: [-1;1])</td>
<td>0.60</td>
<td></td>
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<tr>
<td>Uncertainty among companies (evaluation range: [-1;1])</td>
<td>-0.25</td>
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<tr>
<td>The Optimism Index for FinTech in Russia (evaluation range: [-1;1])</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>Outlook for company perspective (evaluation range: [-1;1])</td>
<td>0.64</td>
<td></td>
</tr>
</tbody>
</table>

Source: survey data, SPARK-Interfax, Rusbase
The current situation in Russia’s FinTech market (1/3)

**Russian Federation**
- Average rating: **31.8**
- Investments in 2017: USD **0.3** billion

**General trends**
The Russian FinTech market showed significant growth in the past two years. This is reflected in the number of concluded transactions and the size of raised investments. FinTech penetrates the banking sphere, insurance automation, risk management and trade. However, according to most experts, it is exactly financial institutions that led in application of financial technology last year. Obviously, the FinTech market growth goes hand in hand with high Internet penetration and robust promotion of high-tech financial services by banks. However, as at today the FinTech advance in Russia is not encompassing. Breakthrough FinTech projects are carried only in the largest million-plus cities or clusters where the respective technical infrastructure is developed and people are accustomed to using it (e.g. a ‘city of non-cash payments’ in Tatarstan, Innopolis, etc.). The most wide-spread financial technologies comprise the following: payments, cash transfers, scoring, financing (lending).

**Key specific features**
The key specific feature of the Russian market is the fact that Russia is considered as a key supplier of IT specialists for the FinTech industry which has a mixed impact on the FinTech growth. On the one hand, Russian specialists emigrate as it is more profitable for them to work abroad. Another specific feature of the Russian market (oppositely to Europe and the US) is the lack of regulation in some segments of FinTech. For example, the law does not regulate P2P lending, collective investments, use of cryptocurrencies (no direct prohibition), etc. Similarly to the human capital, the lack of regulation can be both a driver and a barrier for market development.

Given that the specific features of the Russian FinTech market directly depend on various market issues, we will review the stimulating and constraining factors in the next part of our report.

**Developing market**
| Number of FinTech unicorns**: **5 |

**The largest market participants: ******: MoneyMan, Ezaem, CarMoney

**Sustainable development rating**: **68.9**

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* 2018 SDG Index and Dashboards
** Unicorn is a company with a market capitalization of USD 1 billion and higher
*** at the company’s valuation price
Source: CBInsights
The current situation in Russia’s FinTech market (2/3)

Over the last ten years, Europe and the United States have been witnessing the longest continuous bull market since the mid-20th century, which has never been the case in Russia. The country has been experiencing a pronounced economic downturn since 2010, with a strong economic imbalance. Amid the growing global economy, Russia remains stagnant, with flat consumer demand and weaker investor activity. This is quite apparent and disconcerting. However, if you take a look at our company, you may see that any difficulty can be dealt with. Our company started out in 2012. Oil prices crashed in Q4 2014 as we looked to raise funds. We were getting ready to sign a memorandum of understanding within the last ten days of December when the rouble collapsed. At first, the rouble/dollar exchange rate was 40 roubles, going then from 60 to 80. That was a painful experience, but we survived. Life went on; everybody was OK, continuing their work without any fuss. In terms of capabilities, the market is defined by cyclical economic movements, a strong degree of uncertainty and volatility, as well as by the absence of a capital market. Growth can only come through profit. It is absolutely hinged on whether the market is interested or not because capital comes at a high cost. With a high cost of capital, it is difficult for a company to show its clients, even arithmetically, that it can deliver some billion-dollar profit over a span of 10-15 years. The DCF method is about discounting back. This scenario is quite feasible in the US and Europe with their low cost of capital. Unlike Russia, they assume low risk costs, which is why there is a lot of interest from investors. This is an orderly market process. The market is still emerging. And this process will take some time.

Alexander Dunaev
(MoneyMan)
Today, the situation in the FinTech market is mixed, while the outlook is negative. There are a plenty of reasons to it, as the roots are of a systemic nature. The first and foremost, startups and smaller companies in the Russian market have no chances to compete with larger players due to the lack of competition between the latter. Although the major players declare that there is competition, in fact, it does not happen in the market, which prevents smaller companies and startups from offering innovations in the market. Hence, the first reason comes from the lack of a real need in innovations from outside on the part of financial institutions. The closed nature of financial institutions is the second reason. The participants of the recently held FinTech power conference agreed that the first reaction of financial institutions to interesting ideas is contemplating the implementation on their own. This poses another obstacle for startups as its life cycle at the seed stage rarely exceeds 2-3 years (provided it is not a ‘zombie’ startup) While major players try it ‘on their own,’ startups are closing due to the lack of first clients. Stagnation in the Russian economy is the third reason. The contracting market, sanctions, rouble volatility, growing tax burden, increasing role of the state in the business, and ‘neo-feudalism’ force young and ambitious innovators to leave the country as it is easier for them launch the business of their own in indisputably more stable conditions in the West where the resources are cheaper and the market is larger and, more importantly, growing. In the West, given the need of western institutions in innovations and tough competition, startups develop faster, raise financing and attract clients easier, as well as can protect their intellectual property in a more secure way. In order to make the robust development of FinTech companies happen in Russia, a lot of reforms need to be performed which is not expected in the short-term. In such conditions, the FinTech market in Russia is destined to contract and remain a subsidized branch of government-owned companies (or a part of ‘innovation cities’ subsidized from the federal budget). There are also two significant obstacles for the Russian FinTech development. First, state-owned companies often buy and integrate FinTech startups instead of helping them to develop, buying their products and services, and providing advice to boost their competitiveness. Second, it is difficult to access global capital markets from Russia which otherwise is vital for modern business models in order to monetize digital products and services. It would take years of work to achieve this through improving the country image which is objectively difficult to ensure in the near future. To sum up, the FinTech community does exists and tries to develop in Russia but the external factors are likely to have a negative impact on the market preventing Russian companies from full-scale competition with western FinTech communities in the mid-term.

Alexey Minin
Executive Officer
Data Analytics Institute
Deloitte CIS
The current situation in Russia’s FinTech market as viewed by its participants

What is your opinion of the situation in Russia’s FinTech market from a standpoint of business financial wealth?

- Positive view: 76%
- Negative view: 24%
- The Optimism Index for FinTech in Russia (evaluation range: [-1;1])

### Trend
Most experts (76 percent) are positive about the current situation in Russia’s FinTech market.

The optimism index is at 0.31.

### Specific features

- **Representatives of lending institutions are more optimistic about the situation in the industry (the balance indicator is 7 points above the average).**

- Interestingly, the companies with the revenue of less than RUB 10 million are more optimistic (9-14 points above the average). They are followed by the companies which have been on the market for longer than five years (7 points above the average).

- Companies with the revenue of RUB 10-50 million and young companies (1-3 years old) are less optimistic, too (10 and 12 points below the average, respectively).

- The representatives of the companies engaged in the investment and personal finance management (PFM) are less optimistic, with the balance indicator being 6 and 12 points below the average, respectively.

- The companies with the revenue of RUB 10-50 million and young companies (1-3 years old) are less optimistic, too (10 and 12 points below the average, respectively).
The current situation in Russia’s FinTech market as viewed by its participants: expert commentary

Sergey Sedov (Zaymer)

The expert community is positive about the current conditions in the Russian FinTech market, as it entered the active growth stage. First, the FinTech market is still far from saturation, while the Internet penetration in Russia continues to grow fast (72.8 percent last year which higher than in some EU countries). Second, the availability of highly qualified IT specialists makes it possible to implement the most challenging and non-standard projects in the capital and the regions. Third, business and the government (represented by the Central Bank and the Finance Ministry) actively promote the FinTech, as the latter believe that implementation of non-cash payments would help anti-corruption effort and reduce tax evasion.

The optimism is based on the inevitability, given that FinTech shapes the future of the digital financial market. Developed economies may lag the rest of the world for ever, if they ignore modern approaches and technology. Russia’s robust effort in this field would allow the country to become part of the most developed FinTech economies.

The latest FinTech-related positive legal developments include introduction of online taxation of trade transactions (Law FZ-260 “On online cash offices” has been approved), remote identification of bank clients (Law FZ-432), plans to introduce single financial online marketplace, instant payment system, and approve a crowd funding law.

The mixed assessment of the FinTech market by representatives of various industries derives from differences in development of traditional finance segments mirrored by FinTech. For example, investment and personal finance management segments (whose representatives sounded rather pessimistic) look relatively ‘weak’ compared to the rest of the market. In the US, around half of the population hold securities, while in Russia security holders account for less than 1 percent. Correspondingly, the representatives of FinTech companies developing investment and personal finance management services were less optimistic. Oppositely, the representatives of the FinTech lending segment are more optimistic in their assessments due to the developed lending market. Young companies are less optimistic due to strong competition at the current stage, as well as the difficulties of capital raising. Venture investment is not well developed in Russia.

Surprisingly as it may seem, advancement of FinTech may slow due to the low pace of its development. It will require knowledge, effort and time in order to get accustomed to innovations and implement new methods of work. So far, Russians are acquainted only theoretically with many FinTech opportunities. One may say, the technologies which have been tested yet enjoy ‘the benefit of doubt.’

For many Russians, especially the elder generation (above 40 years), the use of FinTech solutions in their daily lives is quite problematic. Both, the government and business experience difficulties in restructuring their approaches. Everyone should realize the need of such efforts and expect that the applicable solutions will be easily understood, available and efficient.

In addition, the lack of regulation in some fields and fear of abrupt regulatory changes that may constrain development add to the pessimistic sentiment.
The current situation in Russia’s FinTech market as viewed by its participants: expert commentary

Yuri Provkin (Eqvanta)

I am very pleased that FinTech market participants are mostly positive about the future, as we (as a company) are optimistic, too (understandably why). First, I will try to explain why there is negative sentiment (to make my answer balanced). We live in Russia, and it is not only domestic factors that influence the optimism. There is also a geopolitical factor which is the main source of the negative sentiment. [They understand that] the country becomes isolated to some extent due to sanctions and the general feeling that the situation would last for a long time. In my opinion, this is the main source of the negative sentiment. Growing isolation of Russia, increasing unavailability of Western markets for purely Russian companies, Russians begin to suffer inconveniences with bank account service in Cyprus or elsewhere in Europe. We experience it more often. The compliance procedures become more complicated which is a source of tension, too. Our company even made a decision to transfer the entire corporate structure to Russia and regulate shareholder relations based on the Russian law. This is an important decision which is linked to the current international developments. In my opinion, this is the core negative driver. As for positive drivers, I think, they are related to opportunities and technological advancement. Given the fast development of new technology, especially in the past ten years, a lot of changes are taking place in the industry and lead to new opportunities. Businesses saw these opportunities and used them to offer services for new segments. This process still continues: there is more collectible client data, more resources for processing the data, more technical solutions. I believe it is very positive. The positive factors, the taste of opportunities, significantly outweigh the barriers and obstacles which we face as businessmen and companies.

Anrey Petkov (MFC «Chestnoe Slovo»)

We feel optimistic because of implementation of new technology in the business practice: branchless banking, payment services, cloud technology, biometric data, mobile payments. A man will be able to make necessary payments if he has a phone. Companies issue loans within minutes — isn’t it a proof that FinTech exists in real life and not on paper? However, there are reasons for pessimism: there are projects which did not work, regulatory issues, gaps in the legislation on FinTech, as well as new types of fraud which periodically appear on this market, particularly, in the blockchain segment.
The current financial position of the company

How do you view the current financial position of your company?

- **Positive view**
- **Negative view**
- The Optimism Index for the reviewed company (evaluation range: [-1;1])

**Trend**

The Optimism Index with respect to the current financial position of the company is 0.6. This indicates optimistic sentiment in most companies of this industry.

86 percent of the experts provided positive responses regarding situation in the company.

**Specific features**

The most optimistic responses regarding situation in the company came from representatives of large companies with more than 50 employees (26 points above the average).

Overall, young companies are more optimistic, too (6 points above the average) and companies with annual revenue of RUB 2-10 million (10 points above the average).

The representatives of the personal finance management companies (22 points below the average) and companies with annual revenue of less than RUB 2 million (10 points below the average) are the least optimistic.
Measuring uncertainty in strategic decision making

What is your assessment of political and economic uncertainties affecting the strategic decision-making in your company?

- High uncertainty
- Medium uncertainty
- Low uncertainty

Trend
The net level of uncertainty in the FinTech market is -0.25.

Most FinTech companies point to a high level of uncertainty and only 12 percent of respondents believe it is low.

Specific features
Companies with annual revenue of RUB 10-50 million and companies operating for over five years note a high level of uncertainty in the market (13 and 21 points above the average, respectively).

Respondents from personal finance management companies and institutions using scoring technology more often tend to note the low level of uncertainty (the net balance indicators for these categories are 12 and 11 below the average, respectively).
Measuring uncertainty in strategic decision making: expert commentaries

Fast development of FinTech trends makes it difficult to visualize specific perspectives. It is problematic to see the future in detail. In some cases (e.g. in the microlending market), the situation gets more complicated as a result of large-scale legal reforms which affect the structure and role of market players. The lack of stability in international politics impacts market conditions, too. The economic situation in the country and the world strongly depends on political decisions on which the economists cannot exert any influence. The economy enters the late stage of the business cycle as trade wars get worse and business activity slows down. As a result, there is a dramatic increase in uncertainty in the FinTech industry and other business segments.

However, scoring and personal finance management (PFM) will undoubtedly play a prominent role in the new financial environment. The outlook for FinTech industry is undoubtedly positive!

Overall, I believe that the uncertainty has always been and will be there. All entrepreneurs and companies work in conditions of relatively high uncertainty, especially at the initial stage (albeit not only at the initial stage). Hence, it is clear why the figure is at -0.25. Henry Ford must have experienced rather high uncertainty when he started making his vehicles. I understand why the scoring processes are so well defined. The reason is that there is a significant advance in data processing and analysis technology. The current stage is in line with the Pareto principle; much has been done, as scoring technologies advanced significantly when it comes to spectrum of processable data and the speed of processing. The future of the scoring is quite clear as of now, given that scoring companies become able to work with various data bases. From this standpoint, the development level and technological sophistication of companies will increase. The more data there is, the more precise is the assessment. It is also about speed. Technology allows high speed, so the choice of data will become richer. You probably know that the data are drawn from social media, mobile operators, credit history bureaus, behaviour scoring, etc. These data is enriched and grow. So, the future is in processing this data. I agree. Our Scortech scoring company has well defined perspectives and we have no worries about the future. We know that the ongoing development of the company increases its potential. As for the uncertainty in the FinTech market, I think uncertainty is a normal phenomenon. At any time, any company in any industry experiences uncertainty. In our case it is closer to zero or even below it than growing. There are very few business models and companies where founders or CEOs may say that everything is certain and cool, and that they know for sure what happens in five years.

Any political and economic changes in our country affect PFM companies to a lesser extent. It is not important, in which currency people earn money. They are going to count them anyways.

As for uncertainty; I would not agree with the colleagues. Amendments to the law on personal data may undermine the scoring business; likewise, economic changes affect lending volumes and, consequently, the demand for scoring services.
FinTech market stakeholder map

The Central Bank of Russia

- Regulatory level
- Investments, access to infrastructure
- Training, communication, human capital

Technology corporations, banks

- Venture funds
- Private investors
- Government funds
- Accelerators and incubators

Development institutions, associations

Higher education institutions, research institutes

- B2B clients
- B2C clients

Overview of Russia’s FinTech market

Foreword

Key findings

Overview of the FinTech market

Overview of Russia’s FinTech market

The FinTech market in figures

The current situation in Russia’s FinTech market

FinTech market stakeholder map

Supply in the FinTech market

Demand in the FinTech market

Barriers for development of Russia’s FinTech market

Drivers for development of Russia’s FinTech market

Russian FinTech market outlook until 2020

Overview of Kazakhstan’s FinTech market

Appendix

Contacts
CBR is the key regulator of the Russian FinTech market.

Key data

- On 25 February 2016, the Financial Technology and Process Organization Department was set up in the bank of Russia.
- On 10 January 2018, the Financial Technology Department was spun off, and Alisa Melnikova was appointed the director.
- In 2018, the Russian Central Bank approved the Key Directions for Financial Technology Development in 2018-2020.
- In order to develop the financial technology, the Central Bank set the following goals:
  - Fostering competition in the financial market;
  - Increasing availability, quality, and the mix of financial services;
  - Lowering risks and costs in the financial industry;
  - Increasing the competitiveness of the Russian technology;
  - The set goals will be implemented in accordance with the Roadmap for the Key Directions for Financial Technology Development in 2018-2020.

On 22 May 2018, the State Duma approved three draft laws in the first reading, defining the financial technology development in Russia:

01. "On digital financial assets"
   - The law will regulate relations arising in the process of creation, issuance, storage and purchase/sale of digital financial assets, as well as implementation of rights and obligations with respect to smart contracts. The law introduces the concepts of a digital transaction, digital signature, digital transaction registry, digital signature validation, mining, cryptocurrency, token, smart contract, etc.

02. "On digital rights"
   - The law introduces the concept of digital rights. The owner of a digital right is a person who has a unique access to the digital code or identification enabling disposal of digital rights.

03. "On alternative raising investments (crowdfunding)"
   - The law establishes requirements for the investment platform, its operator and participants, information disclosure and provision, as well as specifies the process of investing via such platform. Investment platform operators may include companies listed in the CBR’s register of operators with a minimum capital of RUB 5 million. The operator will have the right to use a single data platform for identification and authentication of investment platform participants. The types of investments which can be performed via this platform include the following: issue of loans, acquisition of investment grade securities at the placements stage, acquisition of property titles via acquisition of investment product tokens which certify such rights. It is allowed to use smart contracts can be used in order to execute and perform contracts between the investors and the crowdfunding operators.

Source: CBR, State Duma’s press releases, TASS
Stakeholder roadmap: CBR’s projects

Regulatory level (CBR’s «sandbox»)

This mechanism is used to launch new financial services and technologies which require regulatory changes. This tool will be used to simulate application of innovative financial services, products and technology for testing the positive outcome assumptions and the use of a special regulatory regime for their implementation allowing companies to test innovative products without violating the current legislation. Any bank or organization may apply for participation in the pilot project in the ‘sandbox’ if it plans to implement a new technology which requires changes in the regulation. Services and technology tested in the regulatory ‘sandbox’ can be either approved for implementation or found unsuitable for implementation.

The regulatory ‘sandbox’ was launched on 19 April 2018.

The ‘sandbox’ framework consists of two councils: the Inter-Agency Expert Council consisting of representatives of government authorities and the Expert Council of Market Participants which comprises representatives of subject matter financial associations and development institutions.

The Inter-Agency Expert Council is led by Anatoly Aksakov, Chairman of the State Duma Financial Market Committee. His deputy is Nikolay Zhuravlev, First Deputy of Federation Council Budget and Financial Market Committee.

The Expert Council is led by Tatyana Zharkova, Managing Director of FinTech Association. Her deputy is Konstantin Parshin, Executive Director of Skolkovo Information technology Cluster.

The first major project to be implemented in the sandbox will enable the testing of private banking products based on cryptocurrencies by the leaders of the banking industry (PJSC Sberbank and Alfa Bank). The project was approved at the round table on “Digital Financial Assets for Banks, Funds and Major Capital Companies: the regulator’s position and solutions for investors.”

On 17 August 2018, PJSC Sberbank successfully launched a pilot project service in the CBR’s regulatory sandbox which enables remote management of corporate client transaction authorizations. The commercial implementation of this product would reduce client service costs.

The pilot project was implemented jointly with professional financial market associations and government stakeholders. The CBR and expert councils set up within the sandbox provided their recommendations and admitted the market relevance of the service.

“The launch of the instant payment system is a key project for developing the retail payment framework in the Russian market. Once implemented, this project will increase the availability of financial services, enhance security of financial operations and reduce costs both for consumers and banks,” Olga Skorobogatova, CBR First Deputy Chairman, stated.
Stakeholder roadmap: CBR’s projects

**Instant Payment System**
The CBR will become an operator of the instant Payment System and provide settlement center services. The National Payment Card System was selected as the operating payment clearing center for the system. The FinTech Association coordinates the implementation of the project, provides a floor for market participants to discuss the client experience, technical issues, as well as develops implementation models.

The instant payment system (IPS) will enable individuals to transfer money using their cell phone numbers, also in instances where the sender’s and the recipient’s accounts are held with different banks. The system payments will be made on a real-time basis round-the-clock including weekends and holidays.

As at June 2018, the prototype testing was almost complete which allowed to establish the commercialization requirements. The system launch is scheduled for early 2019. The instant payment services will be accessible to legal entities as a convenient and secure payment solution, including QR codes. The users will also be able to make payments using messengers, social media, etc.

**Marketplace**
The CBR launched the Marketplace project jointly with market participants in December 2017. The goal of the project is to establish remote retail distribution framework for financial products (services) and registration of financial transactions with the aim of creating a secure and trusted environment for financial transactions and increasing the availability of financial services. The first presentation of the project concept took place at Finopolis, innovative financial technology forum, in October 2017.

Bank deposits will become a pilot product for the Marketplace project. At later stages, the project will comprise other financial products including loans.

Presently, the system prototype is being developed. The first trial is expected to take place in autumn 2018. The commercial version is expected to be launched in late 2018. Project participants: Ak-Bars Bank, Center-Invest Bank, Zenit Bank, Sovcombank, Rosbank, Fins, Moex, National Settlement Depository, Banki.ru.

**Prototype architecture**

Source: CBR, State Duma’s press releases
Key corporate customers interested in FinTech products comprise banks and technology companies. Banks are the most interested in FinTech companies, as the implementation of new and convenient technology for clients makes it possible to attract and retain the target audience. The largest consumer companies including mobile operators and Internet providers showed avid interest in FinTech products in the past two years. They influence large customer audiences which attracts FinTech startups. However, the cooperation between corporations and FinTech companies cannot succeed without partners experiences in working with financial products. Hence, there is space for traditional banks which may become floors for implementing FinTech solutions or full-scale partners if they invest their own capital or attract their customers. A joint venture between PJSC Sberbank and Yande.Market is to become the most high-profile transaction in this field in 2018. Sberbank plans to invest at least RUB 30 billion in this transaction.

“Banks are wary of FinTech companies, this is why the former are so quickly buying the latter. Every bank has enough FinTech companies in its portfolio. What are we going to do with them? So far, making collections.” Herman Gref, Sberbank CEO, said.

<table>
<thead>
<tr>
<th>QIWI Venture</th>
<th>Tinkoff Bank</th>
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<tbody>
<tr>
<td>Round: seed, first round</td>
<td>Round: seed, first round</td>
</tr>
<tr>
<td>Amounts: USD 200,000 – 500,000</td>
<td>Amounts: up to USD 1 mln</td>
</tr>
<tr>
<td>Portfolio: 50-100 projects</td>
<td>Portfolio: up to 50 projects</td>
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<tr>
<td>Sample projects:</td>
<td>Sample projects:</td>
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<tr>
<td>Panda money</td>
<td>Segmento</td>
</tr>
<tr>
<td>USD 100,000</td>
<td>N/a</td>
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<tr>
<td>20 percent</td>
<td>100 percent</td>
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<tr>
<td>Krawlly</td>
<td>N/a</td>
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<tr>
<td>USD 150,000</td>
<td>N/a</td>
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<tr>
<td>EasyWallet</td>
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<tr>
<td>N/a</td>
<td>N/a</td>
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<tr>
<td>Zaimix</td>
<td>Pin Bonus</td>
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<tr>
<th>Yandex</th>
<th>Gazprombank Digital</th>
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<tr>
<td>Round: seed, first round</td>
<td>Round: grants, pre-seed, seed, first round</td>
</tr>
<tr>
<td>Amounts: USD 200,000 - USD 1 million</td>
<td>Amounts: up to USD 10 million</td>
</tr>
<tr>
<td>Portfolio: up to 50 projects</td>
<td>Portfolio: up to 50 projects</td>
</tr>
<tr>
<td>Sample projects:</td>
<td>Sample projects:</td>
</tr>
<tr>
<td>PriceLabs</td>
<td>Iximeusia</td>
</tr>
<tr>
<td>USD 1 million</td>
<td>USD 120,000</td>
</tr>
<tr>
<td>100 percent</td>
<td>N/a</td>
</tr>
<tr>
<td>Chatfuel</td>
<td>APIBank</td>
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<tr>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>100 percent</td>
<td>N/a</td>
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<tr>
<th>SberBank Venture Capital</th>
<th>Lanit</th>
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</thead>
<tbody>
<tr>
<td>Round: seed, second, subsequent rounds</td>
<td>Round: grants, pre-seed, seed, first round</td>
</tr>
<tr>
<td>Amounts: USD 1 million and above</td>
<td>Amounts: up to USD 2,500,000 million</td>
</tr>
<tr>
<td>Portfolio: up to 50 projects</td>
<td>Portfolio: up to 50 projects</td>
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<tr>
<td>Sample projects:</td>
<td>Sample projects:</td>
</tr>
<tr>
<td>Segmento</td>
<td>CardsMobile</td>
</tr>
<tr>
<td>1 млн долл. США</td>
<td>USD 120,000</td>
</tr>
<tr>
<td>50%</td>
<td>N/a</td>
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<tr>
<td>Platius</td>
<td>N/a</td>
</tr>
<tr>
<td>N/a</td>
<td>50%</td>
</tr>
<tr>
<td>N/a</td>
<td>N/a</td>
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</tbody>
</table>

Source: Forbes, RBC, Rusbase, Firrma, company websites
### Stakeholder map: venture funds

Venture funds are funds oriented at working with innovative companies and projects (startups).

<table>
<thead>
<tr>
<th>Stakeholder Name</th>
<th>Round Information</th>
<th>Amounts</th>
<th>Partners/Team Information</th>
<th>Sample Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Almaz Capital Partners</strong></td>
<td>Round: first and subsequent rounds</td>
<td>n/a</td>
<td>Alexander Galitsky (Managing Partner), Pavel Biogdanov, Charles Ryan, Geoffrey Baehr</td>
<td>2can</td>
</tr>
<tr>
<td><strong>Baring Vostok Capital Partners</strong></td>
<td>Round: seed, first round</td>
<td>over USD 1 million</td>
<td>Michael Kavi</td>
<td>Revo Technologies</td>
</tr>
<tr>
<td><strong>Finstar Financial Group</strong></td>
<td>Round: Round 1 and subsequent rounds</td>
<td>n/a</td>
<td>Oleg Boyko</td>
<td>SMS Finance</td>
</tr>
<tr>
<td><strong>Buran Venture Capital</strong></td>
<td>Round: seed and subsequent rounds</td>
<td>USD 101,000 - 500,000</td>
<td>Alexander Konoplyasy, Mikhail Salontal</td>
<td>Kopikot</td>
</tr>
<tr>
<td><strong>Emery Capital</strong></td>
<td>Round: Round 1 and subsequent rounds</td>
<td>up to USD 1 m; subsequent investment: up to USD 5 m</td>
<td>Ivan Saveliev, Alexey Shakhmatov, Ivan Podmasko, Mikhail Zakharov</td>
<td>MoneyMan</td>
</tr>
</tbody>
</table>

Source: Rusbase, fund websites
A business angel investment in one company may amount from ten thousand euro to one million euro.

Business angels use venture investing where financing is provided for a long period (3-7 years), without collateral and guarantees, in exchange for a stake in a company.

**Yuri Milner**
The entrepreneur, manager, owner of DST Global, former co-owner and BoD chairman in Mail Ru.
Jointly with a group of investors, DST Global, Yuri’s venture fund invested USD 250 million in Revolut, British FinTech startup founded by former Russian citizens. During the round, the startup was evaluated at USD 1.7 billion.

**Oleg Boyko**
Entrepreneur, international investor, chairman of finstar Financial Group.
The main business line is financial services in the digital space. Oleg Boyko is actively investing in digital credit businesses that provide high-quality financial products and services to clients on a global level through the use of digital technologies. In 2017, Oleg Boyko announced plans to invest $ 150 million in transactions, startups in the field of new FINTECH technologies and in the development of R&D areas of holding companies for 5 years.

**Vadim Dymov**
In 2013, Vadim invested in MoneyMan, Russian microfinance company. In May 2015 he invested additional USD 6 million, jointly with Emery Capital fund. In exchange, investors will receive approximately a 20 percent stake.

**Sergey Solonin**
Co-founder and co-owner of QWI, LP, and several venture funds
Jointly with Target Global Fintech Opportunities Fund (TGFOF) venture fund and other investors, Sergey Solonin invested around USD 1 million in Tezis.io, FinTech startup. Investors received a minority stake, while the company founders held the controlling stake.
Stakeholder roadmap: business angels

**Sergey Kozlovsky**
President and co-founder of Incom developer company
In 2016, he invested RUB 300 million in PayQR, Russian contactless payment system developer startup.

In June 2017, Sergey invested RUB 60 million in Bonus Club, Russian IT project which develops and implements technical solutions for loyalty programs.

Both startups are part of the Financial and Information Technology company (FIT), fully owned by Cyprus-based PayQR International.

**Sergey Dashkov**
Sergey is a graduate of Moscow Institute of Physics and Technology and a co-founder of SDS-Foods, participant of Venture Club.
The range of investment interests is very wide: big data, FinTech, new energy, VR, IoT, biotech, etc. Sergey entered in ten deals and two of them have been confirmed. Sergey invests in IoT projects, virtual reality, FinTech, etc. The average check is USD 150,000, and the amount of annual investment is USD 1 million.

**Alexander Ruchyev**
The ex-owner of Morton, construction and development company, the president of GK Osnova company

In August 2017, Alexander became a strategic partner of ICO Lab Ecosystem company. He joined the board of founders. In September 2017, he invested his own money in ICO Lab Ecosystem.

In October 2017, it was reported that Alexander Ruchyev and Alexey Voronin would create Smart Valley company — the first platform for ICO automation globally. Their own investments in the project amounted to USD 10 million. In May 2018, the company launched the first ICO.

**Nikita Mikhin**
Nikita is a business angel. In June 2018, he participated in Tezis.io FinTech startup investment round.

**Alexander Borodich**
A private investor
In December 2013, Alexander invested his funds in two Russian projects, Futubank and Minibuh.ru

**Boris Zhilin**
A private investor, the managing partner of Armor Capital investment fund
In 2016, Boris invested RUB 35 million in Boomstarter, crowdfunding start-up company.

**Sergey Dashkov**
Sergey is a graduate of Moscow Institute of Physics and Technology and a co-founder of SDS-Foods, participant of Venture Club.
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**Boris Zhilin**
A private investor, the managing partner of Armor Capital investment fund
In 2016, Boris invested RUB 35 million in Boomstarter, crowdfunding start-up company.
Stakeholder map: government funds

Government funds are funds oriented at working with and investing in innovative companies and projects (startups) on a co-financing basis.

### Moscow seed fund
- Round: seed, first round
- Amounts: USD 101,000 – 500,000
- Sample projects:
  - Tiwo

### Sverdlovsk Venture Fund
- Round: seed, first round
- Amounts: up to USD 0.5 million
- Sample projects:
  - Sverdlovsk Venture Fund

### FRII
- Round: seed, first round
- Amounts: USD 200,000 - USD 4 million
- Sample projects:
  - Scorista

### Samara Region Venture Fund
- Round: seed round
- Sample projects:
  - FinTech Core

### The Ministry of Finance of the Russian Federation
- Round: seed round
- Sample projects:
  - EasyFinance.ru

### Yakutia Venture Company
- Round: seed and subsequent rounds
- Amounts: n/a
- Sample projects:
  - Sakha-plat

The Fund for Developing Venture Investments in Small R&D Enterprises was established the Department of Science, Industrial Policy and Entrepreneurship of Moscow with support from OAO RVK.

Sverdlovsky Venture Fund (SVF) was established on the basis of the Fund for Developing Venture Investments in Small R&D Enterprises in Sverdlovsk Region which was established in 2006 in the form of public and private partnership, with participation of the regional government.

The priorities of the Fund for Development of Internet Initiatives (FRII) include financial and expert support for early stages of project implementation. The Fund also plans to launch various educational programs and propose a number of legislative initiatives.

The Fund was supported by the Economic Development and Trade Ministry of Samara Region. The managing partner of the Fund is OOO Technology Transfer Center owned by Sergey Bogdanov.
An accelerator is a company tasked with assisting other companies (accelerator residents). Accelerators offer structured programs to residents thus allowing companies to optimize business models, win contracts and increase sales. The program continues for 3-6 months. As usual, accelerators provide co-working space to resident companies to use during the acceleration process.

**HSE (PRO) FINTECH**
- Stake: n/a
- Investments: USD 4.4 million (investments by Program alumni including ICO and pre-ICO)
- The Program fee is RUB 20,000 per month
- Experts: Andrey Kuskov (Sberbank-innovations), Sergey Maximchuk (Alfa-start), Alexander Yakovlev (Non-profit organization AO RND)
- Sample projects:
  - Blockchain
  - Cardberry
  - Confideal

**GenerationS**
- Stake: n/a
- Investments: n/a
- Fee: n/a
- Experts: company and bank managers
- Sample projects:
  - Mandarinbank
  - Surely
  - Cardberry

**Corporate accelerators**
- Stake: 0-100 percent
- Investments: infrastructure
- Experts: company shareholders and top managers

**iDealMachine startup accelerator**
- Stake: 15-20 percent
- Investments: USD 20,000, infrastructure
- Fee: n/a
- Experts: Sample projects:
  - SmartMuseum
  - RoboEd
  - xTurion

**fintechlab**
- Stake: n/a
- Investments: n/a
- Fee: n/a
- Experts: Nadiya Cherkasova (Bank Otkritie), Yulia Alekseeva (Credit Europe Bank), representatives of the CBR, Russian Communications Ministry, FinTech association and related higher education institutions
- Sample projects:
  - Pandamoney
  - Relation Rate
  - Rubbles

**SKOLKOVO startup academy**
- Stake: n/a
- Investments: n/a
- Fee: RUB 420,000 ‒ 630,000
- Experts: Dmitry Plushevsky, Andrey Rappoport, Ruben Vardanyan (social investor and entrepreneur), Oskar Hartmann (founder of KupiVIP.ru), Dave (Shahar Waiser (Get’s founder and CEO)
- Sample projects:
  - n/a

**FRII accelerator**
- Stake: above 3 percent
- Investments: RUB 1.4-14 million; the projects which reached the round A stage may receive RUB 275 million
- Fee: n/a
- Experts: renown investors, entrepreneurs, brand managers, marketing experts, interface designers and PR-specialists
- Sample projects:
  - Pay-Z

**QIWI Universe**
- Share 8 percent
- Investments: USD 20,000, infrastructure
- Experts: QIWI shareholders and top managers
- Sample projects:
  - Ru-Beacon
  - EDRA

**FRI accelerator**
- Stake: above 3 percent
- Investments: RUB 1.4-14 million; the projects which reached the round A stage may receive RUB 275 million
- Fee: n/a
- Experts: renown investors, entrepreneurs, brand managers, marketing experts, interface designers and PR-specialists
- Sample projects:
  - Pay-Z

**Unilever accelerator**
- Stake: above 3 percent
- Investments: RUB 1.4-14 million; the projects which reached the round A stage may receive RUB 275 million
- Fee: n/a
- Experts: renown investors, entrepreneurs, brand managers, marketing experts, interface designers and PR-specialists
- Sample projects:
  - Pay-Z
Stakeholder map: development institutions and associations

Development institutions and associations are represented by organizations which contribute to development of the FinTech industry including financial support in implementing projects (in the form of grants, participation in the charter capital of portfolio companies, and issuance of loans).

**FinTech Association**

**The Association’s goals:**
01. Develop and implement new technology solutions to support Russia’s FinTech market;
02. Create conditions for digitalization of the Russian economy.

**The Association’s objectives:**
01. conduct research, analyze trends, summarize international experience;
02. draw a list of priority focus zones;
03. implement own projects and participate in the projects launched by other organizations;
04. coordinate development of software, standards, platforms, and protocols;
05. prepare the proposal on developing and amending the legislation;
06. hold conferences, implement educational and awareness-raising projects;
07. act in the interests of the Association members and provide assistance to them.

**Operational areas:**
01. Identification and management of digital identity;
02. Development of the distributed ledger technology;
03. Development of the retail payment framework;
04. Development of open API.

**Management:**
Olga Skorobogatova,
Supervisory Council Chairman
Sergey Solonin, CEO
Supply in the FinTech market (1/3)

### FinTech industry segmentation

#### Lending
- **Online lending**
  - Blockchain, big data, machine learning, artificial intelligence
- **POS-lending in the real-time mode**
  - Biometric analysis
  - **2.80** The importance of the segment

#### PFM
- **Personal finance management platform**
  - Cloud technology
  - **2.02** The importance of the segment

#### Payments
- **E-wallet**
  - An online payment service
  - Blockchain, cloud technology, IoT, big data, API, contactless payments, SaaS
- **Mobile points of sale (mPOS)**
  - API
- **Exchange office**
  - Internet acquiring
- **Payment aggregator**
  - API, SaaS
  - **n/a** The importance of the segment

#### Digital banks
- **Bank product**
  - Machine learning, artificial intelligence
  - **3.08** The importance of the segment

---

During the survey we asked our experts to evaluate the potential of the above-mentioned FinTech segments in the medium term (1-3 years) in Russia.

Based on the results of our analysis we calculated a relative rating of various FinTech segments (on the scale from 0 to 4, where 0 corresponds to zero relevance and 4 corresponds to very high potential).

Digital banks are the leaders (3.08) They are followed by lending, scoring and marketplace (2.80 points each). The outlook for various FinTech fields is reviewed in Section «The rating of FinTech segments with the highest market potential until 2020.»
### Supply in the FinTech market (2/3)

**FinTech industry segmentation**

<table>
<thead>
<tr>
<th>Loyalty programs</th>
<th>Insurance</th>
<th>Management Accounting</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card aggregator</td>
<td>Insurance telematics</td>
<td>Online accounting</td>
<td>Client data analysis</td>
</tr>
<tr>
<td>Cloud technology, API, artificial intelligence</td>
<td>Cloud technology</td>
<td>Cloud technology, API</td>
<td>Cloud technology, SaaS, API, predictive analytics, artificial intelligence, big data, data mining, machine learning, semantic analysis, deep learning</td>
</tr>
<tr>
<td>Cashback service</td>
<td>Crowdsurance</td>
<td>Online accounting</td>
<td></td>
</tr>
<tr>
<td>Big data</td>
<td>Blockchain, API, biometric analysis</td>
<td>SaaS</td>
<td></td>
</tr>
<tr>
<td>Market analytics</td>
<td></td>
<td>BFM — business financial management</td>
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</tr>
<tr>
<td>Big data, predictive analytics, cluster analysis, machine learning, neural networks, cloud technology, biometric analysis</td>
<td></td>
<td>Comprehensive solutions</td>
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<tr>
<td>Advertising platform</td>
<td></td>
<td>Cloud technology, API</td>
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<tr>
<td>Big data, machine learning, predictive analytics, API</td>
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</tbody>
</table>

| The importance of the segment | 2.06 | 1.86 | 2.80 |

**Product**

**Applied technology**
Supply in the FinTech market (3/3)

FinTech industry segmentation

**Investments**
- The platform for buying securities and training for exchange trading
- Data mining, artificial intelligence, big data, predictive analytics, API, blockchain
- B2B technology solutions
- Cloud technology, SaaS, neural networks, machine learning
- Crowdfunding
- Crowdinvesting
- P2P-lending
- API

**Marketplace**
- Bank marketplace
  - API
- Insurance marketplace
  - SaaS
- Financial supermarket
  - 2.74

**Infrastructure solutions**
- Identification solutions
  - Blockchain, biometric analysis, semantic analysis, artificial intelligence, API, big data, SaaS, machine learning, VR, AR
- Solutions for application programming interfaces (APIs) and banks
  - SaaS, API, cloud technology
- Regtech
- Distributed ledger and smart contracts
- Artificial intelligence, IoT, blockchain, API
- Bank chat bots and robo-advising
- Deep learning, neural networks, predictive analytics, blockchain, machine learning

**Product**

**Applied technology**
- Back office (business process) automation
- Big data, SaaS
- ICO platform
- Blockchain, SaaS, API, artificial intelligence, neural networks
- Information security
  - Machine learning, artificial intelligence, predictive analytics
- E-factoring
  - SaaS
- Data analysis and processing
  - Big data
- The importance of the segment

- 2.74
- 2.48
## Contribution of FinTech products to achievement of the SDGs in Russia (1/3)

The table below contains FinTech solutions which contributes the most to achievement of the SDGs in Russia.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Product</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>15</th>
<th>16</th>
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<tbody>
<tr>
<td>Lending</td>
<td>1) Online lending</td>
<td>●</td>
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<td>●</td>
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<td></td>
<td>2) POS-lending in the real-time mode</td>
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<tr>
<td>Payments</td>
<td>1) E-wallet</td>
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<td>2) An online payment service</td>
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<td></td>
<td>3) Mobile points of sale (mPOS)</td>
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<td>4) Exchange office</td>
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<td>5) Internet acquiring</td>
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<td>6) Payment aggregator</td>
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<tr>
<td>Management accounting</td>
<td>1) Online accounting</td>
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<td>2) Online accounting</td>
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<td></td>
<td>3) Comprehensive solutions</td>
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<tr>
<td>Investments</td>
<td>1) Crowdfunding</td>
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<td>2) Crowdinvesting</td>
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<td>3) P2P-lending</td>
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<tr>
<td>Infrastructure solutions</td>
<td>1) Identification solutions</td>
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<td>2) Distributed ledger and smart contracts</td>
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<td>3) Information security</td>
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<td>4) Bank chat bots and robo-advising</td>
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</table>
Contribution of FinTech products to achievement of the SDGs in Russia (2/3)

Valuation results

The assessment of the Russian FinTech's potential contribution to the achievement of the SDGs in Russia shows that SDG 9 (Industry, innovation and infrastructure) is the easiest achievable goal. This can be achieved through wide-spread financial online services.

Thus, new FinTech lending and investment solutions enable the achievement of the following targets:

- 9.3 Increase access of small industrial and other enterprises (especially in developing countries) to financial services including affordable loans, as well as expand their integration in production and supply chains and markets.

SDG 1. End poverty in all its forms everywhere

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

1.6 Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, in order to implement programmes and policies to end poverty in all its dimensions.

SDG 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent gross domestic product growth per annum in the least developed countries.

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

9.3 Increase the access of small industrial and other enterprises (especially in developing countries) to financial services including affordable loans, as well as expand their integration in production and supply chains and markets.

The most vigorous work is done to achieve SDG 8 (Decent Work and Economic Growth), SDG 1 (No Poverty) and SDG 2 (Zero Hunger).

The evaluation methodology used to analyze the contribution, as well as detailed results for each SDG are listed in the Appendix.

SDG 1

SDG 2

SDG 3

SDG 4

SDG 5

SDG 6

SDG 7

SDG 8

SDG 9

SDG 10

SDG 11

SDG 12

SDG 13

SDG 14

SDG 15

15.4

11.6

8.0

9.8

6.8

1.6

17.8

24.0

6.0

1.5

0.8

6.2
Contribution of FinTech products to achievement of the SDGs in Russia: expert commentaries

What kind of contribution can FinTech companies make to help develop sustainable financial ecosystems?

Alexander Dunaev (MoneyMan)

Business must be sustainable not for the sake of getting the respective label on its website or to show that it is socially responsible but first and foremost the business needs it. Let’s look at the reasons one by one. Sooner or later, the company’s performance will be affected or a regulatory/political response will follow if your company is linked to the resource industry, or if it damages the environment in which it operates. The reason is that environmental fairness or pollution (the fairness aspect is inevitably raised in this context) are always linked to politics. If you want your business to flourish you should invest in the environmental protection. So, it is crucial for the business, not only for the environment. This a function of it. I am still convinced that the main objective of any company is to make profit. The company needs to develop in a sustainable manner in order to make profit on the long term. I mean, I do not believe that a company may have a basis for its operation other than making profit. So, I think that the sustainable development is an integral part of profit making.

Sergey Sedov (Zaymer)

In addition to availability of financial services, FinTech may have a positive impact on the service rendering speed, convenience and profitability. These are areas where FinTech is capable of competing with traditional financial companies on a full scale. In its turn, it helps to provide a stable foundation for sustainable development of the society. The near term goal is to secure the achievements made and promote FinTech’s potential to a maximum extent possible. The development will take place in two key segments — payment systems which will provide alternative to the existing bank payment systems and user communities. It will go beyond retaining loyal clients and will be aimed at reaching of a higher, more positive emotional interaction level. The high level of such dialog will help define the policy of a FinTech company in specific circumstances.

Yuri Provkin (Eqvanta)

I would add two points here. This is convenience, i.e., the technology helps to deliver money faster to clients including remote channels, mobile applications, etc. Today, it works via delivery: you may order a financial product and have it delivered to your office. You may resolve a lot of financial tasks, e.g. open an account (if you are an individual entrepreneur), receive money if you are an individual, obtain a loan or get advice by phone. Hence, I think the financial services become more convenient from a standpoint of various programs which are developed to record financial costs and ensure planning. The technology makes it somewhat more accessibility, convenience, and the speed of decision-making aiming to help clients who participate in this process.
Contribution of FinTech products to achievement of the SDGs in Russia: expert commentaries

What kind of contribution can FinTech companies make to help develop sustainable financial ecosystems?

Anrey Petkov
(MFC «Chestnoe Slovo»)

FinTech makes it easier for all population strata to access financial products, increase the target audience and improve the financial literacy of the population. First of all, there are opportunities for developing an efficient dialog with the state. We expect that some of the barriers can be lifted based on this dialog. New opportunity emerges for discussing improvement plans roles of the participants crystallize when all negotiating parties strive for development.

Some foreign players (for example, https://www.finca.org) focus on social issues making it a core objective of their business. Do you think that the assessment of the societal and economic impact may help companies to attract new market players which are capable of contributing to resolution of social issues? We need to keep in mind that financial technology for microfinance is, among other things, aimed at solving social issues and improving living standards across the social board, with Ivan Merinov (SMS Finance)

Let's think for a moment what is meant by alternative access to financial products. This is obviously about creating value for all types of clients who would not be able to access these products without FinTech. This value is what has been enabled by advanced analytics and alternative financial products. It means, in practice, that FinTech is here to make the financial ecosystem more stable. Some foreign players (for example, https://www.finca.org) focus on social issues, making it a core objective of their business. Do you think that the assessment of the societal and economic impact may help companies to attract new market players which are capable of contributing to resolution of social issues?

Looking at the entire FinTech segment, those who specialize on SME and resolve social issues one may say that it is a vast market with high demand and untapped potential. As at today, financial instruments are not fully available to companies and small businesses. On the one hand, it a kind of a ‘perception’ problem. On the other hand, there is no infrastructure for it. I think, more and more companies notice it. I see that many startups and companies are created exactly in this area. P2P floors and balance sheet lenders emerge as a response to a need in new business evaluation methodologies, entrepreneur valuation, scoring, etc. Hence, I think, the potential is very high and there a lot of market players who see opportunities there. I think, the segment is very large and it will significantly transform in the next 50 years.
Contribution of FinTech products to achievement of the SDGs in Russia: expert commentaries

What kind of contribution can FinTech companies make to help develop sustainable financial ecosystems?

The FinTech industry actually functioning as a social project. The question is whether it is worthwhile to combine business with non-profit social projects. Business equals making money. Otherwise, it would be charity. But it is quite a different thing when a social initiative is smartly integrated into your business processes and acts primarily to deliver benefits to your business while contributing to the social agenda. For example, our company is interested in having professionals who are a best fit for the real world of high-tech business. To make this task simpler, we have become part of a bachelor programme at one of the leading universities. Do we benefit from that? No doubt. Do we contribute to the social dimension? Yes, we do.
Financial inclusion: contribution of microfinance organizations*

Context
According to various estimates, over 20 percent of the Russian population do not have access to bank financial products. The limited access often results from denials issued by banks due to weak credit histories or the lack of it in the case of loan applicants.

The contribution of online services of microfinance organizations (MFO):

Access to finances:
• Growing Internet penetration in remote regions and slower infrastructure and income growth rates transforms the MFO online services into a tool which can be used by households with no access to bank loans to obtain financing in emergency cases, e.g. delays in salary payments. MFO offer short-term loans which are not perceived as significant credit burden.
• Dealing with MFOs increases the probability of obtaining positive loan decisions from banks. Bank customers who came there from MFOs account for six percent of total borrowers who received bank loans. The reason for rehabilitation and obtaining access to bank loans is higher financial discipline among those who dealt with MFOs.
• The MFO online services make it possible to smooth the accessibility of financial services in large cities and remote regions. The share of borrowers from small towns increased by over 7 percent.

Financial literacy:
• The MFO online services appear the most convenient and attractive for low income households. They significantly increase the financial literacy of the population due to the simplicity of interfaces.

Contribution of FinTech products to achievement of the SDGs in Russia (3/3)

* According to the research of the Joint Credit Bureau and Self-Regulatory Organization MiR based on 314 million credit histories of 82 million borrowers stored in the Joint Credit Bureau.
## Demand in the FinTech market

<table>
<thead>
<tr>
<th>Sector</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Banks</strong></td>
<td>- Online accounting&lt;br&gt;- Online reporting&lt;br&gt;- Business process automation&lt;br&gt;- Client data analysis&lt;br&gt;- Bank chat bots and robo-advising&lt;br&gt;- Bank marketplace&lt;br&gt;- IT security&lt;br&gt;- Market analytics&lt;br&gt;- Real-time POS lending</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td>- Card aggregator&lt;br&gt;- Online payment service&lt;br&gt;- Cashback service&lt;br&gt;- Advertising platform&lt;br&gt;- POS-lending&lt;br&gt;- Market analytics&lt;br&gt;- mPOS</td>
</tr>
<tr>
<td><strong>Catering facilities</strong></td>
<td>- mPOS&lt;br&gt;- Card aggregator&lt;br&gt;- Market analytics&lt;br&gt;- Online payment service&lt;br&gt;- Cashback service&lt;br&gt;- Advertising platform&lt;br&gt;- Real-time POS-lending</td>
</tr>
<tr>
<td><strong>Insurance companies</strong></td>
<td>- Online reporting&lt;br&gt;- Crowdsurance&lt;br&gt;- Insurance telematics&lt;br&gt;- Insurance marketplace</td>
</tr>
<tr>
<td><strong>Governmental and municipal organizations</strong></td>
<td>- Business process automation</td>
</tr>
<tr>
<td><strong>Microfinance organizations</strong></td>
<td>- P2P lending&lt;br&gt;- Business process automation&lt;br&gt;- Client data analysis&lt;br&gt;- Market analytics P2P-lending&lt;br&gt;- Real-time POS-lending</td>
</tr>
<tr>
<td><strong>Telecoms</strong></td>
<td>- Data analytics and processing&lt;br&gt;- Market analytics</td>
</tr>
<tr>
<td><strong>Investment companies</strong></td>
<td>- Bank chat bots and robo-advising</td>
</tr>
</tbody>
</table>
Demand in the FinTech market: the sentiment analysis of digital footprints

Online lending is one of the fastest growing segments in the FinTech market. According to experts, 2017 saw this segment grow by 67 percent on 2016. The majority of FinTech players expect that this positive trend will continue within the next two years, pointing out to online lending as one of the key drivers behind the evolution of FinTech. However, the negative consumer attitudes have slowed the development in this segment lately. The sentiment analysis of the digital footprint in social media allows for the identification of the social media users’ sentiments towards the online lending segment of FinTech.

The methodology for studying the sentiment of the social media users to online loan segment of FinTech.

**The subject of the research:** the online loan segment of FinTech.

**The objective of the research:** identify the attitude of respondents towards the research subject (online loans as a whole, specific companies and their services)

**Sample:** 30,000 digital footprints in the Russian social media and 3,000 digital footprints in Kazakhstan's social media.

This part of the research involved data mining including semantic analysis algorithms, sentiment analysis and psychometric analysis.

**Glossary**

- **Digital footprint** — an record made by a social media user (a comment, post, repost).
- **The semantic analysis** — a stage of the automated text recognition algorithm at which semantic relationships are defined and the semantic representation of the text is formed.
- **The sentiment analysis** is a class of the content analysis methods in computer linguistics designed for automated identification of emotionaly tinged speech and assessments (opinions) with respect to the subject of the research.
- **The psychometric analysis** reviews sets of open data in the social media profiles with respect to the author’s attitude to a specific personality type. In our research, we use two key methodologies adopted by the professional community, i.e., MBTI и BIG5.
The average balance value of sentiment toward online lending products in 2013-2018 among Russian users of social media was 0.32. The by-region analysis showed that Perm and Volgograd led among million-plus cities in 2013-2018, while the Far-Eastern Federal District and Siberian Federal District had the highest share of users with positive sentiment among other regions. The top cities by positive sentiment in 2018 were Krasnoyarsk (0.74), Novosibirsk (0.56), and Kazan (0.56).
Demand in the FinTech market: the sentiment analysis of digital footprints

Based on the results of the sentiment value, female users of social media were significantly more loyal compared to male users in 2013-2018 (0.36 versus 0.29, respectively)

In 2018, 76 percent of female users commented, posted or reposted the positive content on online loans (left digital footprint), while the share of male users with similar behavior is 8 p.p. lower (68 percent).

As for the age structure, 18-25 year-old users and those older than 65 years tend to leave positive digital footprint regarding online loans more frequently (the average level of sentiment value for both groups is 0.38).

The users who left positive digital footprint on online loans had the following core interests: sports (0.64) and family (0.63). It should be noted that the ‘portrait’ of users changed in 2018. As of today, key interests include music (0.87) and esoterics (0.84).

The structure of the sentiment towards online loans by age and gender

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Positive attitude (%)</th>
<th>Negative attitude (%)</th>
<th>Balance value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>32%</td>
<td>68%</td>
<td>0.36</td>
</tr>
<tr>
<td>Man</td>
<td>35%</td>
<td>65%</td>
<td>0.29</td>
</tr>
<tr>
<td>18–25 years</td>
<td>31%</td>
<td>69%</td>
<td>0.38</td>
</tr>
<tr>
<td>26–45 years</td>
<td>34%</td>
<td>66%</td>
<td>0.31</td>
</tr>
<tr>
<td>46–65 years</td>
<td>42%</td>
<td>58%</td>
<td>0.16</td>
</tr>
<tr>
<td>65 years and older</td>
<td>31%</td>
<td>69%</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Top ten segments by sentiment balance value

- Sports: 0.64
- TV: 0.50
- Music: 0.49
- Dating: 0.46
- Cars: 0.46
- Entertainment: 0.46
- Travel: 0.43
- Esoterica: 0.43
- Family: 0.43
- Mobile phones: 0.43
Demand in the FinTech market: the sentiment analysis of digital footprints

MBTI psychometrics

Big Five psychometrics

Personality types with the highest sentiment balance values for the entire period

**Supervisor**
Logical Sensory Extrovert

**Conservator**
Ethical Sensory Introvert
Has firm principles and is self-possessed. Quickly identifies toxic persons, draws sharp line between ‘insiders’ and ‘outsiders.’ Tends to give a moral assessment to people when talking to insiders. Ensures order and cleanliness within his/her territory. Does not believe in friendship and love without reciprocity.

**Vigilant**
Intuitive-Ethical Extrovert
Prone to opportunism, unthoughtful and impromptu actions. Only intuitive-ethical extroverts can yield to temptation of taking a train and leaving for an undisclosed location with the only goal of winding down. Likes to spend some amounts of money on his/her whims. Often believes that their destination is good living not burdened with dull daily concerns.

MBTI psychometrics identified two key personality types among social media users with positive sentiment revealed in their digital footprints relating to the online lending segment of FinTech in 2013-2018: supervisor and conservator.

In 2018, conservator (0.66) and vigilant (0.63) were the key personality types.

The Big Five psychometrics did not reveal significant differences between the digital footprints showing positive and negative sentiment of various personality types.
Demand in the FinTech market: the sentiment analysis of digital footprints

Top five companies based on the sentiment revealed in the digital footprint

Repost
Bystrodengi 29 270
eKapusta 6 810
Zaymer 6 750
MoneyMan 4 994
Carmoney 3 437

Note
Bystrodengi 11 595
MoneyMan 407
Zaymer 406
eKapusta 327
Carmoney 304

The involvement ratio by sentiment revealed in the digital footprint

Five companies (eKapusta, Vivus, Platiza, Moneyman and MILI) exceeded the average level (0.32) based on the results of the sentiment analysis in 2013-2017. In 2018, only two companies (eKapusta and MFC «Chestnoe Slovo») exceeded the average level (0.43).

The analysis of involvement by the number of digital footprints showed that Bystrodengi was the indisputable leader. In 2018, the situation has not changed and the structure of the top five list remain the same.

The analysis of involvement by the number of digital footprints showed that the share of negative digital footprints among reposts significantly increased in 2017-2018 (2.2 times versus the average for the entire period).
Barriers for development of Russia’s FinTech market

All stakeholders notice the positive performance of the Russian FinTech market, but the majority of them believe that the market develops slower than it was forecast five years ago.

The analysis of a number of publicly available interviews with market experts in the past two years allowed us to single out top five factors which constrain the development of the Russian FinTech market.

**Top five barriers for market development which are most frequently discussed in mass media:**

- Uneven infrastructure development levels in Russian regions (high concentration of FinTech companies in million-plus cities; the inaccessibility of some regions for promoting FinTech and related tools);
- Inequality in living standards of the Russian population (concentration of demand for FinTech in million-plus cities with higher living standards);
- Emigration of skilled personnel;
- Lack of regulation in some FinTech segments;
- Lack of a unified strategy for FinTech-Bank relationships (FinTech companies are perceived by banks as competitors and a source of profit erosion).

**Top five barriers for market development (according to representatives of FinTech companies):**

- Low appeal of the Russian FinTech industry for foreign investors (2.82);
- Low purchasing power of the population (2.86);
- Shortcomings of government regulation of the industry (2.82);
- Geopolitical risks (2.62);
- Lack of flexibility in the tax system with respect to FinTech (2.36).

Most problems faced by Russian FinTech companies result from the current macroeconomic situation.

The young and robust FinTech market needs investments including those from abroad, as well as the legislative and political stability which will be instrumental in fostering business growth.

Based on this we can identify top five obstacles for market development. Overall, this rating matches the problems faced by the FinTech market and frequently discussed in mass media.

**The rating of the problems faced by FinTech companies in Russia**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low appeal for foreign investors</td>
<td>2.96</td>
</tr>
<tr>
<td>Low purchasing power of the population</td>
<td>2.86</td>
</tr>
<tr>
<td>Shortcomings of government regulation of the industry</td>
<td>2.82</td>
</tr>
<tr>
<td>Geopolitical risks</td>
<td>2.62</td>
</tr>
<tr>
<td>Lack of flexibility in the tax system with respect to FinTech</td>
<td>2.36</td>
</tr>
<tr>
<td>Cyber threats</td>
<td>2.26</td>
</tr>
<tr>
<td>Growing cost of debt</td>
<td>2.20</td>
</tr>
<tr>
<td>Negative perception of the infrastructure (e.g., penetration of the Internet)</td>
<td>2.16</td>
</tr>
<tr>
<td>Currency risks (depreciating the national currency)</td>
<td>2.16</td>
</tr>
<tr>
<td>Weak protection of personal data</td>
<td>1.92</td>
</tr>
<tr>
<td>No access to foreign equipment and services</td>
<td>1.66</td>
</tr>
<tr>
<td>Higher unemployment due to automation and RPA</td>
<td>1.00</td>
</tr>
<tr>
<td>Significantly increased environmental footprint due to heavier use of energy resources</td>
<td>0.46</td>
</tr>
</tbody>
</table>

The FinTech market in figures
The current situation in Russia’s FinTech market
FinTech market stakeholder map
Supply in the FinTech market
Demand in the FinTech market
Barriers for development of Russia’s FinTech market
Drivers for development of Russia’s FinTech market
Russian FinTech market outlook until 2020
Overview of Kazakhstan’s FinTech market
Appendix
Contacts
Barriers for development of Russia’s FinTech market: expert commentary

Alexander Dunaev (MoneyMan)

The problems are about different things. FinTech’s problems are like better. The problems are actually larger and related to different things. Maybe, once they are resolved FinTech would catch up. The key point is that quite different problems have to be resolved first. The source of those problems lies in a totally different area. The lack of capital markets is a huge problem which the lack of technology exchange with Western countries, and the issues arising from the economic self-isolation pose a huge problem which will result in lagging for dozens of years. Hence, FinTech problems just fade in comparison with the overall situation. There is no sense in analyzing FinTech problems alone. They are very indirect and secondary in this context. There is no private sector which is another huge problem. The isolationist scenario for FinTech would not allow for full-scale evolution of the industry. In other areas we have already seen positive shifts. The real incomes of households are slowly increasing, while the regulation becomes both comprehensive and flexible. For example, many oversight functions in microfinance market (in particular, online lending) have been transferred to self-regulatory organizations.

Sergey Sedov (Zaymer)

The above-mentioned problems do exist. However, the reason for optimism is that the FinTech industry operations will result in creation of the economy where the above-mentioned problems would not matter. The availability of cross-border payments and interaction with foreign banks (as a result of minimization of geopolitical risks) is an important pre-condition for implementation of an optimistic scenario. The isolationist scenario for FinTech would result in creation of the economy where the above-mentioned problems would not matter.

Ivan Merinov (SMS Finance)

No breakthrough for the industry is possible while these barriers remain. There will be a smooth, incremental evolution. Insufficient consumer purchasing power places a road block in the path to solving social issues such as the need for scoring and better credit histories.

Yuri Provkin (Eqvanta)

I think, all these barriers can be overcome and none of them is a real obstacle which could prevent our business from becoming a major and successful company, even on an international scale. I believe, all this is manageable and depends mostly on an organization’s goals. I know Russian FinTech companies which expanded internationally. I also know quite large Russian companies which grew but chose not to access international market for their own reasons. Hence, I think the main point here is that all these barriers apply to all players. All those factors, i.e. Russia’s attractiveness for international investors, purchasing power, geopolitical risks are the same and apply to all Russian companies. However, some companies can succeed and some of them cannot succeed. I think, these barriers are just part of the environment in which we have to learn to operate. I would not say that there is a particular barrier which needs special attention. Let me draw an example. Let it be low attractiveness of the Russian FinTech industry for foreign investors. Suppose, it is a significant barrier for a company which decided to pursue the path of international expansion. Here is an example of our company. We became a relative large Russian company with revenue around RUB 4 billion. When we discussed our strategy with various investment bankers we realized that the international story is not the path to follow. We even tried to merge with a major international player but understood that it is impossible because they were advised not to do this. The reason was that became so large a business that our stake in the merged company would reach 40 percent. In fact, the new company would look as a Russian company which would be a risk, given the geopolitical situation and the investor attitude toward Russia. However, should we pursue the
Barriers for development of Russia’s FinTech market: expert commentary

Anrey Petkov
(MFC «Chestnoe Slovo»)

The optimistic scenario is quite feasible despite the barriers, FinTech companies seem to be quite established in their segment. For example, many customers will suffer if mobile bank applications are blocked.

I would initiate change in the industry starting from the state regulation of the segment. The attractiveness of the Russian FinTech industry directly depends on the state regulation. The flexibility of the tax system with respect to the specific features of FinTech should be increased, too.

Barriers 1 (low attractiveness of Fintech for foreign investors) and 5 (lack of flexibility in the tax system) would not disappear if barrier 3 (shortcomings of government regulation) remains in place.

goal of becoming an international player we would follow a different strategy like IDF. They did not focus on developing large business in Russia and went to international markets right away at the initial stage. This was the strategy they chose. As a result, Russia accounts for a smaller part of their strategy and the company remains quite attractive for foreign investors. They attracted large investments in the West, so I think these barriers are notional to some extent and one has to work (in order to bypass them).
Drivers for development of Russia’s FinTech market (1/2)

As we noted before, some specific features of the Russian FinTech market are both barriers and drivers from a standpoint of the market development.

One of such, most ‘dual’ factors is labor force in this market segment (availability of highly skilled specialists). Russian higher education institutions prepare the strong professionals who are in high demand in the global FinTech market. Strictly speaking, not all of them can leave the country in order to launch their startup projects, while the number of invitations from corporations is limited. Hence, there is a sufficient number of highly skilled specialists in the Russian labor market whose requirements are quite suitable for businesses, given the current economic situation. In addition, high-school graduates give more preference to IT-departments of the universities, hence the number of fresh personnel for FinTech may only grow in the next three to five years. We note high interest in young specialists on the part of major corporations (purely FinTech corporations or those including FinTech business branch). For example, Yandex regularly holds lectures for students in leading universities which significantly increases the quality of education with respect to application of obtained knowledge.

Previously, we discussed shortcomings of the state regulation as a major barrier for FinTech market development in Russia. However, we may look at a different angle and find advantages as well. For example, the regulation of the P2P lending may have a positive effect. It is well known that a key problem in that segment is linked to identification of users (borrowers). Upon obtaining an official status P2P hubs may receive access to the databases of the Pension Fund and the Federal Tax Service in order to verify the data provided by the borrowers. This would allow them to significantly increase the efficiency of the scoring mechanism, as well as improve the situation in the lending segment.

Another example is the reforming of the microfinance organization market launched by the CBR in 2017. The CBR did a lot of work to increase market transparency, improve the quality of services and protect the interests of consumers.
Drivers for development of Russia’s FinTech market (2/2)

Top three drivers for market development which are most frequently discussed in mass media:

- The FinTech segment regulation (legal support);
- The availability of highly skilled specialists in Russia;
- The opportunity to use the experience of the developed markets.

The rating shows that the key strategies of FinTech companies are aimed at increasing the efficiency of internal business processes, namely, implementing new technology, launching new goods and products in the market, accessing new markets.

The rating of FinTech company strategies in 2018-2019:

- Implementation of new technology: 0.88
- Launch of new products/services to on the market: 0.87
- Expansion into new markets: 0.86
- Organic growth: 0.82
- Higher promotional spending; marketing: 0.77
- Raising capital from external sources: 0.73
- Talent investment: 0.67
- Higher spending on R&D and business development: 0.59
- Cost cutting: 0.57
- Short-term capital optimization and operating model revision: 0.46
- Merger or/and/or acquisition strategy: 0.44
- Social impact (lower poverty): 0.37
- Economic impact (impact on GDP): 0.32
- Currency risk hedging: 0.32
Drivers for development of Russia’s FinTech market: expert commentary

FinTechs on geographic expansion

Alexander Dunaev (MoneyMan)

Our operations span from Brazil and Mexico to Europe and Central Asia. We have various markets in our portfolio geography. big and small, we work in Georgia and Brazil. I mean that the markets are very different. You can operate anywhere if you are competitive. One just needs to be competitive. “You can sell in any market. Probably, it is difficult to sell from Russia because Russian, so to say, are perceived with caution in the West. There is no problem about it. You open a back office in London and start working. Nobody will care that everything is produced in Russia, nobody would care about it. In the event that your product is not competitive, your business will die. It is normal and it does not mean that your product is good or bad. There can be lengthy discussions on whether a state of affairs in Russian market is bad or good, but here we have all ingredients in order to launch a great international business. The situation in Russia is not perfect but it does not matter, as the specialists you can hire here are great, leasing costs are not so high, many people speak English, and the speed of Internet connection is high.

Sergey Sedov (Zaymer)

First of all, ex-USSR countries. Many people there use Russian payment systems, social media and telecom services. They have common history and similar mentalities. Our next step would probably be Latin America.

One should not think that developed markets (in particular, in Western Europe countries) are closed for Russian FinTech companies. We are capable of offering quite competitive solutions. We can also use our strategic advantages acting as an intermediary between relatively rich West and developing markets which are in need of financial injections. This is confirmed by the use of P2P services which are part of Robo.cash financial group (we raise investments from EU citizens to provide loans in other countries).

Yuri Provkin (Eqvanta)

Everything is too individual, in my opinion. I see companies which access the market. I see companies which successfully operate in the developed markets while there are those preferring developing markets. Much depends on whether the company operates in the consumer finance segment. For a consumer finance company, it is crucial to watch what happens to regulation and competition. This is how we made a decision on which markets we are going to enter. We studied these two aspects and looked for available opportunities. These are the premises on which our decisions are based. There are also other companies which want to go public or make a name in the West — they open offices in San-Francisco or elsewhere in the US. They do it in order to work with investors there and show that the business can exist there by raising significant investments. Therefore, it is difficult for me to answer the question regarding FinTech. Overall, I think that most markets are attractive for us. One need to look at the segment in which the company operates and develop the strategy on an individual basis. Probably, regulation and competition are key areas on which one should focus. Especially if you are a consumer finance company.

Anrey Petkov (MFC «Chestnoe Slovo»)

Upon looking at the online lending segment, MFC «Chestnoe Slovo» microfinance organization would choose Asia and Latin America markets.

Ivan Merinov (SMS Finance)

With FinTechs, the strongest interest is on markets with a large consumer population and deeper penetration of mobile technology. This includes the Asian Pacific Region.
Russian FinTech market outlook until 2020

What is your view of the Russian FinTech market outlook until 2020?

Trend
Over one half of the respondents (60 percent) are optimistic about the outlook for the Russian FinTech market.

The balance value of positive and negative estimates is 0.33.

Specific features
FinTech companies offering infrastructural solutions more often expect that the situation would improve (14 points above the average).

Overall, companies with revenue of less than RUB 2 million and companies with revenue of RUB 2-10 million appear more optimistic (27 points above the average).

Small companies with less than 10 employees and young companies operating for 1-3 years expect the situation in the FinTech market to improve (12 points and 8 points above the average, respectively).

FinTech companies operating in the marketplace format and using the scoring methodologies are not so optimistic as the rest of the respondents (10 points and 12 points below the average, respectively). Companies with revenue of more than RUB 50 million tend to be less optimistic, too (18 points below the average).
Overview of Russia’s FinTech market

Outlook for FinTech companies until 2020

What is your view of your company’s outlook for 2020?

**Trend**
Overall, the outlook for separate companies was more optimistic than the outlook for the industry. The balance value indicator is 0.64.

The absolute majority of the respondents (90 percent) believe that the situation in their companies will improve. Not a single respondent expects that the situation will deteriorate.

**Specific features**
The respondents from companies offering infrastructure solutions were more optimistic compared to the rest (the balance value indicator is 0.76).

However, the respondents from companies with revenue of RUB 2-10 million are the most optimistic (the balance value indicator is 0.85).

It should be noted that the younger a FinTech company is, the more optimistic it is about its own outlook.

Online lending and investment companies are less optimistic (6 points below the average) which may be related to changing legislation and uncertainty around the industry regulation. Companies with revenue of more than RUB 50 million tend to be less optimistic, too (10 points below the average).
The preferences of individuals remained the same and are focused on availability, convenience, efficiency, etc. It will be the technology that will allow people to satisfy their needs in liquidity or offer liquidity in the most convenient form that will have future. Probably, we will see implementation of gamification systems. Development of joint programs within Retail-TMT-FSI will continue. The launch of the CBR’s financial marketplace will be an important landmark and lead to stronger competition between banks trying to attract new clients, as the number of branches and the size of the bank would not matter in the case of the marketplace any longer. From a company standpoint, the business will grow around liquidity management platforms. This will require that banks develop new data collection frameworks, so called business sensors at the level of the client ecosystems. The creation of effective ecosystems and availability of big data on the ecosystem status will allow companies to mitigate portfolio risks through implementing risk forward looking systems. Central banks will continue to ‘misunderstand’ blockchain globally, as it requires market democratization and refusal to regulate markets, given that the system implies self regulation through distributed networks and storage. Cyberthreats and technology allowing for prevention of such threats will play a central role. Client identification methods will become a systemic driver for FinTech development and, hence, will develop further. Hence, the key conclusion is that the current trends will continue to evolve in 2020, with market participants focusing more on decentralization and availability of market instruments for individuals and business.

Alexey Minin
Executive Officer
Data Analytics Institute
Deloitte CIS
Evaluation of the regulator’s efficiency (1/2)

What is the change in the regulator’s efficiency with respect to support and development of the Russian FinTech industry?

Trend
The balance indicator (between those who see positive changes in the regulator’s efficiency with respect to support and development of the Russian FinTech industry and between those who see no positive changes) is 40 percent. Overall, it shows that the regulator’s efforts are perceived positively.

However, almost a half of the respondents (44 percent) said that they saw neither positive nor negative changes in the past two years.

Specific features
The regulator’s effort in the past two years is seen more positively by investment companies (10 p.p. above the average), the companies operating for longer than five years (12 p.p. above the average), and the companies with more than 50 employees (17 p.p. above the average).

Companies with revenue of more than RUB 50 million tend to be the least positive (17 points below the average).
Evaluation of the regulator’s efficiency (2/2)

Please evaluate the efficiency of the regulator’s current effort aimed at supporting and developing the Russian FinTech industry.

The weighted balance indicator for the respondents on a scale of 0 to 5 where 1 percentage point equals 0.01

- High efficiency
- Medium efficiency
- Low efficiency
- Regulator efficiency index (on a scale from 0 to 5)

The satisfaction of FinTech companies with the Regulator’s current effort is at 1.66 points which corresponds to the average level.

One in five respondents believe that the Regulator’s effort is highly efficient, while 38 percent of the respondents believe that the regulator’s efficiency is low.

Specific features
The regulator’s current effort is seen as the most efficient by the companies with more than 50 employees (17 p.p. above the average).

Respondents from companies with revenue of less than RUB 2 million (54 points above the average), the companies operating for 3-5 years (34 points above the average), as well as the lending companies (19 points above the average) tend to be quite positive about the regulator’s efficiency, too.

FinTech companies operating in the marketplace format for 1-3 years with revenue of RUB 2 - 10 million more often tend to believe that the regulator’s effort is not efficient enough (39, 46, and 35 points below the average).

The regulators are not quite sure yet how to deal with this industry. They may well go for the Chinese model with its stringent restrictions.

Ivan Merinov
(SMS Finance)
The rating of FinTech segments with the highest market potential until 2020

Please, evaluate the importance of the proposed FinTech segments in the medium term (one-three years).

<table>
<thead>
<tr>
<th>Segment</th>
<th>World</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital banks</td>
<td>3.30</td>
<td>3.08</td>
</tr>
<tr>
<td>Lending</td>
<td>2.84</td>
<td>2.80</td>
</tr>
<tr>
<td>Scoring</td>
<td>2.76</td>
<td>2.80</td>
</tr>
<tr>
<td>Marketplace</td>
<td>2.76</td>
<td>2.80</td>
</tr>
<tr>
<td>Investment</td>
<td>2.72</td>
<td>2.74</td>
</tr>
<tr>
<td>Loyalty programs</td>
<td>2.56</td>
<td>2.50</td>
</tr>
<tr>
<td>Infrastructure solutions</td>
<td>2.50</td>
<td>2.48</td>
</tr>
<tr>
<td>Personal finance management</td>
<td>2.34</td>
<td>2.06</td>
</tr>
<tr>
<td>Insurance</td>
<td>2.32</td>
<td>2.02</td>
</tr>
<tr>
<td>Management/financial accounting</td>
<td>1.94</td>
<td>1.86</td>
</tr>
</tbody>
</table>

On the scale from 0 to 4

The experts were asked to evaluate FinTech segments with the highest market potential globally and in Russia until 2020. We see that the ratings coincide.

**Digital banks** lead by a significant margin. They are followed by lending, scoring and marketplace segments. However, all three segments received the same ratings in Russia while lending is believed to be the most promising segment on a global scale.

This may be due to the lack of lending services in Asia and Africa where fast development of FinTech is driven by deficiencies of the banking system.

**Specific features**

In Russia, companies with revenue of more than RUB 50 million believe that digital banks and lending have the highest potential (3.31), while companies with revenue of less than RUB 2 million expect marketplace to play more important role (3.00) than lending (3.20).

Young companies operating in the Russian market for 1-3 years believe that investments are the segment with the highest potential in Russia (2.75).
The rating of technologies with the highest market potential until 2020

What is your opinion about the listed technologies from a standpoint of their market potential until 2020? (In which technology would you invest?)

<table>
<thead>
<tr>
<th>Technology</th>
<th>Specific features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial intelligence</td>
<td>API is of most interest for companies operating in the PFM segment (19 points above the average).</td>
</tr>
<tr>
<td>Machine learning</td>
<td>FinTech experts believe that the artificial intelligence has the highest market potential. The AI potential is evaluated at 0.88.</td>
</tr>
<tr>
<td>Predictive analytics</td>
<td>It is followed by technologies closely related to AI: machine learning (0.84), predictive analytics (0.82), deep learning (0.79) and big data (0.78).</td>
</tr>
<tr>
<td>Deep learning</td>
<td>The experts see blockchain's potential as the lowest (0.54). At the bottom of the rating are augmented reality (0.58) and virtual reality (0.55).</td>
</tr>
<tr>
<td>Big data analytics</td>
<td></td>
</tr>
<tr>
<td>Data mining</td>
<td></td>
</tr>
<tr>
<td>Biometric analysis</td>
<td></td>
</tr>
<tr>
<td>Neural networks</td>
<td></td>
</tr>
<tr>
<td>Internet of things (IoT)</td>
<td></td>
</tr>
<tr>
<td>BI - Business Intelligence</td>
<td></td>
</tr>
<tr>
<td>Semantic analysis</td>
<td></td>
</tr>
<tr>
<td>Contactless payments</td>
<td></td>
</tr>
<tr>
<td>Cluster analysis</td>
<td></td>
</tr>
<tr>
<td>Augmented reality (AR)</td>
<td></td>
</tr>
<tr>
<td>Block chain</td>
<td></td>
</tr>
<tr>
<td>Virtual reality (VR)</td>
<td></td>
</tr>
</tbody>
</table>

Trend
FinTech experts believe that the artificial intelligence has the highest market potential. The AI potential is evaluated at 0.88.

Specific features
API is of most interest for companies operating in the PFM segment (19 points above the average).

The semantic analysis attracts companies with 25-50 employees, companies with revenue of more than RUB 50 million, as well as companies using scoring methodology (12, 11, and 7 points above the average).

Companies developing infrastructure solutions, as well as companies with revenue of more than 2 - 10 million tend to believe that BI has high market potential (12 and 13 points above the average, respectively).

Companies operating in the market for longer than five years are more interested in IoT technology (14 points above the average).

1 Deep learning is a combination of machine learning methods
2 Data mining means discovery and analysis of "hidden" data patterns
3 Machine learning is based on the use of AI methods
4 Application programming interface
5 Semantic analysis involves recognising and "understanding" texts
6 Business Intelligence is about software solutions for managers to analyse information on their company and its environment
Overview of Kazakhstan’s FinTech market
<table>
<thead>
<tr>
<th><strong>The FinTech market in figures</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>1,675</strong></td>
</tr>
<tr>
<td><strong>42</strong></td>
</tr>
<tr>
<td><strong>58,000</strong></td>
</tr>
<tr>
<td><strong>370</strong></td>
</tr>
<tr>
<td><strong>0.08</strong></td>
</tr>
<tr>
<td><strong>0.55</strong></td>
</tr>
<tr>
<td><strong>0.70</strong></td>
</tr>
<tr>
<td><strong>0.08</strong></td>
</tr>
<tr>
<td><strong>0.65</strong></td>
</tr>
<tr>
<td><strong>-0.30</strong></td>
</tr>
</tbody>
</table>

*Deloitte’s calculations are based on SPARK-Interfax data on companies which disclosed the revenue for 2016.*
The current situation in Kazakhstan’s FinTech market

Kazakhstan
Average rating: 23.6
Amount of investments in 2017: n/a

Developing market

Number of FinTech unicorns**: 0

The largest market participants***:
Credit24

Sustainable development rating*: 68.1

Trends
Technology
Payments, online lending

Investments
Payments, online lending

Kazakhstan’s FinTech market is at the earliest stage of its development. The interest of Kazakhstan’s government in attracting foreign investment is supported by laws regulating the venture and online lending market, as well as by the opening of the international financial center in Astana providing favorable conditions for FinTech companies.

Deloitte CIS Research Center data (survey of FinTech market participants):
- the share of those who believe that this factor is positive for FinTech growth in Kazakhstan
- the share of those who believe that this factor slows down FinTech market growth in Kazakhstan
- Balance value — the total influence of the factor on the FinTech market development in Kazakhstan

* 2018 SDG Index and Dashboards
** Unicorn is a company with a market capitalization of USD 1 billion and higher
*** at the company’s valuation price
Source: CBInsights
The current situation in Kazakhstan’s FinTech market

The markets of Russia and Kazakhstan are quite similar, as they have common history and development paths. Nevertheless, there are differences. As opposed to Russia, Kazakhstan’s economy is not exposed to sanctions although it is closely connected to the Russian economy, as Russia is Kazakhstan’s key trade partner. As a result, the two countries have similar structure of the economy dominated by large government-owned companies. Tenge, Kazakhstan’s currency, is highly volatile as it is linked to the Russian ruble. Companies which will evolve in Kazakhstan will need to launch their products internationally, which is quite possible, given the openness of the local market. However, Kazakhstan’s major financial institutions are not transparent similarly to the Russian peers which poses barriers for new market entrants. Startups have no easy access to the expertise accumulated by large players which prevents the former from achieving business success. The venture finance market is not sufficiently developed. These circumstances pose risks capable of slowing down the FinTech development. Another slowdown factor affecting FinTech is small number of graduates from higher technical education institutions which sufficient knowledge in the area of exponential technology and their application for business purposes.

Alexey Minin
Executive Officer
Data Analytics Institute
Deloitte CIS
The current situation in Kazakhstan’s FinTech market as viewed by its participants

What is your opinion of the situation in Kazakhstan’s FinTech market from a standpoint of business financial wealth?

<table>
<thead>
<tr>
<th>Trend</th>
<th>The majority of surveyed experts (80 percent) positively evaluate the current situation in Kazakhstan’s FinTech market. The optimism index is at 0.55.</th>
</tr>
</thead>
</table>

In the first turn, we mean online lending and payments when we speak about Kazakhstan’s FinTech market. The share of pessimistic responses is attributed to tighter regulation of microfinance organizations (a new rate has been introduced). Regrettably, there is no dialog between the regulator and business, while the regulator acts mostly in an imperative and punitive manner.

Assem Nurgalieva (First Credit Bureau)

<table>
<thead>
<tr>
<th>Trend</th>
<th>The Optimism Index for the financial position of the company is 0.7. The absolute majority of the respondents (90 percent) positively evaluate the current situation in their companies.</th>
</tr>
</thead>
</table>

The weighted balance indicator for the respondents on a scale of -1 to 1 where 1 percentage point equals 0.01
Measuring uncertainty in strategic decision making

What is your assessment of political and economic uncertainties affecting the strategic decision-making in your company?

**Trend**
Despite optimistic assessments of the current situation in the FinTech industry, almost a half of experts surveyed in Kazakhstan point out to high uncertainty in the current situation from a standpoint of making strategic decisions. Around 40 percent of the respondents refer to the average level of uncertainty.

Hence, the net uncertainty level is -0.30 which slightly exceeds the same indicator for Russia (by 5 points).

The impact of the political factor is very high and strongly affects the retail sector.

Any changes in government institutions (new appointments, changes in programs and strategies) affect business.

As for economic factors, the devaluation of the national currency is the major uncertainty factor for Kazakhstan’s FinTech.

Assem Nurgalieva (First Credit Bureau)

![Uncertainty Scale]

- High uncertainty
- Medium uncertainty
- Low uncertainty
- Net uncertainty (on a scale from -1 to +1)
In Kazakhstan, operations of FinTech companies are regulated by the Civil Code (articles on freedom of contract, loan agreement, repayment of loans and written forms of transactions). In late 2017–early 2018, there were discussions in Kazakhstan regarding regulation of online lending. According to legislators, the lack of maximum limits for annual interest rates resulted in overpayment under loan agreements and stimulated households to take new credits.* In late June 2018, the plenary meeting of the lower chamber of Kazakhstan Parliament approved the law “On the currency regulation and currency control” and the respective amendments to the current legislation. In order to protect households in the online lending segment, the government introduced a mandatory requirement for specifying the effective interest rate in loan agreements and limiting it at 100 percent p.a. From now on, every citizen of Kazakhstan will be able to check the effective loan interest rate in the real-time mode using a credit calculator. The methodology for such calculator will be approved by the National Bank of Kazakhstan. The calculator will be available at the website of the financial regulator. The data obtained with the help of the calculator will be permitted for use in court. Courts will invalidate loan agreements with effective interest rates exceeding 100 percent.

The law may negatively affect investments in Kazakhstan. The interest rate limitation may result in investor flight from the region, projects shifting to the gray zone, as well as higher risk of non-performing investments.

In March 2018, the National Bank of Kazakhstan launched the Invest Online real-time service for investing in the notes issued by the Bank and trading in securities of major Kazakhstan companies. The Invest Online service uses such innovative solutions as blockchain and electronic money issued by the National Bank as a payment means for securities transactions. Users can track the income accrual via the personal account in the system. This can be done after downloading the special mobile application Invest Online.

The National Bank has also designed an instant mobile payment system. The system allows for money payments and transfers based on the mobile phone number. It also ensures instant payments and quick placement of money with the recipient. The pilot testing of the system will be held in 3Q 2018. The system is expected to increase the share of non-cash payments in Kazakhstan.

* the majority of large legal microfinance organizations independently regulate the maximum effective interest rate (through KazFinTech association). According to item 3.3 of the Online Lending Industry Standard, “the amount of the interest, penalties, fines, etc. should not exceed two principal amounts of the core outstanding debt, i.e., Principal x 2 (Principal + Principal), or Principal+100 percent. Principal — core debt.”
Astana International Financial Centre (AIFC) is a financial hub for Central Asia, the Caucasus, EAEU, the Middle East, West China, Mongolia and Europe.

AIFC was launched on 5 July 2018 at EXPO-2017. AIFC is subject to special legal regime based on the Common law. This regime regulates relationships between AIFC members and interested parties with the aim of developing the financial market.

Management:
Kairat Kelimbetov is the Governor of Astana International Financial Centre.

AIFC objectives:
01. Develop draft resolutions for the Council relating to regulation of financial services and respective AIFC activities, initiate public discussions of such draft resolutions and submit them to the Council for approval;
02. Approve legal documents on issues relating to regulation of financial services and respective AIFC activities;
03. Establish the order for issuance, placement, repurchase and redemption of securities in the AIFC jurisdiction;
04. Register, provide accreditation and licensing for AIFC members;
05. Maintain the Register of AIFC members;
06. Monitor and oversee AIFC member operations, take necessary actions and measures;
07. Use other powers provided by resolutions of the Council.

Principal activities:
01. Capital markets;
02. Asset Management;
03. Islamic finance;
04. Financial technology;
05. Wealth management;
06. Green finance.

AIFC advantages:
• Transparent and independent legal system. AIFC law is based on principles, norms and precedents of the law of England and Wales, as well as the standards of major financial centers. The AIFC court abides by the English Law and operates independently from Kazakhstan's judicial system. International judges are expected to participate in the AIFC court. The International Arbitration Center will review disputes arising between the parties of the Arbitration Agreement;
• The AIFC bodies and participants are exempt from taxes (including corporate income tax, individual income tax, land tax and property tax) for a period of 50 years.
• Direct air routes to international financial centers.
• Simplified ‘one-stop’ registration.
• Use of English as an official language for document exchange and registration.

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As a result of the analysis we found two companies which actively develop financial technology in Kazakhstan: Chocofamily Holding and Silkway Ventures Group.

Chocofamily Holding
Chocofamily Holding is a major e-commerce company in Kazakhstan. The holding company consists of seven entities: Chocolife.me (a collective purchase platform), BeSmart (a collective purchase platform), Chocotravel.com (railway and air ticket real time booking platform), Chocofood.kz (online food delivery service), iDoctor.kz (online doctor search service).

- The holding company was created in 2011 when cash-back service Chocolife.me was set up.
- In 2013, the company raised capital from DEMUS Capital and launched two projects: Chocofood.kz and Chocotravel.kz.
- In 2016, Murat Abdysakhninov (Astel, KazTransCom, Dent-Lux) invested his funds in the company.
- In 2017, the third round of investments took place, with Timur Turlov (IC Freedom Finance) and Adil Nurgozhin (partner of IZBF Global) acting as investors.
- In May 2017, Chocofamily management reported about acquisition of a 100 percent stake in its main competitor in Kazakhstan’s online food order and delivery market — Foodpanda Group.
- Next, in June 2017, Chocolife.me acquired a 100 percent stake in BeSmart.kz, its main competitor.
- In November, Chocofamily increased its stake in iDoctor.kz, online doctor search platform.

Silkway Ventures Group
Silkway Ventures is a major Internet project in Kazakhstan. Currently, this FinTech holding company consists of six entities: Prodengi.kz (marketplace of best offers from banks, microfinance organizations and online lenders in Kazakhstan), Credit24 (online lending platform), Klikobilie (digital agency), Micro (microfinance retail lending company), Vietnam-based MoneyBank (P2P online lending company), and Lendex (blockchain-based marketplace for microloans).

- Prodengi.kz was founded in 2009.
- Klikobilie digital agency was founded in 2013.
- Credit24 was founded in 2014.
- In 2015, Forbes listed Klikobilie and Credit24 among top-50 e-commerce projects in Kazakhstan.
- In 2016, the company raised USD 2 million from UK-based Finnams Management fund.
- In 2017, MoneyBank was launched in Vietnam.
- In early 2018, Credit24 joined Mintos, international online platform for mutual lending. After signing the agreement, Kazakhstan became the first country from Central Asia to join Mintos. As a result, European citizens will be able to invest money in online in online loans denominated in tenge using the mutual lending (P2P) platform.
Stakeholder map: venture funds

Venture fund, venture finance, venture manager: accumulate cash/other assets and conduct operations solely for venture finance purposes.

Although the venture capital market in Kazakhstan has not taken shape yet, the government encourages development of venture investment institutions. Both legislative and investment measures are taken to achieve this. Investment measures include issuance of grants via AO National Agency for Technology Development to companies implementing innovative projects. Around 150 companies work on export projects in the special economic zone in the Innovative Technology Park in Atyrau. Correspondingly, Astana Startup Hub will be open in the capital. However, these forms of the government support are not typical venture mechanisms.

In June 2018, venture investment initiatives were supported through approval of the law “On amendments and additions to laws and regulations on risk (venture) financing.” The draft law provided a legal basis for developing venture financing, including introduction of new contract templates and instruments in Kazakhstan’s law. The state support for industrial and innovative initiatives was also strengthened by adding new measures expanding co-financing options for Kazakhstan venture funds.

The law introduces new concepts inherent to venture financing, such as venture fund, venture financing, and venture manager. The key function of the venture fund is to accumulate cash/other assets and operate solely for venture finance purposes. The law also stipulates legal forms for venture funds — joint-stock companies, business partnerships, and simple partnerships, as well as unincorporated simple partnerships. According to the new law, venture funds are required to have at least two participants. Only a legal entity which is a participant in the venture fund can be the venture manager. Venture funds are prohibited to advertise themselves to wide audiences. The law also introduces new forms of contracts which can be signed between venture funds and their portfolio companies. Such contracts comprise joint-stock agreements for joint-stock venture funds or agreements on exercising rights of participants in the event that the venture fund is established in the form of a business partnership. State support measures for industrial and innovative initiatives are supplemented by a new mechanism for state co-financing of venture funds. For this purpose, venture funds can be included in the industrial and innovative infrastructure. The law also introduces an option to provide state co-financing for venture funds via development institutions and other national companies.

Major businessmen in Kazakhstan invest in venture funds but register them abroad due to lack of straightforward regulation and incentives from the government.

Timur Toktabaev,
Vice-Minister for Investments and Development, Kazakhstan
Stakeholder roadmap: business angels

A business angel is an individual or a legal entity which invests part of its funds in the innovative companies at the earliest stages (seed stage and start-up stage).

Adil Nurgozhin
Adil is a business angel, entrepreneur and a partner of I2BF Global venture fund. He is the chief managing director of the Kazakhstan branch of Kazakhstan-Russia Venture Fund for Nano-Technology.

In May 2017, he and Timur Turlov jointly invested approximately USD 2.23 million in Chocofamily, Kazakhstan’s Internet holding company.

Murat Abdrakhmanov
Murat is a co-founder of Astel and Kaztranscom telecommunication companies, as well as Denta Lux dental care clinic chain. Forbes lists him among top fifty influential businessmen in Kazakhstan.

In 2016, Murat invested USD 1 million in Chocofamily Holding.

Kenes Rakishev
Jointly with Israeli businessmen, Kenes Rakishev founded Sirin Labs. On 12 December 2017, Sirin Labs held ICO for Finney, first blockchain-based smartphone and raised USD 157.8 million. As a result, the company was able to accept pre-orders for the device. The Finney sales are expected to start in November 2018.
Stakeholder map: accelerators

An accelerator is a company tasked with assisting other companies (accelerator residents). Accelerators offer structured programs to residents thus allowing companies to optimize the business models, win contracts, and increase sales. The program continues for 3-6 months. As usual, accelerators have co-working space which resident companies may use during the acceleration process.

Accelerators generate income by obtaining stakes in companies and reselling them later. Therefore, they often cooperate with venture funds (the latter allocate money and the former provide training programs, networking, and infrastructure).

<table>
<thead>
<tr>
<th>Accelerator</th>
<th>Program Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>StartUp Kazakhstan</strong></td>
<td>International online program for acceleration: TechGarden.kz, Global Venture Alliance. Amounts: USD 30,000 (stage 1), USD 100,000 (stage 2)</td>
</tr>
<tr>
<td><strong>Tech Garden acceleration</strong></td>
<td>The local acceleration program. Organizer: TechGarden.kz.</td>
</tr>
<tr>
<td><strong>Fintechstars</strong></td>
<td>Partners: Seed Stars (Switzerland-based fund) and MOST (business incubator). Ten leading international startups participate in the contest. Amounts: USD 20,000 (stage 1), USD 350,000 (stage 2)</td>
</tr>
<tr>
<td><strong>iStartUp</strong></td>
<td>A business incubator for IT projects. The company operations span from e-commerce, to cloud computing, and media technology. Amounts: n/a</td>
</tr>
<tr>
<td><strong>Acceleration program of MOST business incubator</strong></td>
<td>Acceleration program of MOST business incubator provides comprehensive support to startup entrepreneurs including training, coaching, monitoring, and access to financing. Amounts: USD 5,000</td>
</tr>
</tbody>
</table>
Stakeholder map: development institutions and associations

Development institutions and associations are represented by organizations which contribute to development of the FinTech industry including financial support in implementing projects (in the form of grants, participation in the charter capital of portfolio companies, and issuance of loans).

**TechGarden.KZ**

Tech Garden innovation cluster is a professional environment for developing new technology for businesses based on the mutually beneficial cooperation between businesses, startups, investors, educational and research institutions.

Key technology development areas:
- Smart industry and new materials;
- Smart environment;
- New-generation utilities and lean technology;
- FinTech, e-commerce and new media.

Services:
- Strategic consulting, development of startup technology to the next maturity stage with the aim of accessing foreign markets;
- Assistance in developing cooperation with major companies in Kazakhstan and CIS;
- Recruitment of highly-skilled specialists who may help to develop and promote your startup;
- PR services — access to and coverage of the startup operations in mass media.

Provided finance to the following FinTech projects:
- Bukhta.kz — online accounting;
- iDocs — electronic exchange platform for significant legal documents.

**KAZFINTECH**

The goal of Kazakhstan FinTech Association is to coordinate and consolidate operations of companies operating in the online lending market, develop the market and FinTech industry as a whole, promote and protect the interests of the industry players, as well as protect consumer interests.

Main goals of the Association are as follows:
- Create a floor for a dialog inside the industry on issues and topics related to the market, industry and companies within the sector.
- Interact with state agencies, industry organizations and associations on market regulation issues, and development of legislation, i.e. ‘rules of the game’ in the interest of the market and industry.
- Ensure interaction with the society and consumers.
- Attract new professional and responsible association members.

The current members of the Association include the following companies: Dengi.click, MoneyMan.kz, Credit24, Zaymer, Zing, MFC «Chestnoe Slovo».

Yerlan Smaylov is an executive director.

**MOST**

MOST is a club for young entrepreneurs and a business incubator which provides co-working space for creation where future businessmen can design projects, exchange experience, receive advice from professional businessmen and raise funds for their business initiatives.

The business incubator is an official member of Youth Business International and Global Entrepreneurship Week, as well as an official partner of Seedstars World, Startup Weekend, Get in the Ring, and other international initiatives in the startup industry.

Offered services:
- Acceleration program;
- Consulting services;
- Provision of floors for and organization of conferences;
- Working space.
Supply in the FinTech market (1/2)

FinTech industry segmentation

**Lending**
- Online lending
- Blockchain, big data, machine learning, artificial intelligence
- POS-lending in the real-time mode
- Biometric analysis

**Digital banks**
- Bank product
- Machine learning, artificial intelligence

**Scoring**
- Client data analysis
- Cloud technology, SaaS, API, predictive analytics, artificial intelligence, big data, business intelligence, machine learning, semantic analysis, deep learning

**Insurance**
- Insurance telematics
- Cloud technology
- Crowdsurance
- Blockchain, API, biometric analysis

**Management accounting**
- Online accounting
- Cloud technology, API
- Comprehensive solutions
- Cloud technology, API

During the survey we asked our experts to evaluate the potential of the above-mentioned FinTech fields in the medium term (1-3 years) in Kazakhstan.

Based on the results of our analysis we calculated a relative rating of various FinTech segments (on the scale from 0 to 4, where 0 corresponds to zero relevance and 4 corresponds to very high potential).

The leading fields with very high relevance in Kazakhstan include digital banks and scoring (rated 3.8 and 3.4, respectively). The outlook for various FinTech fields is reviewed in Section “The rating of FinTech fields with the highest market potential until 2020.”
Supply in the FinTech market (2/2)

FinTech industry segmentation

**Investments**
- Crowdfunding
- P2P-lending
- API

2.9 The importance of the segment

**Marketplace**
- Financial supermarket

3.2 The importance of the segment

**Infrastructure solutions**
- Bank chat bots and robo-advising
- Deep learning, neural networks, predictive analytics, blockchain, machine learning

3.1 The importance of the segment

Product  Applied technology
Demand in the FinTech market

Retail segment
- Online payment service
- Cashback service
- Real-time POS-lending
- mPOS

Catering facilities
- Online payment service
- Cashback service
- Real-time POS-lending
- mPOS

Microfinance organizations
- Business process automation
  - Client data analysis
  - Market analytics
  - P2P-lending
  - Real-time POS-lending

Investment companies
- Bank chat bots and robo-advising
Demand in the FinTech market

The structure of the sentiment towards online lending (by age and gender)

- **Woman**: 36% positive, 64% negative, balance value 0.28
- **Man**: 43% positive, 57% negative, balance value 0.14
- **18-25 years**: 36% positive, 64% negative, balance value 0.27
- **26-45 years**: 34% positive, 66% negative, balance value 0.33
- **46 years and older**: 39% positive, 61% negative, balance value 0.22

<table>
<thead>
<tr>
<th>City</th>
<th>Number of digital footprints</th>
<th>Positive sentiment</th>
<th>Negative sentiment</th>
<th>Balance value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atyrau</td>
<td>76</td>
<td></td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>Astana</td>
<td>386</td>
<td></td>
<td></td>
<td>0.58</td>
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<tr>
<td>Almaty</td>
<td>1 027</td>
<td></td>
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<td>0.04</td>
</tr>
<tr>
<td>Aktau</td>
<td>987</td>
<td>0.13</td>
<td></td>
<td>0.03</td>
</tr>
<tr>
<td>1</td>
<td>619</td>
<td></td>
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<td>0.19</td>
</tr>
</tbody>
</table>

The balance value of the digital footprint in Kazakhstan in 2013-2018 was 0.19 indicating that the overall perception of online loans remains neutral.

Aktau is the city with the highest share of users with positive perception (0.52).

Women are twice as optimistic about online loans compared to men (0.28 vs. 0.14) based on footprint index values. 26-45 year-old respondents are more positive towards online lending, while the older respondents (over 46 years) are less optimistic (0.33 vs 0.22, respectively).
# Contribution of FinTech products to achievement of the SDGs in Kazakhstan

The table below lists FinTech solutions which contribute the most to achievement of some SDGs in Kazakhstan.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Product</th>
<th>1</th>
<th>2</th>
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<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lending</td>
<td>Online lending</td>
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<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td></td>
<td>POS-lending in the real-time mode</td>
<td>●</td>
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<tr>
<td>Insurance</td>
<td>Crowdsurance</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Management accounting</td>
<td>Online accounting</td>
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<tr>
<td></td>
<td>Online accounting</td>
<td>●</td>
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<tr>
<td></td>
<td>Comprehensive solutions</td>
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<tr>
<td>Investments</td>
<td>Crowdfunding</td>
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<td></td>
<td>P2P-lending</td>
<td>●</td>
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</tr>
<tr>
<td>Infrastructure solutions</td>
<td>Bank chat bots and robo-advising</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Contribution of FinTech products to achievement of the SDGs in Kazakhstan

Valuation results

According to the assessment of Kazakhstan’s FinTech companies’ potential contribution to the SDGs in Kazakhstan, the highest expectations are tied with achievement of SDG 9 (Industry, Innovation and Infrastructure), and particularly the following target:

- 9.3 Increase access of small industrial and other enterprises (especially in developing countries) to financial services including affordable loans, as well as expand their integration in production and supply chains and markets.

Similarly to FinTech solutions in Russia, the Kazakhstan products may have a significant contribution to achievement of SDG 2 (Zero Hunger). The potential contribution to achievement of SDG 1 (No Poverty) and SDG 8 (Decent Work and Economic Growth) is less obvious and extensive compared to the Russian FinTech.

The evaluation methodology used to analyze the contribution, as well as detailed results for each SDG are listed in the Appendix.

SDG 1. End poverty in all its forms everywhere

1.1 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

1.2 Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.

1.3 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent gross domestic product growth per annum in the least developed countries.

1.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.

1.5 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

1.6 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

1.7 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

1.8 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent gross domestic product growth per annum in the least developed countries.
Barriers for development of Kazakhstan’s FinTech market

Top five barriers for market development (according to representatives of FinTech companies):

• Cyberthreats (3.8);
• Shortcomings of government regulation of the industry (3.7);
• Currency risks (3.5);
• Insufficient protection of personal data (3.4);
• Low appeal of Kazakhstan’s FinTech industry for foreign investors (3.2).

In contrast to Russia, where key problems are closely related to the macroeconomic situation in the country (according to respondents from FinTech companies), experts from Kazakhstan tend to point out to problems inherent to the industry.

The respondents attached high importance to digital security problems. Cyberthreats (3.8) and insufficient protection of the personal data (3.4) are among top five problems in Kazakhstan’s FinTech industry.

The suboptimal situation in the industry is emphasized by a relatively strong negative assessment of the infrastructure (3.1).

Regulation is indeed a source of significant obstacles affecting FinTech, as this business is very risky from a fundamental standpoint. As for the personal data protection, Kazakhstan lacks standards similar to the ones in Europe. However, despite this and in the absence of the personal data protection culture, there has been no serious precedents. In addition, I don’t think it is a significant barrier.

Low attractiveness for foreign investors is due to small economically active population survey (9 million), as such small market can be interesting mainly for Russian investors. However, for most investors, Kazakhstan seems to be a ‘Cinderella’ market where no foreign investment institutions are represented except for AFC and EBRD which invest only in some industries.

Assem Nurgalieva (First Credit Bureau)

The rating of the problems faced by FinTech companies in Kazakhstan

<table>
<thead>
<tr>
<th>Problem</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber threats</td>
<td>3.8</td>
</tr>
<tr>
<td>Shortcomings of government regulation of the industry (administrative, trade, economic and other barriers)</td>
<td>3.7</td>
</tr>
<tr>
<td>Currency risk (national currency depreciation)</td>
<td>3.5</td>
</tr>
<tr>
<td>Weak protection of the personal data</td>
<td>3.4</td>
</tr>
<tr>
<td>Low appeal of Kazakhstan’s FinTech for foreign investors</td>
<td>3.2</td>
</tr>
<tr>
<td>Insufficient infrastructure (e.g. penetration of the Internet)</td>
<td>3.1</td>
</tr>
<tr>
<td>Growing cost of debt</td>
<td>3.0</td>
</tr>
<tr>
<td>Lack of flexibility in the tax system with respect to FinTech</td>
<td>2.8</td>
</tr>
<tr>
<td>Low purchasing power of the population</td>
<td>2.6</td>
</tr>
<tr>
<td>Geopolitical risks</td>
<td>2.5</td>
</tr>
<tr>
<td>Lack of access to international equipment and services</td>
<td>2.4</td>
</tr>
<tr>
<td>Higher unemployment rates due to automation and RPA</td>
<td>1.6</td>
</tr>
<tr>
<td>Significantly increased environmental footprint due to heavier use of energy resources</td>
<td>0.7</td>
</tr>
</tbody>
</table>

On the scale from 0 to 4
Drivers for development of Kazakhstan’s FinTech market

**Trend**

The most attractive strategies for Kazakhstan FinTech companies include extension of the product and service mix (0.95) and cost cutting (0.95).

In contrast to Russia, the respondents attached high importance to working capital optimization in Kazakhstan (0.85) and the need to revise the operating model which indicates that local FinTech companies are interested in finding the most optimal development models in the current economic environment.

Kazakhstan FinTech companies less often tend to revise strategies based on increasing R&D expenditures (0.35). They are also reluctant to implement M&A strategies (0.25).

**The rating of FinTech company strategies in Kazakhstan**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch of new products/services to on the market</td>
<td>0.95</td>
</tr>
<tr>
<td>Cost cutting</td>
<td>0.95</td>
</tr>
<tr>
<td>Short-term capital optimization and operating model revision</td>
<td>0.85</td>
</tr>
<tr>
<td>Expansion into new markets</td>
<td>0.85</td>
</tr>
<tr>
<td>Implementation of new technology</td>
<td>0.85</td>
</tr>
<tr>
<td>Organic growth</td>
<td>0.70</td>
</tr>
<tr>
<td>Talent investment</td>
<td>0.70</td>
</tr>
<tr>
<td>Higher promotional spending; marketing</td>
<td>0.65</td>
</tr>
<tr>
<td>Economic impact (Impact on GDP)</td>
<td>0.55</td>
</tr>
<tr>
<td>Currency risk hedging</td>
<td>0.50</td>
</tr>
<tr>
<td>Social impact (lower poverty)</td>
<td>0.50</td>
</tr>
<tr>
<td>Raising capital from external sources</td>
<td>0.45</td>
</tr>
<tr>
<td>Higher spending on R&amp;D and business development</td>
<td>0.35</td>
</tr>
<tr>
<td>Merger or/and/or acquisition strategy</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Entering new markets is an obvious option in a situation where there are barriers such as market regulation and lower numbers of economically active people. Kazakhstan’s FinTechs are primarily looking at markets such as Indonesia, Vietnam and some African markets. All in all, Africa is a region with quite strong potential. If we look at more sophisticated indicators, we can see that some countries in this region are demonstrating evolutionary leaps that we have seen in South East Asia. For example, Ramnet has already set up operations in this region. As for particular countries, these are Kenya, Nigeria, Ghana and Morocco. It is an important factor when a country has a credit bureau. I have just named new destinations. Among traditional destinations, there are Kyrgyzstan and Uzbekistan, primarily due to language similarity and openness to companies from Kazakhstan.

Assem Nurgalieva
(First Credit Bureau)
Kazakhstan’s FinTech market outlook until 2020

What is your view of Kazakhstan’s FinTech market outlook for 2020?

Trend
Kazakhstan’s FinTech companies are more optimistic both about the current situation and the future.

Most respondents (80 percent) expect the situation to improve. The balance value indicator is 0.4.

What is your view of your company’s outlook for 2020?

Trend
The outlook for company perspectives is at 0.65.

Most respondents (90 percent) are confident that the situation in their companies would only improve by 2020.
Evaluation of the regulator’s efficiency

What is the change in the regulator’s efficiency with respect to support and development of the FinTech industry in Kazakhstan?

Please evaluate the efficiency of the regulator’s current effort aimed at supporting and developing the FinTech industry in Kazakhstan.

Trend
The respondents were divided in their opinions regarding the efficiency of the regulator’s effort in the FinTech industry. 40 percent of the respondents saw changes for the better, while another 40 percent believed that the situation deteriorated. One in five respondents (20 percent) stated that there have been no significant changes neither for the better nor for the worse.

Trend
A half of the respondents (50 percent) indicated that the efficient of the Regulator’s current effort is low. Only one in five respondents believed that the efficiency was high. The balance value indicator is 1.5. This is 16 points below the similar indicator for Russia.
The rating of FinTech segments with the highest market potential until 2020

Please, evaluate the importance of the proposed FinTech segments in the medium term (one-three years).

<table>
<thead>
<tr>
<th>Segment</th>
<th>World</th>
<th>Kazakhstan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoring</td>
<td>3.6</td>
<td>3.8 ↑</td>
</tr>
<tr>
<td>Digital banks</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Crediting</td>
<td>3.4</td>
<td></td>
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<tr>
<td>Investments</td>
<td>3.3</td>
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<tr>
<td>Loyalty</td>
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<tr>
<td>Marketplace</td>
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<tr>
<td>Personal finance accounting</td>
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<tr>
<td>Infrastructure solutions</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Management / accounting</td>
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<tr>
<td>Insurance</td>
<td>2.7</td>
<td></td>
</tr>
</tbody>
</table>

Trend

According to the respondents, scoring and digital banks are the FinTech segments with the highest market potential both globally and locally. Lending ranks the third both on a global and local scale. Importantly, top three FinTech segments with the highest market potential are the same both in Russia and Kazakhstan.

According to the respondents, investments have the highest market potential in the global FinTech market, while loyalty programs and marketplace would be in higher demand in Kazakhstan.

The management accounting and insurance were rated rather low among other FinTech segments both in Russia and Kazakhstan.

On the scale from 0 to 4
The rating of technologies with the highest market potential in Kazakhstan until 2020

### Trend
According to the experts, the technologies with the highest market potential are big data and predictive analytics (0.94).

Kazakhstan's FinTech companies rank cluster analysis and IoT higher (21 and 18 points above the average, respectively) than Russian companies.

However, there are the same technologies in the end of the rating both in Kazakhstan and Russia, i.e., augmented and virtual reality (0.57), as well as blockchain (0.55).

---

1 Deep learning is a combination of machine learning methods
2 Data mining means discovery and analysis of "hidden" data patterns
3 Machine learning is based on the use of AI methods
4 Application programming interface
5 Semantic analysis involves recognizing and "understanding" texts
6 Business Intelligence is about software solutions for managers to analyse information on their company and its environment

On the scale from 0 to 1
Appendix
# Ratings by regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Rating</th>
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</thead>
<tbody>
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<td>Canada</td>
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<tr>
<td>Mexico</td>
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<tr>
<td>USA</td>
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<tr>
<td><strong>ASEAN</strong></td>
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<td>Asia</td>
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<td>China</td>
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<td>Indonesia</td>
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<td>Japan</td>
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<td>Kazakhstan</td>
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<td>Malaysia</td>
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<td>The Philippines</td>
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<td>Singapore</td>
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<td>South Korea</td>
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<td>Thailand</td>
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<td>Turkey</td>
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</tr>
<tr>
<td>UAE</td>
<td>50</td>
</tr>
<tr>
<td><strong>Australia and Oceania</strong></td>
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</tr>
<tr>
<td>Australia</td>
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<tr>
<td>New Zealand</td>
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<td>Germany</td>
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<td>Greece</td>
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<td>Romania</td>
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<td>Italy</td>
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<td>The Netherlands</td>
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<td>Norway</td>
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<td>Poland</td>
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<td>Portugal</td>
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<tr>
<td>Ireland</td>
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<td>Russian Federation</td>
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<td>Spain</td>
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<td>Sweden</td>
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<td>Switzerland</td>
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<td>England</td>
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<td><strong>South America</strong></td>
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<td>Brazil</td>
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<td>Panama</td>
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<td>Uruguay</td>
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## The list of FinTech companies in Russia

<table>
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<th>No</th>
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<th>Product</th>
<th>Line of business</th>
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<tbody>
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</tr>
<tr>
<td>2</td>
<td>Easyfinance.ru</td>
<td>PFM platform</td>
<td>PFM</td>
</tr>
<tr>
<td>3</td>
<td>Moi koshelki (My wallets)</td>
<td>PFM platform</td>
<td>PFM</td>
</tr>
<tr>
<td>4</td>
<td>Keep soft</td>
<td>PFM platform</td>
<td>PFM</td>
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<td>PFM platform</td>
<td>PFM</td>
</tr>
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<td>6</td>
<td>CashOff</td>
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</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Company name</th>
<th>Product</th>
<th>Line of business</th>
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<td>Blocknotary</td>
<td>Identification solutions</td>
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</tbody>
</table>
## The list of FinTech companies in Russia

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### The list of FinTech companies in Russia

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The list of FinTech companies in Russia

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<td>Bank chat bots and robo-advising</td>
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NF Myers-Briggs types: Sj type

Sj Type
The distinguishing features of this type are stability and reliability. People of this type enjoy tradition and security. The shortcoming is the slowdown of the process due to excessively formalized approach to compliance with rules, somewhat bureaucratic approach. This type is suitable both for manager and subordinate roles, can take any role in the structure in which they work. They fulfill their responsibilities fully and completely.

They often act as founders of popular movements and administrators; tend to take responsibility for other people’s actions. Another shortcoming is their conservative views, as the Sj type people are gradualists by nature. Such people are not always sensitive and sometimes tend to wear a mask.

EsFJ.
EsFJ people are practically minded, open for new ideas. They are easy to talk to and build strong relationships with colleagues.

ISFJ.
They are calm and responsible. Corporate interests are a priority for them. They perform work in strict accordance with the plan.

ESTJ.
ESTJ type are take-charge people, natural leaders. They like planning and achieving goals.

ISTJ.
ISTJ is the most reliable and the most conservative type. They follow traditions, keep the word, like to structure the information.

Summary: conservative, calm, friendly.
NF Myers-Briggs types: NT type

NT Type
This type is the rarest and includes only 10 percent of population in any given country. They like the intellectual work and easily adapts to new conditions. They tend to doubt what other people say and do not believe then until verify themselves. They often take offense if they are accused of incompetence.

ENTJ.
ENTJ are leaders and managers by nature. They always have goals and finds various instruments for achieving them. They like new knowledge and continuously improve in various fields.

INTJ.
Assertive, do not recognize any authority, like logic and uses it in all actions and solutions.

ENTP.
Demonstrate well-developed intuition which is offered used in practice. Like new ideas and are enthusiastic about new work.

INTP.
Intellectuals slightly inclined to patronizing. Capable of making objective assessments of the situation, aways have new ideas in stock, has the ability to convince, usually a ‘wordsman.’

Summary: innovator and an idea-driven personality. The main creed: leadership and superiority in everything.
NF Myers-Briggs types: SP type

**SP Type**
The key characteristics of this type are love of freedom and high risk tolerance. They prefer to live here and now. They like the process more than the end result. The most suitable professions for them are creative ones: design, painting, and photography. They like new emotions. They display leader qualities to a lesser extent than NT-type personalities but in some situations their inventiveness is striking.

**ESFP.**
Optimistic. Like to make friends. Like activity and movement. Hate loneliness.

**ISFP.**
Always need constant emotional support. Love freedom and have positive attitudes.

**ESTP.**
People from this group never get tired. Like risk, good at building relationships with other people.

**ISTP.**
Like technical devices, can fix everything. The oriental type of personality. They don’t strive for education or prestige; they like calm and fulfill themselves in their favorite occupation, proceeding to completion.

**Summary:** a sensitive and freedom-loving personality.
NF Myers-Briggs types: NF Type

**NF Type**

Usually find their mission as intermediaries; constantly search for the purpose of life. They are nomads by nature and visionaries; like spiritual dimension and find it even in small things. They want to find harmony with the environment, like to get new knowledge and share it with other people. As a result, they succeed in teaching. Such people are in demand in commerce, advertising and other fields. They have strong intuition and are capable of feeling what their partners expect them to feel. The key supporters of this group are females.

**ENFJ.**

Persons in this group are clear leaders. They are extroverts and sensitive to other people and their feelings. They do not like monotonous routine.

**INFJ.**

People of this personality type have deep intuition. They apply astuteness and sharp wit in building relationships with other people. They enjoy the success of others.

**ENFP.**

Astute personality. Sensitive and sophisticated persons, deny the usefulness of pure logic, often acts spontaneously.

**INFP.**

Calm idealists with a strong sense of dignity. Ardent supporters of ideals and common values.

**Summary:** have good intuition and use it in combination with common sense. Take a proactive approach to life
The methodology for assessing contribution to the UN SDGs

The methodology for assessment and rating calculation
The contribution to achievement of the UN SDGs is calculated on the basis of the target coverage within the SDGs in each of the FinTech segments which influence the achievement of the SDGs, as well as the materiality of contribution of these FinTech segments in the achievement of the covered targets.

**Target coverage ratio** is the relation between the number of targets within a given SDG which depends on FinTech advancement to a significant extent, on the one hand, and the total number of targets within that SDG as listed in the Global Agenda, on the other hand.

**Contribution materiality** ratio reflects the impact of a certain FinTech segment on achievement of the SDG targets adjusted to the market size in the reviewed industry.

The impact on the target achievement is rated on a scale from 1 to 5 where 1 means that the target can be achieved only through using the potential of other industries, while 5 means that a given FinTech segment has the most significant impact on the achievement of the target. Given that one segment often has an impact on several SDG targets, the assigned impact reflects the average value of impacts on each specific target.

We used the survey results in order to calculate the market size for each segment.

Assessment results | Russia | Kazakhstan |
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<tr>
<td><strong>SDG 1 No poverty</strong></td>
<td>3/7</td>
<td>26.6</td>
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<tr>
<td><strong>SDG 2 Zero hunger</strong></td>
<td>2/8</td>
<td>42.0</td>
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<tr>
<td><strong>SDG 3 Good health and well-being</strong></td>
<td>2/13</td>
<td>52.0</td>
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<tr>
<td><strong>SDG 5 Gender equality</strong></td>
<td>1/9</td>
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<tr>
<td><strong>SDG 6 Clean water and sanitation</strong></td>
<td>1/8</td>
<td>54.4</td>
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<tr>
<td><strong>SDG 7 Affordable and clean energy</strong></td>
<td>1/5</td>
<td>8.0</td>
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<tr>
<td><strong>SDG 8 Decent work and economic growth</strong></td>
<td>3/12</td>
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<tr>
<td><strong>SDG 9 Industry, innovation and infrastructure</strong></td>
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<td><strong>SDG 10 Sustainable cities and communities</strong></td>
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<td>60.0</td>
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<tr>
<td><strong>SDG 12 Responsible consumption and production</strong></td>
<td>2/11</td>
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<tr>
<td><strong>SDG 13 Climate action</strong></td>
<td>1/5</td>
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<tr>
<td><strong>SDG 17 Partnerships for the goals</strong></td>
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