International Coordination Council of Banking Associations in the CIS, Central and Eastern Europe (International Banking Council)

# REGULATION AND DEVELOPMENT OF FINANCIAL TECHNOLOGIES: PROBLEMS, RISKS, SECURITY

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## THE DIGITAL ECONOMY IN RUSSIA AND GLOBALLY

#### THE LEVEL OF THE DIGITAL ECONOMY DEVELOPMENT IS LOWER THAN IN LEADING COUNTRIES

**3.9%** Russia's share of the digital economy in GDP

This is less than in the USA, China and European Union

0.5%

Share of digital goods and services exports in the structure of Russia's GDP **2.5%** in Western Europe

**2.9%** in India

**5.8%** in China

Russia is **39th** in terms of economy digitization

SOURCES: DIGITAL RUSSIA REPORT 2017, BCG, MCKINSEY GLOBAL INSTITUTE, DELOITTE



#### THE GOVERNMENT PLANS TO TRIPLE THE VOLUME OF THE DIGITAL ECONOMY BY 2025

### 8% – 10%

Share of the digital economy in GDP by 2025

## ₽1,08T

will be spent on the National program «The Digital Economy of the Russian Federation» by 2024

The digital economy will be able to provide  $from 19\% \ to \ 34\%$ 

of GDP growth by 2025

## THE DIGITAL ECONOMY IN RUSSIA AND GLOBALLY

FINTECH IS THE DRIVER OF RUSSIA'S DIGITALIZATION

# THE BANKING SECTOR

is the technological leader in digital transformation in Russia

Russia has been included in the top 5 countries in the field of digital banking in the EMEA region in 2018

FinTech

ensures public and business digital economy inclusion

Russia had a 43% FinTech adoption rate for metropolises in 2017, and was ranked 3rd globally

SOURCES: DIGITAL RUSSIA REPORT 2017, BCG, MCKINSEY GLOBAL INSTITUTE, DELOITTE



THE ADOPTION **OF FINANCIAL** SERVICES AND TECHNOLOGIES IN RUSSIA



2 cards per person

40%

77%



of population is covered by financial services

#### 55%

share of cashless payments in the national economy

average number of bank

20% credit card ownership

of Russians made purchases or payments online

45% of banking clients use mobile or online banking

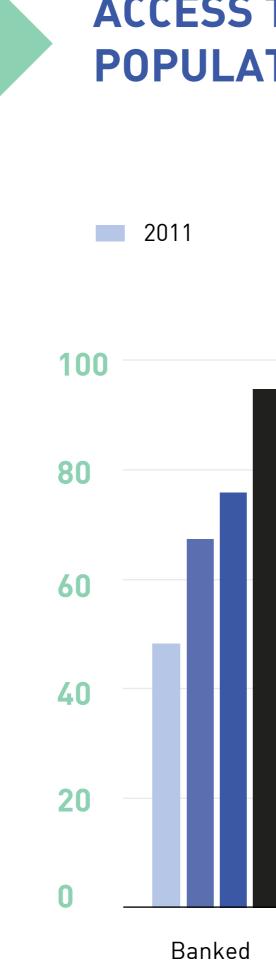
# annual growth of P2P-transfers (₽19T)

2.5 million number of POS terminals

in Russia

## THE ADOPTION **OF FINANCIAL** SERVICES AND TECHNOLOGIES IN RUSSIA

The maturity level of the financial services market is low but the growth rate of financial technologies penetration is high

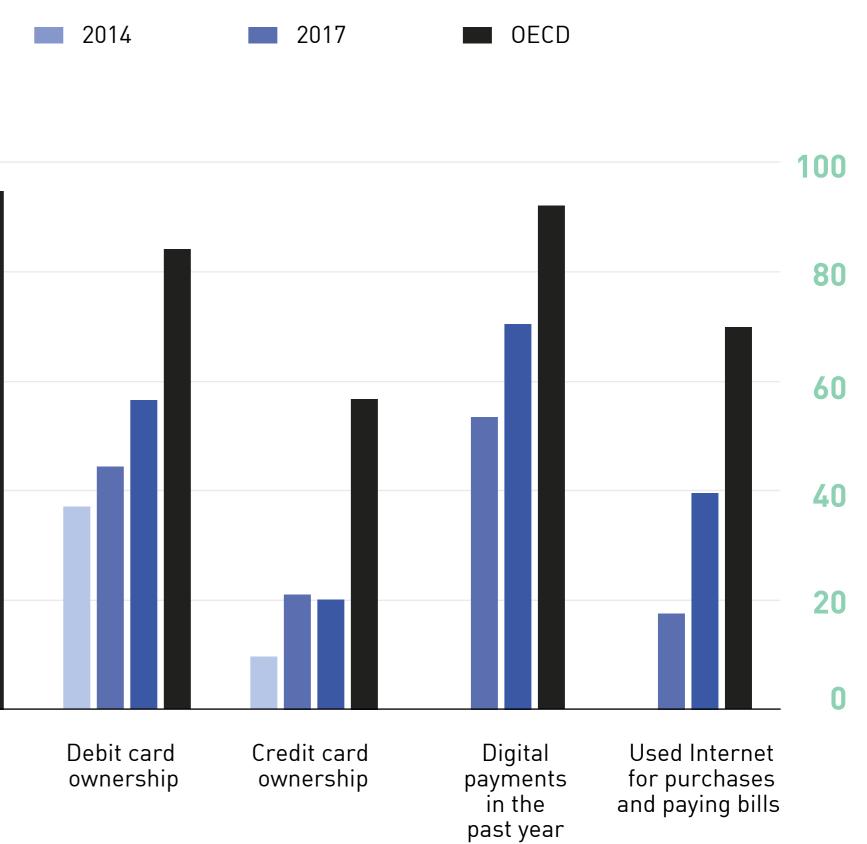


SOURCES: WORLD BANK, GFK, EY

population



#### **ACCESS TO FINANCIAL SERVICES, POPULATION AGES 15 AND ABOVE**



## FINANCIAL TECHNOLOGIES DEVELOPMENT IN RUSSIA

KE	Y DRIVERS OF FINTECH DEVELOPMENT	BARR
	The level of internet penetration and mobile device usage is growing	🗙 Th
	87 M Russians use Internet 67 M mobile internet users	S Dig
	Rising financial services availability and adoption	× Lo
	Growing customer demand for fast, personalized, high-quality financial services	× Th
	Growing number of social media users (there will be 88M users by 2025)	× La
	E-commerce development, including m-commerce (30% annual growth)	

End-to-end technologies development within the National program «The Digital Economy of the Russian Federation»

SOURCES: DIGITAL RUSSIA REPORT 2017, MCKINSEY, YCHART, CHRIS SKINNER



#### **RIERS TO FINTECH DEVELOPMENT**

e level of financial literacy among Russians is low

gital divide and lack of adequate infrastructure Itside of large cities

w level of public confidence in financial technologies cluding P2P lending, crowdfunding)

e rise of cyber threats

ck of legislative regulation for mainstream adoption

## MAJOR TRENDS IN FINTECH DEVELOPMENT



- Distributed ledger technologies
- Payments and money transfers automation
- Open Banking
- Ecosystems and marketplaces
- → Big Data and Data Analytics
- → Artificial Intelligence
- → Robotics
- → Internet of Things
- →) VR/AR
- → Cloud technologies
  - Cybersecurity

#### FINANCIAL TECHNOLOGIES AND SERVICES



BUSINESS PROCESSES TRANSFORMATION/ NEW BUSINESS MODELS

> SHIFTING COMPETITIVE LANDSCAPE

NEW QUALIFICATIONS AND PROFESSIONS

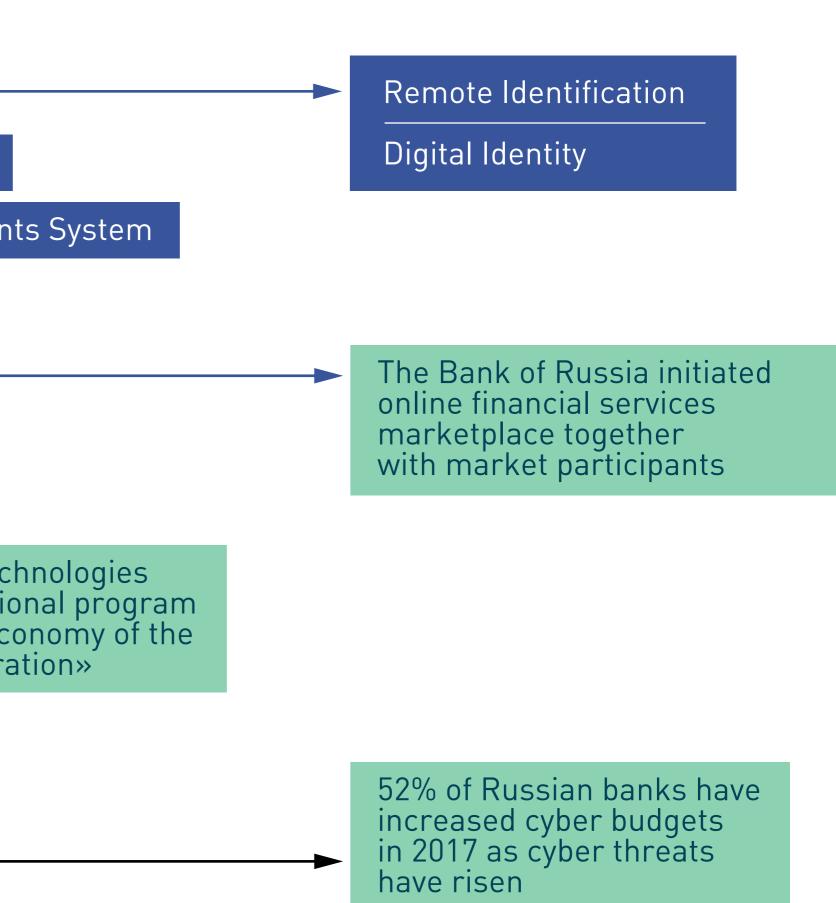
CUSTOMER EXPERIENCE IMPROVEMENT

## MAJOR TRENDS IN FINTECH DEVELOPMENT

AFT IS DESIGNING AND IMPLEMENTING NEW TECHNOLOGICAL SOLUTIONS IN THE FIELD OF FINANCIAL TECHNOLOGIES TO SUPPORT THE DEVELOPMENT OF THE RUSSIAN FINANCIAL MARKET AND ENSURE EASY ACCESS TO DIGITAL FINANCIAL SERVICES

	Dispersion and sutherstication		
0	Biometrics and authentication		
$\ominus$	Distributed ledger technologies		Masterchain
$\ominus$	Payments and money transfers automation		Faster Paymen
$\bigcirc$	Open Banking		Open API
$\bigcirc$	Ecosystems and marketplaces		
$\bigcirc$	Big Data and Data Analytics	7	
$\bigcirc$	Artificial Intelligence		
$\bigcirc$	Robotics		End-to-end tec within the Natio
$\bigcirc$	Internet of Things		«The Digital Ec Russian Federa
$\bigcirc$	VR/AR		
$\overline{\boldsymbol{\ominus}}$	Cloud technologies		
$\overline{()}$	Cybersecurity		





## TECHNOLOGICAL **AREAS FOR** INVESTMENT IN RUSSIA

According to a survey of FinTech executives, the most attractive technological areas for investment in 2017 were the following:



Mobile technologies

Artificial Intelligence

Cybersecurity

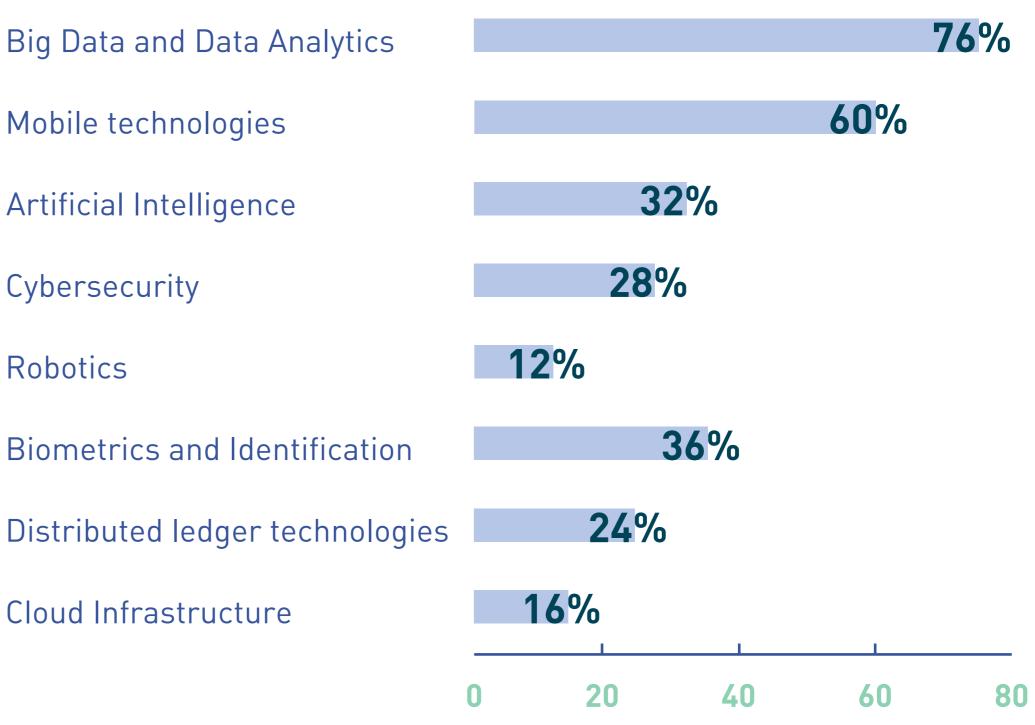
**Robotics** 

**Cloud Infrastructure** 

SOURCE: THE BANK OF RUSSIA



#### **TECHNOLOGICAL AREAS** FOR INVESTMENT IN RUSSIA



SPECIFIC FEATURES **OF FINTECH** DEVELOPMENT IN RUSSIA



#### **RUSSIAN VENTURE INVESTMENT MARKET IN 2017**

AR/VR 6% E-commerc 21%

\$30.8 M were invested in FinTech in Russia in 2017

\$20 M

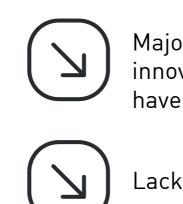
were invested in services that allow payments for goods and services in installments (Russian startups «Revo Technologies» and «Sourcedata») by venture capital funds «Baring Vostok» and «Vostok Emerging Finance (VEF)»



	<b>2%</b> Travel			<b>19</b> %
	Education		FinTech	
	0	1% Security		
	8%	<b>1%</b> Games		
		<b>1%</b> Internet of Things		
ce	Ducinese		Medicine	Navigation
	Business	Artificial	8%	6%
	solutions	Intelligence 8%	Advertis <b>8%</b>	ing

#### DOUBLED ANNUAL GROWTH **OF AN AVERAGE DEAL SIZE** \$1,7 M TO \$3,4 M

SPECIFIC FEATURES **OF FINTECH** DEVELOPMENT IN RUSSIA







investments in FinTech were made by leading banks in 2011–2016





Major banks drive fintech innovation. FinTech companies have low disruptive potential

Lack of legislative regulation



Some of the global disruptive FinTech segments are absent or developing

• online (P2P) lending, digital wealth management, InsurTech

Flexible policy of the Bank of Russia



The need to train FinTech professionals and bolster the talent pool



was launched in 2018 to mitigate legal barriers





**«Financial Technologies** and Data Analysis» (HSE)

**FinTech School** (Financial university)

**«Technological** entrepreneurship and innovative business **development**» (MIPT)

## FORECAST OF FINTECH GROWTH IN RUSSIA TO 2035

47.2%

of financial services will be provided using FinTech products and services by 2035

#### 96.3%

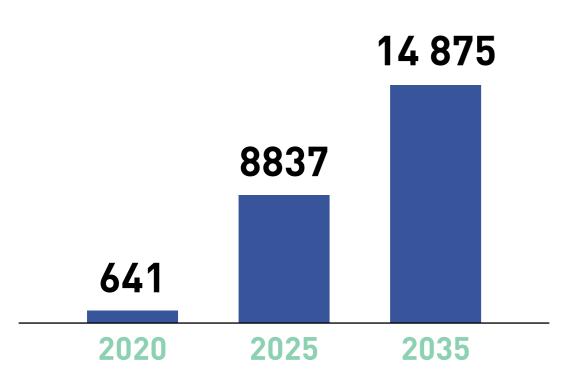
of all transactions in Russia will be performed using innovative services for making payments and remittances

#### FORECAST OF TRANSACTION VOLUME USING FINTECH SERVICES FOR PAYMENTS AND MONEY **TRANSFERS IN RUSSIA, \$BILLION**

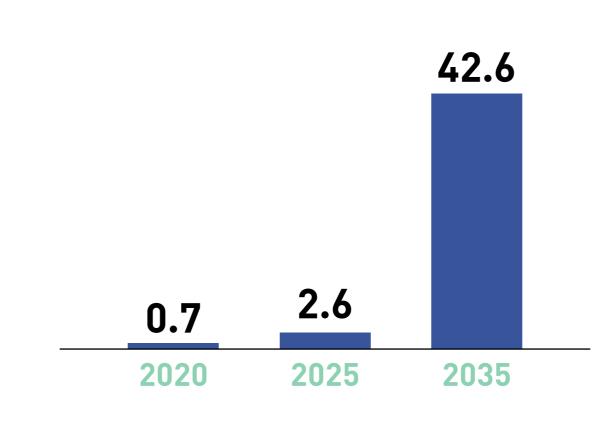


of assets will be managed using innovative services for investments and capital management

FORECAST OF FUNDS UNDER THE MANAGEMENT **OF INNOVATIVE SERVICES FOR WEALTH MANAGEMENT IN RUSSIA, \$BILLION** 



SOURCES: EXPERTS' OPINION, EY ANALYSIS, STATISTA BCG



SOURCES: EXPERTS' OPINION, EY ANALYSIS



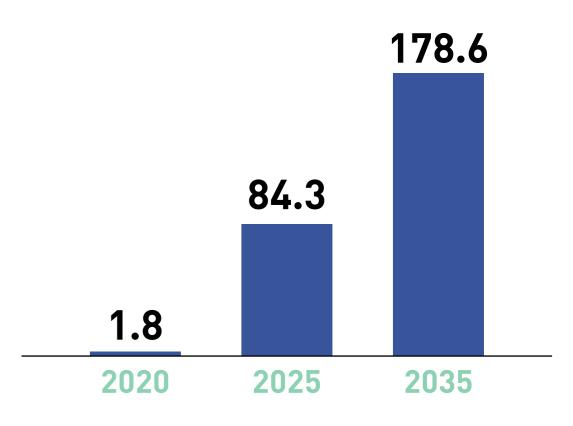


36.7%

of financing will be provided using innovative financing services



#### FORECAST OF FINANCING WITH THE USE **OF FINTECH SERVICES IN RUSSIA, \$BILLION**



SOURCES: EXPERTS' OPINION, EY ANALYSIS, CAMBRIDGE CENTRE FOR ALTERNATIVE FINANCE

# FORMER DE LA CONTRACTIÓN DE LA CONTRACTICACIÓN DE LA CONTRACTI

