Russian entrepreneurs on the global market: the role of universities and business schools

(results of the 3d wave of research on entrepreneurial universities and business schools, 2020)

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Director of the Institute of Economics and management UrFU,
Director of AC «Expert»

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You know well the left-bottom person. Somebody else?

Nikolay Storonskiy
36 years old
Education: MIPT, NES
Founder of Revolut, the main products of which are the app and card, allowing to save on currency payments.
Total funding amount: $903 million

Pavel Durov
36 years old
Education: SPSU
Founder of Telegram Messenger, a cross-platform messenger that allows exchange of text, voice, video messages and files of other formats.
Total funding amount: $850 million

Aleksandr Yakunin
40 years old
Education: UrFU
Co-founder of ServiceTitan - a software provider for companies working in the sphere of domestic services (ventilation, plumbing, heating, air conditioning).
Total funding amount: $325 million

Nikita Shamgunov
42 years old
Education: UrFU, ITMO
Founder of MemSQL, which is developing a database management system that is used to analyze large pools of information.
Total funding amount: $158 million

Simon Litsyn
63 years old
Education: LETI
Founder of StoreDot, a company that develops high-speed battery charging technology for smartphones and electric car batteries.
Total funding amount: $146 million
Background and context
Project goals

- Analysis of Russian universities contribution to global technological and entrepreneurial development on the basis of objective and verifiable indicators within a scalable model
- Development of proposals and recommendations for the universities based on big data analysis, in-depth interviews with startup founders and expert discussions
University Comprehensive Assessment Model

Effectiveness of scientific and innovative activities of Russian universities and business schools

- **Academic productivity of universities**
  - 2016, 2017, 2018, 2019, 2020
  - **Database**: international scientific databases (SCOPUS)

- **Inventive activity Index**
  - 2017, 2018, 2019, 2020
  - **Database**: international patent databases (Google Patents etc)

- **Entrepreneurial universities rating**
  - 2018, 2019, 2020
  - **Database**: international startup databases (Crunchbase)

- **Russian business schools’ internationalization map**
  - 2017, 2018, 2019, 2020
International practice in assessment of entrepreneurial universities
<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PitchBook. The top global universities producing VC-backed entrepreneurs</strong></td>
<td>Number of successful alumni projects, entrepreneurs graduated and capital raised</td>
</tr>
<tr>
<td><strong>Forbes. Startup Schools: America’s Most Entrepreneurial Universities</strong></td>
<td>Number of graduates and students who self-identified as founders and business owners in LinkedIn</td>
</tr>
<tr>
<td><strong>Monitoring the Innovation Performance of Russian Universities (RVC, ITMO)</strong></td>
<td>Methodology design and monitoring the effectiveness of innovative activities of Russian universities: case of research universities, Project 5-100, federal universities</td>
</tr>
<tr>
<td><strong>Interfax: innovation and entrepreneurship</strong></td>
<td>Cooperation with high-tech companies, Small Innovative Enterprises and R&amp;D in university</td>
</tr>
<tr>
<td><strong>Best Russian Universities by Forbes</strong></td>
<td>Statistics on the employment of graduates, their relevance in the regions and the number of entrepreneurs among them. Forbes also studied biographies of more than 1,600 members of the Russian elite - members of the Forbes list and their children, heads of private and public companies, officials and deputies</td>
</tr>
</tbody>
</table>
Research framework
What means "Russian entrepreneur"?

For the purposes of this research "Russian entrepreneur" means a person who graduated in one of Russian universities.

Thus,

- a Malayan citizen
- of Chineeze nationality
- having founded a start-up in Brasil

would be considered as Russian entrepreneur if he has Russian graduation.
CB is also becoming increasing popular with scholars and researchers. More than 100 scientific contributions based on its data have been made available so far.*

As reported by Kauffman Foundation, the database is increasingly used by the venture capital industry as “the premier data asset on the tech/startup world”.

CB information includes investments and funding information, founding members and individuals in leadership positions, mergers and acquisitions, news, industry trends and other indicators (overall around 100).

Crunchbase is the leading platform to discover innovative companies and the people behind them.

CB sources its data in four ways: the venture program, machine learning, an in-house data team, and the CB community. These submissions are subject to registration, social validation, and are often reviewed by a moderator before being accepted for publication.

CB has more than 600,000 active community contributors on the platform. Over five million users access the CB website each month.

Data collection

1. Data upload
   Crunchbase
   (world, founded date: 2011 – 2020)
   ~ 350,000 startups
   ~ 1 million founders
   100 indicators for each startup

2. Selecting startups with “Russian roots”
   - Analysis of names and surnames
   - Education verification
   - Headquarters location verification
   ~ 5,000 startups, ~ 7,000 founders
   100 indicators for each startup

3. In-depth education analysis
   LinkedIn, Facebook, Crunchbase, AngelList
   2,237 startups
   (~ $6,880 million)
   2,419 founders
Startup allocation according to the total funding amount

Startups of Russian descent (according to the place of the founder’s education), founded in 2011-2020:

2237 startups, 2419 founders, $6,88 bln

Startups of Russian descent (according to the place of the founder’s education), founded in 2010-2019:

1096 startups, 1181 founders, $5,85 bln

<table>
<thead>
<tr>
<th>Country</th>
<th>Total funding amount</th>
<th>VC-backed startups / Total amount of startups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd wave</td>
<td>2nd wave</td>
</tr>
<tr>
<td>USA</td>
<td>$2.41 bln</td>
<td>$1.51 bln</td>
</tr>
<tr>
<td></td>
<td>350 / 668</td>
<td>188 / 297</td>
</tr>
<tr>
<td>UK</td>
<td>$2.24 bln</td>
<td>$2.29 bln</td>
</tr>
<tr>
<td></td>
<td>60 / 137</td>
<td>37 / 67</td>
</tr>
<tr>
<td>China</td>
<td>$0.08 bln</td>
<td>$0.007 bln</td>
</tr>
<tr>
<td></td>
<td>9 / 31</td>
<td>5 / 11</td>
</tr>
<tr>
<td>Germany</td>
<td>$0.11 bln</td>
<td>$0.51 bln</td>
</tr>
<tr>
<td></td>
<td>10 / 53</td>
<td>5 / 21</td>
</tr>
<tr>
<td>Russia</td>
<td>$0.95 bln</td>
<td>$0.97 bln</td>
</tr>
<tr>
<td></td>
<td>298 / 591</td>
<td>219 / 398</td>
</tr>
</tbody>
</table>
Startups of Russian descent 2011-2020

Startups with the highest total funding amount

<table>
<thead>
<tr>
<th>Startup</th>
<th>Founded date</th>
<th>Headquarters location</th>
<th>Founders</th>
<th>Total funding amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolut</td>
<td>2015</td>
<td>London, UK</td>
<td>Nikolay Storonskiy (MIPT, NES)</td>
<td>$903 million</td>
</tr>
<tr>
<td>Telegram Messenger</td>
<td>2013</td>
<td>London, UK</td>
<td>Pavel Durov, Nikolay Durov (SPSU)</td>
<td>$850 million</td>
</tr>
<tr>
<td>ServiceTitan</td>
<td>2013</td>
<td>California, USA</td>
<td>Aleksandr Yakunin (UrFU)</td>
<td>$325 million</td>
</tr>
<tr>
<td>MemSQL</td>
<td>2011</td>
<td>California, USA</td>
<td>Nikita Shamgunov (UrFU, ITMO)</td>
<td>$158 million</td>
</tr>
<tr>
<td>StoreDot</td>
<td>2012</td>
<td>Tel Aviv, Israel</td>
<td>Simon Litsyn (LETI)</td>
<td>$146 million</td>
</tr>
<tr>
<td>Waves Platform</td>
<td>2016</td>
<td>Moscow, Russia</td>
<td>Aleksandr Ivanov (MSU, Leipzig University)</td>
<td>$142 million</td>
</tr>
<tr>
<td>Alcresta</td>
<td>2011</td>
<td>Massachusetts, USA</td>
<td>Aleksey Margolin (MSU)</td>
<td>$139 million</td>
</tr>
<tr>
<td>NEAR</td>
<td>2012</td>
<td>Singapore, Singapore</td>
<td>Aleksandr Skidanov (IzhSTU)</td>
<td>$134 million</td>
</tr>
<tr>
<td>Behavox</td>
<td>2014</td>
<td>London, UK</td>
<td>Roman Zelov (TSU), Vyacheslav Slavinskiy (MSU), Alexander Glasman (SPSU)</td>
<td>$121 million</td>
</tr>
<tr>
<td>Workato</td>
<td>2013</td>
<td>California, USA</td>
<td>Aleksey Timanovskiy (MSU)</td>
<td>$105 million</td>
</tr>
</tbody>
</table>

* Aggregated Crunchbase data for the period uploaded in July 2020
Startups of Russian descent 2019-2020

Prospective projects in recent years (the highest total funding amount and/or on trend)

<table>
<thead>
<tr>
<th>Startup</th>
<th>Founded date</th>
<th>Full description</th>
<th>Headquarters location</th>
<th>Founders</th>
<th>Total funding amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amuleit (COVID-19 Contact Tracer)</td>
<td>2020</td>
<td>A system that identifies employees infected with COVID-19, thereby saving the business from bankruptcy due to quarantine</td>
<td>California, USA</td>
<td>Aleksandr Kozhevinikov (MIPT, Innopolis, Penza State University)</td>
<td>0</td>
</tr>
<tr>
<td>Toki</td>
<td>2020</td>
<td>Trend Search and Analytics Module for TikTok</td>
<td>Massachusetts, USA</td>
<td>Vladimir Yesaulov (VLSU)</td>
<td>0</td>
</tr>
<tr>
<td>SoftSmile</td>
<td>2019</td>
<td>Software for dentists and orthodontists to help establish a treatment plan automatically</td>
<td>New York, USA</td>
<td>Khamzat Asambayev (HSE, MSU)</td>
<td>$2 million</td>
</tr>
<tr>
<td>Arloid Automation</td>
<td>2019</td>
<td>Automatic Change System for Heating, Ventilation and Air-Conditioning (HVAC) settings according to changing environmental conditions</td>
<td>California, USA</td>
<td>Anatoliy Aseyev (SPSU, CSU)</td>
<td>$1.5 million</td>
</tr>
<tr>
<td>Insolar Technologies</td>
<td>2018</td>
<td>Blockchain platform for business</td>
<td>Moscow, Russia</td>
<td>Andrey Zhulin, Dmitriy Zhulin (BMSTU, University of London), Pyotr Fedchenkov (MSU)</td>
<td>$13 million</td>
</tr>
<tr>
<td>NEAR Protocol</td>
<td>2018</td>
<td>Blockchain platform to improve productivity and convenience of work</td>
<td>California, USA</td>
<td>Aleksander Skidanov (IzhSTU)</td>
<td>$12 million</td>
</tr>
<tr>
<td>Simdaq</td>
<td>2018</td>
<td>Universal platform to improve trading and asset management</td>
<td>Limassol, Cyprus</td>
<td>Vladimir Levitin (SPSU, ITMO, SPbPU)</td>
<td>$5 million</td>
</tr>
<tr>
<td>ElectroNeek</td>
<td>2018</td>
<td>Robotic platform for creating digital workforce and personal assistants</td>
<td>California, USA</td>
<td>Dmitriy Karpov (MSU)</td>
<td>$3 million</td>
</tr>
<tr>
<td>HyPoint</td>
<td>2018</td>
<td>A new generation hydrogen fuel cell system for the aerospace industry</td>
<td>California, USA</td>
<td>Sergey Shubenko (MIPT), Sergey Nefedkin (MPEI), Aleksandr Ivanenko (RANEPA), Sergey Panov (RSATU)</td>
<td>$2 million</td>
</tr>
<tr>
<td>Winstrike</td>
<td>2018</td>
<td>Platform for the promotion of cybersport</td>
<td>Moscow, Russia</td>
<td>Yaroslav Komkov (RUC)</td>
<td>$11.5 million</td>
</tr>
</tbody>
</table>

* Aggregated Crunchbase data for the period uploaded in July 2020
1) The main direction of migration is the United States (34%), the EU (17%, of which 1/7 in Estonia), and the United Kingdom (7%).

2) Even without Telegram, the UK is the most attractive place to raise capital (over $20 mln per funded startup vs. 10 in Singapore, 7-8 in the US, 4 in the EU, 3 in Russia)

3) In Russia, 30% remain. Polar cases of Moscow and St. Petersburg: the share of those remaining in Moscow (and Kazan!) is 40%, the share of those remaining in St. Petersburg (and Novosibirsk, Tomsk) is ~20%

* For 281 startups, the location is not defined; it is not considered when calculating the share
The largest number of investments in the world, as well as among startups of Russian descent, attracted startups from the USA.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>World</th>
<th>Russian descent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT hardware, software</td>
<td>34.7%</td>
<td>37.2%</td>
</tr>
<tr>
<td>Trade and services</td>
<td>20.9%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Services for business</td>
<td>13.4%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Medicine and pharmacy</td>
<td>7.5%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Financial services</td>
<td>7.0%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Robotics and AI</td>
<td>5.6%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Education</td>
<td>4.5%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>3.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Transport and logistics services</td>
<td>1.5%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Social networks</td>
<td>1.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Social services</td>
<td>0.4%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

The chart shows the total funding amount for startups of Russian descent and the world from 2011 to 2020. The United States leads in both categories, followed by China. Russia is also a significant player, particularly in IT hardware and software.
There are more startups in financial services, robotics and AI in percentage terms among startups of Russian origin than in the world.

<table>
<thead>
<tr>
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<th>Russian descent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT hardware, software</td>
<td>26.9%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Trade and services</td>
<td>22.5%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Services for business</td>
<td>13.3%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Financial services</td>
<td>9.5%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Medicine and pharmacy</td>
<td>8.3%</td>
<td>4.9%</td>
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<td>Robotics and AI</td>
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<td>13.0%</td>
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<td>2.4%</td>
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</tr>
</tbody>
</table>
Startups of Russian descent: sectoral and geographical shifts

**Geographical distribution, 2011-2020**

<table>
<thead>
<tr>
<th>Location</th>
<th>10 years</th>
<th>2019-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>30,6%</td>
<td>28,99%</td>
</tr>
<tr>
<td>Russia</td>
<td>29,0%</td>
<td>14,98%</td>
</tr>
<tr>
<td>Europe</td>
<td>21,5%</td>
<td>20,77%</td>
</tr>
<tr>
<td><strong>Location undefined</strong></td>
<td>11,3%</td>
<td><strong>26,57%</strong></td>
</tr>
<tr>
<td>Asia</td>
<td>6,2%</td>
<td>8,70%</td>
</tr>
<tr>
<td>South America</td>
<td>0,8%</td>
<td>0%</td>
</tr>
<tr>
<td>Australia and New Zealand</td>
<td>0,5%</td>
<td>0%</td>
</tr>
<tr>
<td>Africa</td>
<td>0,1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

1) Since 2016, one could observe a trend (noted by foreign researchers, among others) in reducing the number of tech startups created

2) Sectoral shifts of Russian startups in the last 2 years: in favor of fintech, B2B, robotics and AI at the expense of IT

3) Geographical shift: it is too early to conclude yet, but if the "undefined" location is distributed in proportion to the shares of certain locations, the share of Russia will noticeably decrease

**Sectoral distribution, 2011-2020**

<table>
<thead>
<tr>
<th>Sector</th>
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<th>2019-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT hardware, software</td>
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<tr>
<td>Trade and services</td>
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<td>13,0%</td>
</tr>
<tr>
<td>Robotics and AI</td>
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</tr>
<tr>
<td>Financial service</td>
<td>10,6%</td>
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</tr>
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</tr>
<tr>
<td>Social services</td>
<td>0,1%</td>
<td>0,0%</td>
</tr>
</tbody>
</table>

Source: Crunchbase
Startups of Russian descent: funding types

**Startup funding status**

- Seed: 77.3%
- Early Stage Venture: 14.9%
- M&A: 6.0%
- Late Stage Venture: 0.9%
- Private Equity: 0.7%
- IPO: 0.2%

**Top Investors by headquarters location***

<table>
<thead>
<tr>
<th>United States</th>
<th>Russia</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y Combinator</td>
<td>Internet Initiatives Development Fund (IIDF)</td>
<td>Techstars</td>
</tr>
<tr>
<td>Starta Accelerator</td>
<td>Moscow Seed Fund</td>
<td></td>
</tr>
<tr>
<td>500 Startups</td>
<td>AltaIR Capital</td>
<td></td>
</tr>
</tbody>
</table>

*supported more than 10 startups

**Last funding type**

- Seed: 50.7%
- Series A: 9.8%
- Early Stage Venture - Series Unknown: 7.2%
- Pre-Seed: 6.3%
- Angel: 5.7%
- Grant: 4.8%
- Initial Coin Offering: 3.2%
- Series B: 2.9%
- Convertible Note: 2.1%
- Debt Financing: 1.5%
- Equity Crowdfunding: 1.2%
- Undisclosed: 1.2%
- Non-equity Assistance: 1.1%
- Corporate Round: 0.6%
- Private Equity: 0.6%
- Series D: 0.5%
- Series C: 0.4%
- Product Crowdfunding: 0.2%
- Post-IPO Equity: 0.1%
Key results: educational and geographical pathways of founders
## Startups of Russian descent 2011-2020: founders’ education

### Startups and Founders

<table>
<thead>
<tr>
<th>Category</th>
<th>Startups</th>
<th>Founders</th>
<th>Total funding amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,237</td>
<td>2,419</td>
<td></td>
</tr>
<tr>
<td>Russian business education</td>
<td>780</td>
<td></td>
<td>$2.6 billion</td>
</tr>
<tr>
<td>Russian technical education</td>
<td>1,375</td>
<td></td>
<td>$5.7 billion</td>
</tr>
<tr>
<td>Foreign business education</td>
<td>399</td>
<td></td>
<td>$1.1 billion</td>
</tr>
<tr>
<td>Foreign technical education</td>
<td>187</td>
<td></td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>Foreign education</td>
<td>648</td>
<td></td>
<td>$2.56 billion</td>
</tr>
<tr>
<td>Only Russian education</td>
<td>1,771</td>
<td></td>
<td>$5.78 billion</td>
</tr>
</tbody>
</table>

### Only Russian universities

1,771 founders, 73% of all founders

Overall these founders raised 5.78 $ billion, where 34% of funding is raised by 8 startups from top-10

- P. Durov (Telegram Messenger) $850 million
- N. Shamgunov (MemSQL) $158 million
- A. Margolin (Alcresta) $139 million
- A. Glasman, R. Zelov (Behavox) $121 million
- A. Yakunin (ServiceTitan) $325 million
- S. Litsyn (StoreDot) $146 million
- A. Skidanov (NEAR) $134 million
- A. Timanovskiy (Workato) $105 million

### At least one university abroad

648 founders, 27% of all founders

Overall these founders raised 2.56 $ billion, where 43% of funding is raised by 3 startups from top-10

- N. Durov (Telegram Messenger) $850 million
- A. Ivanov (Waves Platform) $142 million
- V. Slavinskiy (Behavox) $121 million
Startups of Russian descent 2011-2020: founders’ foreign education

<table>
<thead>
<tr>
<th>Founders with Russian roots</th>
<th>2419</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign education (&gt;50% USA)</td>
<td>641 26,5%</td>
</tr>
<tr>
<td>Foreign technical education</td>
<td>187 7,7%</td>
</tr>
<tr>
<td>Foreign business education</td>
<td>399 16,5%</td>
</tr>
<tr>
<td>Foreign technical + business</td>
<td>42 1,7%</td>
</tr>
</tbody>
</table>

Startups with foreign-educated founders attracted 37% of the total investment

Top countries

- United States: 329
- United Kingdom: 116
- France: 42
- Germany: 37
- Switzerland: 28
- Sweden: 22
- Finland: 20
- Spain: 19
- Netherlands: 16
- Canada: 15
- Israel: 14
- China: 14
- Italy: 13
- Australia: 12
- Austria: 10

Top universities

- Stanford University: 43
- University of California: 32
- Y Combinator Startup…: 30
- MIT: 25
- London Business School: 21
- Harvard University: 19
- LSE: 17
- Columbia University: 16
- INSEAD: 16
- Founder Institute: 15
- Stockholm School of…: 12
- University Of…: 10
## Startups of Russian descent 2011-2020: founders’ foreign education

### Technical education

- **Top universities**
  - University of California: 13
  - MIT: 13
  - Stanford University: 9
  - Columbia University: 5
  - Harvard University: 3
  - Eindhoven University of Technology: 3
  - The Johns Hopkins University: 2
  - ETH Zurich: 2
  - City University of London: 2
  - Heriot-Watt University: 2

### Business education

- **Top universities**
  - Stanford University - Graduate School of Business: 32
  - University of California - Haas School of Business: 23
  - London Business School: 20
  - London School of Economics and Political Science - LSE: 16
  - INSEAD: 15
  - MIT - Sloan School of Management: 13
  - Stockholm School of Economics: 12
  - Columbia University - Columbia Business School: 11
  - Wharton School - University Of Pennsylvania: 10
  - IMD Business School: 7

### For founders

- **Acceleration programs, business school**
  - Y Combinator: 30
  - Founder Institute: 15
  - Draper University: 7
  - Singularity University: 4
  - Alchemist Accelerator: 3
  - 500 Startups Accelerator: 2
  - Berkeley SkyDeck: 2
  - MIT Accelerator: 2
Education centers of founders with Russian roots

United Kingdom: 46 / 116
Country of university

Number of universities / Number of graduated founders

**United Kingdom**

46 / 116

*Number of universities where founders from Russia studied*
From Russian university to foreign country: Russian founder pathway

- Red arrows: flows from Moscow
- Blue arrows: flows from Saint Petersburg
- Black arrows: flows from the regions

- *Where a founder studied in Russia → where a startup was created abroad*
- Only major flows with at least 5 founders are shown

Number
- 19: N. Novgorod
- 25: Samara
- 27: Krasnoyarsk
- 30: Kazan, Chelyabinsk
- 40: Tomsk
- 42: Yekaterinburg
- 73: Novosibirsk
- 322: Saint Petersburg
- 1067: Moscow

213

- 33
- 38
- 7
- 19
- 14
- 17
- 13
- 21
- 13
- 20
- 45
- 120
- 91

USA
SOUTH AMERICA
SINGAPORE
NORTH AMERICA
CHINA
ASIA
INDIA
EUROPE
AFRICA
LATIN AMERICA
ANTARCTICA
Key results: alma mater of founders
Ranking methodology

- Number of downloads in App Store and Google Play (35% Relevance)
- Page views per visit calculated over 1 project (5%)
- Average number of website visits over the last 6 months (15%)
- Total funding amount (20%)
- Share of supported projects (20%)
- Size and success (65%)
- Number of startups
- Number of graduated founders

Only universities with more than 10 startups are ranked.

Source: Crunchbase, Apptopia, SimilarWeb
Russian «entrepreneurial» universities

Top-5 universities attracted 37% of the total funding amount
Top 10 universities account for 50% of all startups

<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>Number of startups</th>
<th>Total funding amount, Mln $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Moscow Institute of Physics and Technology</td>
<td>132</td>
<td>1 290.1</td>
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<tr>
<td>2-4</td>
<td>Higher School of Economics</td>
<td>196</td>
<td>431.1</td>
</tr>
<tr>
<td>2-4</td>
<td>Lomonosov Moscow State University</td>
<td>355</td>
<td>1 358.9</td>
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<tr>
<td>2-4</td>
<td>St. Petersburg State University</td>
<td>145</td>
<td>1 400.7</td>
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<tr>
<td>5</td>
<td>Bauman Moscow State Technical University</td>
<td>134</td>
<td>356.3</td>
</tr>
<tr>
<td>6-7</td>
<td>ITMO</td>
<td>58</td>
<td>215.0</td>
</tr>
<tr>
<td>6-7</td>
<td>Novosibirsk State University</td>
<td>59</td>
<td>160.7</td>
</tr>
<tr>
<td>8</td>
<td>Moscow State Institute of International Relations</td>
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<td>118.7</td>
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<tr>
<td>9-10</td>
<td>Peter the Great St. Petersburg Polytechnic University</td>
<td>82</td>
<td>97.0</td>
</tr>
<tr>
<td>9-10</td>
<td>National Research Nuclear University MEPhI</td>
<td>64</td>
<td>75.5</td>
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<tr>
<td>11</td>
<td>Ural Federal University</td>
<td>48</td>
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<td>MISIS</td>
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<tr>
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<td>Moscow Aviation Institute</td>
<td>54</td>
<td>134.4</td>
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<td>14-15</td>
<td>MIReA - Russian Technological University</td>
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<td>97.1</td>
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<tr>
<td>14-15</td>
<td>St. Petersburg State Electrotechnical University &quot;LETI&quot;</td>
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<td>South Federal University</td>
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<td>17</td>
<td>Samara National Research University named after Korolev</td>
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<td>102.8</td>
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<td>18-19</td>
<td>Novosibirsk State Technical University</td>
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<td>18.7</td>
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<td>Perm State University</td>
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<td>Moscow Polytechnic University</td>
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<td>25</td>
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<td>24</td>
<td>20.1</td>
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Top-10 by number of startups (units)

<table>
<thead>
<tr>
<th>University</th>
<th>Number of startups</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSU</td>
<td>355</td>
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<tr>
<td>HSE</td>
<td>196</td>
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<tr>
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<tr>
<td>Bauman MSTU</td>
<td>134</td>
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<tr>
<td>MIPT</td>
<td>132</td>
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<tr>
<td>Peter the Great SPPU</td>
<td>82</td>
</tr>
<tr>
<td>MGIMO</td>
<td>64</td>
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<tr>
<td>MEPhI</td>
<td>64</td>
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<tr>
<td>NSU</td>
<td>59</td>
</tr>
<tr>
<td>ITMO</td>
<td>58</td>
</tr>
</tbody>
</table>

Top-10 by total funding amount ($ billion)

<table>
<thead>
<tr>
<th>University</th>
<th>Total funding amount ($ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPSU</td>
<td>1.40</td>
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<td>MSU</td>
<td>1.36</td>
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<tr>
<td>MIPT</td>
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<td>UrFU</td>
<td>0.50</td>
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<tr>
<td>HSE</td>
<td>0.43</td>
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<tr>
<td>Bauman MSTU</td>
<td>0.36</td>
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<tr>
<td>ITMO</td>
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<tr>
<td>ETU &quot;LETI&quot;</td>
<td>0.18</td>
</tr>
<tr>
<td>NSU</td>
<td>0.16</td>
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<tr>
<td>IzhSTU</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Number of ranked universities (number of startups > 10)

2020 | 2019
--- | ---
46 | 39

Startups left due to restriction

2020 | 2019
--- | ---
578 | 58

 Universities left due to restriction

2020 | 2019
--- | ---
265 | 50
Russian «entrepreneurial» universities: economic and managerial education of founders

### Top-15

<table>
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<tr>
<th>Rank 2020</th>
<th>Rank 2019</th>
<th>University</th>
<th>Total score</th>
<th>Number of startups</th>
<th>Total funding amount, $ million</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
<td>HSE</td>
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<td>304.5</td>
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<td>6</td>
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<td>Skolkovo Moscow School of Management</td>
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<td>8</td>
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<td>Peter the Great St. Petersburg Polytechnic University</td>
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<td>-</td>
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<td>41.5</td>
<td>17</td>
<td>7.5</td>
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</tbody>
</table>

### Top-10 by number of startups (units)

- HSE: 126
- MSU: 73
- Plekhanov University: 63
- Financial University: 59
- RANEPA: 50
- SPSU: 47
- MGIMO University: 45
- SPSUE: 36
- SUM: 34
- NES: 24

### Top-10 by total funding amount ($million)

- NES: 954.23
- HSE: 304.54
- Financial University: 191.71
- MSU: 189.88
- Plekhanov University: 125.80
- SUM: 102.70
- RANEPA: 78.35
- NSUEM: 76.60
- SPSU: 75.75

---

**Number of ranked universities (number of startups > 8):**

- 2020: 22
- 2019: 22

**Startups left due to restriction:**

- 2020: 330
- 2019: 33

**Universities left due to restriction:**

- 2020: 178
- 2019: 26
Interview results with founders (3 waves)
46 founders, 66 startups

- Total funding amount in total: $86.6 million
- Maximum funding: SONM – $42.5 million
- 56% of founders attracted investment
- 15% of founders attracted more than $2 million

---

**Headquarters location**

- United States: 25
- Russia: 22
- Not defined: 3
- Singapore: 3
- United Kingdom: 2
- Poland: 2
- Finland: 2
- Australia: 1
- Brazil: 1
- Israel: 1
- Cyprus: 1
- Switzerland: 1
- Estonia: 1
- Japan: 1

---

**Founded Date**

- 2016: 5; 7%
- 2015: 4; 6%
- 2017: 2; 3%
- 2018: 13; 20%
- 2019: 10; 15%
- 2012: 8; 12%
- 2013: 8; 12%
- 2014: 9; 14%
- 2011: 7; 11%
- 2010: 5; 7%
- 2011: 4; 6%
- 2012: 3; 5%
- 2013: 2; 3%
- 2018: 8; 12%
- 2019: 10; 15%
Interview results with founders (3 waves)
46 founders, 66 startups

Universities

<table>
<thead>
<tr>
<th>Institutes</th>
<th>MIT</th>
<th>Stanford University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauman MSTU</td>
<td>SFedU</td>
<td></td>
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<tr>
<td>MSU</td>
<td>SibFU</td>
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<td></td>
</tr>
<tr>
<td>MISIS</td>
<td>MGIMO</td>
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<td>Peter the Great SPPU</td>
<td>FinU</td>
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<td>Samara University</td>
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<td>International Space</td>
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<td>univerzita v Praze</td>
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</table>

Sectors

- IT hardware, software
- Services for business
- Transport and logistics services
- Financial services
- Robotics and AI
- E-commerce
- Education
- Entertainment
- Social services
- Medicine and pharmacy
- Social networks

- 46 founders, 66 startups
- 15; 23% IT hardware, software
- 9; 14% Services for business
- 8; 12% Transport and logistics services
- 7; 11% Financial services
- 6; 9% Robotics and AI
- 5; 8% E-commerce
- 4; 6% Education
- 3; 4% Entertainment
- 1; 1% Social services
- 4; 6% Medicine and pharmacy
- 1; 1% Social networks
Interview results with founders

The idea for the project

- Global / local trends: 14
- Research project / job / extracurricular activity: 9
- Lack of a market / a good on a market / complexities of a market: 8
- Chance meeting / event unrelated to universities: 6
- Practical work: 4

Necessary skills

«A startup is a permanent and complicated mess that needs to be managed»

«A startup, especially at an early stage, is an emotional roller coaster»

- Ability to communicate (teamwork, communication with investors etc.): 9
- Market analysis, price analysis, testing of hypotheses: 8
- Attracting investment: 6
- Quick learning and instant application: 6
- Presentation of the project: 5
- Flexible thinking, rapid reaction to changes: 5
- Technical skills: 5
- Ability to sell your product: 4
- Ability to think globally: 3
- Assess the response: 2
- Information management, structural thinking, synthesis: 2
- Ability to criticize: 1
- Ability to take a risk: 1
Interview results with founders

Success of the project

«Success would not be achieved overnight, it's like having a career as a rock musician»

- Preliminary market analysis, testing of hypotheses and reviews: 16
- Team: 16
- Personal qualities of founder: 9
- Continuous monitoring of technologies and trends, market analysis: 7
- An important niche: 7
- Creating a product that will make a difference in the world: 6
- Focus on scale / global market: 6
- Finance: 6
- Work experience: 6
- Crisis, pandemic: 5
- Acquaintances and contacts, environment: 5
- Focus on uniqueness: 4
- Technical education of founder: 2
- Promotion, business packaging, website design: 2
- Changing of consumer behavior: 1
- Consumer feedback: 1
- Cross-sectoral decision: 1
- Risk: 1
- Long-term strategy: 1

Seeking investment

- Own capital: 18
- Funds, acceleration programs (Russian): 13
- Business angel, venture investor: 10
- Grants: 5
- Funds, acceleration programs (foreign): 5
- Crowdfunding: 1
Founders trajectories - 1

based on interview results

Russian university → start of the project while studying

**Alexandr Kim, Sputnik8**
Saint Petersburg State University

Sputnik8 — marketplace of travel activities (Russia)

Russian university → university abroad → startup abroad

**Vyacheslav Kozlovsky, evee**
Peter the Great St. Petersburg Polytechnic University, University of Technology Sydney

evee — Electric car sharing (Australia)
Founders trajectories - 2
based on interview results

Russian university ➞ career in a technology company ➞ startup

Pavel Ershov, Directual
Moscow Institute of Physics and Technology, New Economic School

Directual low-code platform allows to develop comprehensive backend for web, mobile or IoT apps in days instead of weeks and months (Russia)

Russian university ➞ career (up to top management) by university specialization ➞ startup

Levon Brutyan, Collectly
Financial University under the Government of the Russian Federation, Harvard Business School, Hult International Business School

Collectly helps healthcare orgs increase collections, automate billing operations, and elevate patient financial experience (USA)
Founders trajectories - 3
based on interview results

**Russian university → academic career → startup**

Petr Fedichev, Gero
Moscow Institute of Physics and Technology

Gero — Using next-gen AI to design drugs against complex disorders (Singapore)

**Russian university → career in finance → investing → startup**

Anton Anufriev, Nappy Club
Financial University under the Government of the Russian Federation

Nappy Club — Online marketplace and home delivery service for unique diapers (Russia)
# Interview results with founders

## Business education

1. Structuring knowledge  
2. Expanding contacts  
3. Holding management positions  
4. Developing business communications with people of different levels

## Acceleration programs

1. Financial resources  
2. Mentoring  
3. Less time-consuming  
4. More useful (than MBA) for startup founders

## Russian education vs. Foreign education

1. Ability to understand complex things  
2. Background, opportunity for further development  
3. Academic background, including in mathematics, software development  
4. Basic learning skills, ability to work with huge data sets

1. Expanding the horizons and contacts  
2. Access to foreign markets  
3. Learning no more than in a Russian business school  
4. Access to foreign investments
Interview results with founders

**Russian education**

**Pros**

1. Teacher support, role of a mentor
2. Environment, team building
3. Infrastructure
4. Background / knowledge
5. Technical / engineering skills
6. Internships in companies, meetings with employers
7. Ability to attend any lectures from other faculties
8. Public activity

**Cons**

1. Low mobility, delays in updating of curricula
2. Strong gap between academic education and business
3. No margin of error, no freedom to experiment
4. Learning to work for hire
5. Teachers of the old formation
6. Responding to old challenges of an industrial society
7. Poor English
8. Lack of knowledge in tech entrepreneurship
9. Lack of knowledge in legal matters
10. Lack of knowledge sales
11. Failure of soft skills

**Suggested tools**

- Lectures with successful global entrepreneurs
- More practice, mentoring successful entrepreneurs in educational projects
- Equipped business laboratories, accelerators
- Knowledge exchange and support ecosystem
- Foundation for technology entrepreneurship, market analysis
- Entrepreneurship and sales course in any specialty
- Help in finding investors
- Chat for students and alumni in Telegram
- Consolidation of technical universities and business schools
- Development of the "Startup as a Diploma" model
- A model of interaction with startups to attract interns from universities
- Online education, personification
- An iterative approach
- Mechanisms to reward teachers for updating content
Universities awareness of alumni careers

based on interview results

BASH Today provides services of booking sites for private and corporate events.

“University programs were mostly taught by theorists who have never been practitioners. I think it’s a great disadvantage that the university still has. I tried to collaborate with the university and create an applied course, at least not a basic course, but an optional one. I’m ready to do it for free, but MGIMO hasn’t come forward and cooperated yet, unfortunately.”

Efim Kolodkin, MGIMO, BASH Today

Sticker.Place — visual communication company.

“Founders are always looking for people. Currently, there are many programs for recruiting students as developers at Sberbank or Yandex. This is active work which is regularly being done with universities. For startups, of course, there is no such program, but it would be good to have one. We need personnel, we generally have money for this aim, but it is quite difficult and ineffective to attract students at present.”

Andrey Nikiforov, MEPhI, British Higher School of Art and Design, Sticker.Place

SONM — blockchain-based decentralized fog computing platform.

“It is very important when universities take the initiative in inviting founders to give a lecture to their students, share their experiences. I gave lectures at the top universities in London, including Oxford, and at MSU in Russia. Unfortunately, my alma mater university has not yet invited me, I wouldn't mind.”

Alexei Antonov, Perm State University, SONM
More about the results of the 3d wave of research on entrepreneurial universities and business schools

Presentation materials about entrepreneurial universities and business schools

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