Artificial Intelligence (AI) in Russia

Russian Digital Economy

In May 2018 the Russian Ministry of Communications and Mass Media became the end-responsible ministry for bringing the digital economy, and AI as part of this, to a new level.

Since July 2017 the main policy framework for digitalization is the Program "Digital Economy of the Russian Federation till 2024". In 2018 about 40 MEUR was allocated for its implementation. In May 2018 the Ministry of Digital Development got the instruction to revise this Program by October 1, 2018 (not done yet).

In 2014, the National Technology Initiative was launched to stimulate the development of 9 Russian high-tech 'topsectors', ensuring that Russia will be leading producer of such technologies in 2035. Sectors concerned are: AutoNet, AeroNet, EnergyNet, FinNet, FoodNet, HealthNet, MariNet, NeuroNet, and SafeNet and all include, amongst others, AI technologies. Roadmaps for each sector define intermediate steps on the way to 2035 and based on these roadmaps, R&D and innovation project calls are launched regularly. Target groups: Russian companies, universities and scientific bodies.

- Russia is not leading, but following global AI trends
- Neuro Technologies and Artificial Intelligence are key technologies of Russia's digital economy
- AI is not regulated. First steps expected by the end of 2018. First policies to be in place by 2020
- State and science are dominant in AI developments, private sector slowly picking up
- Opportunities: e-commerce is fast-growing, low data protection awareness, big cities 24/7 economy, 'smart city' priorities; deregulation needs
- Russian universities produce immense talent pool
- Hidden gem: the Russian startup potential

T-adviser, forum of biggest IT-companies in Russia, on growth potential of AI market:
- AI and machine learning market in Russia will grow from 9,5 MEUR in 2017 to 380 MEUR in 2020
- Market share of AI in the Russian industry will comprise 330 MEUR in 2021
- In 5 years 80% of all decisions in financial domain will be taken by means of AI
- In 3 years 50% of the consumer sector will make use of bots for consumer services

AI up till now

(2007-2017)

- According to SAP research, in the past 10 years in Russia some 1400 AI scientific projects were carried out. Most of them (1200) were non-profit.
- The private sector did not show much interest in the development and use of AI. AI was mostly driven by the state and state (owned) business.
- About 311 MEUR was allocated for R&D in AI. In comparison, the US state budget allocates about $200 mln annually for research in AI.
- The total number of researchers involved: between six and ten thousand people.
- Public funding for AI-related projects was primarily targeted at the public sector, transport, defense and security. Projects mostly concerned the development of data analysis, decision support systems and image and video recognition, in areas where results were expected to be quickly applied in practice (e.g., data analysis and various recognition systems help to optimize logistics and transport problems).
- In comparison with global trends, in Russia the private sector is slowly picking up on AI and machine learning trends and developments. Universities and scientific institutes produce a large portion of AI-related research and technologies.
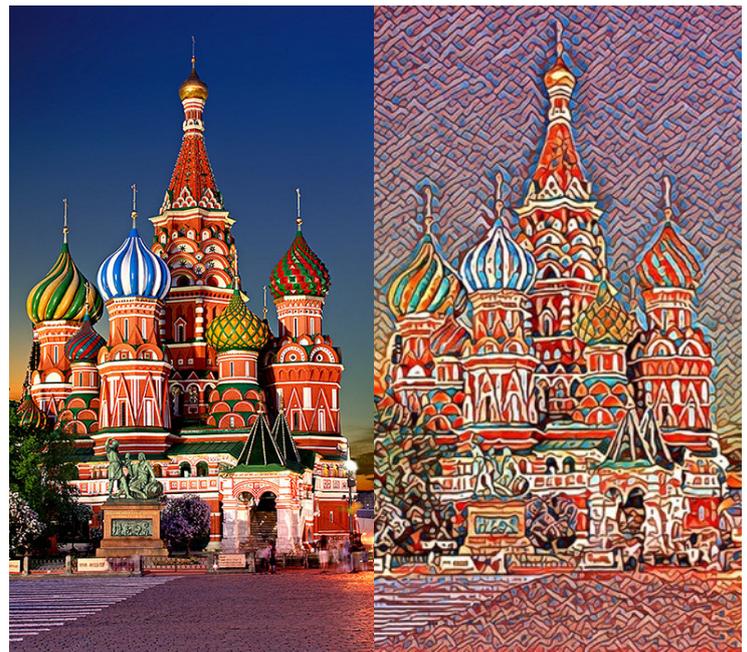
Current AI topics

As a result of past projects and developments, AI applications in Russia are found in different areas:
- services personalization (e.g., telecom)
- efficiency increase by data analysis in retail and industry (e.g., telecom, home appliances, oil well drilling, banking)
- automation and optimization of technical support and communication by bots (e.g., food retail, telecom)
- assist and advice on companies' products (e.g., air tickets retail)
- human resources and personnel recruitment
- computer vision
- augmented reality
- robotics
- image recognition (texts and documentation procession and analysis)
- video recognition (advertisement targeting)
- quality control during manufacturing processes (e.g., in pharmaceutical industry)

Examples of AI applications in Russia:

- "Yandex" in 2017 launched a voice assistant "Alice" representing an alternative to similar solutions of Apple (Siri), Google (Google Assistant) and Amazon (Alexa). This system can search for information and personify data, is able to process incomplete instructions and improvise.
- "ABBYY" is one of the biggest global centers in AI R&D. It develops solutions in text recognition and linguistics, e.g., a program for text recognition FineReader, a system for stream data capture FlexiCapture, and digital dictionaries ABBYY Lingvo.
- The Russian startup "Stafory" provides a service - robot "Vera" – for hiring new specialists. Vera is able to search for new candidates, make phone and video calls, schedule appointments and provide a list of potential candidates in short time frames. Vera is used in many Russian companies and now she is entering the US market.
- The "Moscow city government" has developed a digital strategy "Smart city-2030". A 12-year project with AI applications to make life and work in Moscow more comfortable and safe. A key aspect will be personalized access to digital services based on personal characteristics of each citizen.
- "Prisma" is a Russian startup able to style users' photos according to the works of famous artists using an artificial neural network.

Other Russian companies and mature startups active in AI development are: 3DiVi; Cubic Robotics; Detectum; Double Data; Kipod; MTS, Megafon; Magnit; NTechLab; Promobot; RoadAR; Robocv; Rostelecom; Semantic-Hub; Telegram; Visionlabs.

Talent pool

Russia has a massive potential in qualified specialists for AI projects. In the whole country, 286 universities operate appropriate MSc programs. Russian higher education institutes yearly train about 50.000 students in 65 specialties related to data analysis, machine learning, speech and image recognition, computer linguistics, and similar topics. Over the past five years, more than 200.000 specialists were trained.

In May 2018 Samsung Electronics opened the first AI center in Russia, which plans to create joint laboratories with leading Russian universities.

Startups

As a logical consequence of the large AI talent pool in Russia, many startups are active in the AI field. A study by a Russian community Science Guide (2017) of the AI market, key companies, investors, influencers and tech hubs show that startups using artificial intelligence technologies occupy 16% of the market. The largest part of startups are specialized in machine vision (33%), followed by natural language processing, text analysis (14%), chatbots (9%) and speech recognition (5%). Least represented in the market are recommender systems technology (8%), predictive analytics (7%) and robot technology (7%).

Additional overviews of Russian startups in the field of AI can be found via:

- Rusbase
- Venture Capital

Regulatory steps

At the moment in Russia AI is still a non-regulated technology. First steps to create a regulatory framework for AI are foreseen by the end of 2018. The aim of the government is not only to develop national standards, but to also enhance cooperation with foreign countries and contribute to the development of international standards. An important milestone is March 2020, when the federal government will review the progress on national standards (cloud, fog, quantum technologies, virtual and augmented reality systems, and AI technologies) By June 2020 national standards for information security in systems that implement cloud, fog, quantum technologies, virtual and augmented reality systems, and artificial intelligence technologies should be in place.

Igor Drozdov, Chairman of the Board of the Skolkovo Foundation: "AI is in a somewhat more distant future than cryptocurrencies and ICO. That's why we decided it is too early to regulate it right now. At the moment it is necessary to determine our attitude to AI, the scope of AI and the legal status of robots."

Conferences

AI Conference, November, 22, 2018
Open conference on AI, February 14-16, 2019

This factsheet was prepared on the basis of the report published by the Holland Innovation Network on AI development in 14 countries.

More Information

For further information, you can contact the Economic department of the Netherlands Embassy in Moscow via mos-economics@minbuza.nl or phone no. +7 495 797-29-21.

You can find general information about doing business in Russia, available subsidies and financing for entrepreneurs on the Embassy's website and on the website of the Netherlands Enterprise Agency (in Dutch).

What can the Embassy do for you?

The Netherlands Embassy in the Russian Federation can facilitate your company in a number of ways:
- Provide more detailed market information based on your specific questions and needs;
- Answer first-line questions re. doing business in Russia;
- Facilitate contacts with regional authorities (or federal).

Sanctions

Please note that EU sanctions are imposed on the Russian Federation. Companies are responsible to ensure that their activities comply with the sanction regulations. For more information about sanctions, you can contact the Netherlands Enterprise Agency's sanctions desk (in Dutch) and consult the handbook on dealing with sanctions on their website.