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中华人民共和国科学技术部
Ministry of Science and Technology of the People's Republic of China

UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

Skoltech
Skolkovo Institute of Science and Technology

United Nations – MoST Joint Capacity Building Workshop on Science, Technology and Innovation for Sustainable Development

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Session 4: Institutions and infrastructure enabling environment – an application in science and technology park development

The Role of the Innovative University in the Ecosystem of a Technopark on the example of Skolkovo Innovation Park

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Part 1

Technoparks in Russia

Technoparks in Russia

First Technopark – Tomsk Science and Technology Park

Tomsk State University of Control Systems and Radio Electronics

Year 1990

In 1991, the MIET technopark was opened at the Moscow Institute of Electronic Technology in Zelenograd, in 1992 - the Science Park of Moscow State University, in 1993 - the Technopark in Moskvorechye at the Moscow Engineering Physics Institute, in 1998 - the technopark based on the Kurchatov Institute and so on.

Technoparks in Russia – Figures and Facts

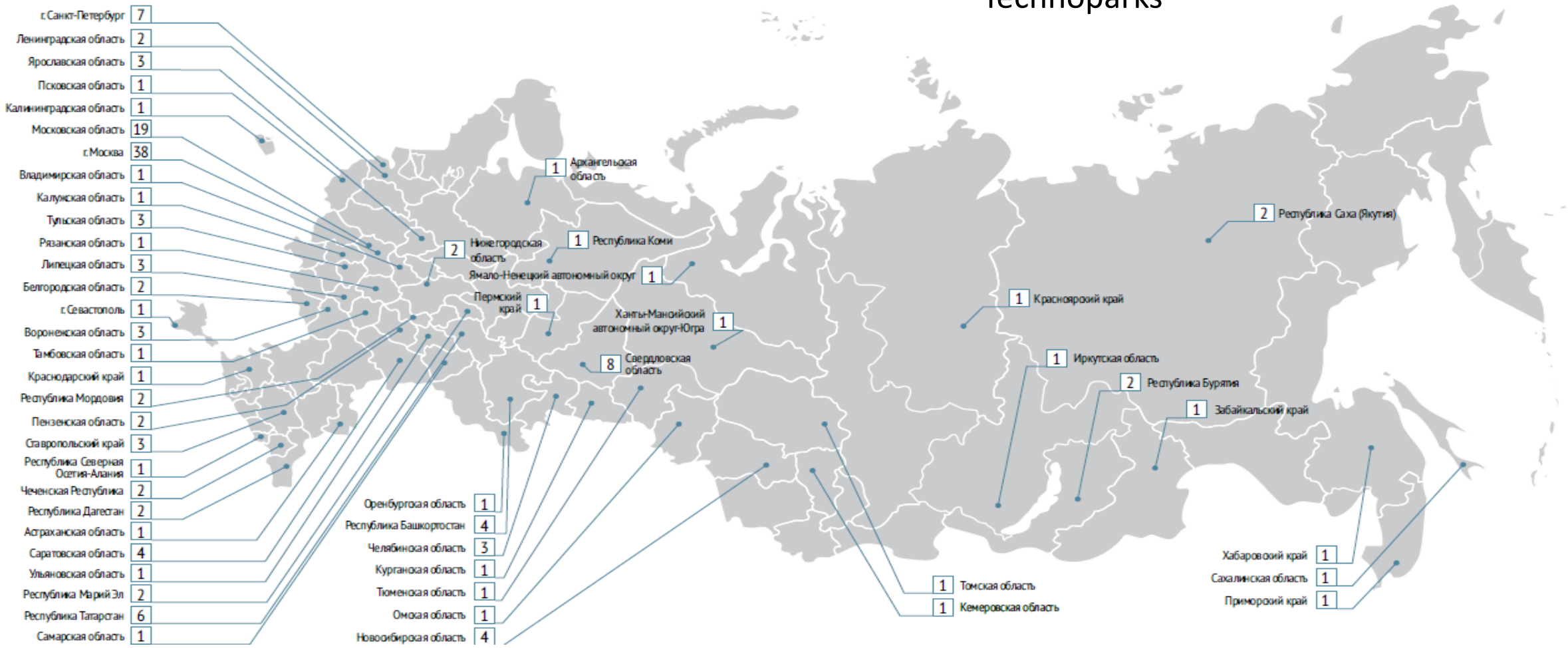
Building Technoparks in Russia 1990-2018

Technoparks in Russia – Figures and Facts

157 TECHNOPARKS 53 REGIONS

ВКЛЮЧАЯ 65 Industrial Technoparks

ИЗ КОТОРЫХ 49 ДЕЙСТВУЮЩИХ, 16 СОЗДАВАЕМЫХ



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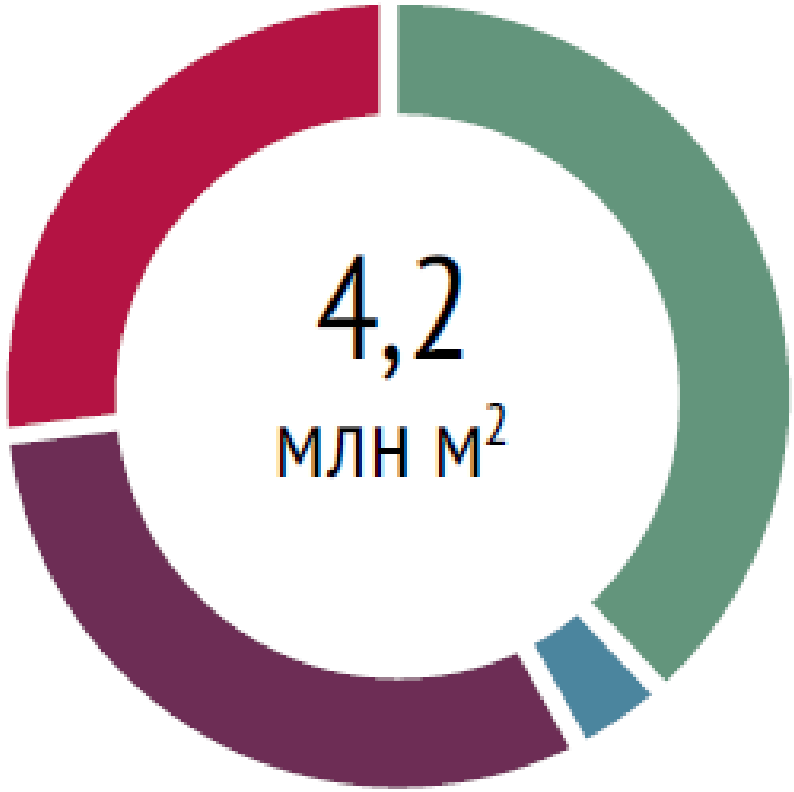
Technoparks in Russia – Figures and Facts

Facilities types structure



27,2%	Offices	1147,4 тыс. м²
27,4%	Other	1159,3 тыс. м²
5,5%	Labs	231,6 тыс. м²
39,9%	Manufacturing	1684,3 тыс. м²

Technoparks in Russia – Figures and Facts

2011

The Association of Clusters and Technoparks was established.

Systematic work on creating the legislative base for supporting Technoparks, revealing best practices and informing about them

Technoparks in Russia – National Standard

2017

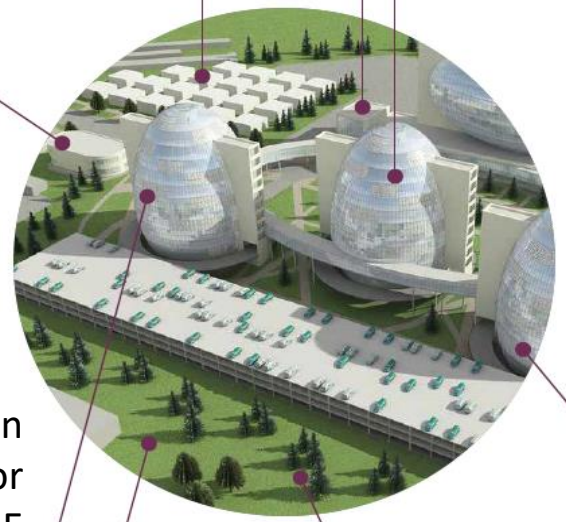
The Association of Clusters and Technoparks developed a National Standard.

ГОСТ Р 56425-2015
«Технопарки» (ГОСТ)

Availability of connection to the central water supply system and to the networks of gas distribution and heat supply

The presence of a connection point on the territory of the Technopark to electric networks with a capacity of not less than 2 MW or specific power not less than 0.2 MW per 1 hectare of Technopark territory

Availability of facilities Technological infrastructures



The total area of Technopark premises is not less than5000 m2

The presence of the management company

Not less than 20% of rooms for SME

Separate territory with an area of at least 3.5 ha

Land related to categories of industrial land and (or) lands of settlements on which it is allowed to place industrial facilities

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Industrial Technoparks in Russia

2018

Legislative changes which created a term “Industrial Technopark” and “Technological Infrastructure.

Legislative background for the futureState support

Industrial Technoaprk has specialized industrial facilities: reinforced floors, cranes, infrastructure (electricity, heat, gas, water supply, other elements).

Next steps

To approve standars for Industrial Technoaprks
To create mechanisms of support

Technoparks in Russia – next steps

2019-2024

New support program

400 mln.USD to suppot 129 more Technoparks

Technoparks in Russia – outcomes

- **Critical role of the government**
  - To create standards
  - To develop support instruments (especially infrastructure)
  - Customs, foreign specialists, certification
- **NOT Critical role of the government**
  - Less regulation in providing grants, orientation on the result, not spending money procedure
  - Innovation process – not government, but education

Part 2

Skolkovo Innovation Park

About Skolkovo Innovation Park

- SPECIAL ECONOMIC ZONE
- SPECIAL CUSTOMS CONDITIONS
- SPECIAL TAX CONDITIONS
- OWN REGULATION SYSTEMS, INCLUDING MEDICAL PROGRAMS
- OWN STANDARDS

Sk Сколково

100+ industrial partners

50 R&D centers of partners already operating in Skolkovo

2000 startups

>25% share in the Russian venture capital market

>20% of all PCT applications in Russia

20 000 square meters prepared laboratory and office space available for startups

2,6 M square meters - Total area

30 000 workers – city capacity

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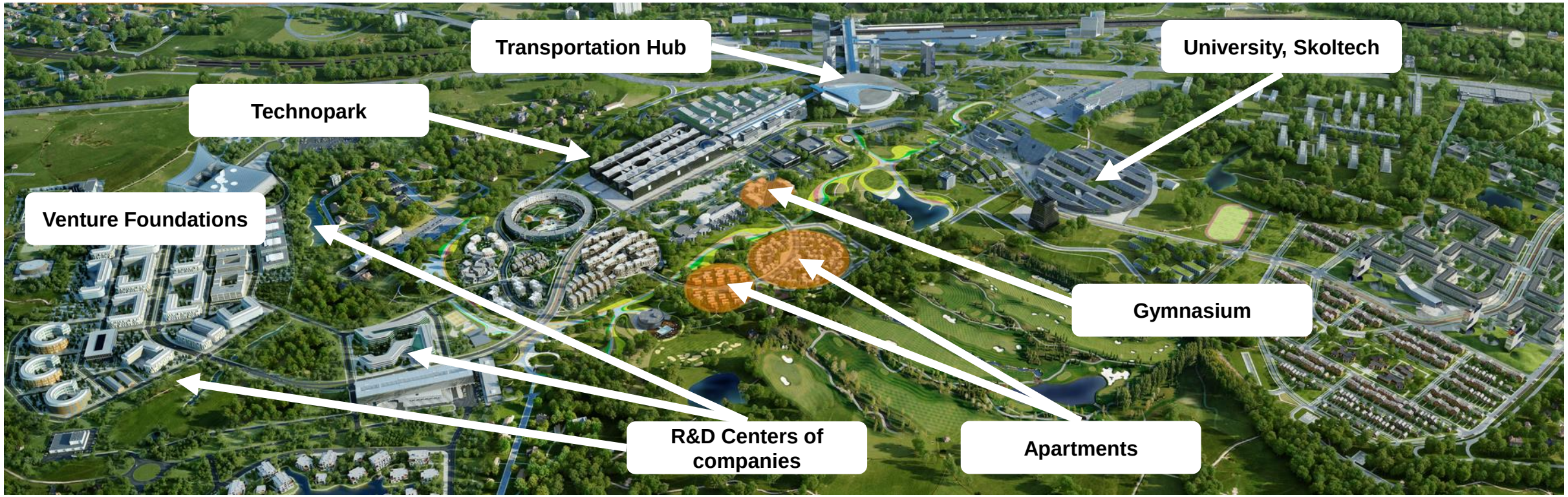
Institutions and infrastructure enabling environment



9 YEARS OLD

MISSION: **TECHNOLOGY COMMERCIALIZATION**

Institutions and infrastructure enabling environment

SKOLTECH TODAY

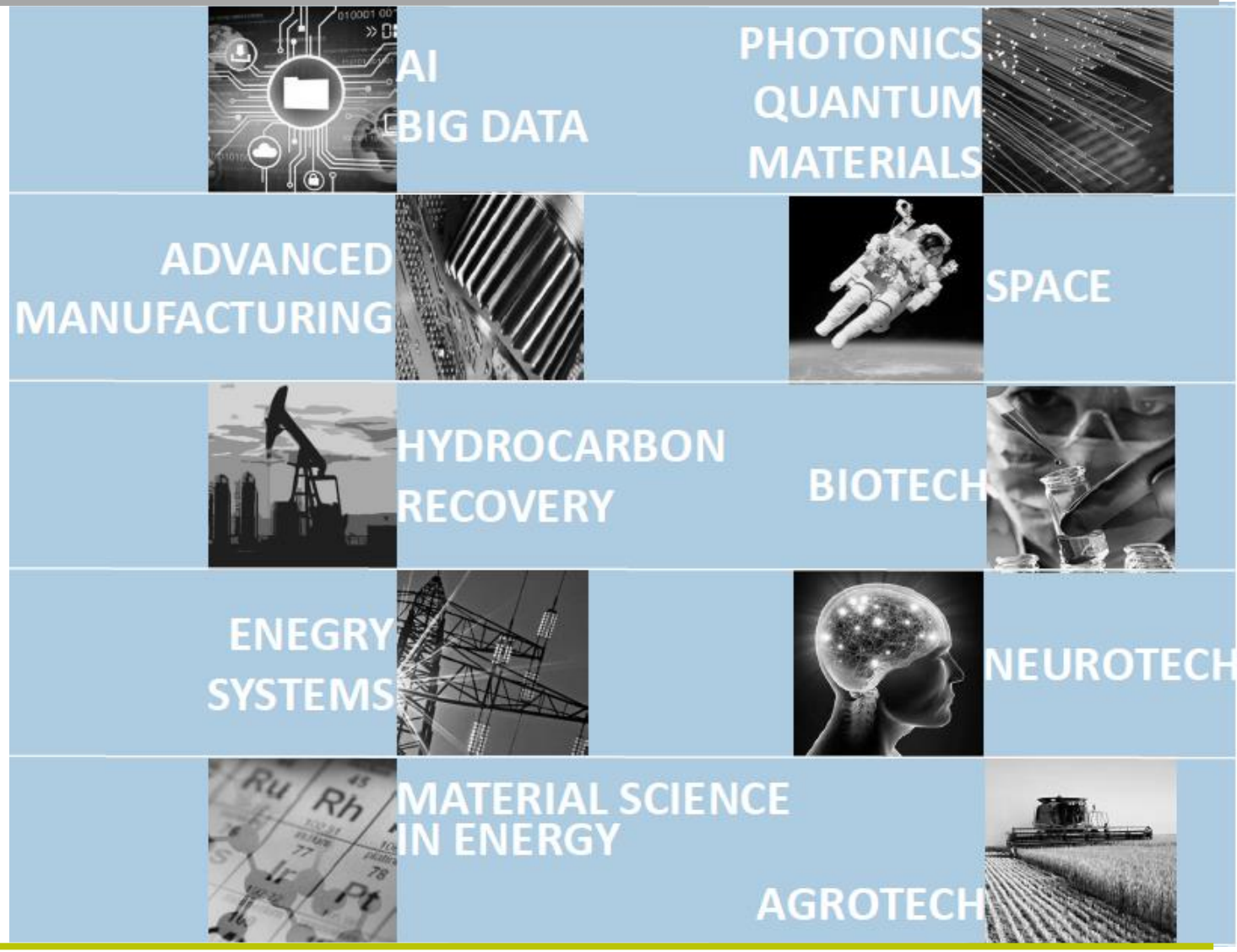
10 TECHNICAL CENTERS

WITH **26** LABS

AND [ ] CENTER FOR ENTREPRENEURSHIP AND INNOVATION

150 FACULTY

950 STUDENTS



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Institutions and infrastructure enabling environment

Values for Corporations

- **Partner status of Skolkovo Foundation** – 100
  - Tax credits for Partner Research Centers – 10 (including Boeing, CISCO, Fanuc)
  - Access to shared facility equipment
- **Member of Industrial Advisory Group of Skoltech**
  - Access to Professors for joint research
  - Access to Students for internships, joint thesis, placement
  - Education for industry

Valurs for Startups

- **Resident status of Skolkovo Foundation** – 2100
  - Tax credits
  - Additional financing
  - Services on preferential terms
  - Simplified procedure for hiring foreign employees
  - Information and PR support
- **Member of Industrial Advisory Group of Skoltech**
  - Access to Professors for joint research
  - Access to Students for internships, joint thesis, placement
  - Education for industry
- **Easier access to the Development Institutes**
  - Offices of 10 institutes in Skolkovo

Institutions and infrastructure enabling environment

- **Everything in-house is good, but not critical**
- **Opportunities and services are more important**

Collaboration between research and innovation

- Government Decree # 218
  MEASURES OF THE STATE SUPPORT FOR THE DEVELOPMENT OF COOPERATION OF RUSSIAN HIGHER EDUCATIONAL INSTITUTIONS AND ORGANIZATIONS IMPLEMENTING COMPLEX PROJECTSON CREATION OF HIGH-TECH PRODUCTION

- **Gap between a university startup and a business deal**
  - How to support a university startup?
  - STRIP program

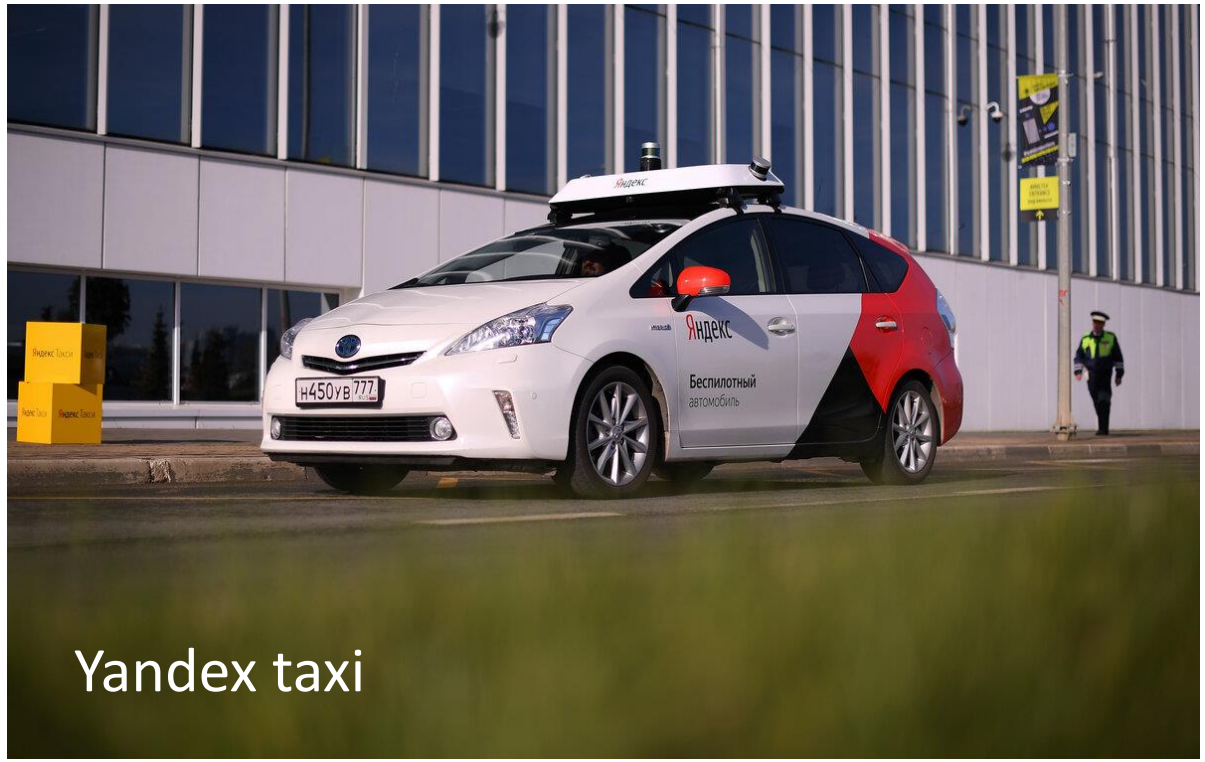
Collaboration between research and innovation

- **Don’t forget that innovation has a venture nature**
- **Efficient budget spending ≠ startup company**

Experience developing Technology Park

TECHNOPARK AS A PILOT PROJECTS TESTBED

- Unmanned vehicle testbed
- Smart grid testbed
- Smart city (IoT testbed)



Yandex taxi

Experience developing Technology Park

- **Technopark itself can serve as a good testbed for new technologies**

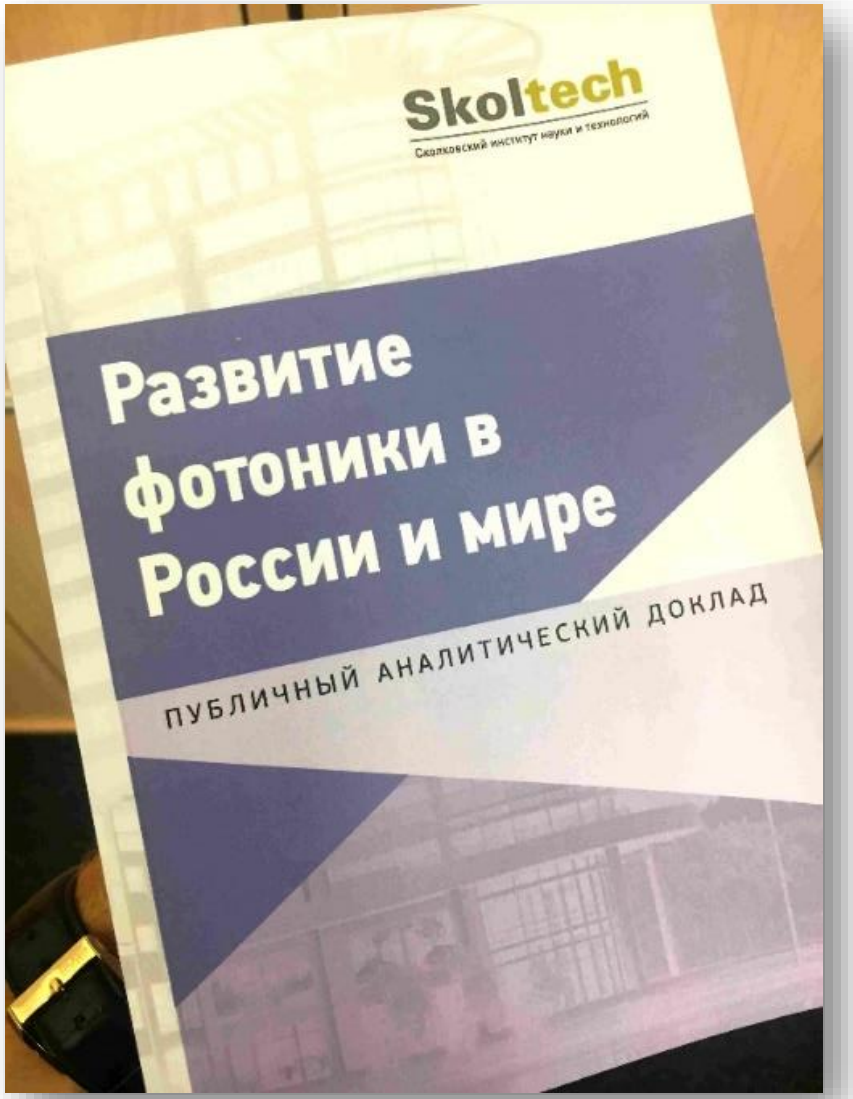
Some of the key lessons learned

Collaboration with industry in different formats

- Skoltech Industrial Advisory Groups
- Industrial analytics
- Long-term relations

The role of the sales team

- How to survive if your Technopark is expensive?
- Competition



Some of the key lessons learned

SALES OFFICE SYSTEM

- **5 clusters:** IT, Energy, Biotech, Advanced Manufacturing, Space
- **Partners Office**
- **Industrial Liaison Office**
- **Project Office**
- **Contract Office**
- **Analytical Office**
- **Advisor to the President on fundraising**

- Pre-sale
- Sale
- Negotiations
- Project management
- Analytics
- Fundraising
- Assistance for establishing contacts
- Statistics

SYNERGY

Some of the key lessons learned

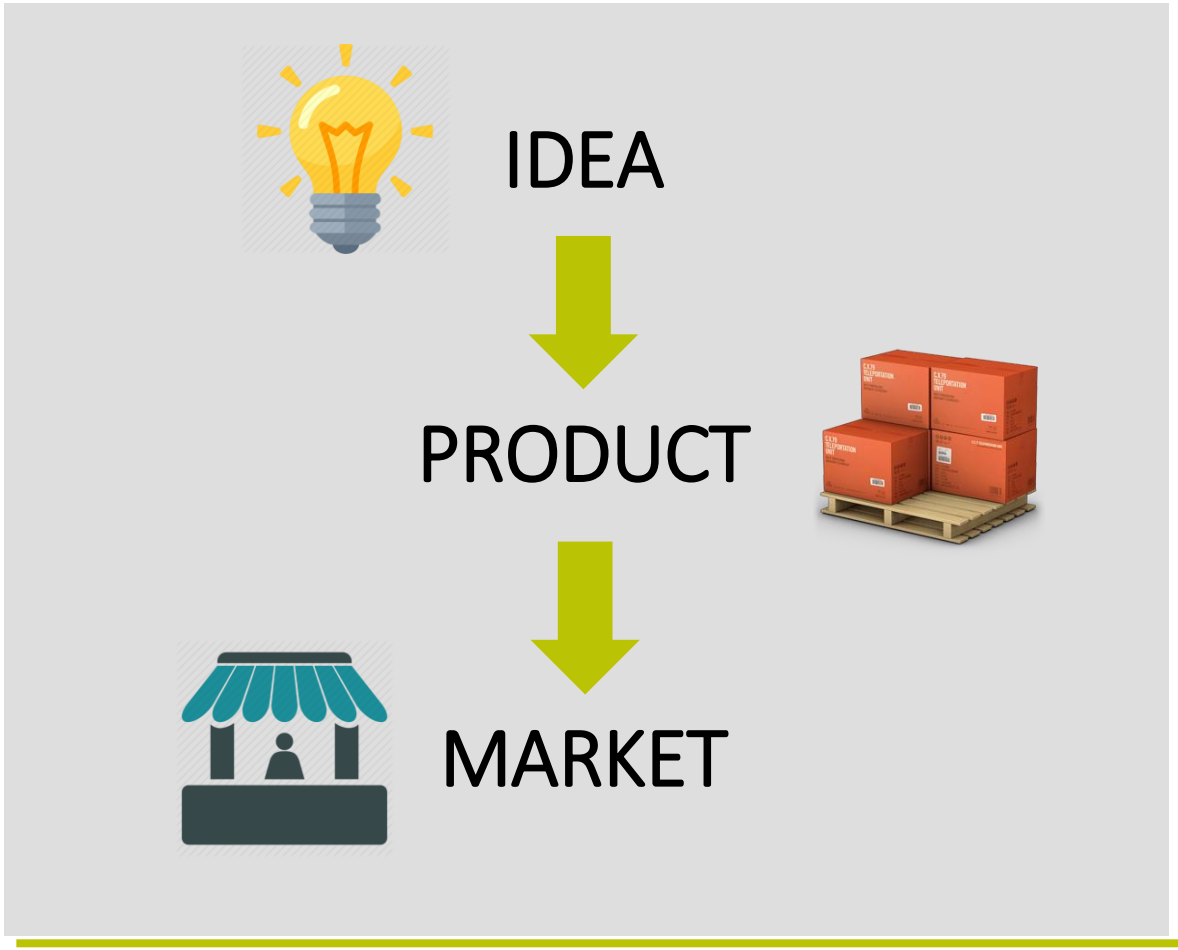
SKOLTECH SALES OFFICE STRUCTURE

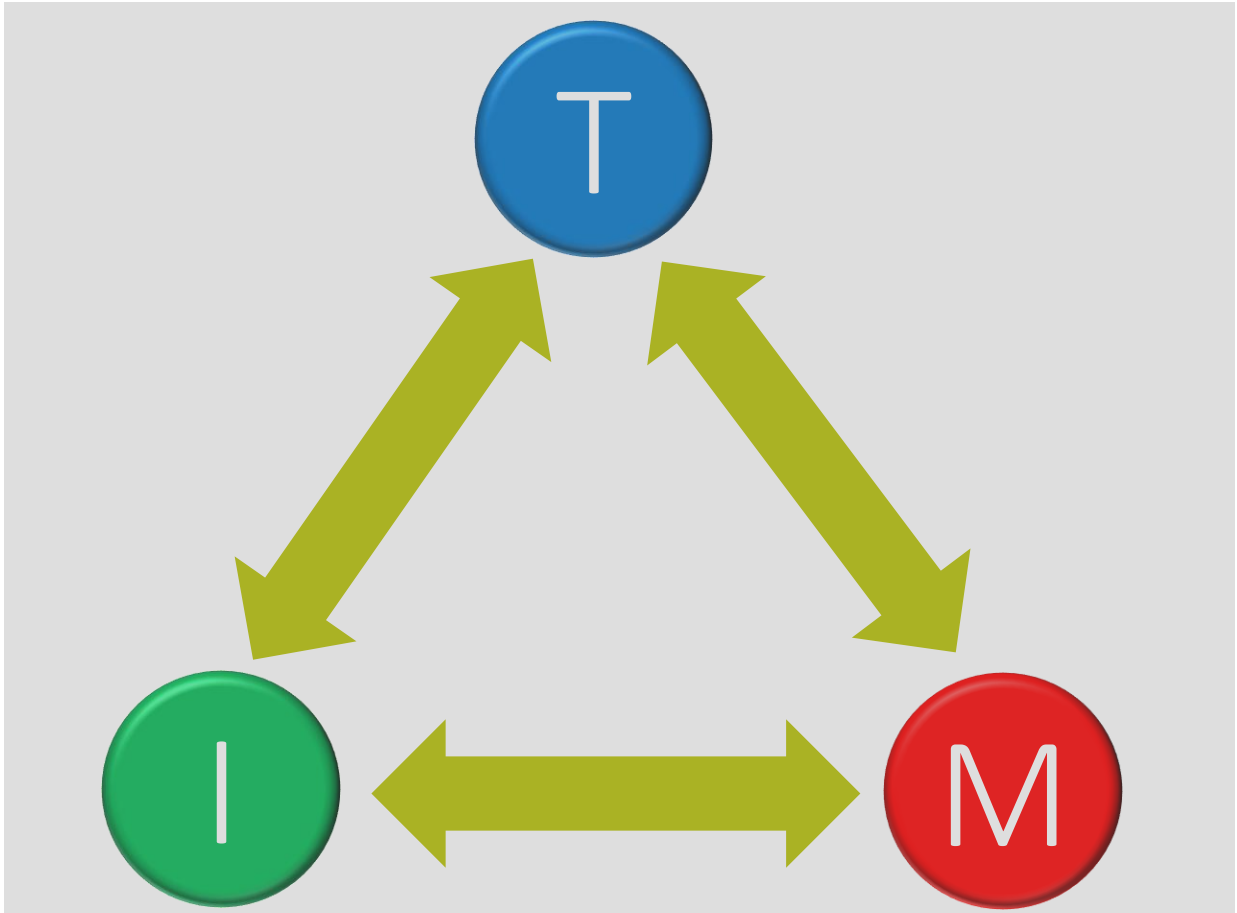
	Офис партнерских программ с индустрией	Контрактный офис	Департамент индустриальных программ	Офис по индустриальной и научной политике	Советник Ректора по фандрайзингу
PRE-SALE	✓				✓
SALE	✓		✓		
ПЕРЕГОВОРЫ		✓	✓		
ВЕДЕНИЕ ПРОЕКТА		✓	✓		
ФАНДРАЙЗИНГ					✓
АНАЛИТИКА				✓	
ПОМОЩЬ	✓		✓		
СТАТИСТИКА	✓				

Some of the key lessons learned

- Long-term relations with stakeholders
- Technopark is to be commercialized itself

INNOVATIVE

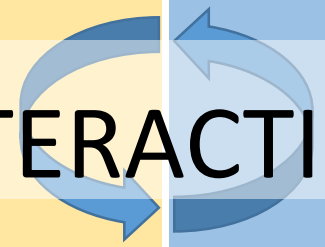




DIGITAL

ENGINEERS

MATEMATICIANS



INTERACTION

Not enough math

Lack of understanding of real life

Problem solving skill

To educate

To educate

Innovative and Digital

- **Technopark should always be on the cutting edge**

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THANK YOU FOR YOUR TIME!

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