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SKOLKOVO TECHNOLOGY CHALLENGES

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FRUCT

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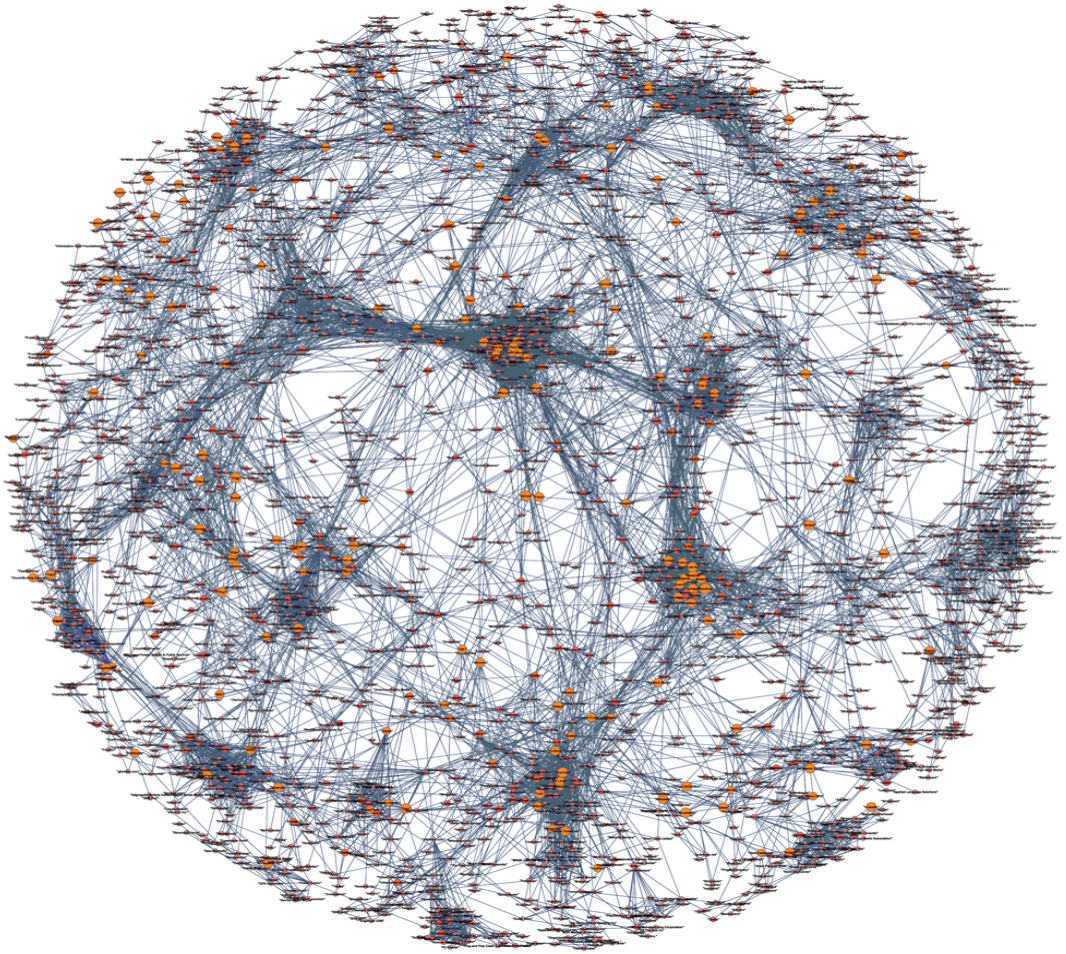
CONNECTIONS



The Mission of Skolkovo

Skolkovo is a strategic development initiative designed to:

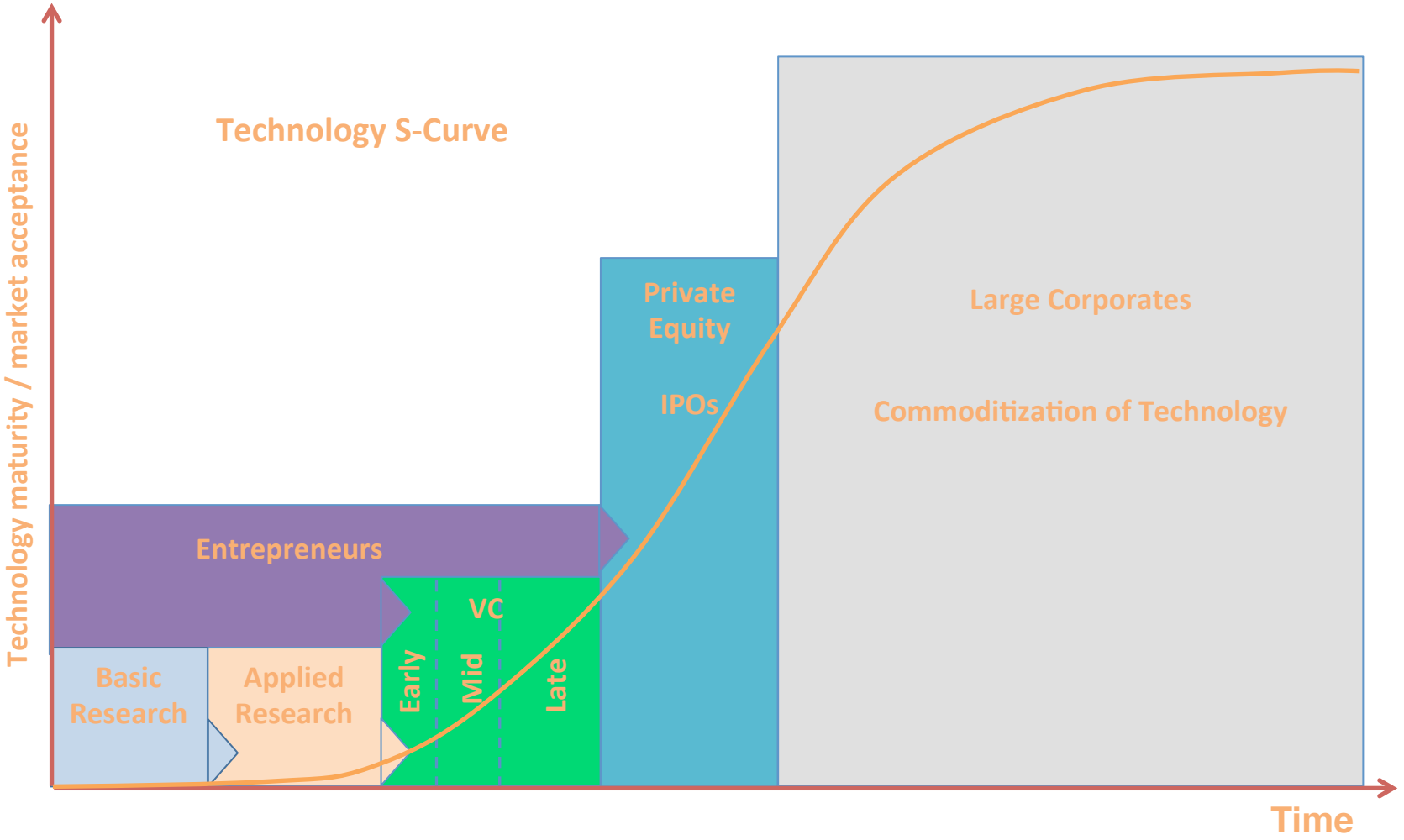
- **Diversify and modernize** the Russian economy through innovation and entrepreneurship
- **Fully-Integrate Russian science and technology** into the global economy
- **Develop human capital** through world-class research and education
- **Create globally-competitive** knowledge-based companies

GUIDING PRINCIPLES

- Attract world-class talent, institutions and businesses: open, transparent, fair
- Self-sustaining over time
- Maximize private sector participation
- Physical and virtual
- Accountable governance

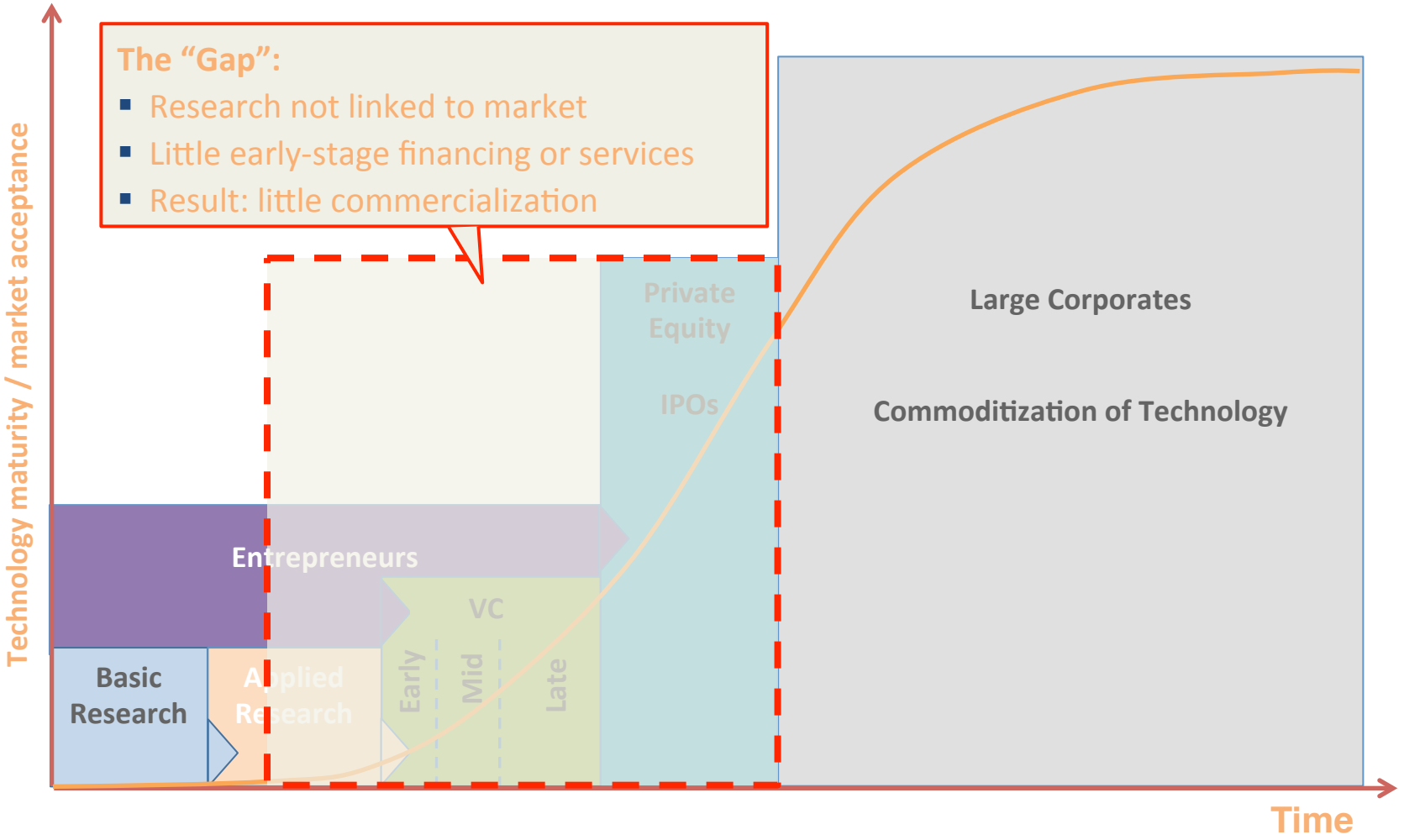
WHY SKOLKOVO?

NORMAL TECHNOLOGY ENVIRONMENT



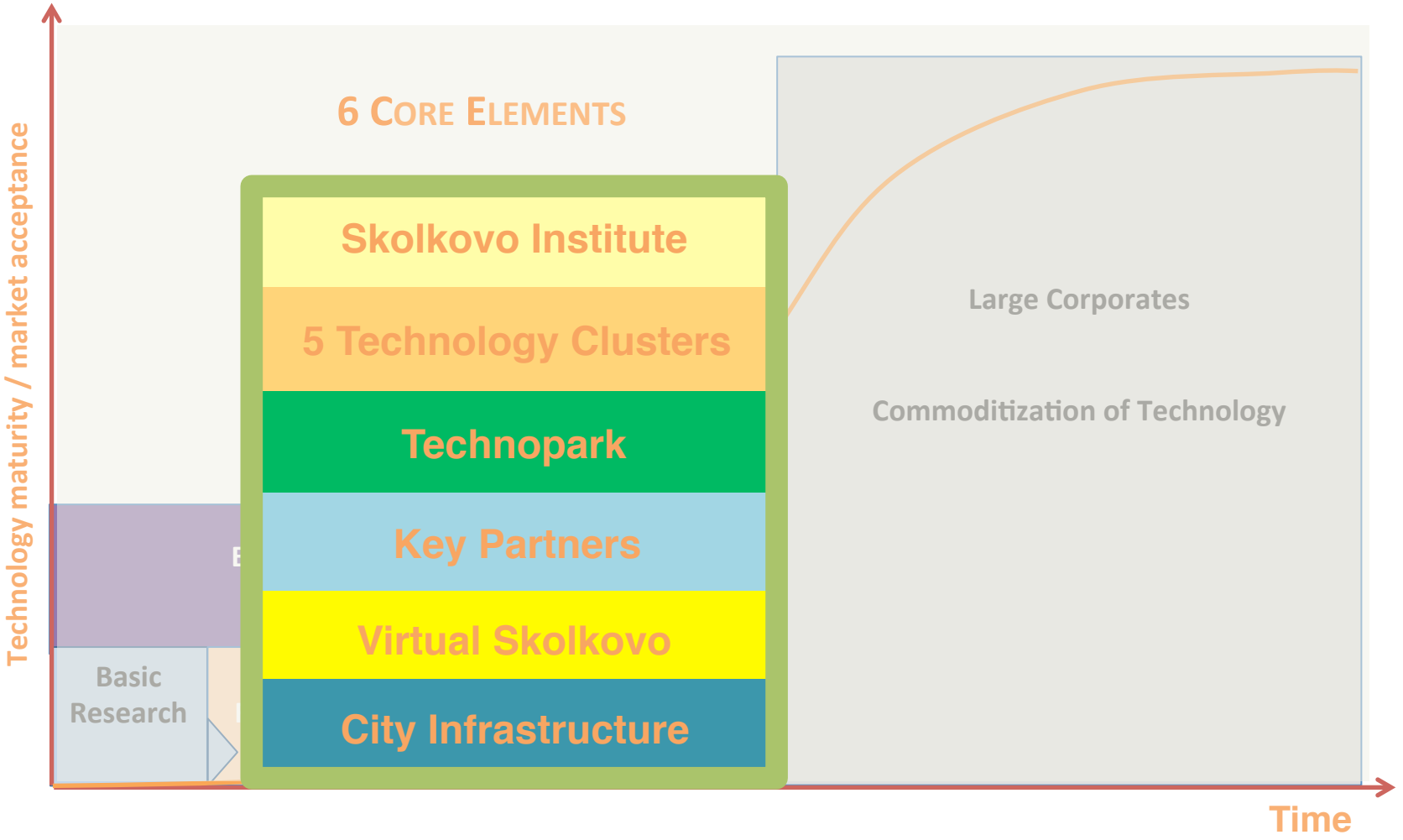
WHY SKOLKOVO?

CURRENT RUSSIAN SITUATION



Skolkovo Ecosystem

Goal: "Fill The Gap" with Tools for Efficient Commercialization



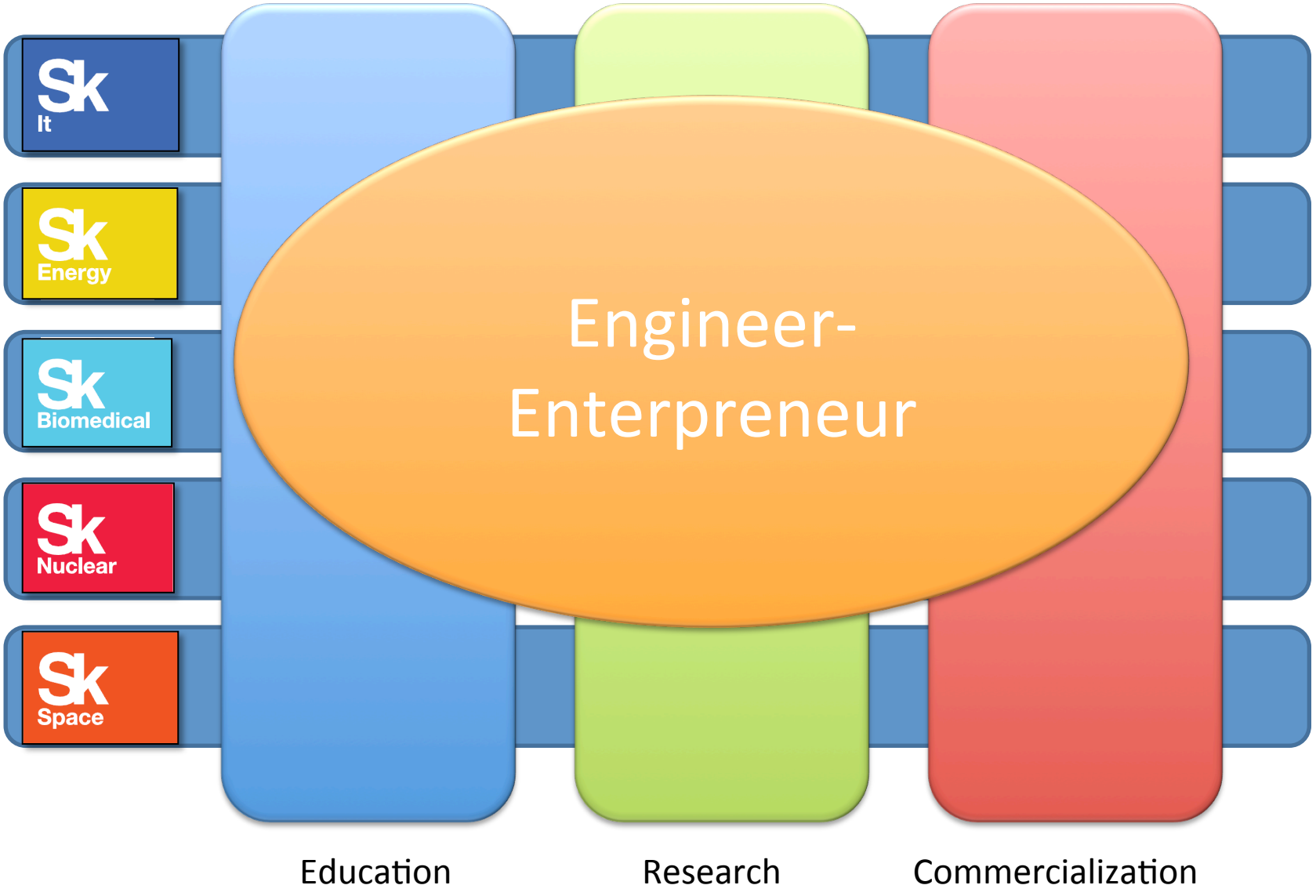
Key Ecosystem Players

TECHNOLOGY CLUSTERS

Sk Energy	Energy efficiency, energy saving, new energy technology
Sk It	IT and software engineering
Sk Biomedical	Biotechnology and medical technology incl. development of medical drugs and equipment
Sk Space	Space technology in telecoms, navigation, imaging, life systems
Sk Nuclear	Nuclear medicine, energy, other applications

REFLECTING 5 MODERNIZATION PRIORITIES OF THE RUSSIAN GOVERNMENT

Skolkovo Ecosystem Foundation

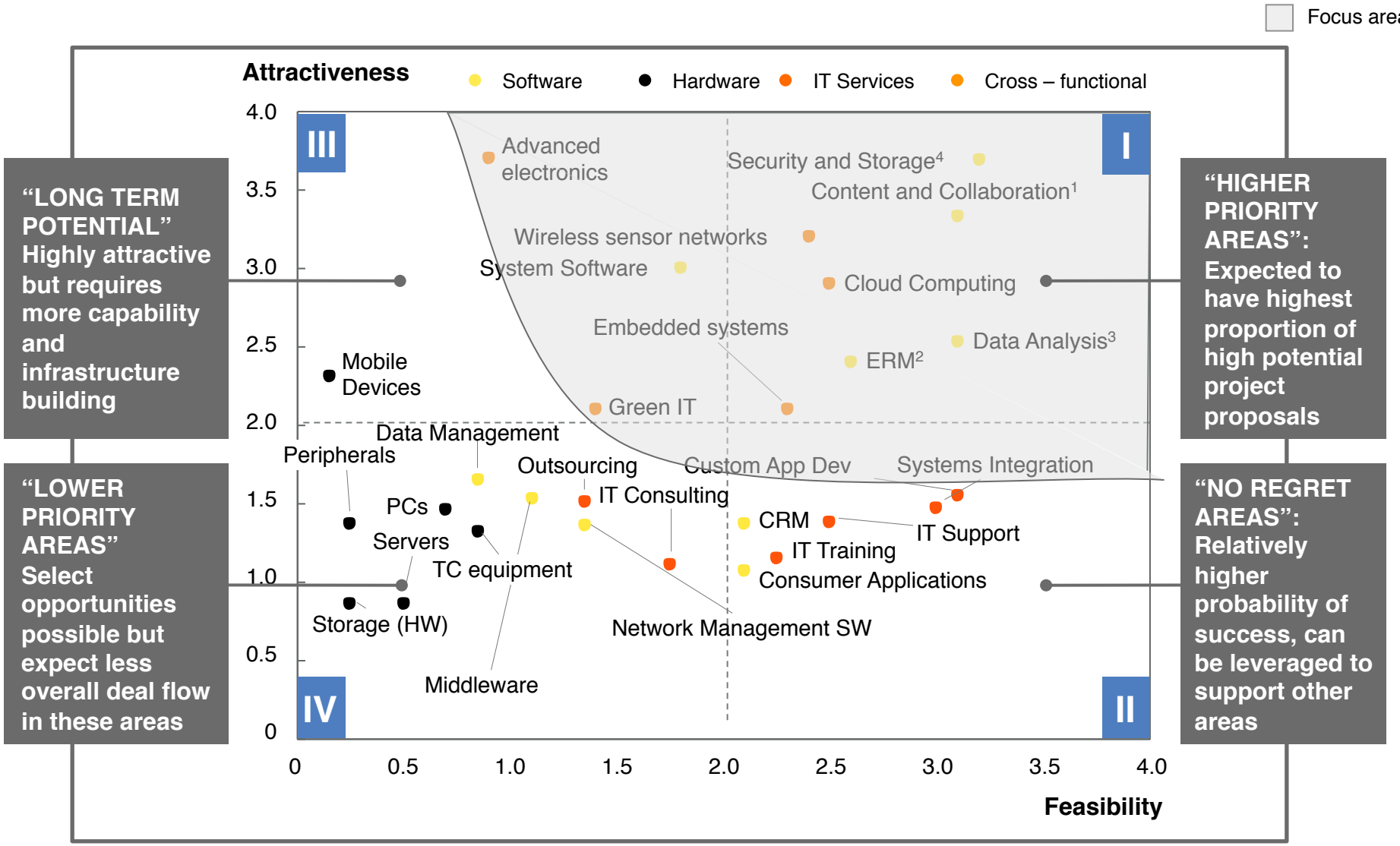


GLOBAL IT TRENDS

- *WORLD*
  - **IT SERVICES:** the scope of services in the IT sector far exceeds the amount of software development (software), but the growth of the sector has stabilized
  - **SOFTWARE:** new markets gain importance in view of reducing the use of unlicensed software
  - **EQUIPMENT:** in developed countries IT equipment spending is a small proportion of capital spent in emerging markets – its a significant amount

- *RUSSIA*
  - **IT SERVICES**: IT services is a small fraction of total IT spending, compared with Western countries
  - **SOFTWARE**: stable rapid growth associated with the automation of industries and state projects
  - **EQUIPMENT**: the IT spending in Russian firms is mostly the cost of IT equipment

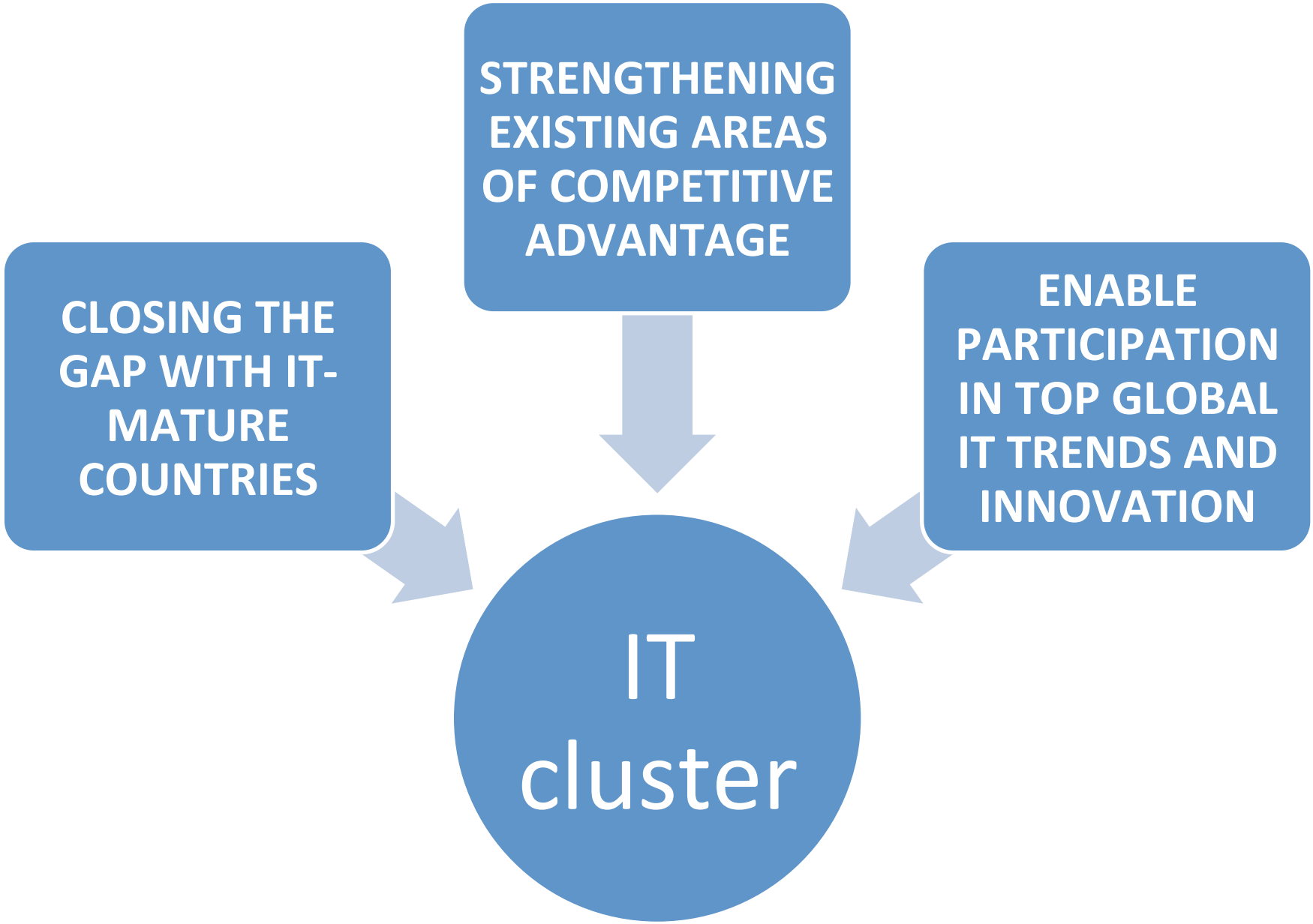
IT CLUSTER FOCUS AREAS



1, 2, 3, 4 – Specific priority area candidates inside the directions are listed on the next page

SOURCE: IDC data, expert interviews

SKOLKOVO IT PRIORITIES



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IT CLUSTER FORESIGHT

New generation of intelligent multimedia search engines

Image, video and voice recognition and processing

Mobile applications

Web X.0

Wireless sensor networks

"Green" Information Technologies

Cloud computing

IT security

New methods of information processing, storage and transfer

Development of new highly productive data processing and storage systems

IT in Education

IT in medicine and health care

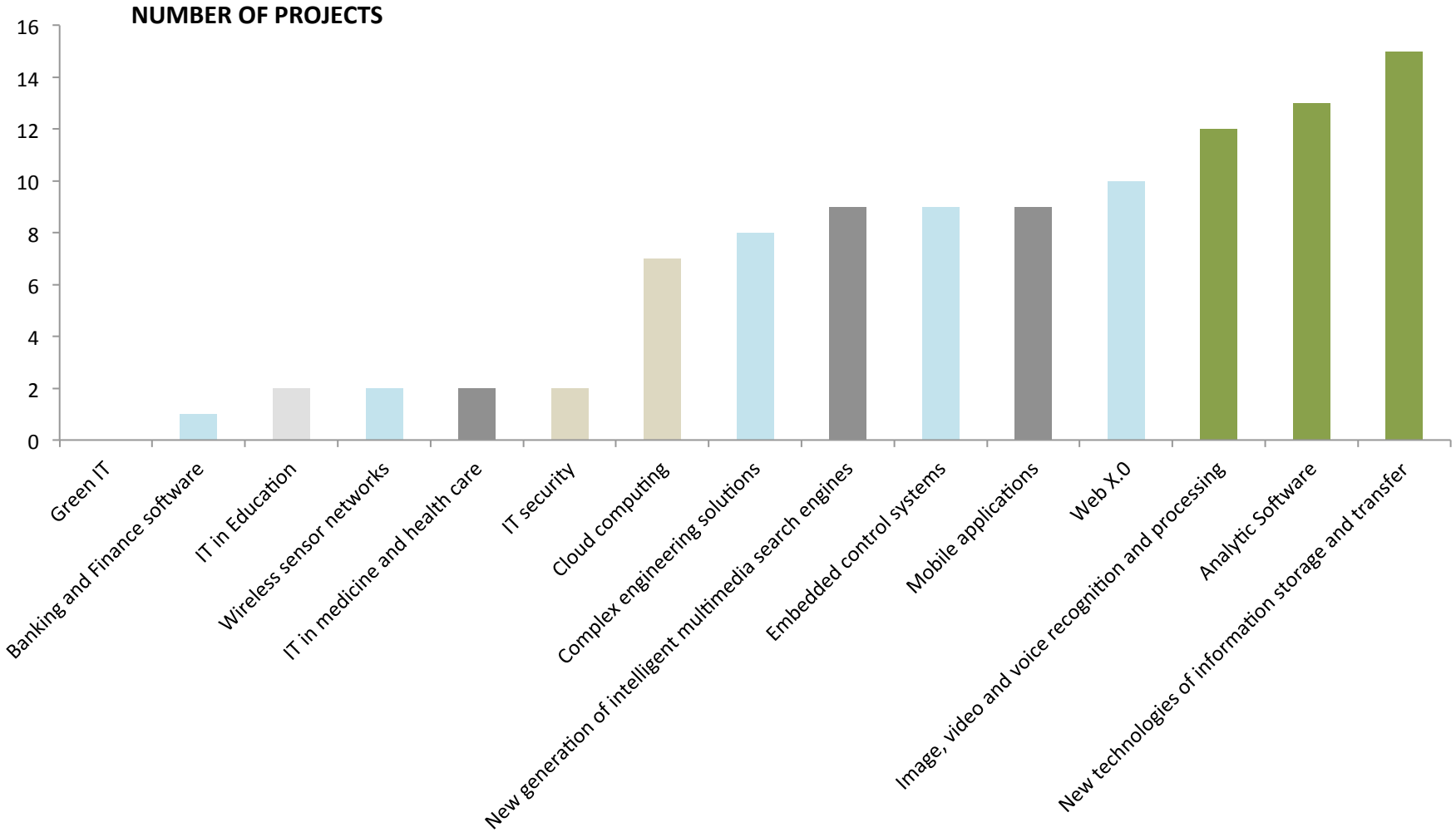
Complex engineering solutions

Financial and banking software

Analytic Software

Embedded control systems

IT Cluster Projects' statistics



SOME IT CLUSTER STATISTICS

APPLIED FOR SKOLKOVO STATUS	
Total	+500
Approved	180
APPLIED FOR FINANCING	
Total	40
Financing granted	30

Total financing projects: 1 600 mln rub. (2010-2013 rr.)

DIRECT START-UP SUPPORT

Taxes and benefits

- **No VAT or profit tax** for up to 10 years if profit is < $10M/year and turnover is <$30M/year
- **14%** unified social tax rate for residents (vs. normal 34%)
- **Refund of import customs** duties and VAT expenses paid during import to the RF customs territory

Grants

- **YOUNG GROUPS OR STUDENTS,** max grant 1,5 mln rbl
- **START-UPS,** max grant amount 30 mln rbl
- **EARLY STAGE,** max grant amount 150 mln rbl
- **ADVANCED STAGE,** max grant amount 300 mln rbl


Заседания Клуба друзей «Сколково» в рамках ИННОПРОМ
InnoLive – инновации в жизнь
Общество через 20 лет: к чему приведут инновационные технологии. Взгляд футурологов


SKOLKOVO
СКОЛКОВО


Et
Энерготех
Bt
Бизнес
Sk
Сколково
ВЕДОМОСТИ
Sk
Сколково
ВЕДОМОСТИ
InnoLive – инновации в ж


ВЕДОМОСТИ
Sk
Валерий Гудов


SKOLKOVO

IT CLUSTER KEY PARTNERS

Российская ассоциация телемедицины

ROSTELECOM always in touch

Fraunhofer IGD

Microsoft

Nokia Siemens Networks

NOKIA Connecting People

SIEMENS

Российская академия наук Институт проблем нефти и газа

МГУ имени М.В. Ломоносова

Российская Академия Наук

CISCO

EADS

РЖД

РОСНЕФТЬ

RFD Rock Flow Dynamics

ИНГТ СО РАН

THALES

AIRBUS AN EADS COMPANY

Российский государственный университет нефти и газа имени И.М. Губкина Базовый ВУЗ нефтегазового комплекса России

ЛУКОЙЛ НЕФТЯНАЯ КОМПАНИЯ

Mobility and Collaboration

Green Secure Cloud

IT New Frontiers

Wellbeing with IT

Managing Complexity with IT

How to Enter Skolkovo

Apply your project for a Participant Status online: app.i-gorod.com

Fulfill main criteria: a company should have legal status in Russia + internationally recognized scientist in the project

10 randomly chosen experts from a cluster will independently make their conclusions on the project

If 5 or more of them are positive - than get your certificate of a Skolkovo participant

All the procedure will be finished in a month time

How to get Grants

Being a Participant of Skolkovo apply for a grant

Cluster's experts will decide if your project is eligible for a grant

Due Diligence

Skollkovo Invest committee is making the final decision

All the procedure will be finished in 2 months time

WHAT SKOLKOVO IS, WHAT SKOLKOVO IS NOT

We make financial grants	→	We are not an investment fund; we do not invest, take equity stakes or board seats
We are not-for profit		
We finance and support R&D and early-stage companies	→	We do not finance production or advanced commercial operations
We are a platform for international collaboration in R&D and technology transfer	→	We are not a sales agent
We support and finance innovative R&D and technology start-ups, both Russian and international	→	We are not limited to only Russian technology ; in fact our mandate is to enhance 2-way tech transfer

BENEFITS

- Possibility to work with leading Russian innovative companies
- Privileges from Russian government
- Grants from Skolkovo
- Direct access to Russian market

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Skolkovo M.D.

Skolkovo M.D.
Мобильное Диагностическое Устройство

Sk Skolkovo

Уникальный отбор концепций мобильного диагностического устройства

Устройство должно выполнять диагностику определенного перечня заболеваний.

Победитель станет участником проекта «Сколково» и получит грант в размере

до 9 миллионов рублей.

Прием заявок открыт до 2 июня 2012 года.

Условия отбора – на сайте **md.sk.ru**

Appendix

SELECTED PROJECTS

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CLOUDMACH

cloudmach
HTML5/WebGL Platform for 3D Apps

Название проекта

3D rendering in a cloud

http://www.cloudmach.com/

IT Foresight

Mobile Applications

Cloud Computing

ГРАНТ получен

Руководитель Проекта

Max Gannutin

- Graduated Saint Petersburg State Electrotechnical University;
- As scientist researched thermodynamic modeling in Saint Petersburg State Polytechnical University;
- Worked in large international companies, such as netViz, where he developed algorithms for complex 2D graphics rendering;
- Founded Cloudmach to commercialize idea of 3D rendering in a cloud.

Аннотация проекта

3D rendering in a cloud allows to create interactive 3D environments for any web browser on any device.

Any Browser

Any Device

No plugins, No downloads, No instalations

Партнеры проекта

Cloudmach Inc
(co-investor)

МФПА Московская финансово-промышленная академия

FORESIGHT VENTURES

Участие в Сколково

-First project powered by 3D rendering in a cloud technology **released** (3D virtual helpdesk);
-Project team become **2 times bigger**;
-Company attended main industry **conferences** in Europe, USA and Russia.

ООО «Глобал Лаб»

Название проекта

Global Lab: the Collaborative Learning Platform

IT Foresight

ИТ в образовании

http://www.ilaet.co.uk

Руководитель Проекта

Boris S. Berenfeld, Ph.D.
President and CEO
International Laboratory
Of Advanced Education Technologies

Аннотация проекта

Global Students Laboratory (Global Lab) is a web-based learning platform that combines advanced technologies with innovative learning strategies to support student inquiry. A complete, turnkey solution, Global Lab offers all the resources and tools needed for collaborative investigations. Students use digital probes and a wide range of mobile devices to submit data directly into the project-wide database where findings are accessed, visualized, analyzed, and discussed. A cloud-delivered education IT solution, Global Lab integrates social networking and Internet applications into a cohesive framework to support cutting-edge education.

Партнеры проекта

International Laboratory of Advanced Education Technologies

Участие в Сколково

3DiVi Company

3DVision: Development of technological platform (hardware and software) for three-dimensional computer vision

http://www.3divi.com

ГРАНТ ПОЛУЧЕН

IT Foresight

Recognition and processing of images, video and audio

Project Leader

Pavel Zaytsev

CEO and President of Papillon ZAO. Managed to grow the startup company to a vertically integrated provider of biometric solutions with $50M in annual sales. Pavel is the author of more than 20 inventions and useful models in biometric technology. He is the owner of patents in Russia and Europe; has patent applications in the USA. Education: Master of Science degree in Applied Mathematics and Physics from Moscow Institute of Physics and Technology -1985.

Project Summary

The project is aimed at the development and commercialization of the technological platform (hardware and software) for three-dimensional computer vision. This solution can be employed in various applications and electronic appliances including application of natural user interface for Smart TV.

The technology can be applied in:

- interactive coaching systems
- video games
- new generation TV-sets interface, GoogleTV in particular
- creation of personal 3D avatar for games and virtual shopping

Partners

- The Ural Federal University (UFU, Yekaterinburg)
- Matthew Turk, PhD from MIT and MS from Carnegie Mellon University

Skolkovo Participation

Skolkovo support allowed 3DiVi Company to open a new office in Chelyabinsk where 20 highly qualified developers will work. Moreover the company is now about to finish negotiations concerning creating a new computer vision laboratory in cooperation with the Ural Federal University. In October 2011 3DiVi will visit the Silicon Valley as a part of delegation headed by Chelyabinsk region Governor.

ООО «Титан Информационный Сервис»

WE BREATHE LIFE INTO IT™

Project Name

Speereo Speech Recognition System

IT Foresight

Recognition and processing of images, video and audio signals

http://www.speereo.com

Project Leader

Konstantin Lamin

Graduated from Leningrad Technical Institute (St.Pete Tech. Inst.) as an engineer. While studying was involved into a research group that was working in AI project. Later has organized several IT companies. Since 1998 is investing own capital into Speereo Software UK Ltd. – a research project that deals with speech recognition technology and voice interfaces. At the same time has been actively administrating own companies that provide IT services and software development.

Short Description

We are building voice interfaces where all the commands are issued in everyday language or even set by Users. Speereo Speech Recognition (SSR) is our own invention – fully Russian product. SSR recognizes continuous speech not depending on a speaker (man, woman, child). SSR is to be implemented into video interfaces, home appliances, 'smart home' systems. Separate voice interfaces are to be created for automotive industry and navigation. SSR is to be supplied to aerospace industry and to be used in voice interfaces for people with limited abilities.

Project Partners

'Voenmech' Tech. University, RU

Global Innovation Labs Company, US

Skolkovo Involvement

SSR testing stands are published into Internet and made available.

Voice Interfaces for automotive industry and video-content are being developed.

Toytemic Inventions, LLC

Название проекта

Strategy-on-carpet: devices and methods designed to extend computer games into real world.

http://www.toytemic.com

IT Foresight

- Встроенные системы управления
- Беспроводные сенсорные сети

Руководитель Проекта

Evgeny Smetanin

Producer, manager and developer in digital edutainment, computer games, interactive toys and gadgets. Experienced in licensing of the designed products to Western companies. In 2009 Smetanin and his partners had founded Toytemic Inventions for developments in toy robotics. During last year Toytemic led by Smetanin has subsequently won contests in business-incubator of the Academy of National Economy, «Innovative Toy" (Toy Russia'11), "Skolkovo Innovation Award» (Cisco I-PRIZE).

Аннотация проекта

Integrated applied technology designed to support wireless ad hoc networks of mobile and self-propelled devices in personal area (up to 10 m). The core of the technology is an original-designed positioning system enabling each device real time mapping of the exact spatial position and orientation held by any moving object accurate within 2-3cm/30degrees. Initial field of application – toys & games. This project involves the development of a standardized cost-effective kit of built-in electronic components and simple RCs to transform motorized cars, animals, and robots into game units. Regular grouping operations, general movement parameter settings, and other similar elements should apply to these units.

Партнеры проекта

- Ioffe Physical Technical Institute, RAS
- Lebedev Institute of Precision Mechanics and Computer Engineering, RAS
- Moscow State Technical University "MIREA"
- Georgia Institute of Technology
- Condor Solutions, Ltd.
- Dusenberry Entertainment

Участие в Сколково

- participation in presentations and contests
- expanding professional contacts & collaboration
- new opportunities in fund raising