

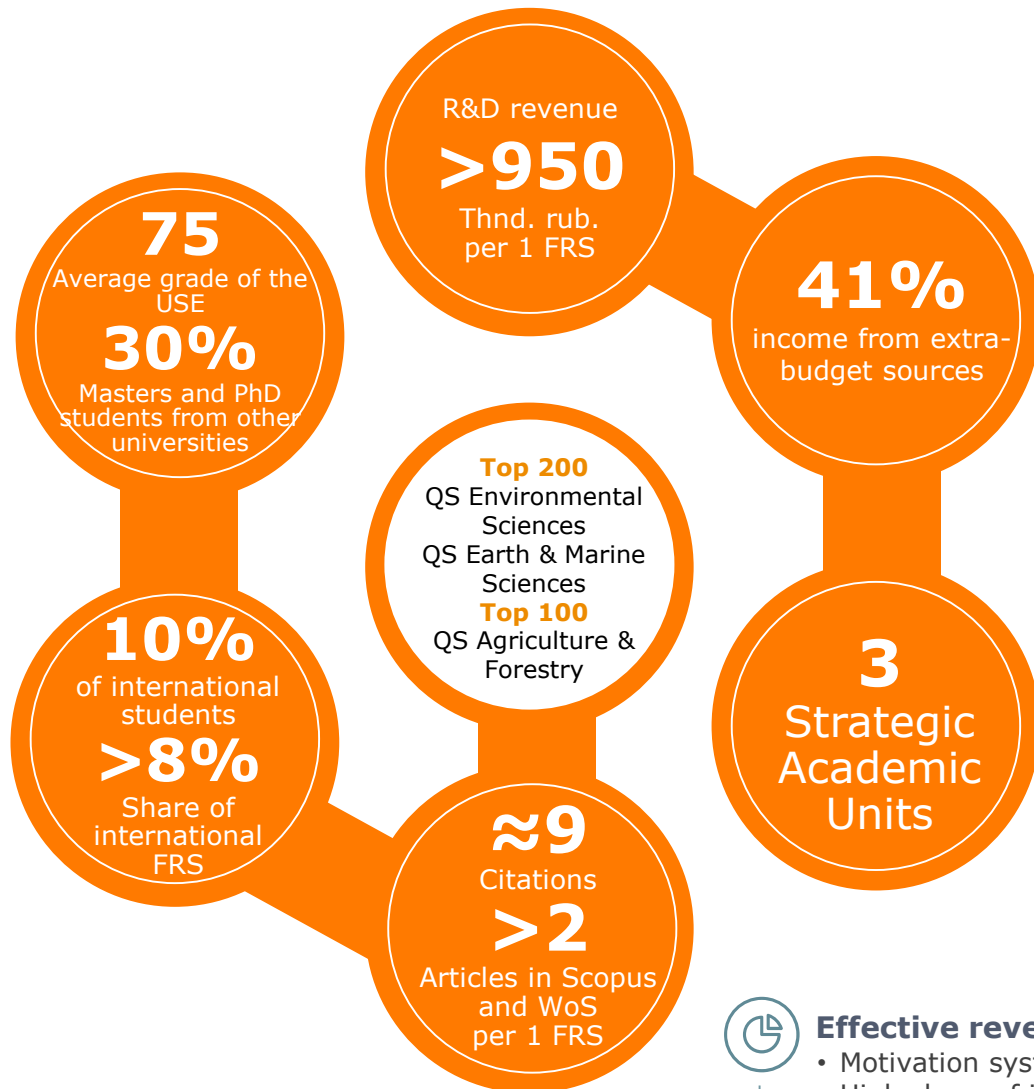


СИБИРСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ
SIBERIAN FEDERAL UNIVERSITY

Roadmap of the competitiveness enhancement program 2018-2020

October 2017

THINK PLANET, DO SCIENCE



High performance in publication activity and citation

- An effective motivation system
- 3 SibFU journals indexed in Scopus and WoS
- Intensive networking cooperation



Effective mechanism of recruiting talented Russian and international students

- Online admission tests
- New Grant and Scholarship Support Programs
- Module academic programs; new joint academic programs
- PhD SibFU
- The network of the University's offices in Central Asia and Central Africa



Effective mechanism of recruiting leading international scientists

- 8 scientific schools, centers of excellence in key research areas
- Grant support and competitive salary
- Effective referral system of recruiting new Faculty and Research staff
- Postdoc SibFU



Organizational structure that promotes competitiveness

- 2 Strategic Academic Units in the organizational structure
- 1 Strategic Academic Unit is in the process of formation



Effective R&D commercialization

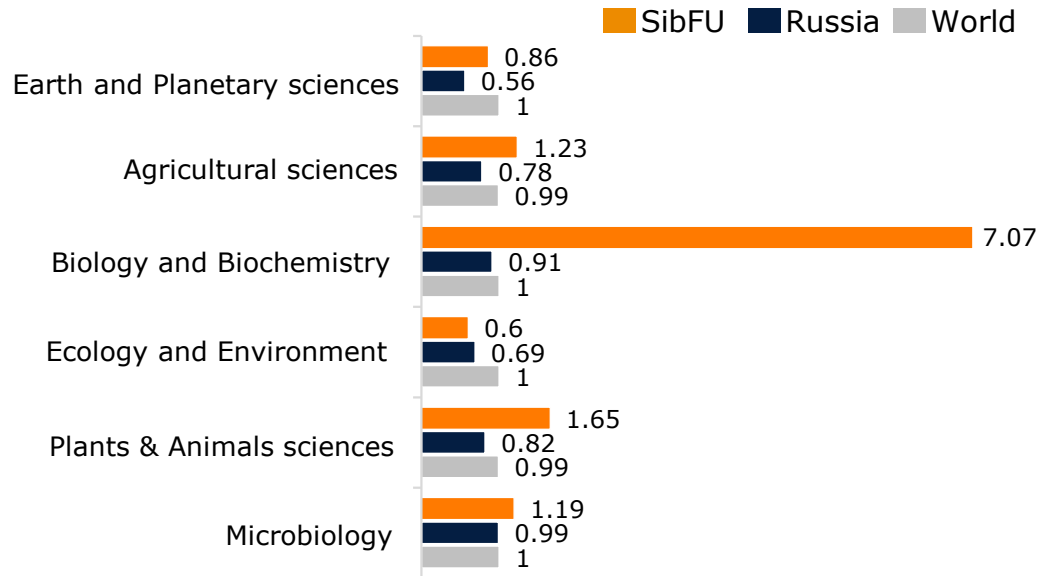
- RUSAL, Norilskiy Nickel and Schlumberger R&D centers, Research Institute of Space communication and Navigation, R&D office in South Asia
- Competence Center for R&D commercialization
- Participation in international research networking collaborations
- Ecosystem to foster the growth of Faculty and Research staff competences in the field of commercialization
- An effective system for managing R&D intellectual property



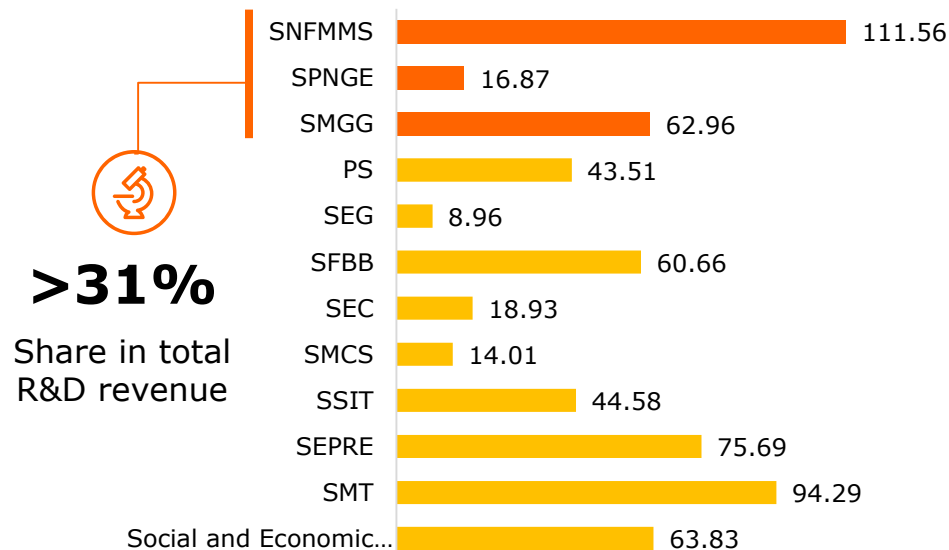
Effective revenue management

- Motivation system, aimed at increasing University's income
- High share of income from tuition fees
- High R&D revenue volume
- Effective endowment fund activities
- XXIX World Winter Universiade facilities management

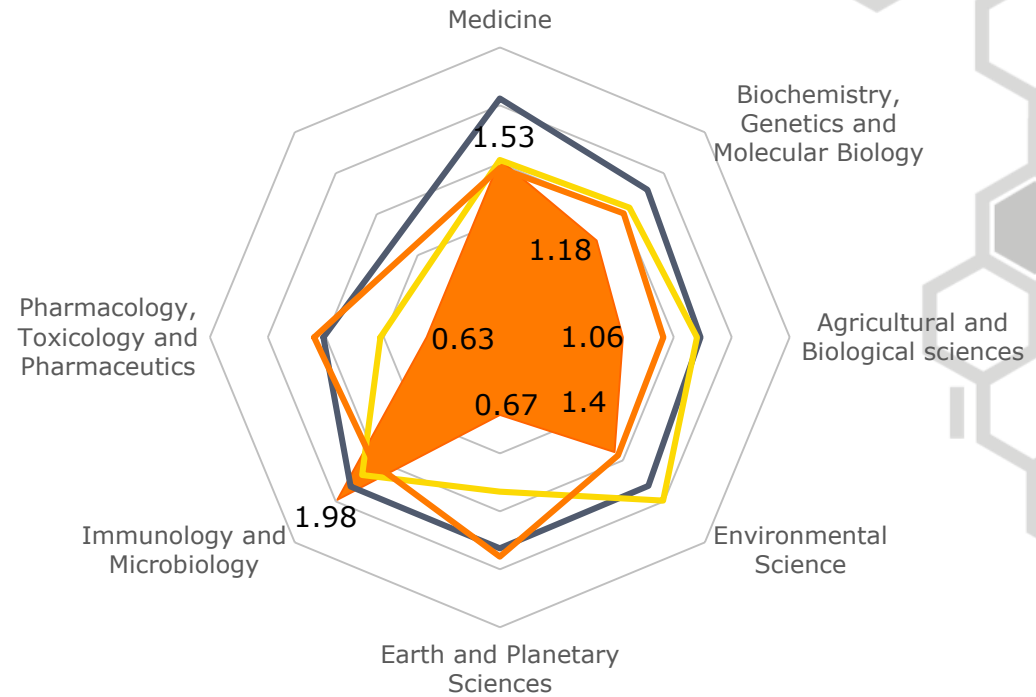
Normalized citation index by subject category, 2012-2016*



R&D revenue by Schools, 2016



Comparison of SibFU with peer universities on subject-weighted citation rates, 2012-2016**

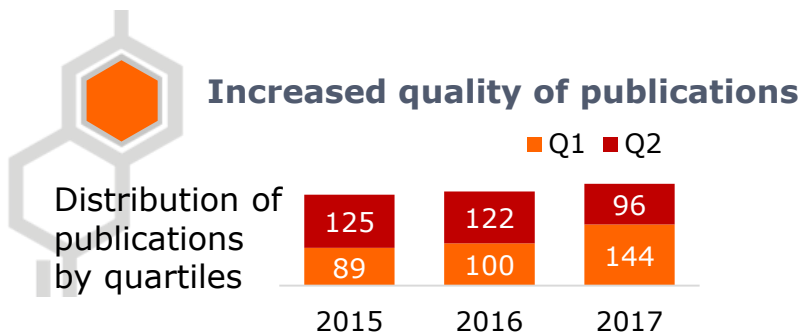


SibFU and peer universities



Note: *according to the Web of Science, **according to Scopus

ACHIEVEMENTS



SibFU IS THE MOST CITED UNIVERSITY IN RUSSIA*

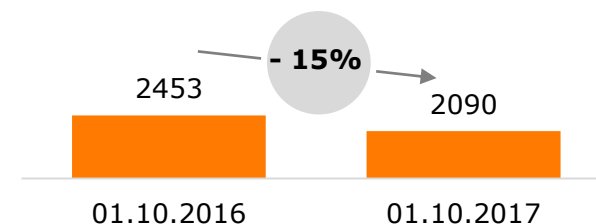
* in 2016 according to Clarivate Analytics

New R&D centers opened

>60%
Increase in R&D revenue



Reduction of ineffective Faculty and Research staff



Growing number of academic programs in English

20%
The growth of students in the preparatory faculty in 2017

2 times

The growth of PhD and masters programs

Organizing major scientific events and international summer schools in 2017

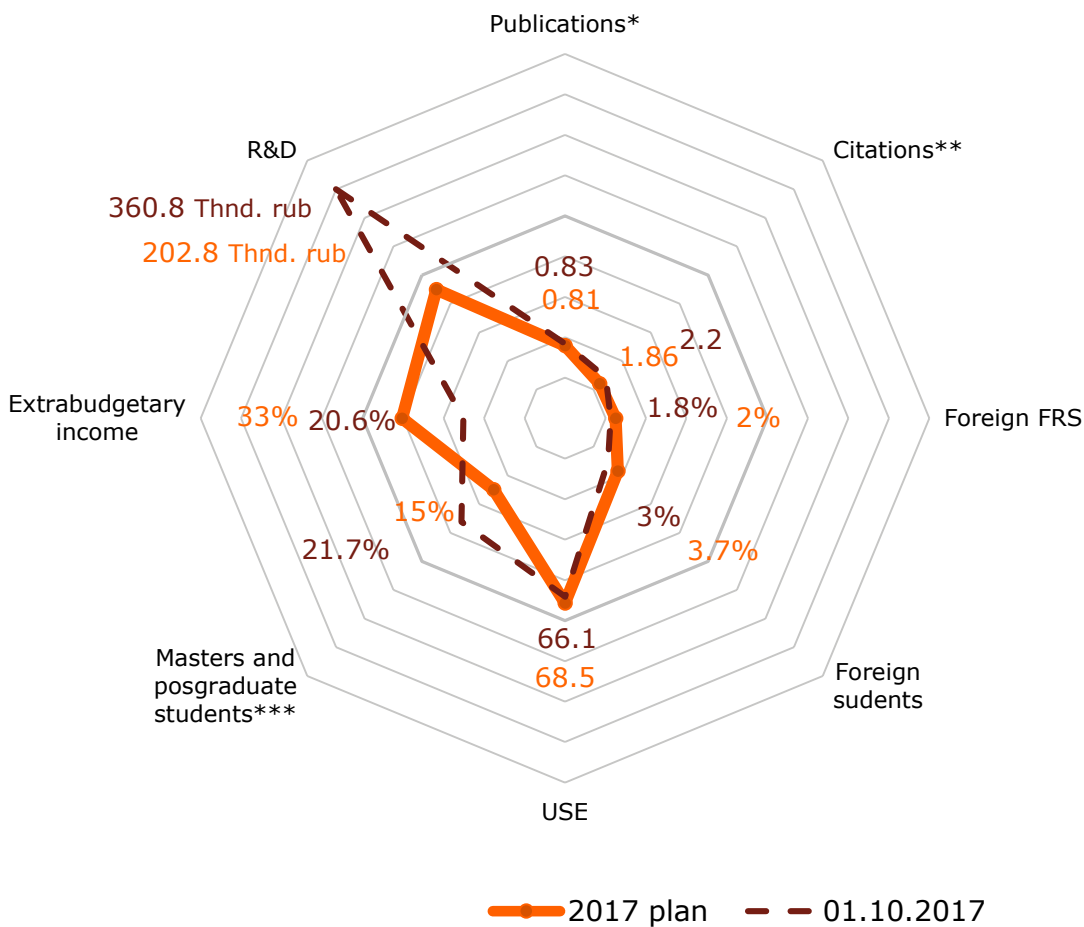
7 conferences with international participation >30%

13 summer schools specializing in various areas

GROWTH AREAS

- Recruiting international students to the degree academic programs
- Recruiting international Faculty and Research staff

GAPS IN ACHIEVING PERFORMANCE INDICATORS



Note:

*according to WoS for the 5 year period
 **according to WoS
 *** from other organizations

REASONS FOR THE GAPS

- 1 Lack of academic reputation
- 2 The delay in the effect of the University updated marketing strategy implementation
- 3 Uncompetitive salaries for international Faculty and Research staff
- 5 Inconsistency of the academic process management system used by departments
- 6 Low share of academic programs in English
- 7 Low level of Faculty and Research staff awareness of market requirements and R&D commercialization processes
- 8 Low English language knowledge level of Faculty and Research staff

1 MODERNIZING TEACHING PROCESS

- Improving academic programs
- Transition to a module academic programs
- Transition to the programs-based management in teaching
- Effective marketing of academic programs
- Expanding network collaborations

3 IMPROVING MOTIVATION SYSTEM

- Increasing number of placements for research staff
- Using differentiated approach to motivate faculty staff and research staff, setting focus on increasing the quality of publications and the income from R&D commercialization
- Introducing a motivation system for administrative staff

5 TRANSFORMING MANAGEMENT SYSTEM

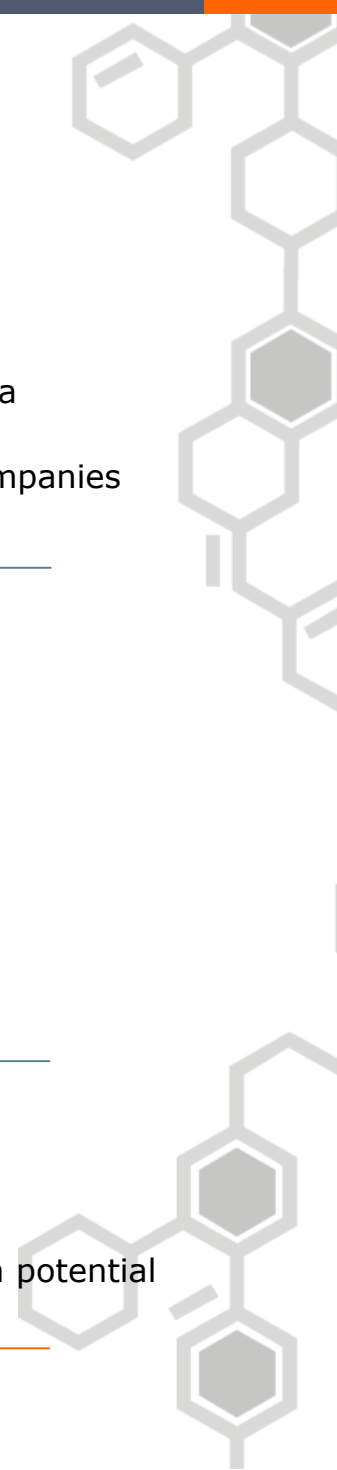
- Using differentiated approach to managing the Schools based on the performance indicators and their growth potential
- Transforming the management system, including the formation of strategic academic units

2 ENHANCING UNIVERSITY'S REPUTATION

- Promoting the University brand: participating in exhibitions, professional associations, organizing scientific events and accelerating the mass media attention
- Developing partnerships with large industrial companies
- Expanding Networking collaborations

4 CONCENTRATING RESOURCES ON KEY RESEARCH AREAS

- Identifying leading Schools (driver-schools)
- Working on increase the publication activity and citation in scientific areas with the greatest potential for growth of scientometric indicators
- Developing partnerships with large industrial companies



» **In the short term, the following changes in the management system are to be made:**



Creating the Department of Academic Programs

- Transition to a module academic programs and to the programs-based management of the teaching process



Introducing positions of Director for Scientific direction development

- Development of applied research that meets the needs of the market



Creating a Competence center for R&D commercialization

- To support the research activities of students, PhD students and Faculty and Research staff, increase the awareness of the commercialization process



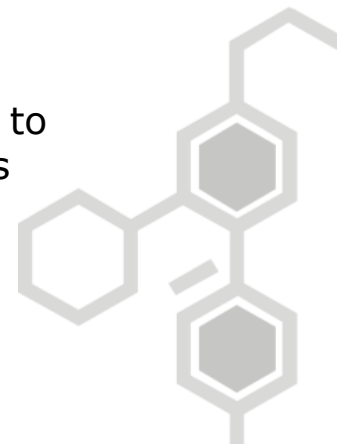
Developing a service model of the interaction between University Schools and the centralized administrative divisions

- To ensure the quality and timely provision of the services necessary for the Schools' effective operation



Strengthening the University's structural units: developing schools dedicated to various scientific areas, merge of schools and formation of Strategic Academic Units

- To strengthen the efficiency of the individual structural units' activities



FACTORS AFFECTING THE FORMATION OF STRATEGIC ACADEMIC UNITS

Green Science:

Sustainable Environmental Management

- Global climate change
- Reducing the ecological footprint and anthropogenic impact on the environment
- Improving the quality and expectancy of human life

M3:

Mining, Metallurgy and Material Science

- Resource depletion
- Tightening of the ecological standards for production industries
- The Fourth Industrial Revolution

CONTRIBUTION OF THE STRATEGIC ACADEMIC UNITS TO THE UNIVERSITY INDICATORS FOR 2020



Top 200 QS Environmental Sciences

Top 100 QS Agriculture & Forestry Sciences

Top 200 QS Earth & Marine Sciences



10-12% growth in publication activity throughout the university

25-35% growth in publication activity in biology, biotechnology and climatology

2 times growth in citation



2.2 times growth in shares of international Faculty and Research Staff



30% of Masters and PhD students from other organizations

20% share of international students

4 points growth of the average score of USE

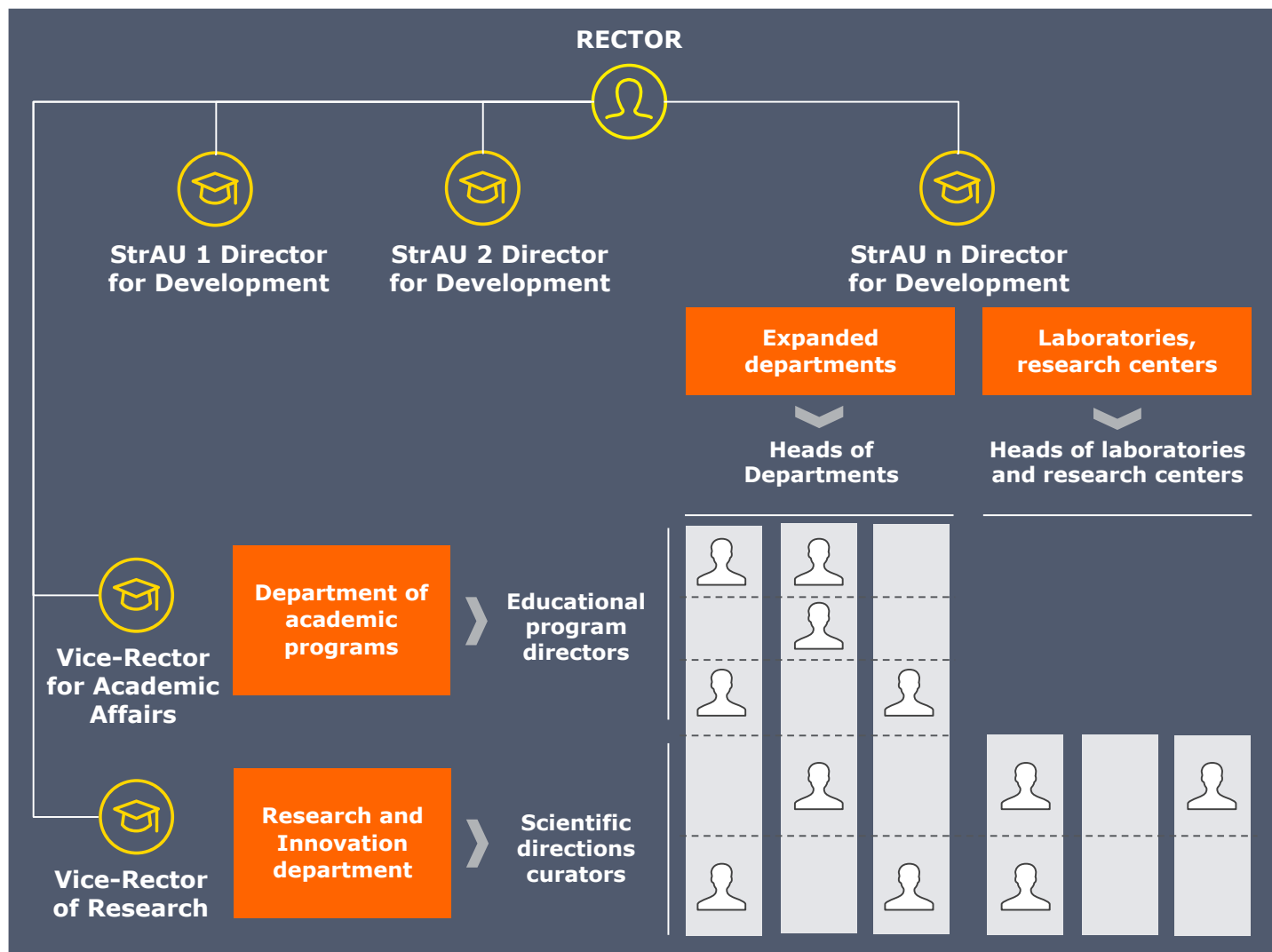


45% revenues from extra-budgetary sources




1.5 bln. Roubles – R&D revenue

» The vision of the University in the long term implies high autonomy of its structural subdivisions, which is typical for the best international universities



FUNCTIONALITY OF STRATEGIC ACADEMIC UNITS

- 1 Planning and performing academic activities
- 2 Marketing of academic programs
- 3 Planning, realizing and commercializing R&D activities
- 4 Selecting and recruiting personnel
- 5 Planning purchases and logistics
- 6 Budgeting the academic unit

 Faculty and Research staff

Note:

* the position of the Director of Strategic Academic Unit corresponds to the level of the Vice Rector

» **SibFU IS A CENTER OF EXCELLENCE IN THE AREA OF SUSTAINABLE ENVIRONMENTAL MANAGEMENT, ECOLOGICAL MANAGEMENT AND MINERAL RESOURCES PROCESSING, AS WELL AS IMPROVING THE QUALITY AND EXPECTANCY OF HUMAN LIFE**

QUALITATIVE RESULTS BY 2020

- High quality and efficiency of the University management
- University organizational structure, that supports changes and fosters competitiveness
- Efficient marketing strategy
- Efficient Research and Innovation strategy

