Industry-academia collaboration in Bulgaria – the case of Sofia University

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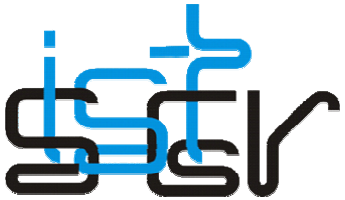


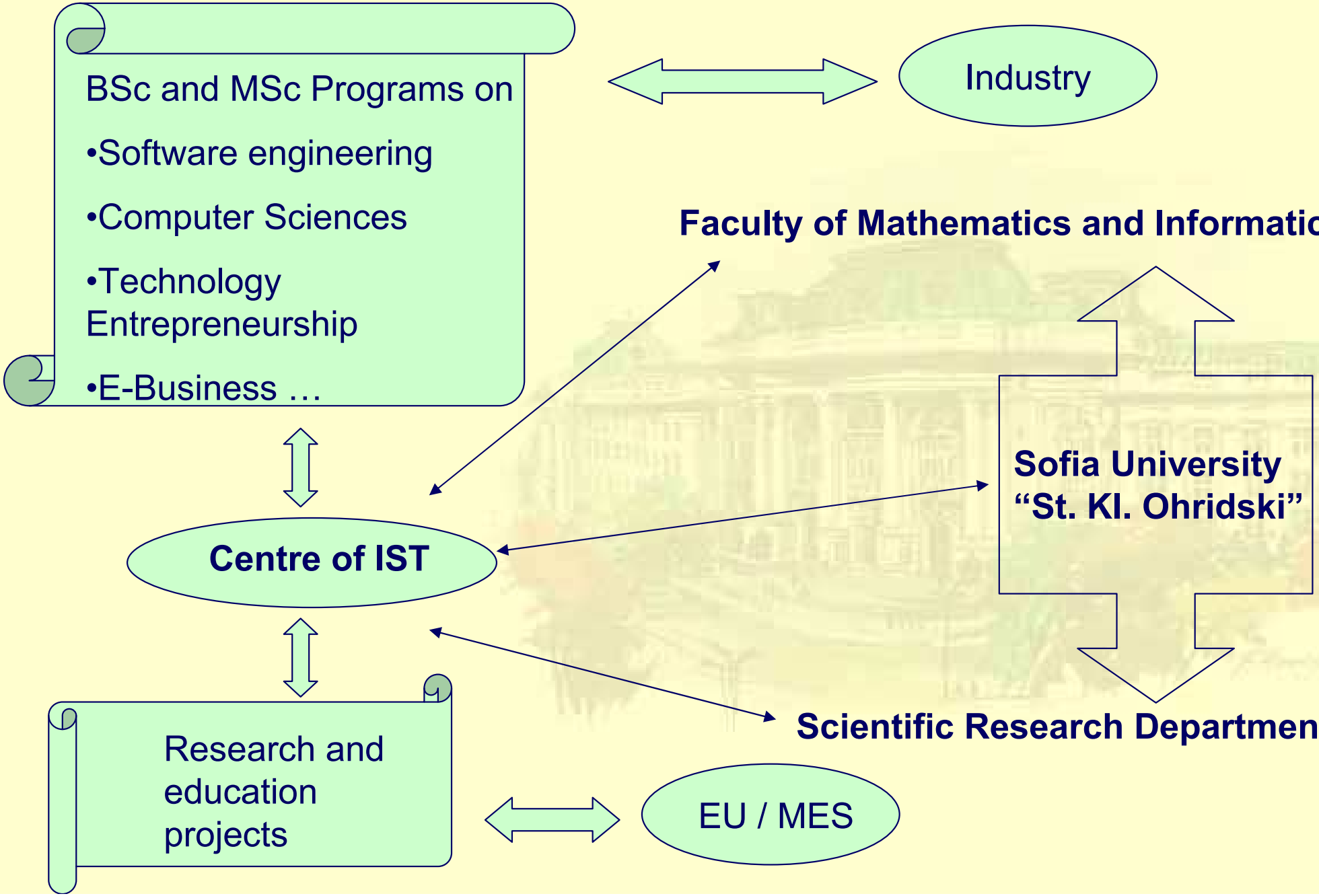
Main topics

- Introduction
- Best practice cases at Sofia University
- Trends in innovation and technology transfer
- Challenges for FMI
- Outlook

Sofia University “St. Kliment Ohridski”

- The first school of higher education in Bulgaria
- The largest and most prestigious university in Bulgaria, a big academic and scientific centre
- 16 Faculties on humanities and scientific disciplines
- More than 18 000 students and 3000 lecturers and administrative staff

Centre of Information Society Technology



Technology Transfer Office http://tto.uni-sofia.bg/

- TTO activities:
  - allocation of new knowledge to be developed in new products, materials and services and commercialised;
  - raising awareness of researchers on business needs
  - transparency of research results
  - promotion of TTO services and training
- TTO tools:
  - web site, data bases
  - services - feasibility analysis, development of a demonstrative/promotion tool of research results, and the enterprise technological needs assessment

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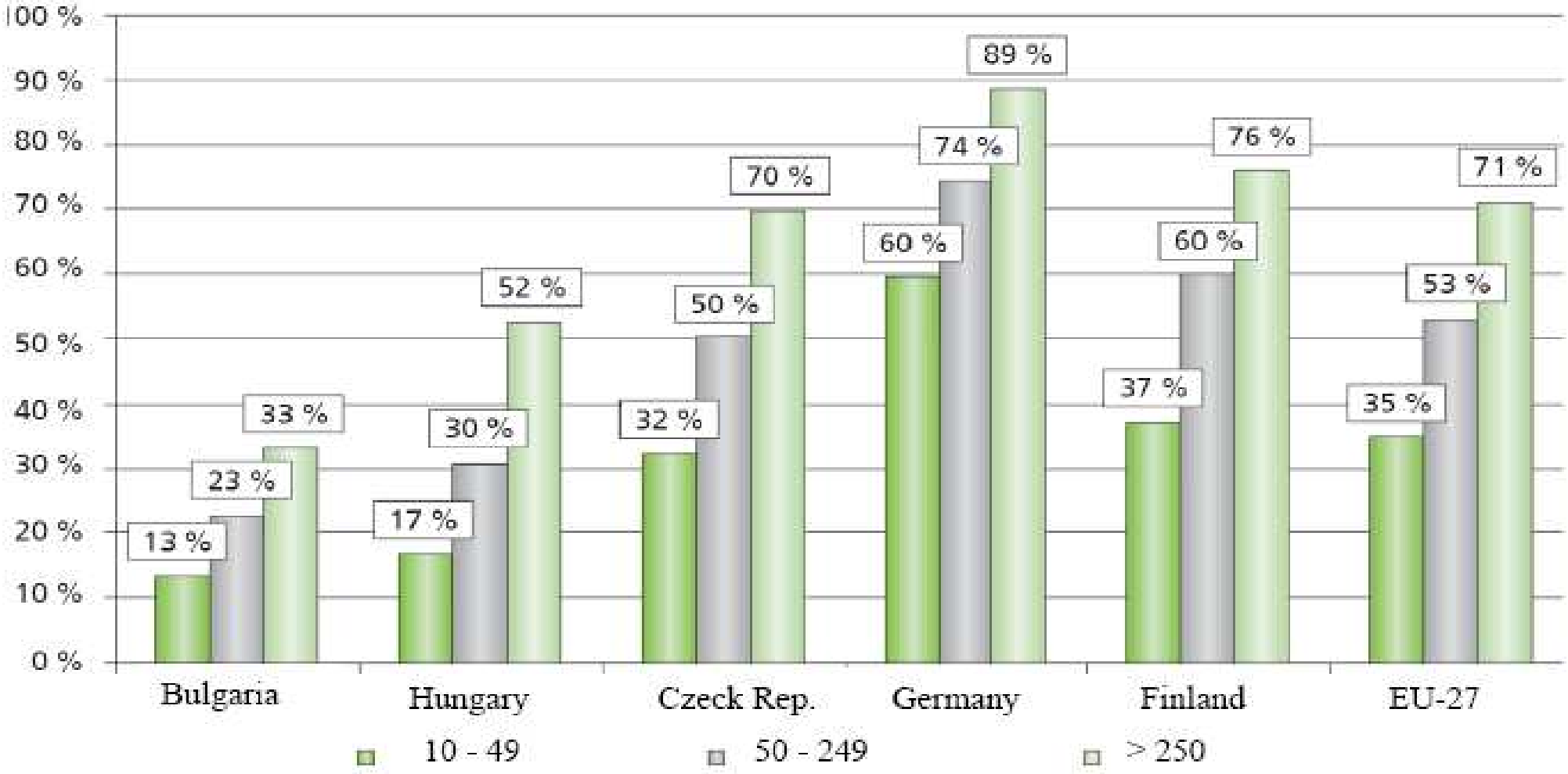
Main weaknesses in Bulgaria

(European Innovation Scoreboard)

- Weak links between science and businesses
- Not sufficient measures to develop innovation infrastructure, support services, technological brokerage, intermediary services, etc.
- Not involvement of university students in scientific and technological activities
- Low innovative culture and weak innovative culture of businesses
- Low level of investment in new products and processes
- Slow implementation of measures and not systematic and transparent evaluation, etc.

Innovation firms by number of employees



Source: Eurostat, 2008; New Cronos, CIS 4

Knowledge creation in Bulgaria

among 145 countries:

- 39 place in Physics
- 45 in Mathematics and Chemistry, growing publications and their citation by other researchers
- 47 in Computer Science and Engineering, with decreasing from 1995 to 2003 publications and their citations
- very low commercialization of research results

Type of academia-industry collaboration in Bulgaria

Consultations	17%
Training, seminars, conferences	13%
Organization of student, doctoral, etc. research practices	11%
Assisting the management of business processes	8%
Studies of the effectiveness of technologies/ products/services	7%
Creation of new technologies	6%

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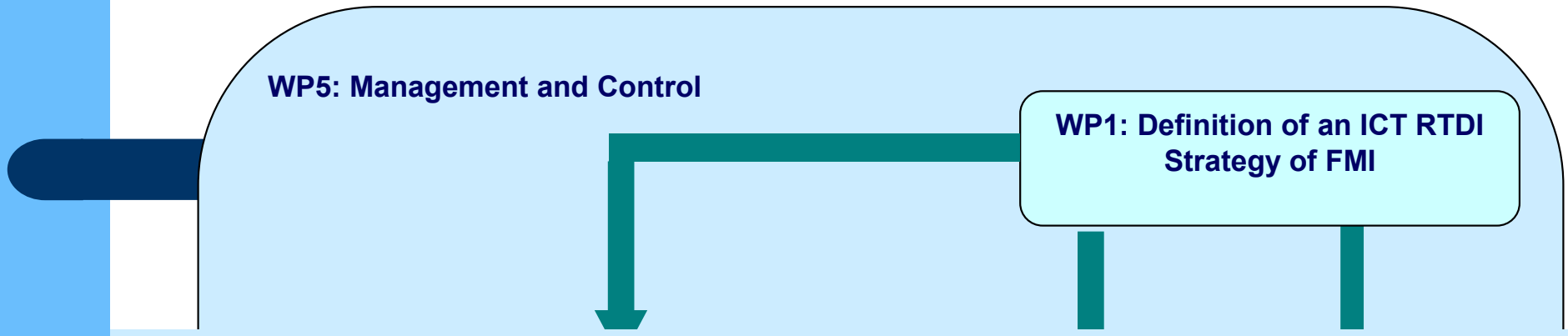
FP7 SISTER project

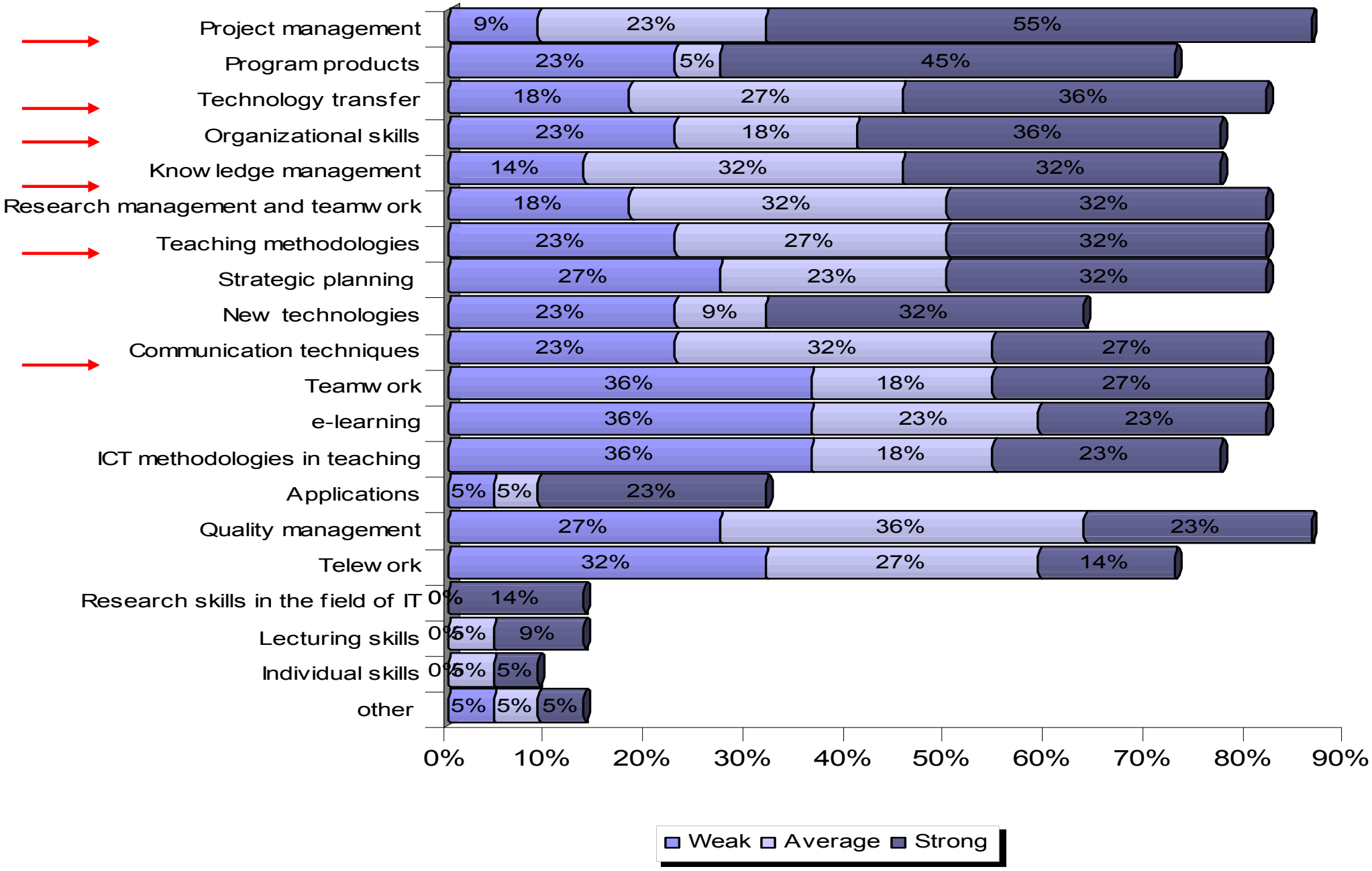


- Strategic goal of WP3:
  - Strengthening the innovation, technology transfer capacity and interdisciplinary skills of FMI staff
  - Enhancing FMI collaboration with partners outside the academic community
  - Exchange of knowledge and best practices
  - Expanding interdisciplinary education and training

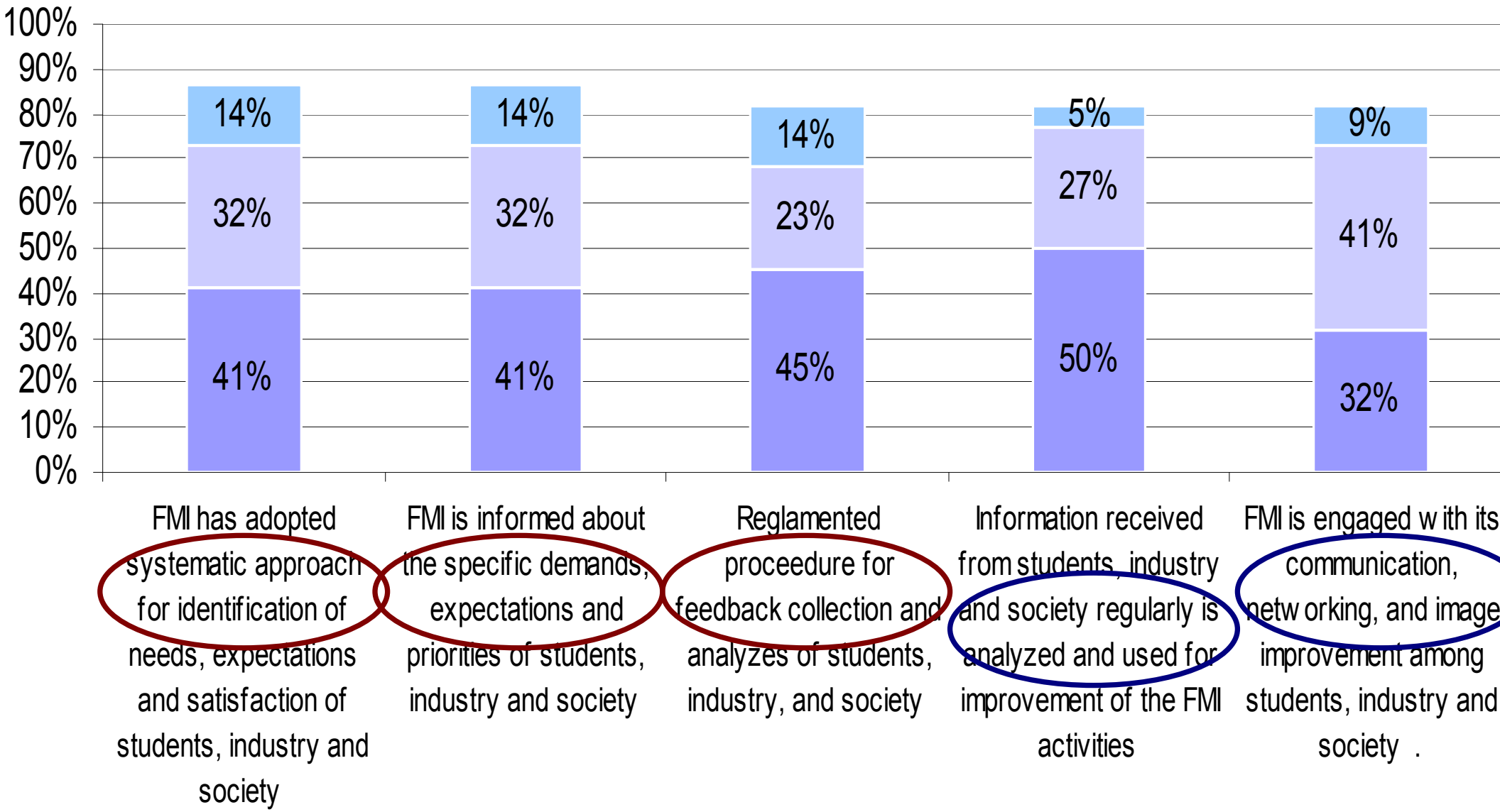
FMI staff and users' surveys

- FMI staff experience, skills, and research interests and needs
- Research priorities according to FMI staff – on European, on national, and on personal short-term and long-term level
- Personal assessment of the organization and work within FMI
- Evaluation of the overall national environment and attitudes toward researchers and research career in Bulgaria.

Needs for additional training



Relationships with Students Industry and Society



Collaboration with businesses at FMI

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Challenges for Bulgaria

- increase the R&D expenditure (public and private) and develop more successful commercialisation of the research base
- a strong link between science institutions, enterprises and other institutions involved in the innovation system
- increase the competitiveness of Bulgarian products and enterprises by stimulating the innovativeness of companies.

Challenges for FMI

- key aspects of effective knowledge-transfer strategy:
  - actionable message
  - target audience
  - knowledge-transfer processes and supporting communications infrastructure
  - evaluation - performance measures
- strengthen TTO and links with industry
- transparency of FMI research
- interdisciplinary skills building

Exchange of knowledge and experience

- Industry-academia collaboration
  - Technology transfer institutions
  - Business incubators
  - Mobility patterns: exchange of staff and internship
  - Technology entrepreneurship and business patterns
- Strengthen research in Knowledge management
  - Main technologies and techniques used
  - Knowledge audit and measurement
  - Organizational culture and knowledge sharing
  - Practical cases

Thank you for your attention!

Questions?

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