University-Industry Relationships as Key Factor for Strategy Development at ELTE Faculty of Informatics

Examples and experiences
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21st Century paradigm of University-Industry partnerships

- Planning and establishment a partnership
  
  strategic approach
  
  two challenging triangles

- A win-win-win model
  
  University
  
  Industry
  
  Society
  
  Education
  
  Research
  
  Innovation
Improvement of competitiveness: Recognition of shared interests and values

- increase the number of highly qualified informatics professionals with skills for high tech research, development and innovation

- harmonization of current research topics in informatics and the content of university education with the state of the art industrial RDI

- development of competence centres at the universities
Obstacles and risks faced

- lack of human and financial resources
- short term interests (drain of BSc students, young researchers, brain drain)
- problems with sustainability of high level education
- rigid administrative regulation
Our answers
Joint labs

- Involving MSc and doctoral students into industry related R&D projects, 16+20 ECTS credits
- Choosing themes: relevance for both university and companies, appropriate for PhD research topic, potential for international cooperation
- Motivating force: real tasks, state-of-the-art research topics, exploitation and marketable product
- A new learning environment: (vertical) teamwork, communication, language proficiency, project management, soft skills, graduates meet labour market’s real demands
- Motivation to continue learning on master and PhD level

- Motivation to develop new curriculums and teaching methodology
- Professionals from industry as invited lecturers and project leaders at university
- An example: ELTE - Ericsson Software Technology Lab – competence center
Our answers
additional benefits

- Development of personal contacts, mutual understanding between university and company
- Special competences of staff developed / innovation lab / business skills, and business experience of PhD students and academic staff
- Possibilities of double employment
- Contribution to holding human resources on university career path
- High number of publications, open-source licences
- Contribution to excellence of university

- Productification, exploitation in related companies (e.g. ELTE-Soft non-profit Ltd.)
- Roots of an innovation ecosystem
University-Industry Partnerships on European Level

EIT ICT Labs Master School
- 2 years long (90+30 ECTS)
- 19 participating universities in 8 countries

ICT Labs - Nodes

EIT ICT Labs Master School
- Leading Business Partners
- European Top Researchers
- 7 Technical Majors
- Co-Location Centres
- Innovation & Entrepreneurship
- Network of Universities

EIT ICT Labs BAPG Node director
**The Knowledge Community**

**Goal:**

Creating a functional and viable regional educational, research and innovation hub on CEE level driven by a business perspective.

- **Budapest Associate Partner Group**
- **Strategic industrial and research lab. partners**
- **Activities:** research and carrier potential Support for I&E education (DTC, MSc)

**Platform of innovative SMEs (Hungarian micromultis)**
The EIT ICT Labs Master School

The EIT ICT Labs Master's education is:

- a two-year programme at advanced level
  - 2 universities /the best 19 universities in Europe/
  - 2 countries => double Master's degree
- including an Innovation & Entrepreneurship (I&E) Minor
- personal contact with well-known researchers, partner companies
- technical excellence
- interesting internship opportunities
- exciting networking events (kick-off, summer school)
The participating cities

19 universities in 15 cities

Nice  Rennes  Paris  Budapest
Saarbrücken  Stockholm  Trento  Delft
London  Helsinki  Eindhoven  Berlin
Turku  Twente  Darmstadt
A success story

EIT C.H.A.N.G.E AWARDS

• ELTE student, study programme:
  Software Information Technology
• EIT ICT Labs Master School student:
  • 1st year in Helsinki
  • multicultural community
  • creative friends
  • innovative idea => business plan
  ⇒ won EIT ICT Labs MSc Summer School in Trento
  ⇒ nominated to EIT CHANGE AWARDS competition
  • European Institute of Innovation and Technology (EIT)
  • she is one of the EIT’s first ‘CH.A.N.G.E
  Agents and Next Generation of Entrepreneurs’
  ⇒ Now her idea is:
  'the best innovative idea in the continent'

Dorottya Maksay
EIT ICT Labs joint Master’s programmes at ELTE

EIT ICT Labs Master School

- Budapest’s contribution: 2nd year of the SDE, S&P, DMT.
- High-skilled Hungarian and CEE students with solid mathematic and computer science background.
- Student consulting services.
  
  * Budapest became coordinator of the Security and Privacy major.*

EIT ICT Labs Master School Kick-off 2014 in Budapest

- ELTE is the organizer of the first graduation ceremony
- I&E training programs and formal events combined
- cca. 450 participants
EIT ICT Labs Budapest Doctoral Training Centre

ICT research topics combined with I&E education

- 16 Hungarian doctoral candidates enrolled in the first year (more doctoral candidates to be enrolled in 2014)

- Focus: Excellence in communication software and system performance
EIT ICT Labs Outreach Programme

Coordinated from Budapest

Outreach to EU countries not directly involved EIT ICT Labs

- Managed by Budapest Associate Partner Group on EIT ICT Labs level
- Provide opportunities for students and educators in EIT education programmes
- Activate start-ups by building strong ties to innovation programmes and contests
- Collaborate with key people: faculty members, researchers, innovation ecosystem actors