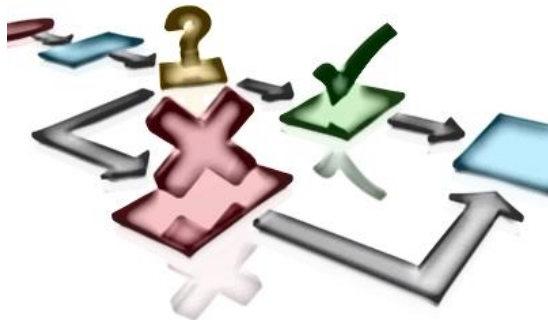# University-Industry Relationships as Key Factor for Strategy Development at ELTE Faculty of Informatics

Examples and experiences

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Zoltán Horváth, Dean for Faculty of Informatics, ELTE
EIT ICT Labs BAPG Node director

21 st 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
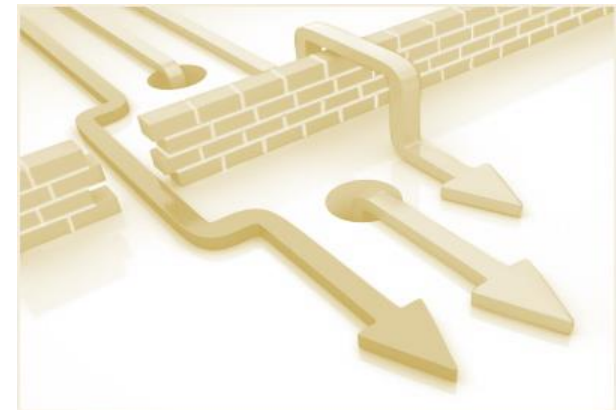
   ▸ Research

   ▸ 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 carreer 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

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13/10/2014

University-Industry Partnerships on European Level

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13/10/2014

The Knowledge Community

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)

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Informatics, ELTE, Hungary

The participating cities

19 universities in 15 cities

Nice, Rennes, Paris, Budapest, Saarbrücken, Stockholm, Trento, Delft, London, Helsinki, Eindhoven, Berlin, Turku, Twente, Darmstadt

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Informatics, ELTE, Hungary

A succes 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

Zoltán Horváth Dean for Faculty of Informatics, ELTE, Hungary   13/10/2014

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

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EIT ICT Labs Outreach Programme

X·Europe — **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

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