EIT ICT Labs Budapest in Horizon 2020

Zoltán Horváth
**node director, EIT ICT Labs Budapest
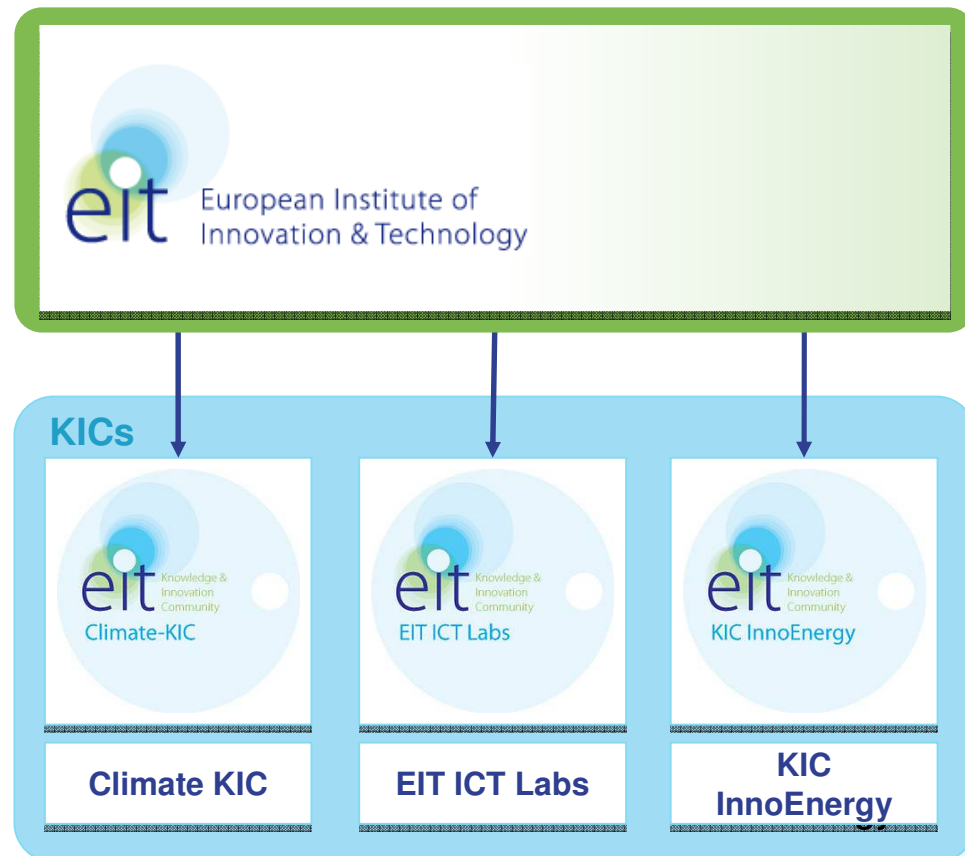dean, ELTE Faculty of Informatics**

The EIT and its KICs

The **European Institute of Innovation & Technology (EIT**

Independent agency within the EU (2008)

It funds **Knowledge and Innovation Communities (KICs)**

- Official call and selection of the first three KICs in 2009
- First KICs fully operational in December 2010
- EIT ICT Labs launched also its work at the end of 2010
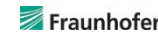
Integrated into H2020 – Budget 3.5%

eit — European Institute of Innovation & Technology

KICs

eit — Knowledge & Innovation Community — Climate-KIC

eit — Knowledge & Innovation Community — EIT ICT Labs

eit — Knowledge & Innovation Community — KIC InnoEnergy

Climate KIC

EIT ICT Labs

KIC InnoEnergy

eit — Knowledge & Innovation Community — EIT ICT Labs
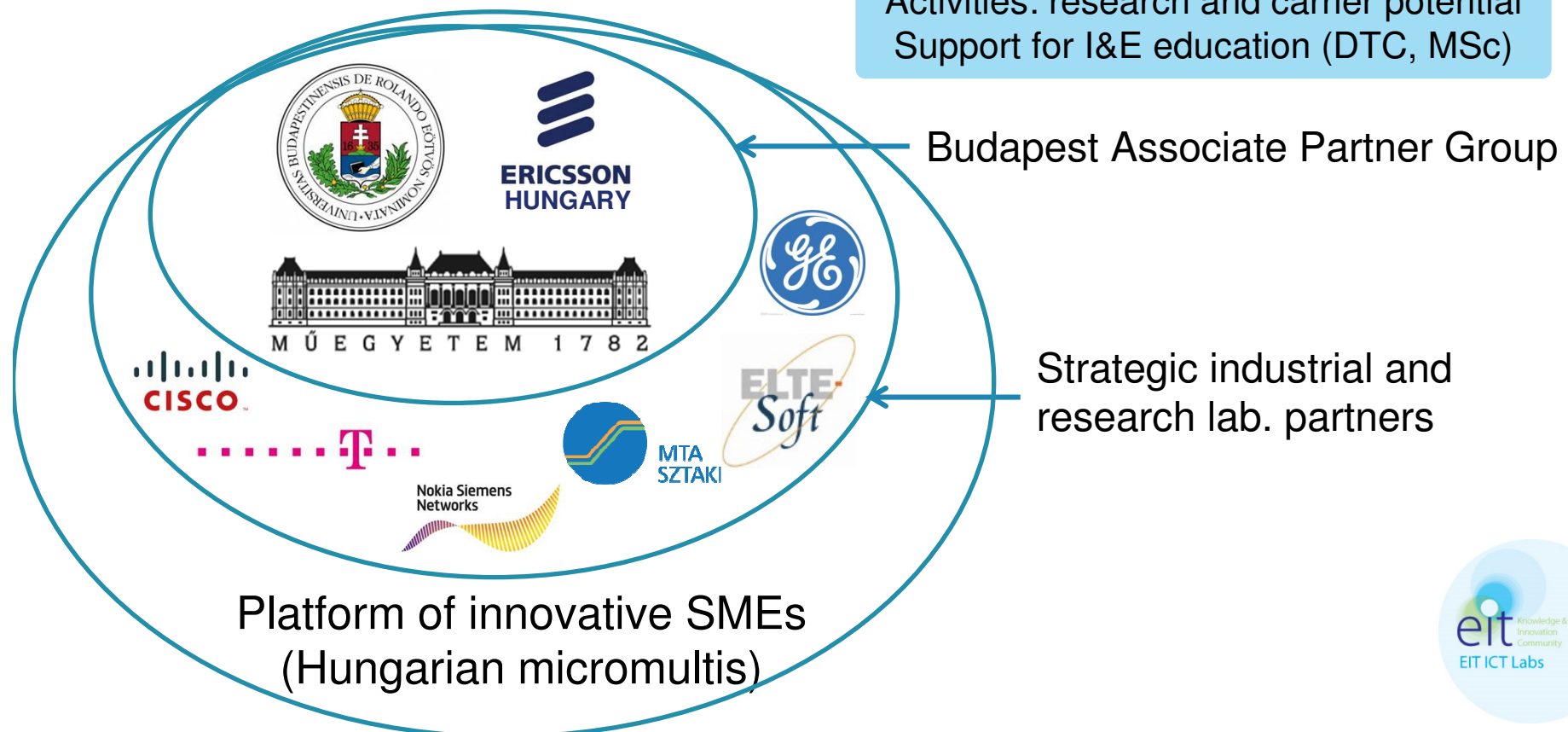
EIT ICT Labs – Nodes and Partners

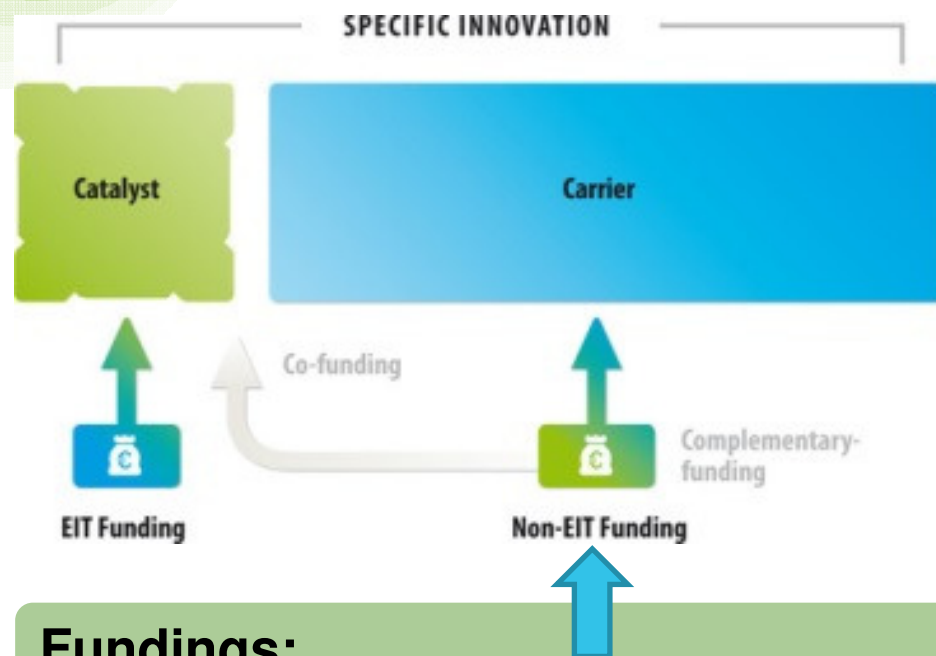# Implementation of the knowledge triangle in the Budapest Associate Partner Group

Goal:

creating a functional and viable regional educational, research and innovation hub on CEE level driven by a business perpective

Activities: research and carrier potential Support for I&E education (DTC, MSc)

Budapest Associate Partner Group

Strategic industrial and research lab. partners

Platform of innovative SMEs (Hungarian micromultis)

Financing structure

SPECIFIC INNOVATION

Catalyst

Carrier

Co-funding

Complementary-funding

EIT Funding

Non-EIT Funding

- To set up the local CLC and carrier project between January 2013 and the first half of 2014
- Consortium: ELTE, BME, Cisco

- The EIT funding serve to realize the innovation cycle
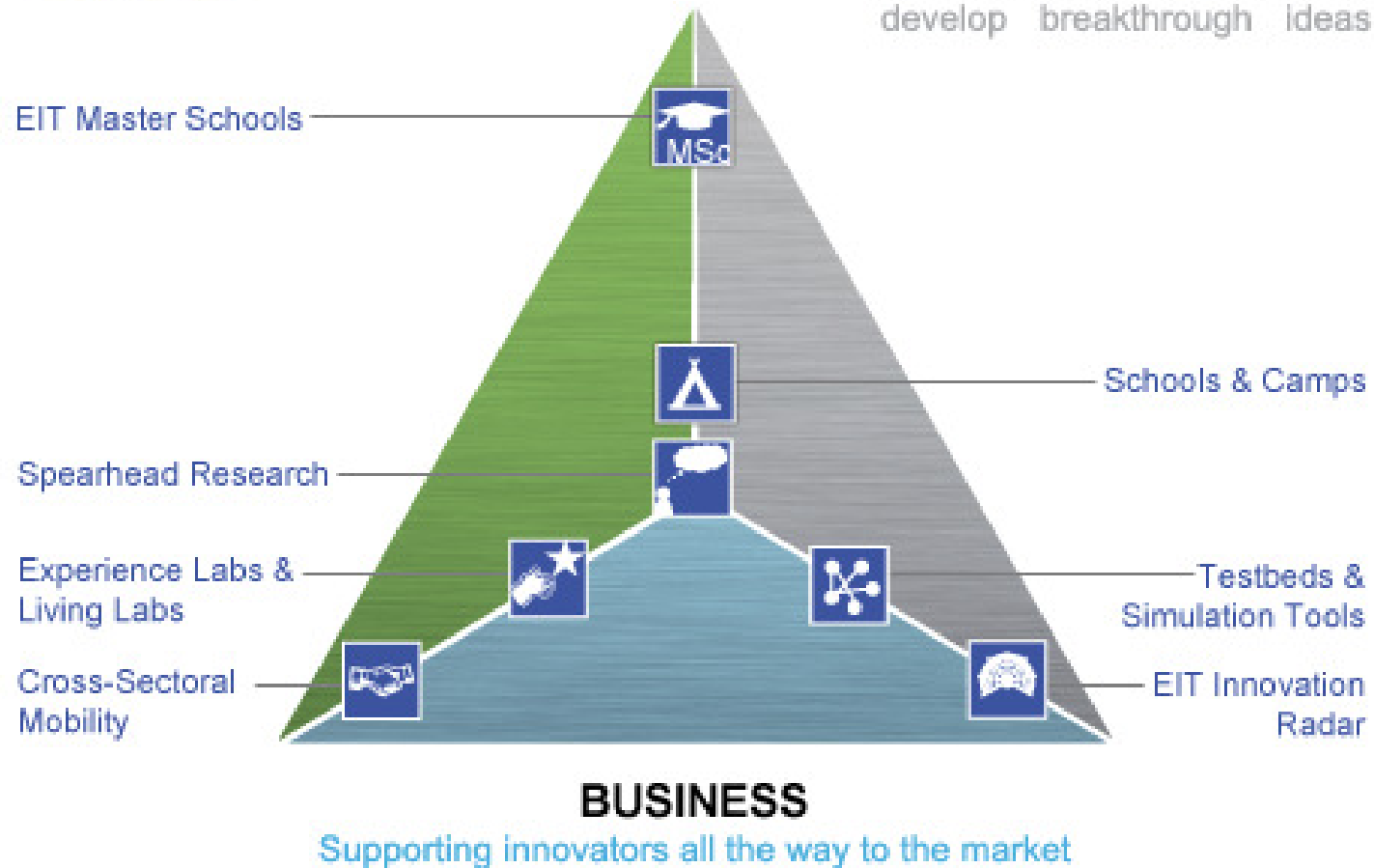
Fundings:

- Industry funded R&D projects

- EU FP7 and national R&D projects

- Dedicated National Development Agency grant
  Carrier funding for further R&D activities: 1.000.000.000 HUF

- Support from the Minister of National Development
  Financial background for the preparation period: 20.000.000 HUF

- „Social Renewal Operational Program" (TÁMOP)
  Education - Curricula Development: 120.000.000 HUF

eit Knowledge & Innovation Community
EIT ICT Labs

EDUCATION

Creating a new breed of entrepreneurs

RESEARCH

Enabling excellent individuals and multidisciplinary teams to develop breakthrough ideas

EIT Master Schools

MSc

Schools & Camps

Spearhead Research

Experience Labs & Living Labs

Testbeds & Simulation Tools

Cross-Sectoral Mobility

EIT Innovation Radar

BUSINESS

Supporting innovators all the way to the market

Education
the tradition of industry driven ICT education

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.

EIT ICT Labs Budapest Doctoral Training Centre.

- 16 Hungarian doctoral candidates enrolled in the first year (18 more doctoral candidates to be enrolled in 2013 and 2014)

- Focus: Excellence in communication software and system performance

Research & Innovation Areas

EIT ICT Labs

Action lines –
Innovation areas

H2020

ICT calls

Cyber-Physical Systems $\longrightarrow$ Smart Cyber-Physical Systems

Big data, robotics

Advanced Cloud Infrastructures

Future Cloud $\longrightarrow$ Tools and methods of software development

Future Networking Solutions $\longrightarrow$ Smart networks and novel internet architectures

Privacy, Security & Trust $\longrightarrow$ Cybersecurity, trustworthy ICT

Health & Wellbeing $\longrightarrow$ Health, demographic change and wellbeing

Smart Energy Systems $\longrightarrow$ Secure, Clean and Efficient Energy

Smart Spaces $\longrightarrow$

Future Urban Life and Mobility $\longrightarrow$ Smart, Green and Integrated Transport

R&I activities and business development

Research and innovation actions

EIT ICT Labs Budapest

2013 & 2014: 12 R&D&I projects

IDENTIFYING THE PROBLEMS OF COMPLEX INFOCOMMUNICATION NETWORKS

Cyber-Physical Systems;
Future Networking Solutions.

FUTURE DIGITAL FIELDS AND MOBILITY

Urban Life and Mobility;
Future Networking Solutions.

HUMAN COMPUTER COLLABORATION

Future Cloud;
Smart Spaces.

PRIVACY, SECURITY AND TRUST

Smart Energy Systems.

CPS For Smart Factories – András Lőrincz, ELTE

Future Programmable Networks – Attila Takács, Ericsson Hungary and Rolland Vida, BME

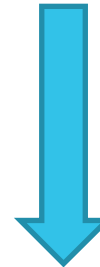Europa – EIT's Cloud-based data – András Benczúr, ELTE

Security monitoring for critical infrastructure – Levente Buttyán and Márk Félegyházi, BME

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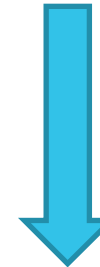# EIT ICT Labs Budapest founded business - platform of innovative SMEs

Hungarian micromultis altogether w cca. **30 m EUR** revenue / year:

- Aitia,
- Attrecto innovation,
- BalaBit,
- Binergy,
- Bonn Hungary,
- IND,
- Intellifactory,
- IVSZ,
- NETvisor,
- Prezi

Established best practices for disseminating knowledge and expertise on dynamically developing small companies

Academy

Industry

To encourage the development of a regional platform of companies, which give rise to more highly added value jobs in the region.

Startup Activation - EIT ICT Labs

Link startups to EIT-related entrepreneurship programmes

- Leverage already existing programmes, such as
  - Berlin: Deutsche Telekom Innovation Contest
  - Helsinki: AppCampus, Startup Sauna, Demola
  - Trento: TechPeaks
  - Budapest: Startup activities of ELTE and BME
- Execute with the help of startup ecosystem actors in X-European countries

Startup Activation - Budapest

BrassTacks – Intensive Startup Training

- Regional startup competition – in cooperation with MMCluster and Avec
- Intensive, practice oriented and interactive modules
- Tailor-made for early stage startups
- Participation of Rob Fitzpatrick and other foreign and Hungarian experts
- Meeting opportunity with VCs and multinational companies
- More than 30 applications in two weeks and 7 startups from 5 countries (Austria, Slovenia, Bulgaria, Romania, Hungary) selected

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

Student from Budapest won CH.A.N.G.E Award 2013

Annual award of EIT to support entrepreneurial talents

- **Dorottya Maksay,** master student at EIT ICT Labs Budapest, was awarded for developing her Homebuddy initiative
- **Homebuddy** provides social interaction and care for elderly people by matching them with students who need accommodation.

Thank you

www.ictlabs.elte.hu
www.eitictlabs.eu