Improving Regional Innovation Ecosystems: A bottom-up and top-down approaches towards Open Innovation

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**Problem characterization** (two gaps)

Gap 1 - OI refers to the inbound and outbound flow of knowledge, ideas and technologies in a “co-creative” environment that allows an innovation come to light and mature.

Gap 2 - “A technology brings value only when commercialized together with a certain business model”.

Henry Chesbrough (2003a)
The research approach of this study is action research.

- Action research has always two goals:
  - making the action happens and
  - reflecting what happens in order to contribute to the theory.

The general phases of an action research process are:
- Planning,
- Taking action,
- Evaluating the action and
- Further planning.

The empirical research is based on various case studies.
- In fact, these case studies are all related to each other since the intention is to create a powerful network in the Portuguese innovation ecosystem.
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**UTEN Portugal Program**

[UTEN Logo]

[UTEN Portugal University Technology Enterprise Network]

[CRUP Logo]

[FCT Logo]

[IC² Institute]

[INPI Logo]

The UTEN Portugal Program is supported by various institutions, including the University of Texas at Austin, the Portuguese University Rectors' Conference (CRUP), Fundação para a Ciência e a Tecnologia (FCT), and the Instituto Nacional de Propriedade Industrial (INPI).
• 15 Portuguese Universities and select technology parks and research centres

• **UT Austin | Portugal** - The University of Texas at Austin, Austin, Texas, USA

• **IC² Institute** - The University of Texas at Austin, Austin, Texas, USA

• **MIT | Portugal** - Massachusetts Institute of Technology CoLab, Boston, Massachusetts, USA

• **Carnegie Mellon | Portugal** - Carnegie Mellon CoLab, Pittsburgh, Pennsylvania, USA

• **Fraunhofer | Portugal** - Fraunhofer-Gesellschaft, Munich, Germany
Key Objectives of the UTEN program

• Collaboration in a huge network
  – Globally competitive and sustainable S&T commercialization activities, processes, and programs
  – National Network and Regional Centers of S&T Commercialization Excellence

• Sustainability
  – Increased University-Industry Collaboration
  – Sustainability of TT programs and activities
  – Technology venture growth in U.S. and Global Markets
  – Enhanced Wealth and Job creation in Portugal
Activities of the UTEN program – 5 years

**Activity 1: Internships**
- International Internships: 27,
- In-Situation Training: 3,
- Reverse Internship: 1.

**Activity 2: Networking**
- International conferences: 3,
- International workshops: 19,
- Regional Training Weeks: 9,
- Initiation Brainstorms: 6,
- Roundtables - Leaders Meetings: 3.

**Activity 3: Promotion of Entrepreneurship**
- Technology Venture Competitions,
- Boot Camps,
- Startup Days: 3.

**Activity 4: International Business Development** (US Connect Program)
- “Portugal Connect”

- S&T assessments in Portugal (the Living Cases):
  - Rapid Screens: 40,
  - Market Looks: 10,
  - Biz Dev: 3.

**Activity 5: UTEN Institution Building**
- General Assembly,
- Executive Committee,
- Scientific Director,
- Coordination Office and Secretariat,
- International Advisory Board,
- External Review Committee.

**Activity 6: Observation and Assessment**
- Individual Activity Evaluations,
- UTEN Annual Survey,
- UTEN Annual Report,
- UTEN Annual Conference.
Technology Screening for TTO Staff and Entrepreneurs

UTEN has focused in the TTOs *(a bottom-up approach)* to build and spread the Portuguese regional innovation ecosystem. A three-step “funnel” process that includes a “readiness assessment,” “RapidScreen” and “MarketLook.”
Results

- Indicators

Source: UTEN 2012 report
Results

- Indicators (after article)

Number of research & development agreements and spinoffs (new and actives)

Source: UTEN reports 207-12
UTEN Program – Evolution of patent applications (after article)
UTEN continually focuses on increasing the capacity of individual participants, as well as the capacity and sustainability of the network...

Networking building & developing programs: **Year 1**

Establishing the framework: **Year 2**

Building nationally: **Year 3**

Sharpening focus: **Year 4**

Increasing ownership & institutionalization: **Year 5**
UTEN Network has all necessary sets to play in the OI environment with all partners:

- customers and suppliers,
- Solvers and seekers,
- "coopetitors",
- TTOs and other tech brokers,
- public authorities, patent agents, public funding agencies, etc.

UTEN Program Final Notes