How to become an entrepreneurial university

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HISTORY

- Established 1961
- Increased demand for higher education
- Need for a third technical university
- New institutions distributed throughout the country
- Oncoming crisis in textile industry: university with an economic mission
Modern University of Technology
Excellent Education and Research
New technology and its application in society
Engineering approach
Distinctive in this context is our capacity to combine and cooperate across disciplines between science, engineering and social sciences,
entrepreneurial mindset
Research Institutes University of Twente

- Mesa+ : Nanotechnology
- CTIT : ICT (incl. embedded systems)
- MIRA : (Bio)medical Technology and Technical Medicine.
- IGS : Innovation and Governance Studies

- Green Energy Initiative

Strength and Expertise:

- Distinctive research and education (Bachelor/Master/PhD)
- Contribute to the challenges of our society (sustainability, health, safety, energy, etc.)
- Transfer of knowledge and technology (innovative entrepreneurship)
EDUCATION

- 20 bachelor’s programmes
- 33 master’s programmes
- Technology, behaviour, society, and medicine
- Approx. 10,000 students (ba, ma, PhD)
ENTREPRENEURIAL UNIVERSITY

- Identify and support talent
- Provide facilities (labs and offices) through Kennispark business accelerators
- Provide investment funds and support through Holding Technopolis Twente
UT spin offs

700 spin offs approx. 7000 jobs
Kennispark (Science park) Twente

- Building on history *entrepreneurial* University of Twente
- A cooperation between City of Enschede, Province of Overijssel and University of Twente
- Improve the system for innovation and entrepreneurship
- Goal: 10,000 high end jobs
- Innovation campus of national importance
Program lines

Coordinate, complete, communicate
– Saxion, BTC, IPT, Oost NV, WTC

1. Facilitate starting and growing businesses (Entrepreneurship)

2. Stimulate innovation in existing companies (Innovation)

3. Develop an inspiring area for innovative businesses (Area)
Entrepreneurship (starting business)

- Awareness
- Talent scouting
- Education, training, coaching
- Business development
- Financing networks (HTT)
- Incubator, facilities
Innovation (existing business)

- Access to knowledge: Portals
- National programmes (threatened by government spending cuts)
  - Open Innovation Clusters
    - High Tech Facilities
    - Neutral ground
    - Events, training, acquisition, business development, etc.
- Acquisition of companies
New R&D centres

- TPRC (Thermoplastic Composites; incl. Boeing)
- High Tech Factory (small tech production)
- T-Xchange (virtual reality + serious gaming; incl. Thales)
- CMI (Medical Imaging; incl. Siemens)
- XUV optics (ASML, Zeiss, Panalytical)
Basic aspect

- Two extreme models
  - life sciences, pharma, etc.
  - nano, IT, etc.
- Centralized: TTO, roadmaps, licensing, IP
- Decentralized: business case development, start-ups, shares

- Twente: (decentralized model)
  - Technology (or IP) and business case are mostly only loosely linked
  - Start-ups are often an effective commercialization strategy
What is the driver?

- Talent!
  - Highly educated
  - Entrepreneurial
  - Ambitious
  - Aware!
- Knowledge, financing, environment (soil, water)
  - Entrepreneurship
  - Courage
  - Interaction
  - The realization that you need others
Lessons learned 1

- Is it our smart ideas that fuel the process?
  - A bit, but innovation is unpredictable
- It’s about talent that has the guts (or is naïve enough) and conditions to try it
  - You’re sitting on a goldmine?
  - Twente: 20% sees entrepreneurship as a serious career choice
  - And has no clue when they first visit
  - Entrepreneurial mindset on campus
Lessons learned 2

- The university is not the center of gravity from which it all branches out

- See the university and Kennispark as
  - part of the pie
  - in the light of a shared higher goal
  - regional development rather than tech transfer
Lessons learned 3

- The picture changes while we’re drawing it
  - Make ourselves ultimately and visibly responsible for the process (not only the results)
  - Pioneering qualities
  - Behave as a young firm with high ambition
    - Stay away from the debate around structure, public organizations love that but it’s poison for us
  - Deliver, deliver, deliver
Lessons learned 4

- We have to innovate the regional system
- University, city, province, partners, companies, public opinion: they learn the game along the way, with us
- Link straight into higher management and separate from the existing structures
- Cooperate with and invest in other parties
  Innovation platform, regional development agency
- Take time
Conclusions

- It’s a journey, not a structure
- It takes time
- Choose your pioneers carefully
- Learn and develop underway with internal and external partners and friends
- You have to: every regional system is unique
- And have a lot of fun