

**Nikos**

Dutch Institute for  
Knowledge Intensive Entrepreneurship

# University of Twente

## Entrepreneurship support at the University of Twente: Acceleration of Growth

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Research and Business Development

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**University of Twente**  
*The Netherlands*

## Presentation

- NIKOS
- Opportunities and results of spin off program from University of Twente
- Successes and issues to solve
- Approach of design of support structure
- Firm level
- University level
- New program high performance teams, high potential ideas
- Q & A

## Look who's talking?

- Mechanical Engineering / Industrial Engineering and Management
- Research: analyses of strategic processes of High tech start ups in a social network structure
- Business Development: consulting and training high tech start ups; 300 start ups.
- Consulting in curriculum development of new Innovation Management & Entrepreneurship Master at MEPhI (Moscow)
- Part time Entrepreneur

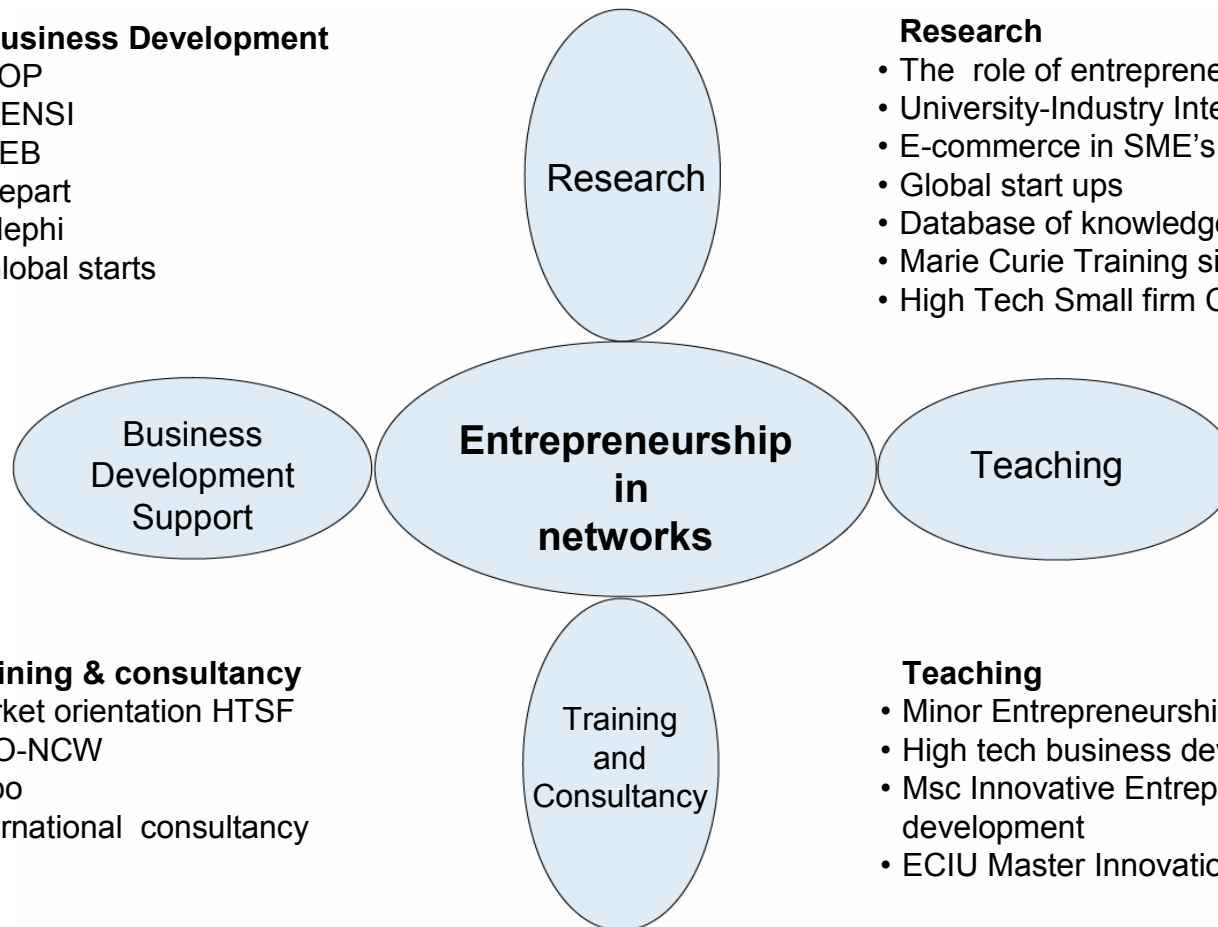
## Activities in NIKOS

### Business Development

- TOP
- NENSI
- KEB
- Bepart
- Mephi
- Global starts

### Research

- The role of entrepreneurial networking
- University-Industry Interaction (ECIU)
- E-commerce in SME's
- Global start ups
- Database of knowledge intensive firms
- Marie Curie Training site
- High Tech Small firm Conference



Business  
Development  
Support

**Entrepreneurship  
in  
networks**

Teaching

Training  
and  
Consultancy

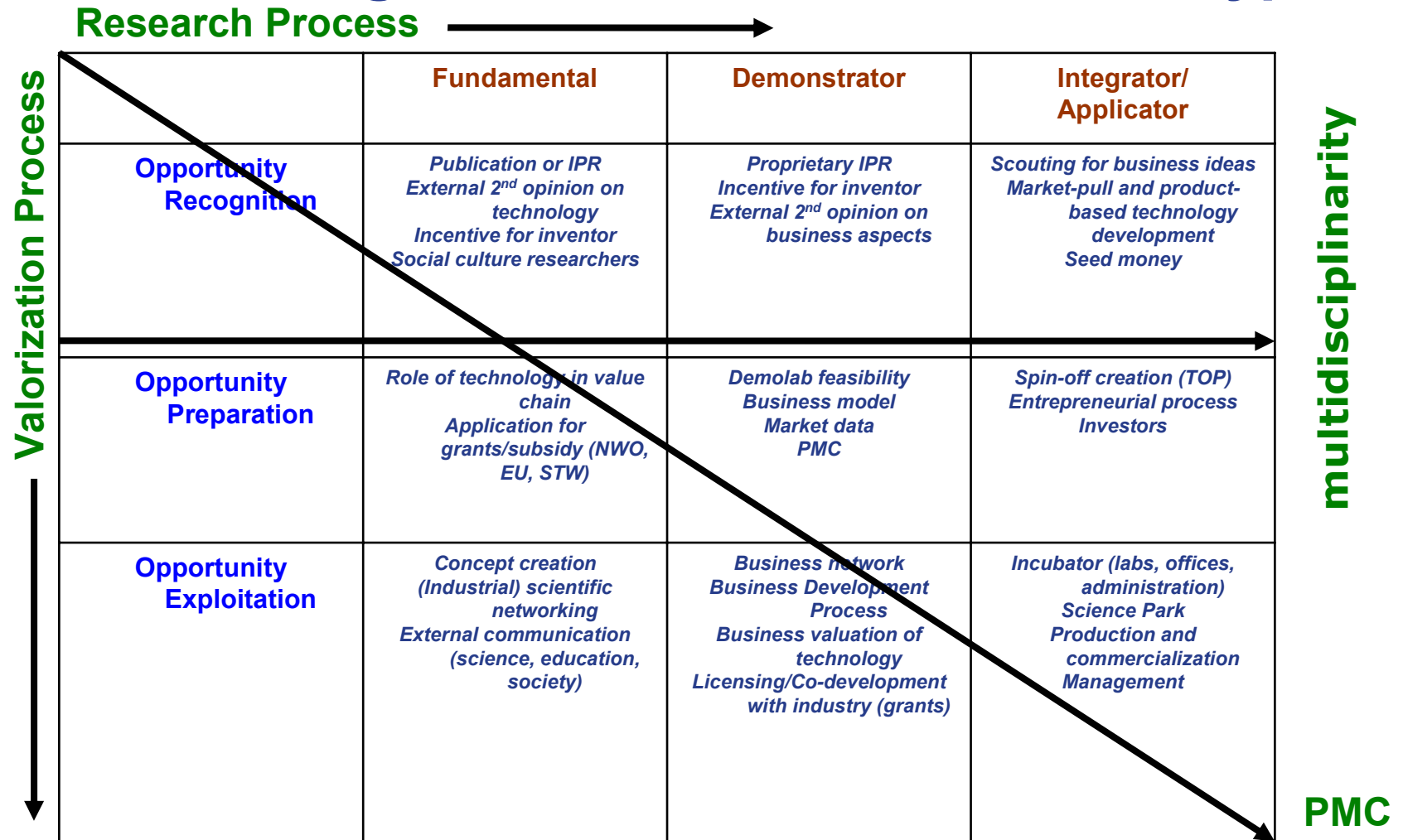
### Training & consultancy

- Market orientation HTSF
- VNO-NCW
- Rabo
- International consultancy

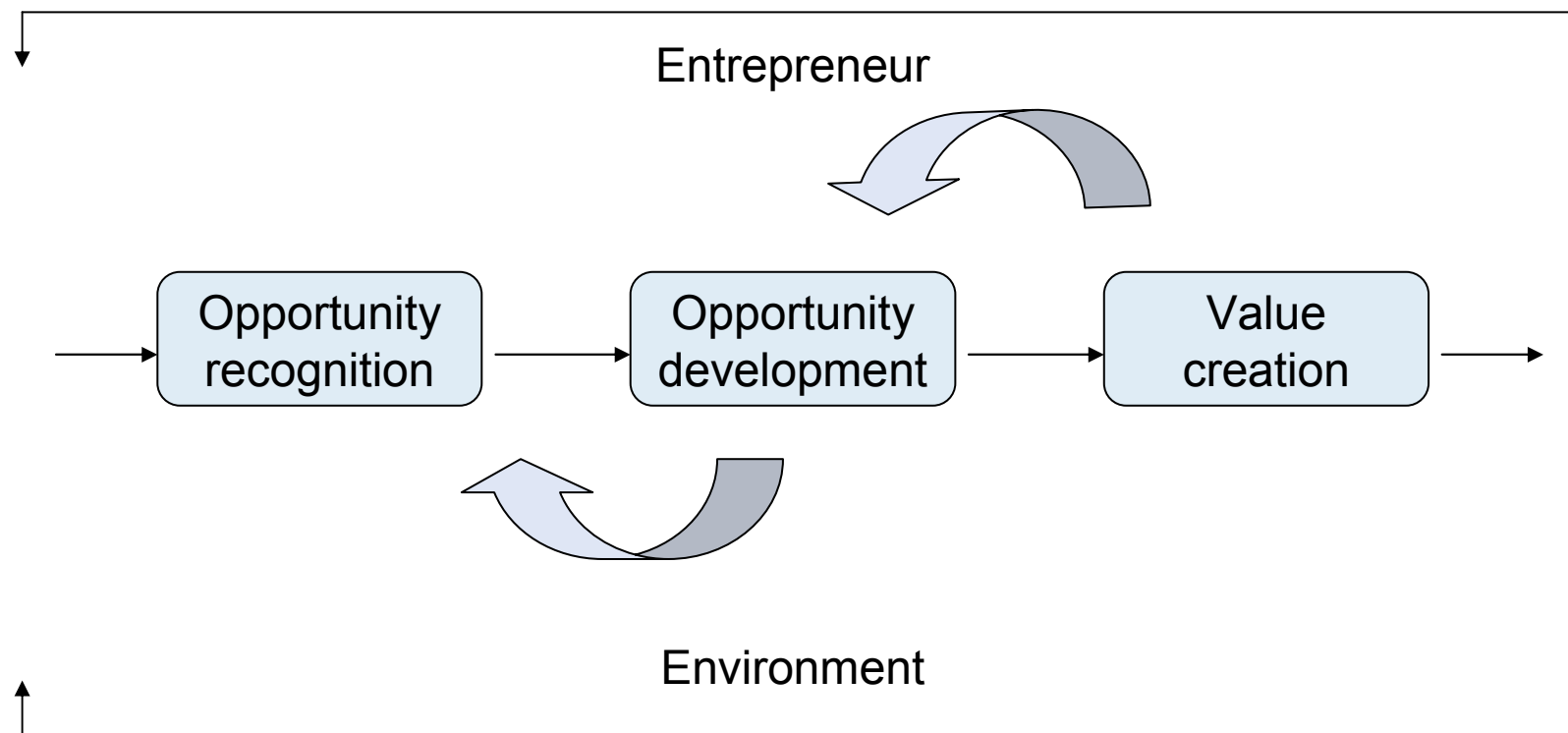
### Teaching

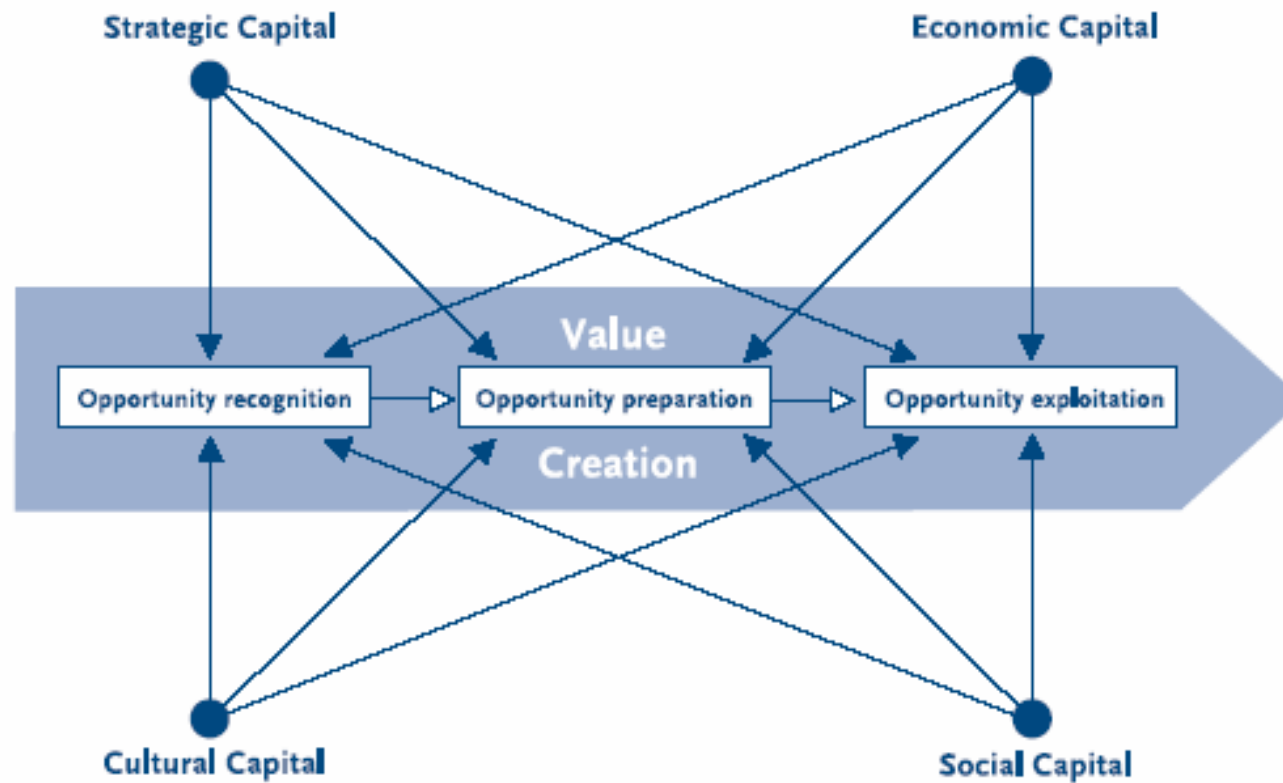
- Minor Entrepreneurship, international management
- High tech business development
- Msc Innovative Entrepreneurship & business development
- ECIU Master Innovation & Entrepreneurship

## Forms of creating value in different research types



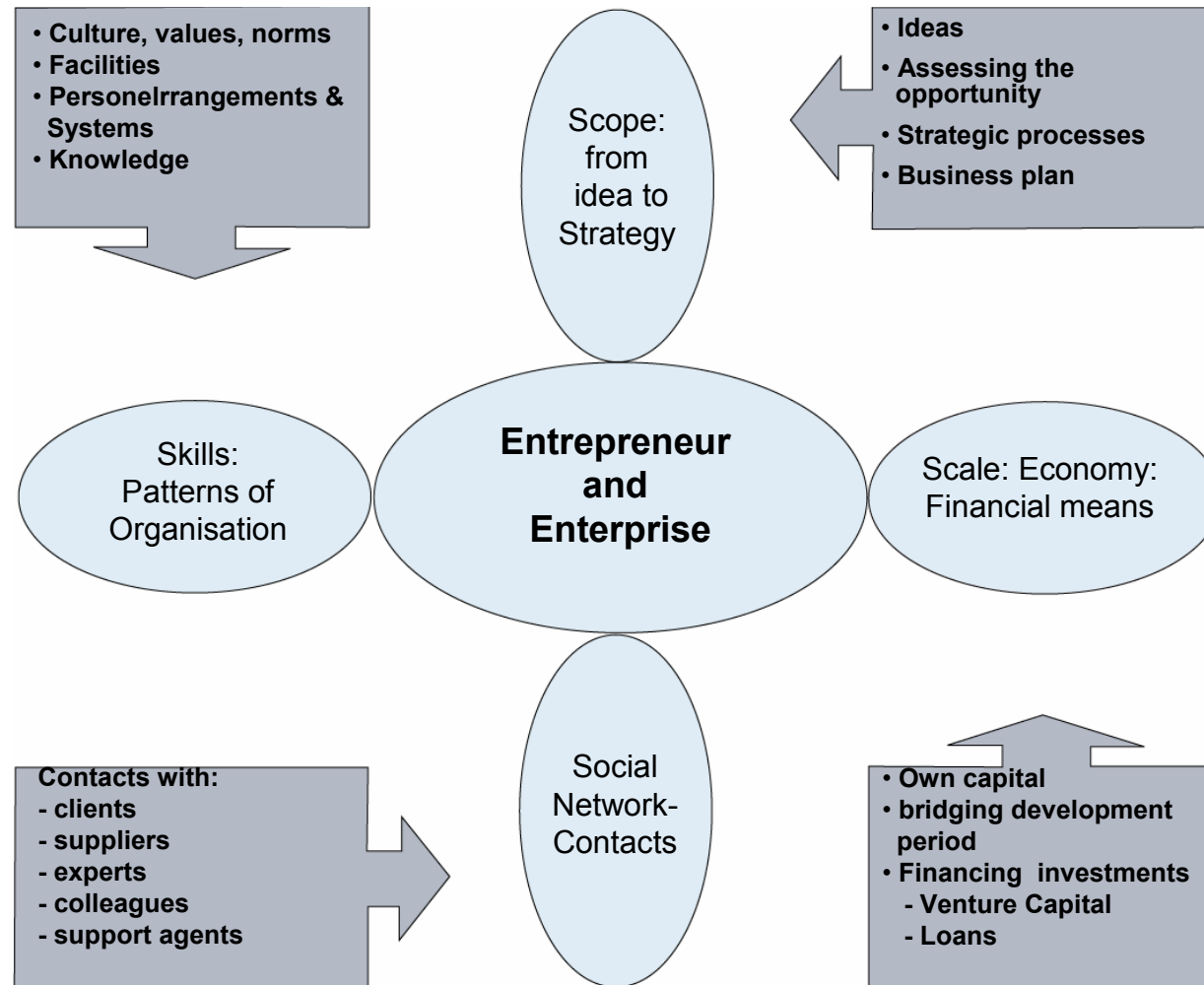
## The entrepreneurial process







## What are the needs of an entrepreneur?





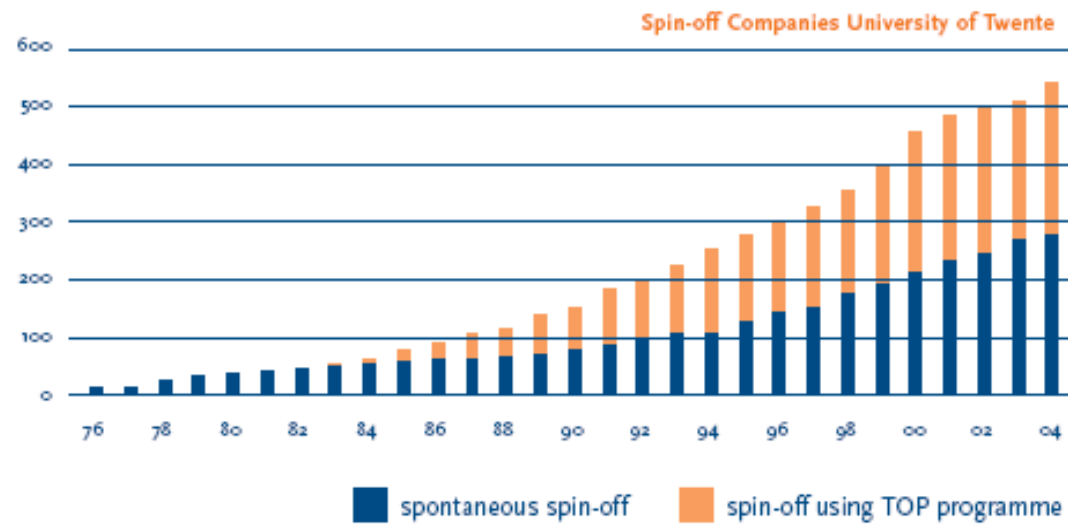
## Support instruments



## How to stimulate growth in high tech based firms?

- Laissez faire, the invisible hand of the market will do its work
- Governmental intervention, The visible hand steers the region: e.g. transfer state service organisations to the region; or start an university
- Co-ordinate many visible hands by building entrepreneurial networks on micro level

## Spin off Companies University of Twente



## Economic results:

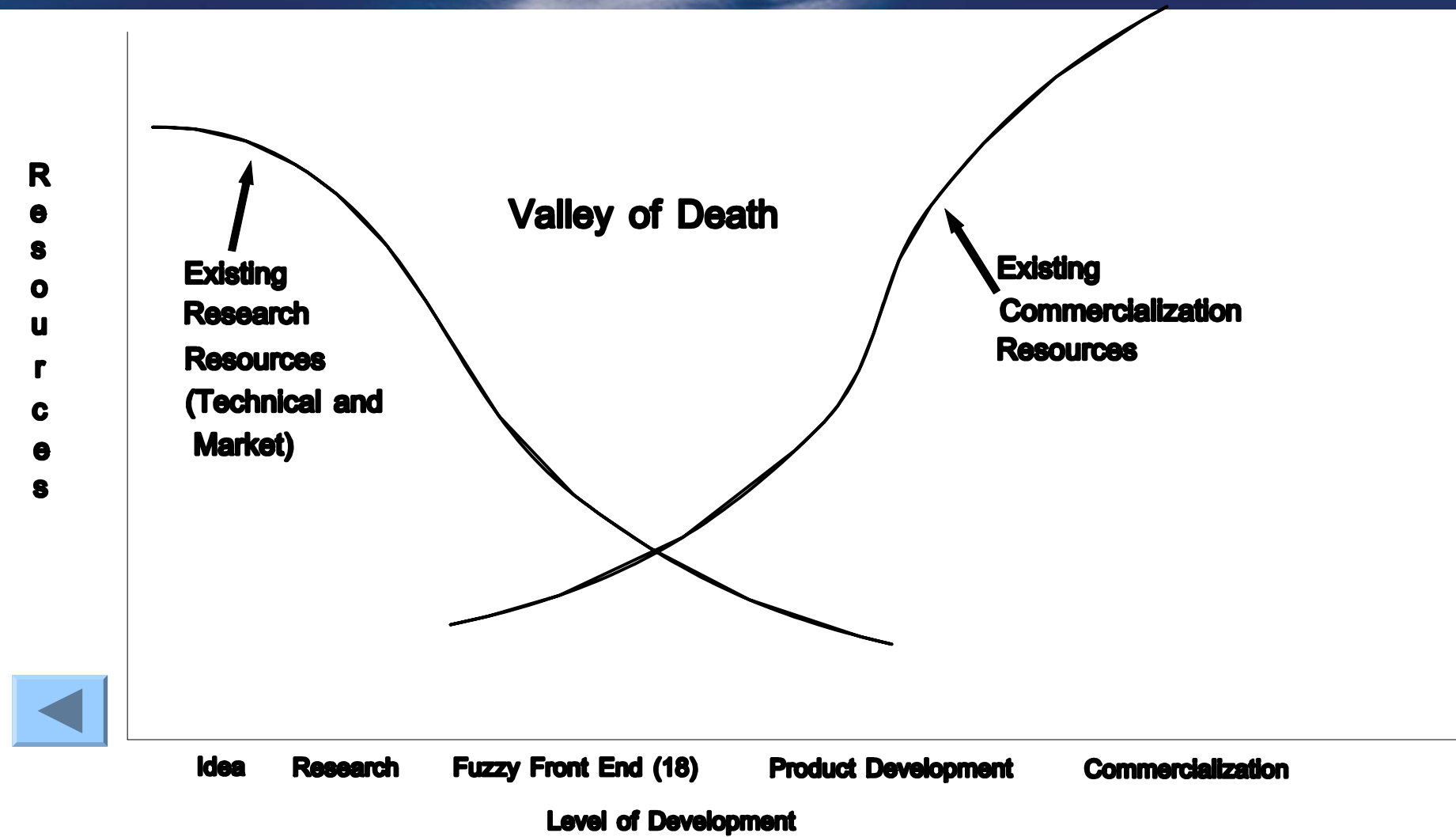
- 500 firms in TOP program (since 1985)
- Approx. 400 survived
- Total direct employment in region > 3000 fte
- Indirect employment ?
- Clustering: ICT, biomedical, process technologies, nano (around Mesa+)

## Issues

- Spin offs are small (medium) sized
- Growth is small
- Distance to market → valley of death
- IP management
- What about creating business in/with existing firms?
- Difference between inventor and entrepreneur

## Issues

- Market orientation versus technology orientation
- Operational effectiveness versus Strategic flexibility
- Service or product / production
- Strategic partnering
- Management competencies
- Building of industrial networks
- Global arena





## Incubators

### Twente Life Sciences Business Accelerator



Nanotech accelerator



Business & Technology Centre – BTC-Twente

## Entrepreneurship in the curriculum (1)

3yr Bachelor / elective Minor

1 & 2 year Master programme

2005-2006 theme **minor** Entrepreneurship

### Innovative Entrepreneurship & Business Development Business Administration (MSc)

Entrepreneurship has been seen as a basis for economic growth since Schumpeter showed the importance of entrepreneurship for radical economic change. Structural readjustments in the economy, as Schumpeter labelled the process of creating new markets using innovations, are not initiated by people and organisations that recognise the opportunity of the innovation underpinning them, and consequently create new business upon this opportunity. The recognition and assessment of opportunities, the development of business concepts and their implementation is the basic process under study. In this context, we offer a one-year, full-time Master's programme in Innovative Entrepreneurship & Business Development. The programme is closely connected to Nikos research on entrepreneurship in networks.

**Objectives**

The Innovative Entrepreneurship & Business Development Master's programme aims to provide students with:

- competences to work in an entrepreneurial context
- knowledge of entrepreneurship as a scientific field
- a network of innovative companies and entrepreneurs
- the opportunity to develop their own enterprise

**Programme**

Innovative Entrepreneurship & Business Development is a programme within the Business Administration Master's programme. The programme comprises 60 European Credits (EC). You will be introduced to the field of academic knowledge on entrepreneurship and innovation in lectures on:

- principles of entrepreneurship
- business development in a network perspective
- organisational factors of entrepreneurial processes
- design and management of the innovative organisation

graduate.utwente.nl

University of Twente  
The Netherlands

Discover (knowledge intensive) entrepreneurship

University of Twente  
The Netherlands

## Characteristics of successful support of entrepreneurial processes


- Multi-dimensional (strategy, organisation, networking, economics)
- Multi-level networking: firm level, regional level, global networks enhancing University Industry Interaction across technological fields
- Multi-actor: combining heterogeneous competencies e.g. creativity, technology, and marketing competencies



**Nikos**

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**New Program for generating High potential  
entrepreneurial teams creating business out  
of UT-technology**



## Group based support/selection

- Kansrijk eigen baas (200 firms created in 2,5 year in Achterhoek)
- Individual trajectories (self selection based)
- Group based (n=60, 4-6 months)
- Self selection + assessment
- Intensive training, ideas brought in, process of enterprise concept development



## High Tech / High potential Group based selection process

- Enterprising with knowledge
- Group based (n=60, 4-6 months) + team/concept based 1 year
- Target groups students & persons with work experience
- Using high potential business concepts UT

## **High Tech / High potential Group based selection process**

1. Self selection + assessment
2. Intensive training, general ideas brought in, process of enterprise concept development
3. Selection of high potential teams matched with high potential business concepts
4. Small group/personal coaching with high level business coaches
5. Network with international VC-funds
6. Office space 1000m<sup>2</sup>



## Expected Results

- Groups of 60 persons
- 30 firms based on own idea development of participants (after 5 years 25 firms, employment >250)
- 5 firms based on high potential ideas matched with teams based on selection during program (after 5 years, 2-3 firms, employment >250)
- 2 groups per year, 3 years → employment after 8 year >3000

## Questions and remarks?

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