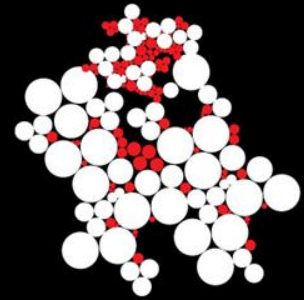


UNIVERSITY OF TWENTE.



# How to become an entrepreneurial university

Dr. A.H. Flierman

President, University of Twente





# HISTORY

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- 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

# RoUTe '14 - high tech human touch

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- 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

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- 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

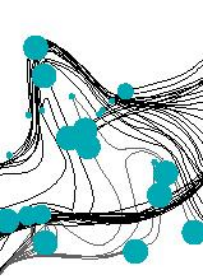
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- 20 bachelor's programmes
- 33 master's programmes
- Technology, behaviour, society, and medicine
- Approx. 10.000 students (ba, ma, PhD)

# ENTREPRENEURIAL UNIVERSITY

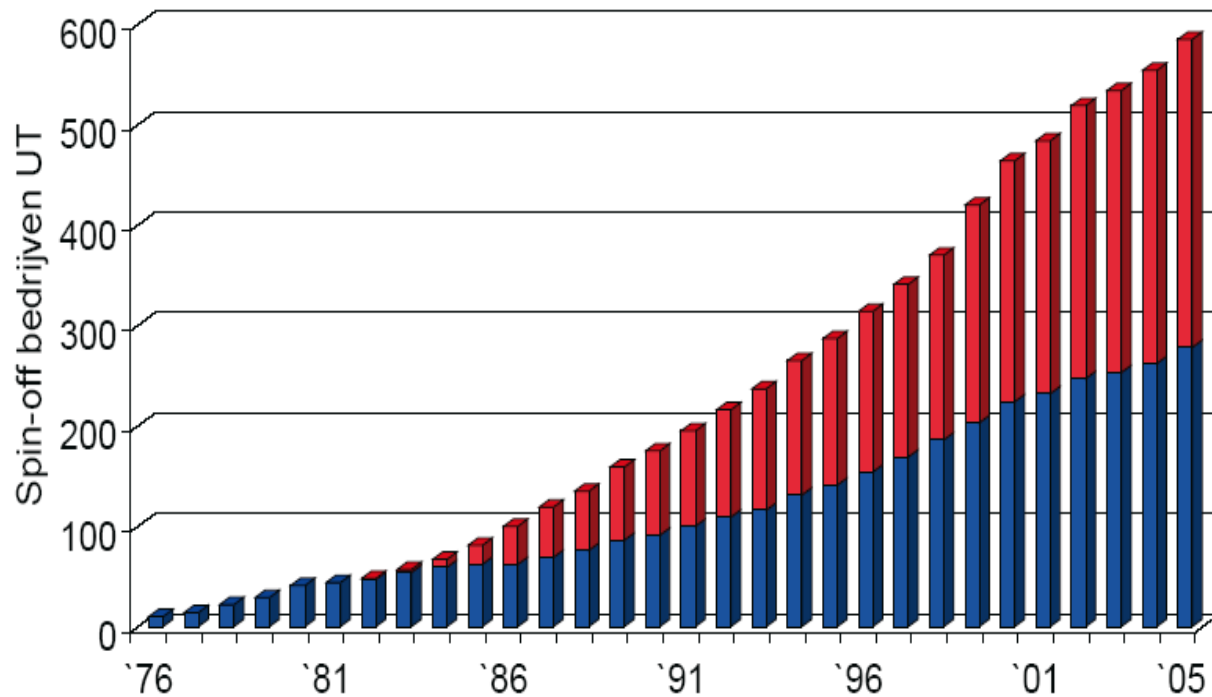
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- Identify and support talent
- Provide facilities (labs and offices) through *Kennispark* business accelerators
- Provide investment funds and support through Holding Technopolis Twente



# UT spin offs

700 spin offs approx. 7000 jobs





## Kennispark (Science park) Twente

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- 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

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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)

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

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- 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

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- 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

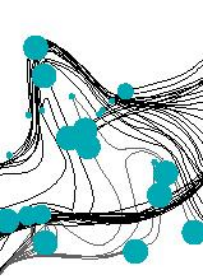
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- Two extreme models
  - life sciences, pharma, etc.
  - nano, IT, etc.
- Centralized: TTO, roadmaps, licensing, IP
- Decentralized: business case development, start-ups, shares
  
- Twente: (decentralized model)
  - Technology (or IP) and business case are mostly only loosely linked
  - Start-ups are often an effective commercialization strategy

# What is the driver ?

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



## Lessons learned 1

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- 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

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- 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

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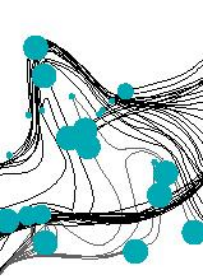
- The picture changes while we're drawing it
  - Make ourselves ultimately and visibly responsible for the process (not only the results)
  - Pioneering qualities
  - Behave as a young firm with high ambition
    - Stay away from the debate around structure, public organizations love that but it's poison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



## Lessons learned 4

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- 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

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- 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

