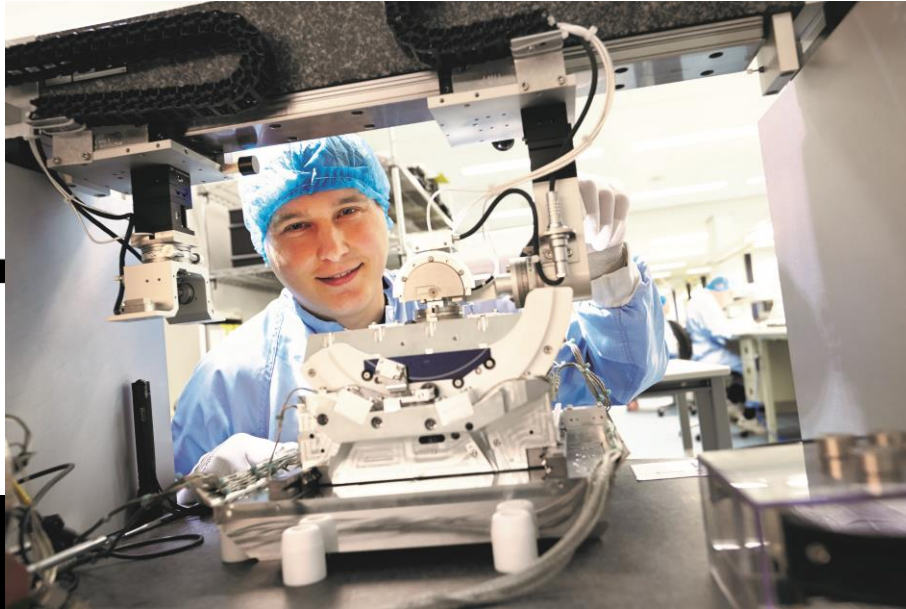


FIELD LABS FOR DIGITALIZATION OF INDUSTRY

› RECENT POLICY EXPERIENCES IN THE NETHERLANDS

Tom van der Horst, June 14th 2017



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QUESTIONS

Changing markets for innovation and new avenues for industry-research collaborations

- How are markets for innovation changing? What have been their impacts on new forms of collaboration in innovation?
- How does the digital transformation affect the importance of geography in industry-research collaborations? What is the role of regional institutions?
- Are large emerging research consortia (involving both industry and research) the future of industry-research collaborations? Are these consortia conducive to innovation and job creation? What ownership model provides the best economic benefits to participants and the socioeconomic context at large?
- What role are universities and public research institutes playing in supporting business innovation in the digital economy? How is it different from the past?

DIGITIZATION CHANGE THE MARKET FOR INNOVATION; NEW FORMS OF COOPERATION

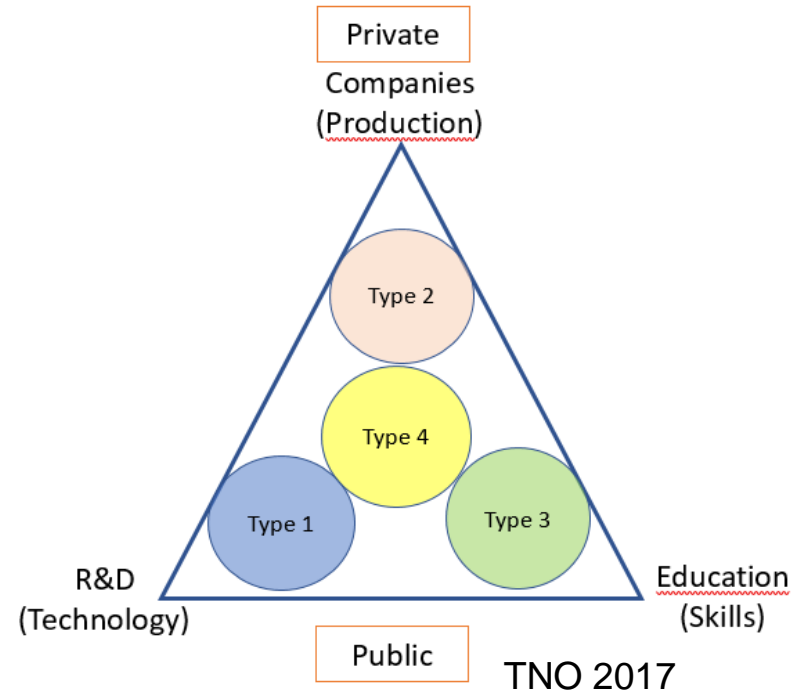
→ SMART INDUSTRY FIELD LABS

- › Smart Industry: acceleration of digitalisation of industry
 - › Approach: **bottom-up development of field labs.**
 - › **Field labs** are an industrial environment where Smart Industry solutions are developed, tested, implemented as well as where people can learn to apply them.
 - › Close cooperation of companies, knowledge institutes and government (public private partnership).
 - › 30 fieldlabs has started up in 2 years.
- Inspiration for regions and EU (digital innovation hubs)



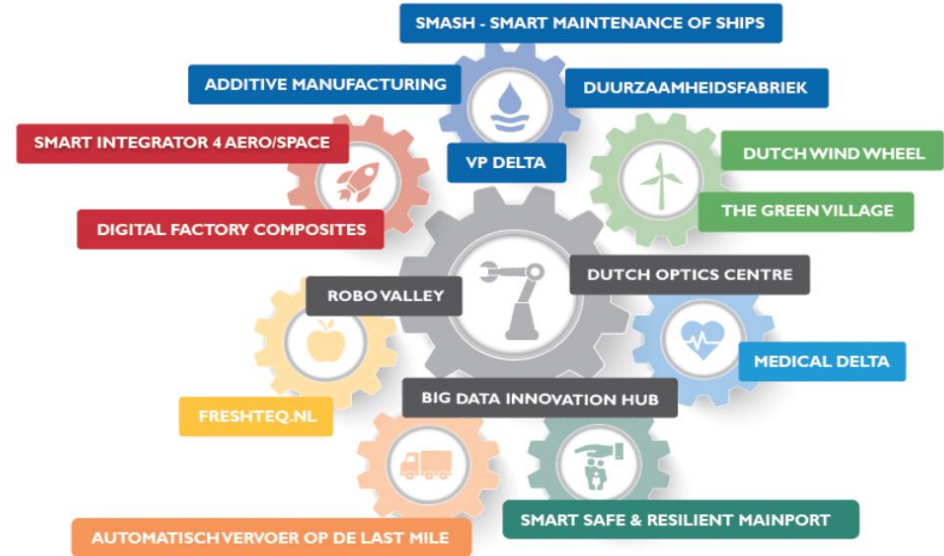
FIELD LABS ASK FOR ADAPTIVE POLICY APPROACHES

- › The bottom up approach seems inevitable
→ digital innovations and the related business models are hard to predict
- › Field labs ask for an adaptive approach: portfolio management
→ are the most important ICT innovations covered? (TNO study for EZ / OECD)
- › Professionalizing of the field lab approach itself → improving typologies and standards



GEOGRAPHY OF INDUSTRY-RESEARCH COLLABORATIONS; WHAT IS THE ROLE OF REGIONAL INSTITUTIONS?

- › Dutch regions have adapted field labs as an attractive instrument for executing their innovation policy.
- › The regional level seems to strengthen the adaptive approach; local networks, proximity
- › But there is a risk for fragmentation, 'me-too' initiatives
→ national portfolio management



DOES FIELD LABS CONTRIBUTE TO BUSINESS AND JOB CREATION?



3. SMART DAIRY FARMING 3.0

Increasing sustainability (health and production), efficiency and profitability of dairy farming by collecting real-time data of dairy cows and sharing this in the supply chain. Partners: Friesland Campina, CRV and Agrifirm. Location: Amersfoort.

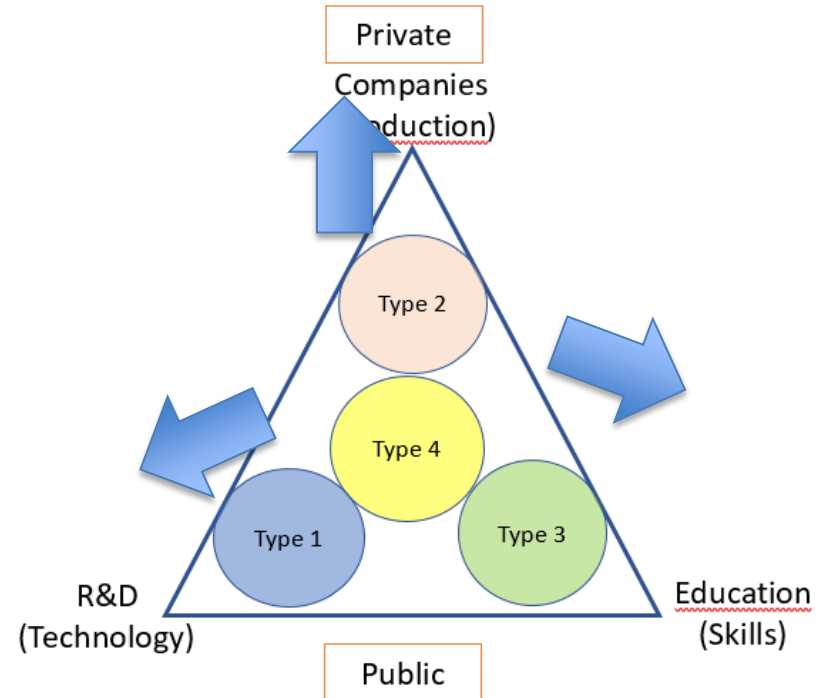
- → the field lab has become a data company



THE OWNERSHIP MODEL OF FIELD LABS DEVELOP OVER TIME

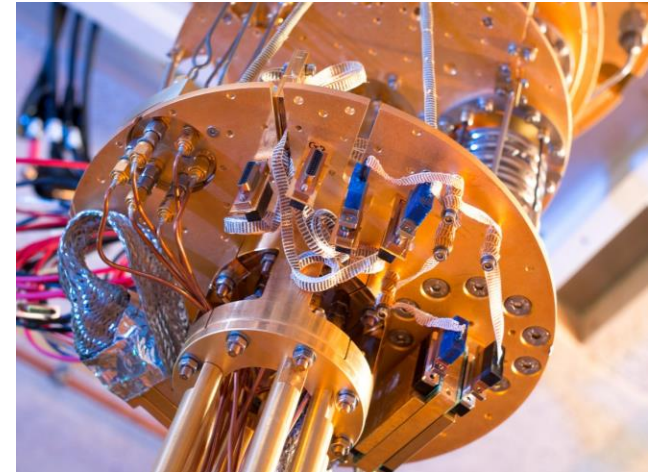
1. The field lab become a company
2. Or become a knowledge institute
3. Or become an education activity

(No bias please)



ARE LARGE EMERGING RESEARCH CONSORTIA THE FUTURE OF INDUSTRY-RESEARCH COLLABORATIONS?

- › Yes; for international break through innovation initiatives large consortia (mass, scale) are needed, for example Qutech
- › But other types of field labs needs to operate on a regional or national level; creating regional impact to assist SME's with digitization of their business model



ROLE OF UNIVERSITIES AND PUBLIC RESEARCH INSTITUTES IN SUPPORTING BUSINESS INNOVATION

- › More adaptive
- › Co development of roadmaps in public /private strategy processes
 - regional, national and international portfolio management of public private partnerships

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