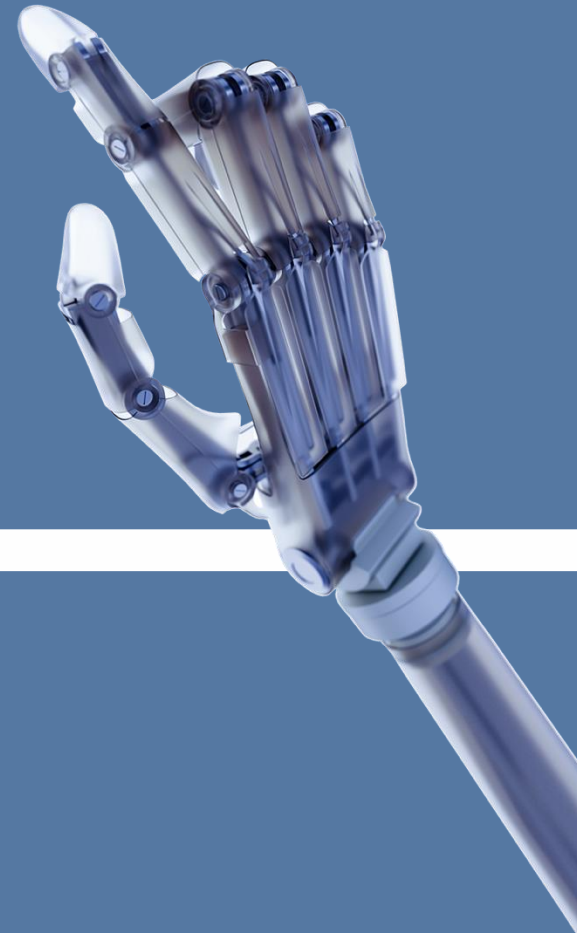


› LEIDERSCHAP IN NETWERKEN

ARNOLD STOKKING,
Algemeen Directeur Industrie

TNO innovation
for life



Agenda

1. Eigen positie kennen
 - TNO en positionering
2. De enorme toename in netwerken en redenen waarom
3. Enkele handvaten voor leiderschap aan de hand van voorbeeld Solliance
4. Discussie

TNO missie

TNO connects people and knowledge to create innovations that boost the sustainable competitiveness of industry and well-being of society.

Our two main business models are:

Contract research

Co Creation, Shared Research

Next to consultancy, licensing and venturing

Thema's & Roadmaps

INDUSTRY
HEALTHY LIVING
DEFENCE, SAFETY & SECURITY
URBANISATION
ENERGY



FLEXIBLE & FREE-FORM PRODUCTS
SPACE & SCIENTIFIC INSTRUMENTATION
SUSTAINABLE CHEMICAL INDUSTRY
SEMICONDUCTOR EQUIPMENT
NETWORKED INFORMATION

FOOD & NUTRITION
PREDICTIVE HEALTH TECHNOLOGIES
PREVENTION, WORK & HEALTH

MISSIONS & OPERATIONS
FORCE PROTECTION
INFORMATION SUPERIORITY
HUMAN EFFECTIVENESS
CYBER SECURITY & RESILIENCE
NATIONAL SECURITY & CRISIS MANAGEMENT

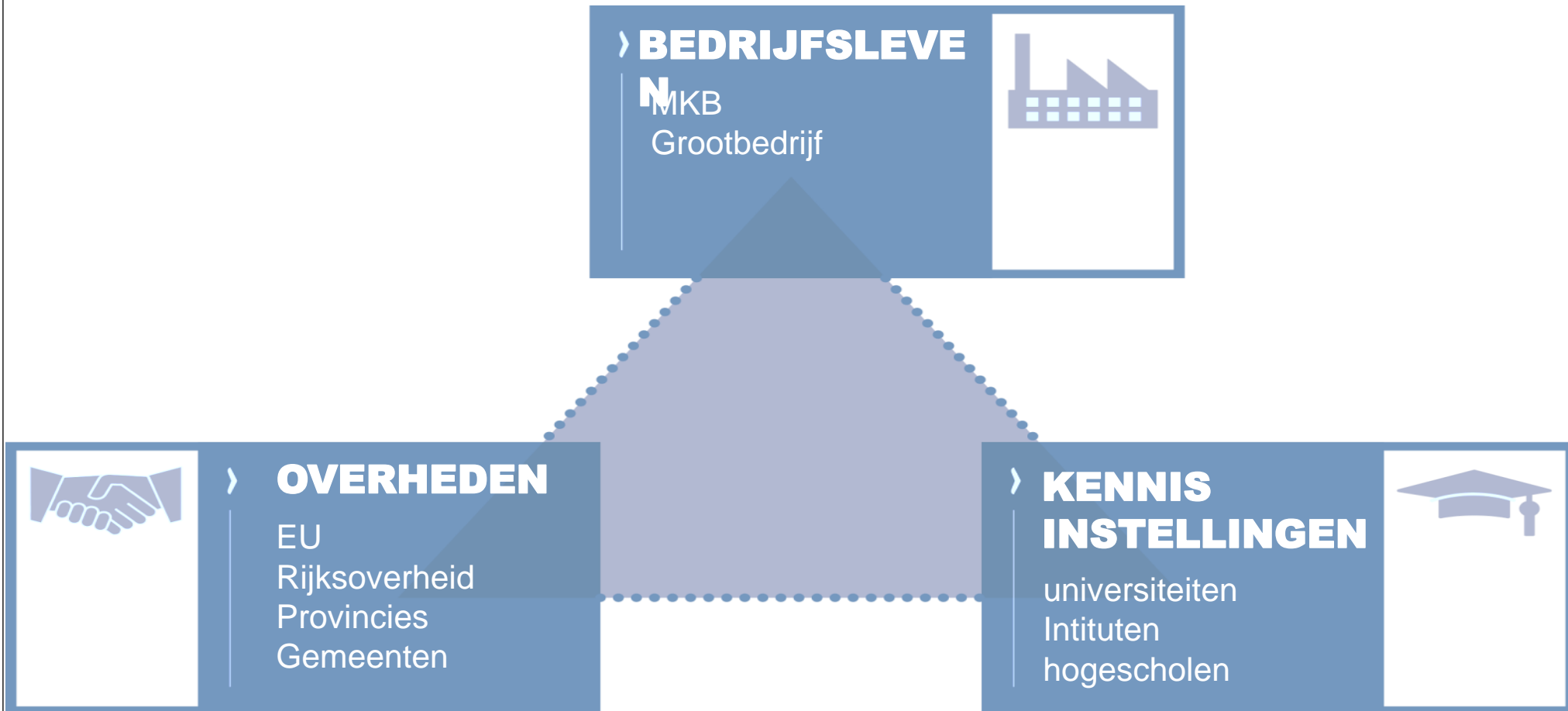
MOBILITY & LOGISTICS
ENVIRONMENT & SUSTAINABILITY
BUILDINGS & INFRASTRUCTURES
SMART CITIES

SUSTAINABLE ENERGY
GEO ENERGY
GEOLOGICAL SURVEY OF THE NETHERLANDS
MARITIME & OFFSHORE

Positionering aan de hand van 4 bouwstenen



GOUDEN DRIEHOEK (TRIPLE HELIX)



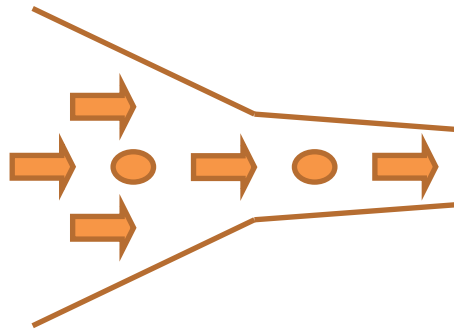
VAN TRIPLE HELIX NAAR MULTI HELIX



INNOVATIE ONTWIKKELINGEN

OOK TOEPASBAAR BUITEN INDUSTRIE?

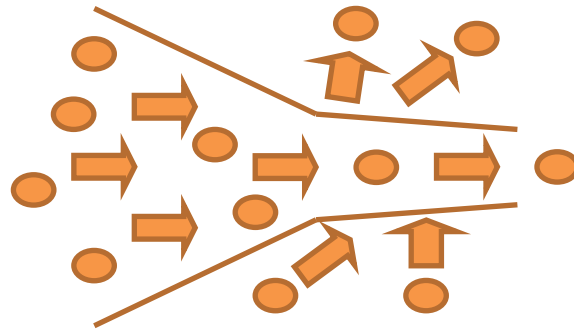
Vanaf de 20^e eeuw



Naar binnen
gerichte innovatie

Closed innovation

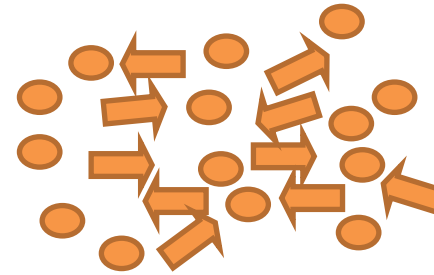
Vanaf 2000 en verder



Extern gerichte,
gezamenlijke innovatie

Open innovation

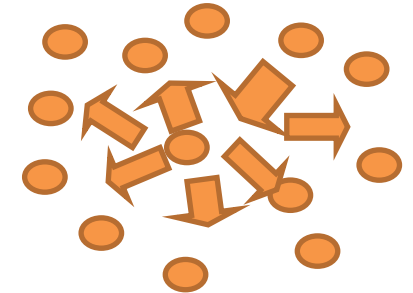
Vanaf 2005 en verder



Ecosysteem centraal,
Cross-organisatie
innovatie

**Network Centric
Innovation**

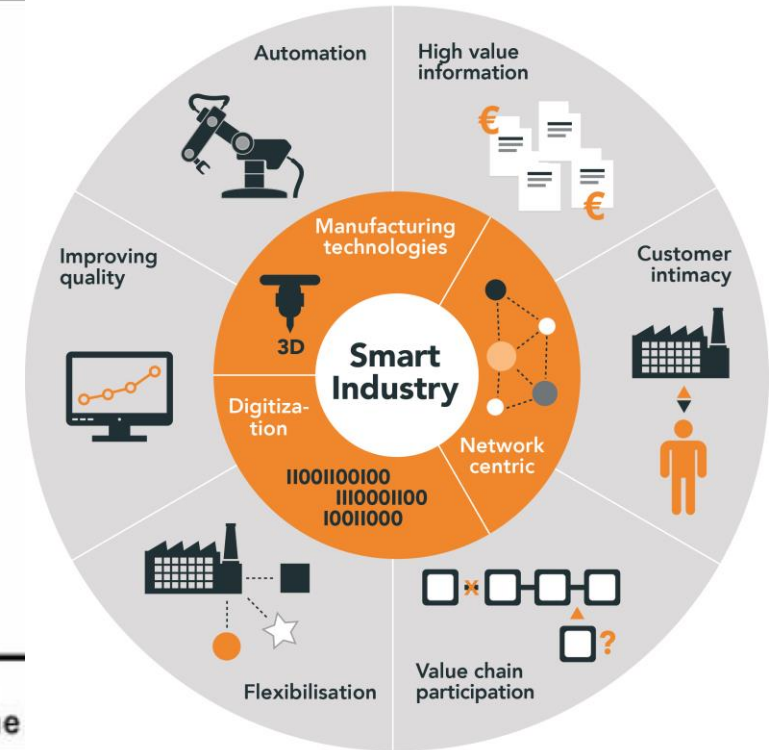
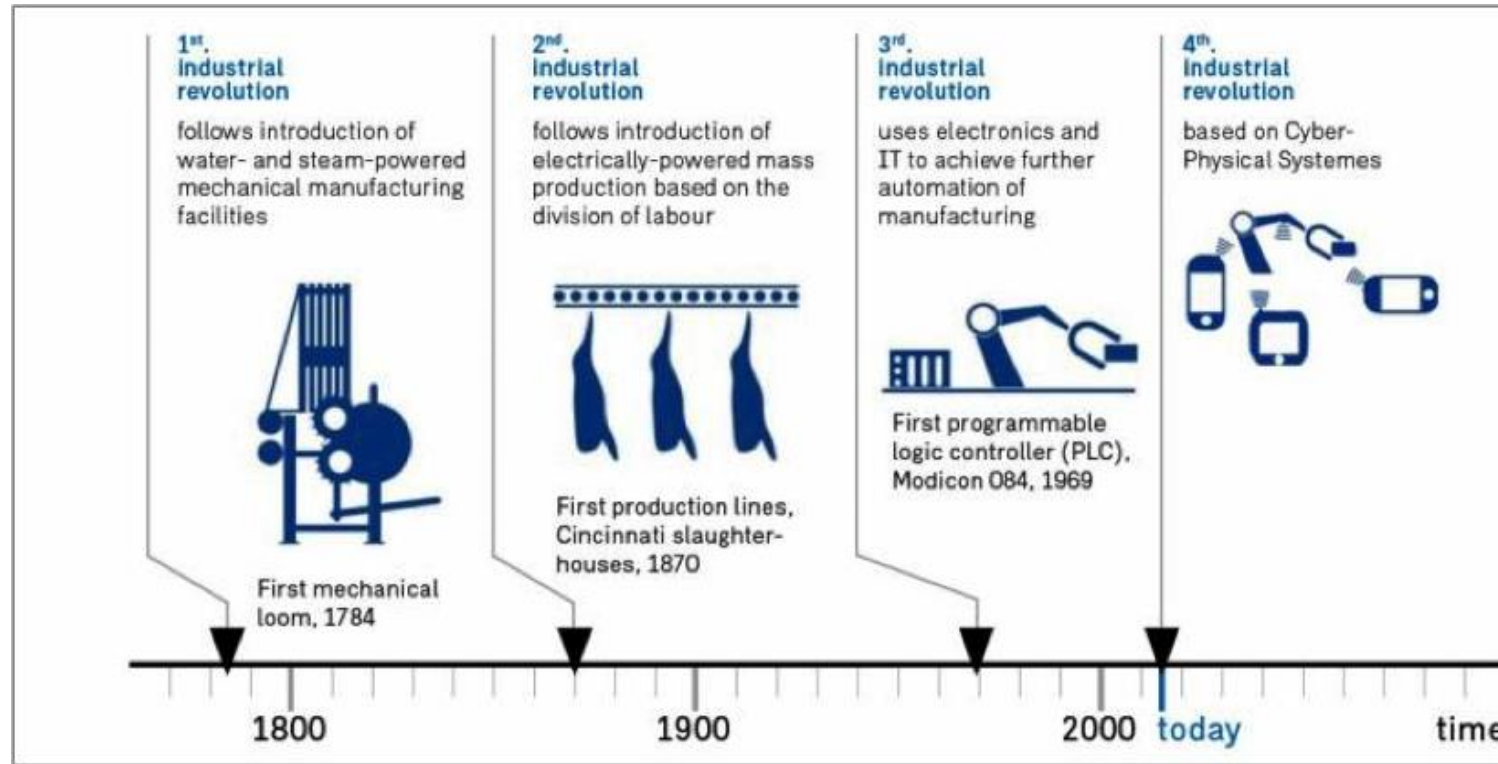
Vanaf 2012 en verder



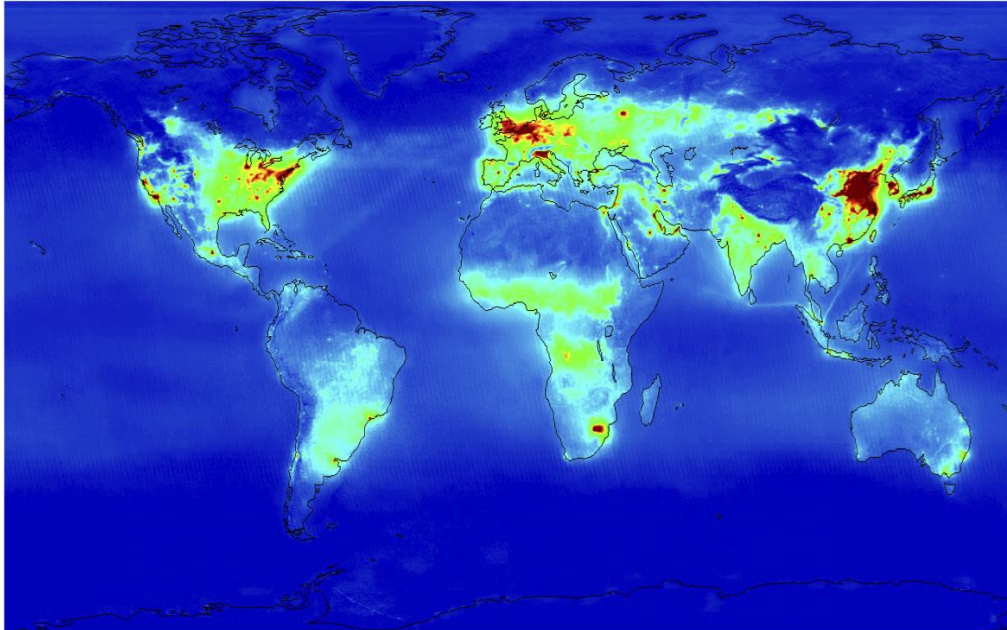
Multi valorisatie,
Ecosysteem & ICT
Exponentieel

**Networks and
Platforms**

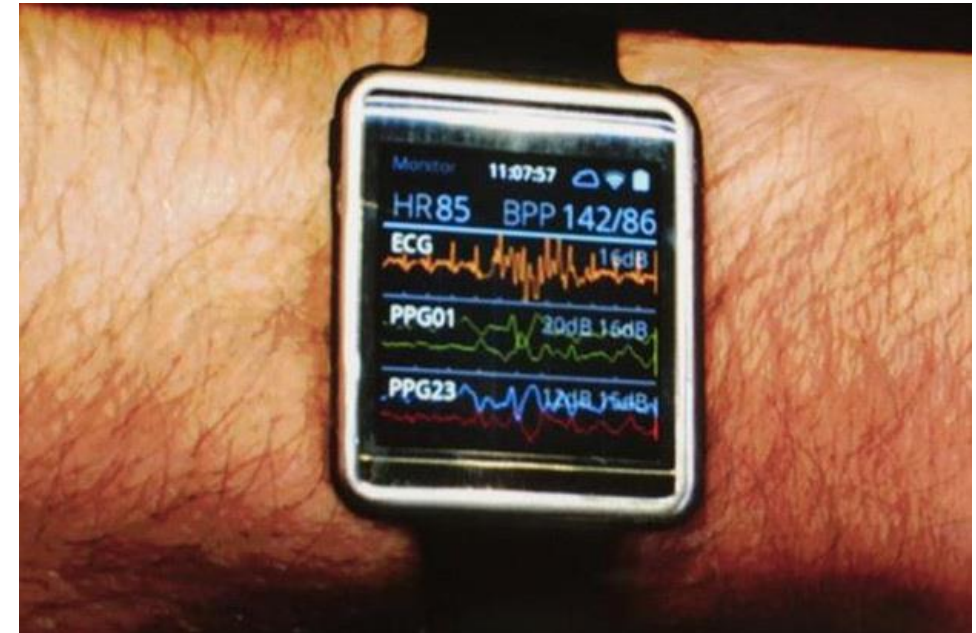
DIGITALISERING HEEFT ENORME IMPACT OP ONTWIKKELINGEN EN OP SAMENWERKEN.



VRIJWEL ALLE PRODUCT EN SERVICE DOORBRAKEN ZIJN GEBASEERD OP SAMENWERKEN.



NOx data from (TROP)OMI, available for everybody

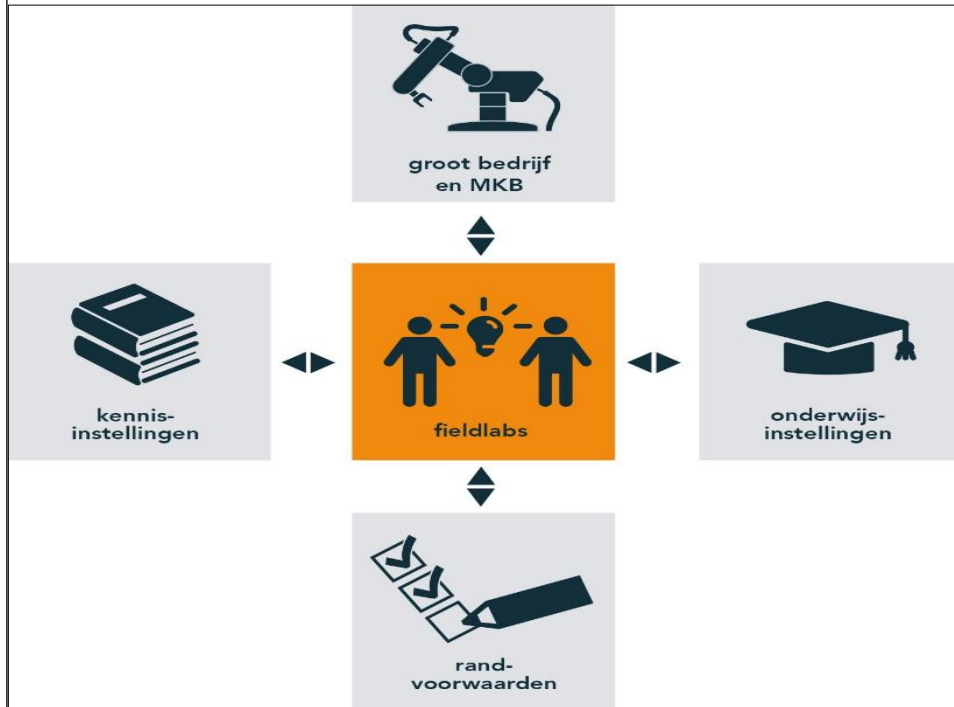


Smart watch Samsung met Holst Centre inside

VAN EEN PROJECT ORGANISATIE NAAR FOCUS EN MASSA: ECOSYSTEEM BENADERING



FIELDLAB, CONCEPT VAN SMART INDUSTRY

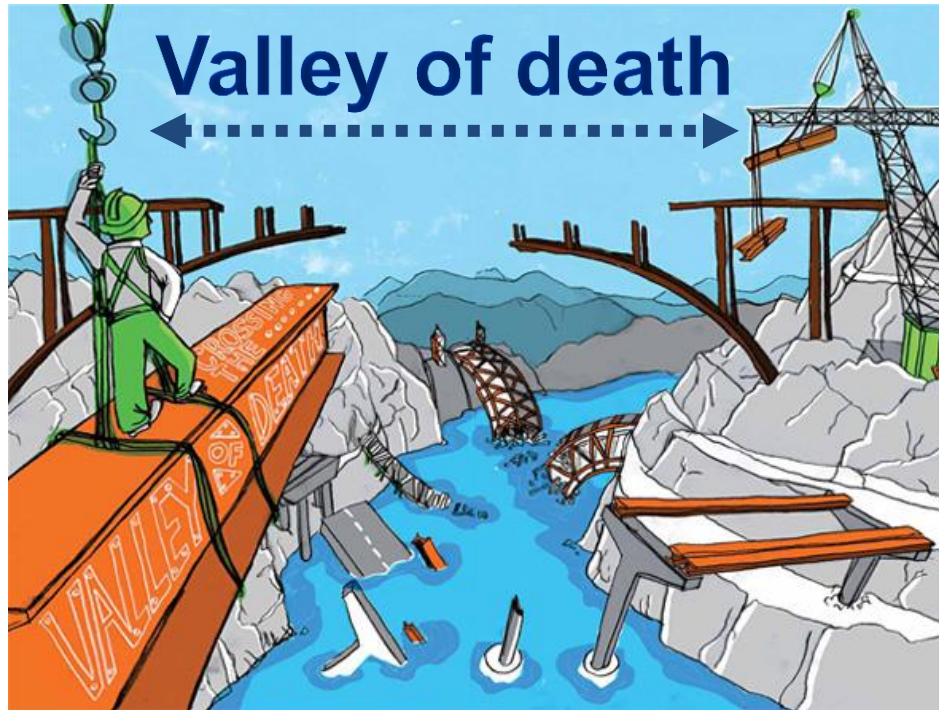


Fieldlab is: a practice environment in which companies and knowledge institutions targeted further development, testing, and deploying Smart Industry Solutions

Different functions:

- achieve breakthrough innovations
- driver of innovation ecosystem
- low threshold (new technology)
- regional integration
- connecting HBO and MBO to Smart Industry topics
- Identification of Human Capital attention points
- identifying obstacles for regulation

FIELDLABS REDUCEREN RISICO'S DOOR:



- › Samen investeren tijdens fase van hoge kosten en risico
- › Marktvraag testen
- › Skills combineren

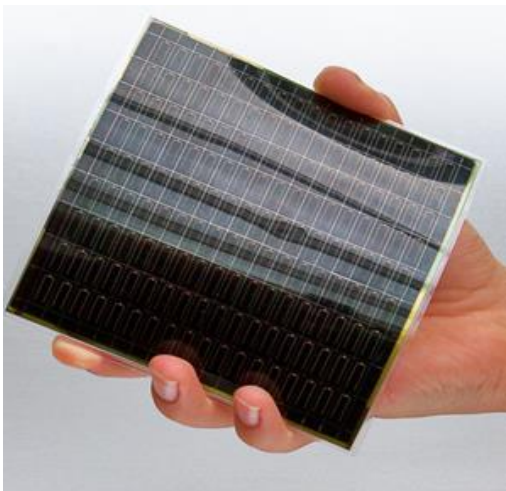
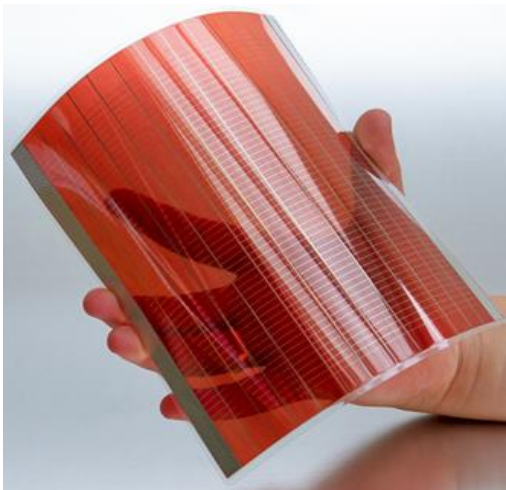


TRANSACTIONNEEL SAMENWERKEN VERSUS STRATEGISCH SAMENWERKEN

- **Transactioneel Samenwerken: (Key Account Management):** De kunst om je klant/partner te begrijpen en je aan te passen aan hun strategie en vraag. Dit vertaalt zich in proposities waarbij je bij voorkeur de verwachtingen van je klant / partner overtreft.
- **Strategisch samenwerking (strategische allianties):** Samenwerking op een deelgebied van de organisatie waarbij de partners een deel van hun organisatie en middelen inbrengen en daarbij een deel van de zeggenschap afstaan aan de samenwerking.

Strategische Allianties kenmerken zich door:

- win-win focus
- balance of power



Partners in research and industry

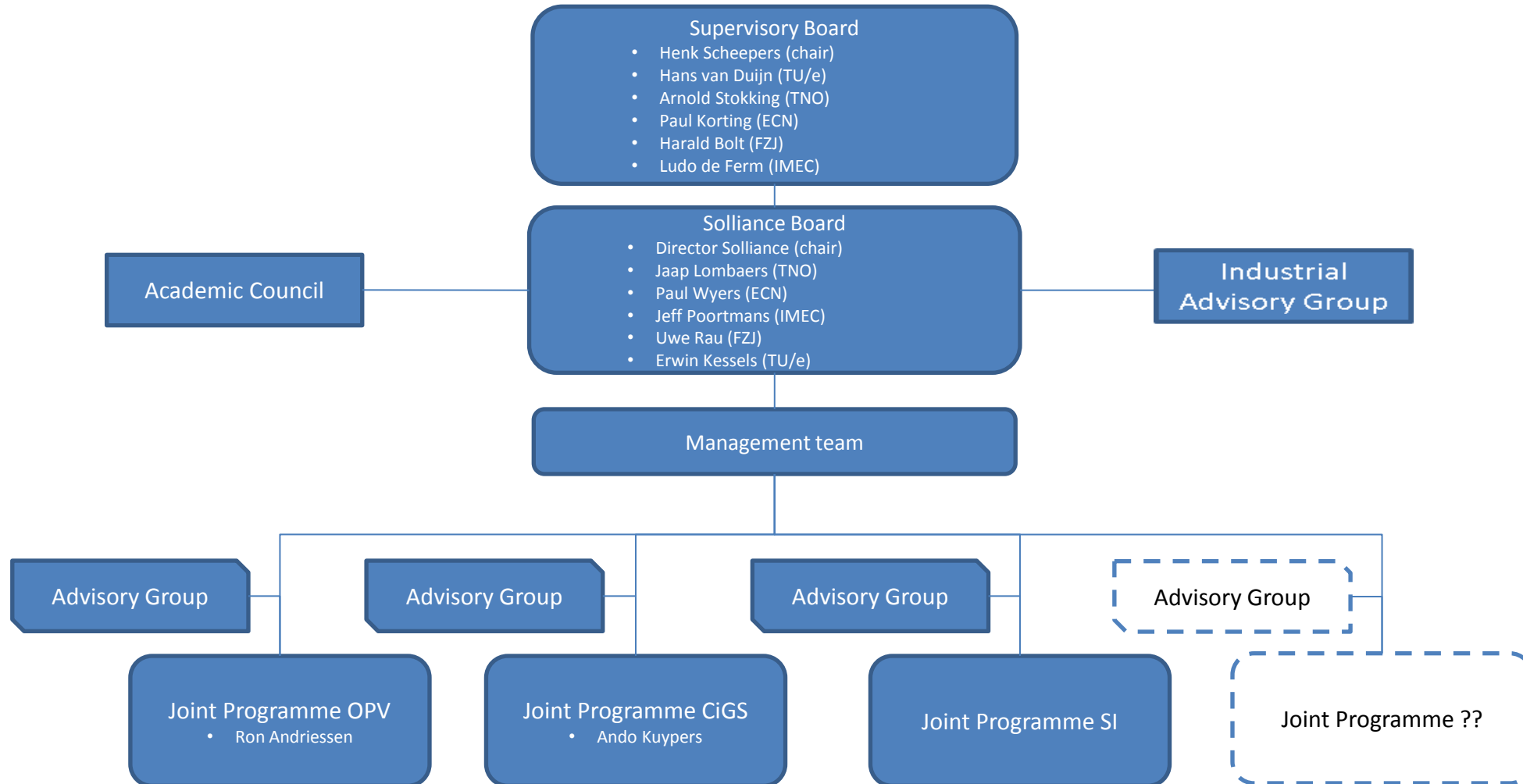
Solliance research partners



Solliance industry partners



Solliance Governance Structure



Guiding principles

- Each level monitors and sets the stage for subordinate levels:
 - Supervisory Board:
 - Monitors and steers the ‘Why’ of Solliance (what is the overall purpose of Solliance)
 - Creates and monitors the conditions for a sustainable organization
 - Board of Directors:
 - Monitors and steers the ‘How’ of Solliance (which initiatives are we going to start to serve the overall purpose of Solliance)
 - Creates the conditions for a successful operation
 - Is responsible for the execution
 - Management Team
 - Monitors and steers the ‘What’ of Solliance
 - Delivers the results
- ‘two hats’ must be avoided

Thank you for your attention

