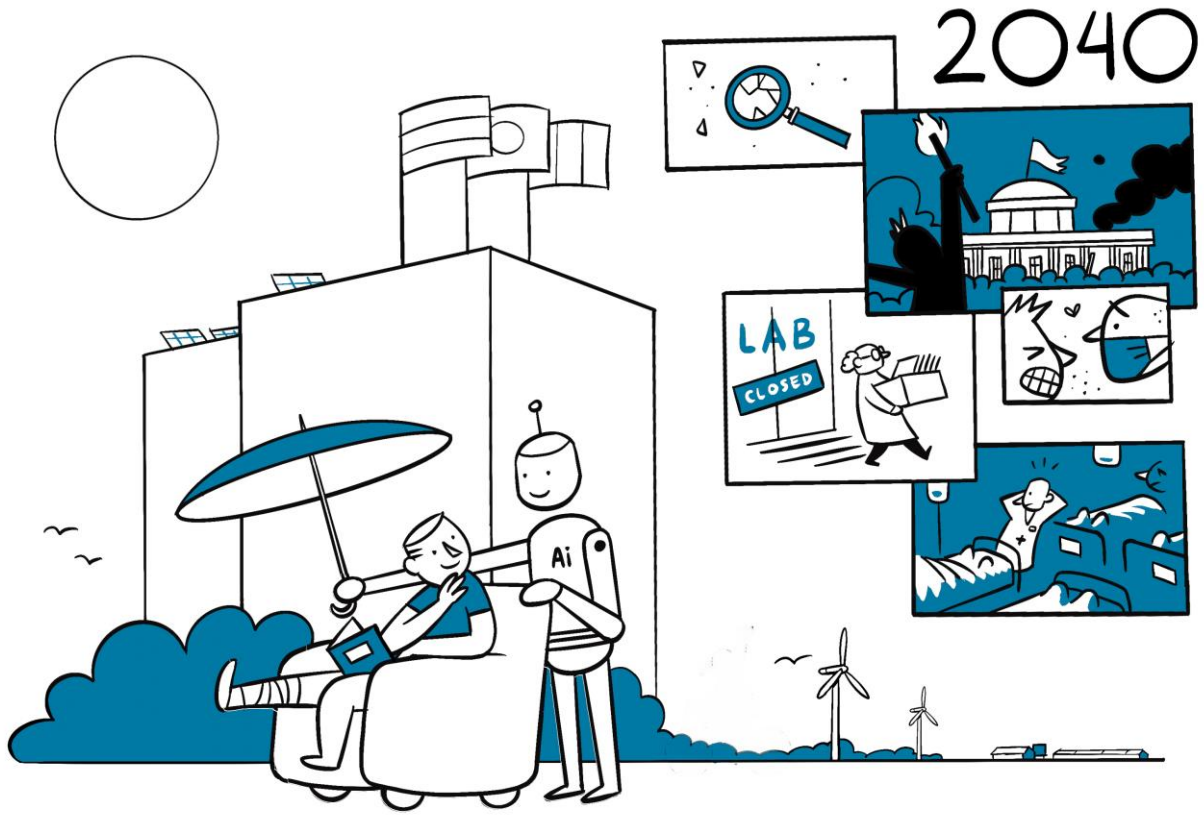
Hospital of the Future



Maroeska Rovers

Radboudumc
university medical center

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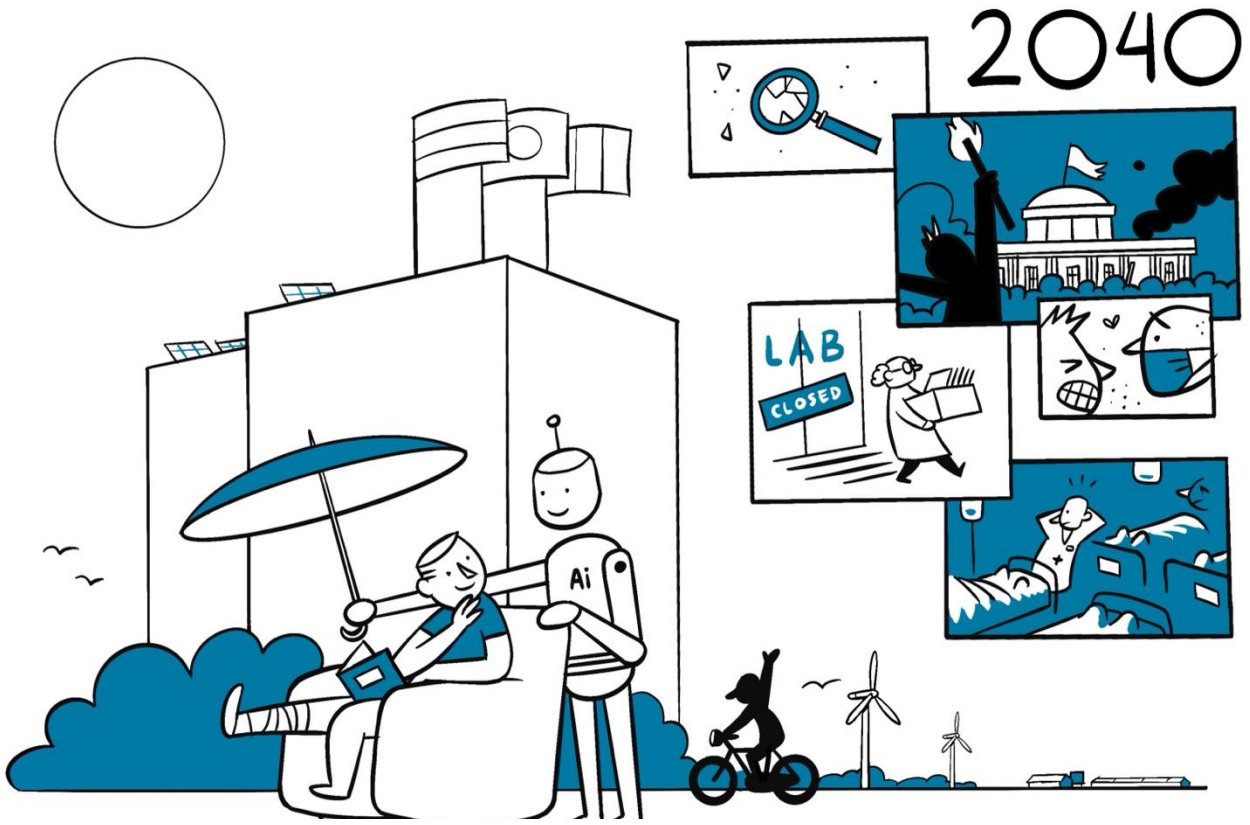




Societal challenges in healthcare



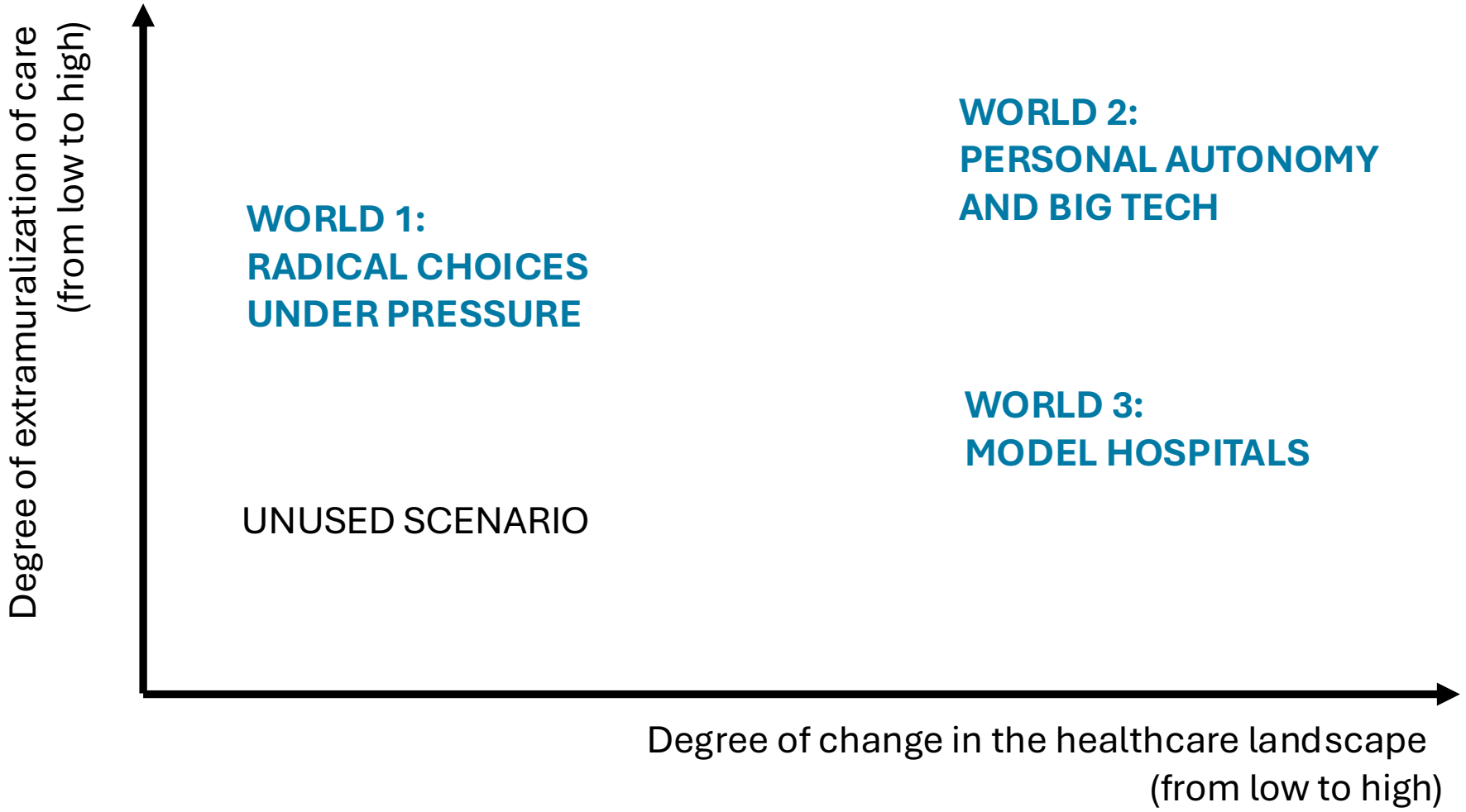
HOSPITAL OF THE FUTURE



FACTOR 10
LABOR PRODUCTIVITY

MST Medisch Spectrum Twente
Twente Board
FME POWERED BY DUTCH TECHNOLOGY
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OXFORD SCENARIO PLANNING

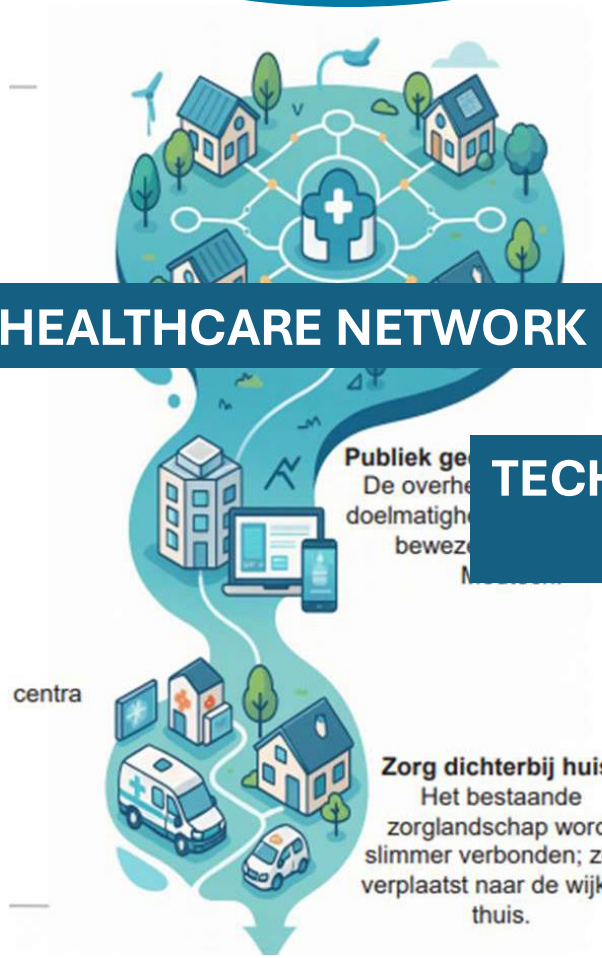


THE IMAGINED REALITY

World 1:
Radical choices under pressuse

World 2:
Personal autonomy and Big Tech

World 3:
Model Hospitals



HEALTHCARE NETWORK

Zorg dichterbij huis:
Het bestaande zorglandschap wordt slimmer verbonden; zorg verplaatst naar de wijk en thuis.



TECHNOLOGICAL MEDICAL MARVEL

zorg wordt een commerciële 'on-demand' dienst.

Het Ziekenhuis zonder muren:
Zorg is overal beschikbaar via apps, wearables en 'health checks' in winkels.

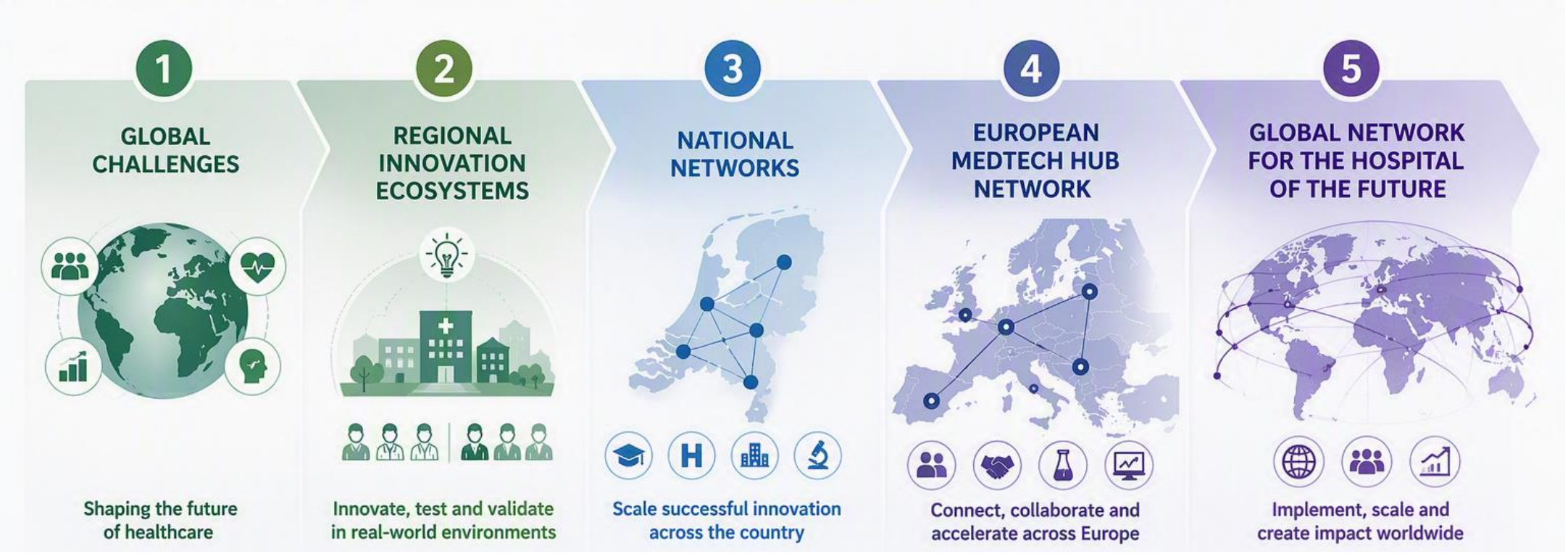


TOP TECH CENTRE

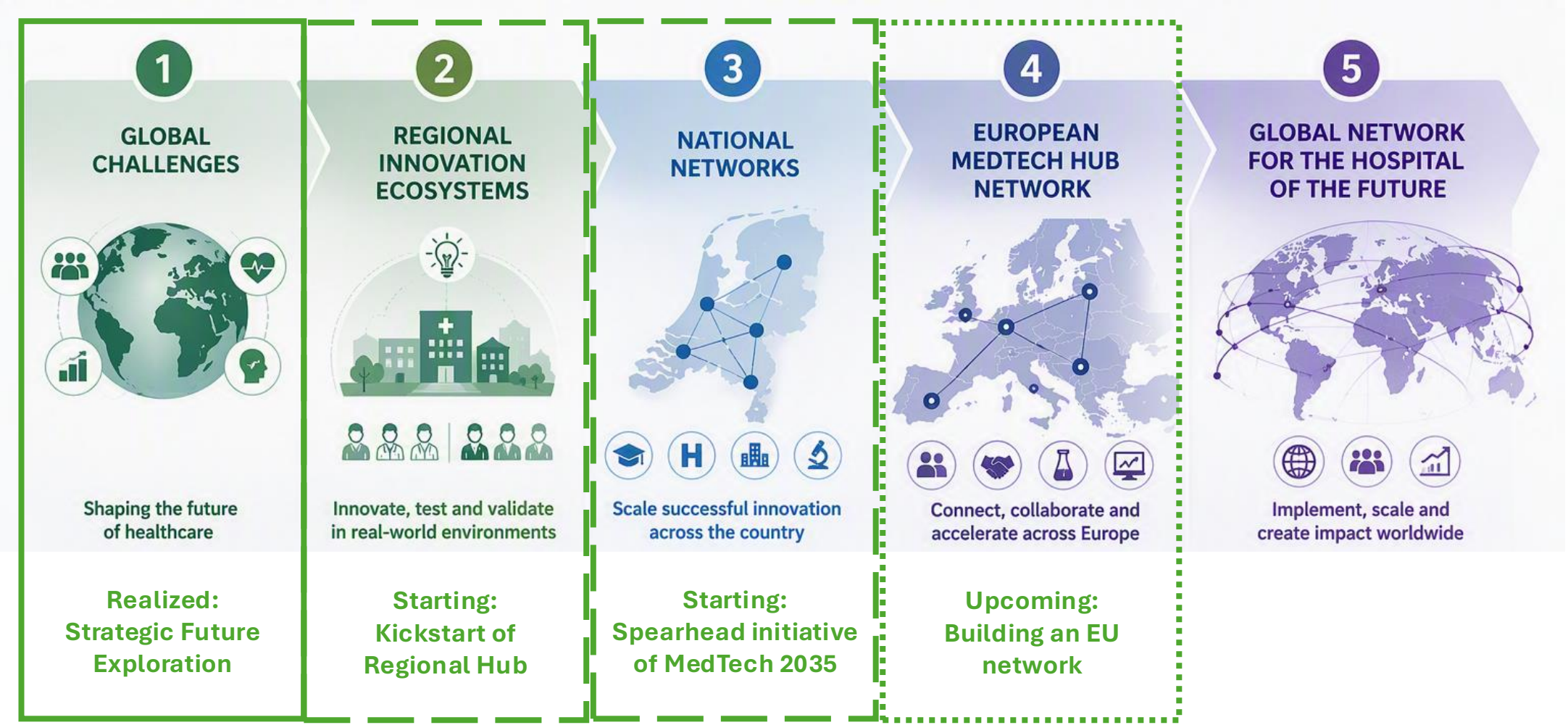
Innovatie door Concentratie:
De overheid stimuleert excellente 'flagship hospitals' als de innovatiehubs.

Regietoren:
Hoog-complexe zorg in 'Zorgstraten', regionale coördinatie vanuit een digitale 'Regietoren'.

From future foresight to global impact



From future foresight to global impact



Kabinet trekt € 102,5 miljoen uit voor versterking Nederlandse MedTech-sector

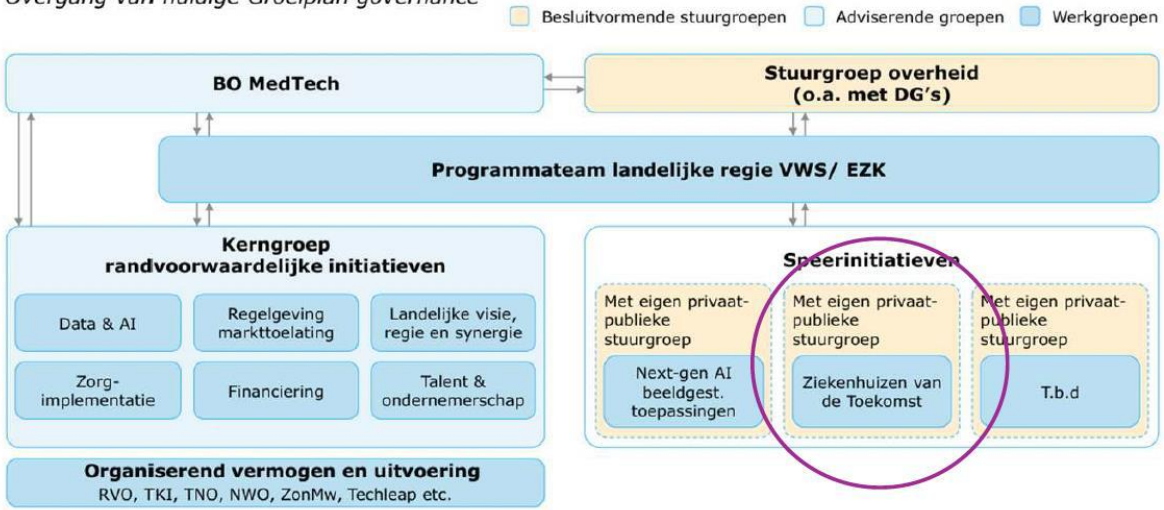
Nieuwsbericht | 06-07-2026 | 17:35

Technologie kan onze economie én zorg structureel versterken. Enerzijds vormt de MedTech-sector een veelbelovende groeimarkt voor de Nederlandse economie. Anderzijds biedt medische technologie oplossingen om ons zorgsysteem overeind te houden (tegengaan van personeelstekorten, opvangen van een groeiende zorgvraag door vergrijzing). De ministeries van Volksgezondheid, Welzijn en Sport (VWS) en Economische Zaken en Klimaat (EZK) investeren daarom € 102,5 miljoen in medische technologie (in de periode tot en met 2036). Private partijen moeten daar een minstens zo groot bedrag tegenover zetten. Philips kondigt vandaag al aan dat zij € 50 miljoen gaan investeren.

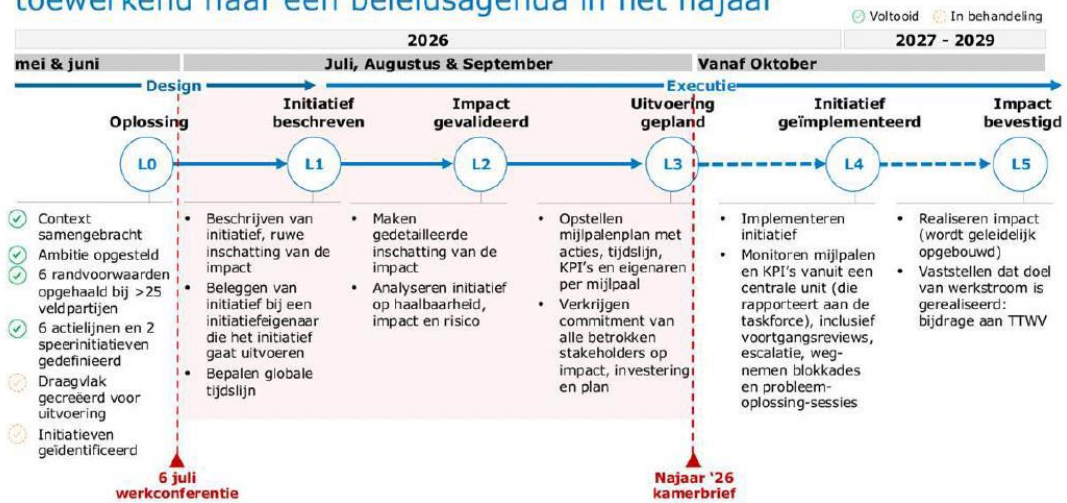
Medtech2035

Voorgestelde governance voor implementatie

Overgang van huidige Groeiplan governance



MedTech2035 bevindt zich aan het einde van de designfase, toewerkend naar een beleidsagenda in het najaar

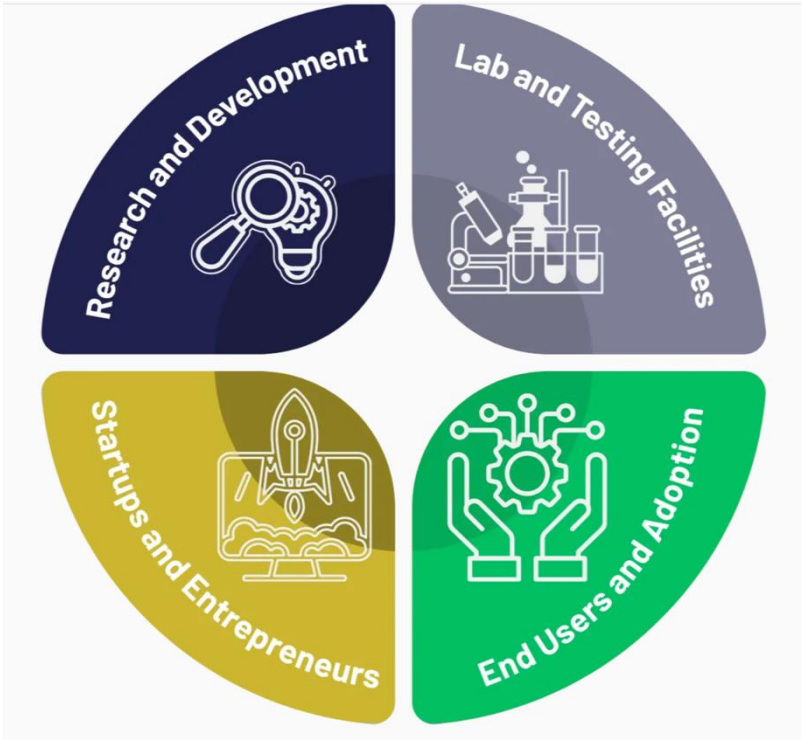


Governance: Hub and spokes

- The model is inspired by successful **mission-driven innovation models**, such as DARPA, SPRIN-D and NADI
- This model is not structured around organisations or funding schemes, but around **societal challenges** (NADI). The aim is to move more quickly from ideas to **proven impact at scale**
- **Key characteristics:**
  - Working towards a clear and shared mission
  - A portfolio of initiatives rather than one large programme
  - Continuous learning, stopping, adapting, or scaling initiatives based on results
  - Creating space for new partners and emerging technologies
  - A strong focus on measurable impact

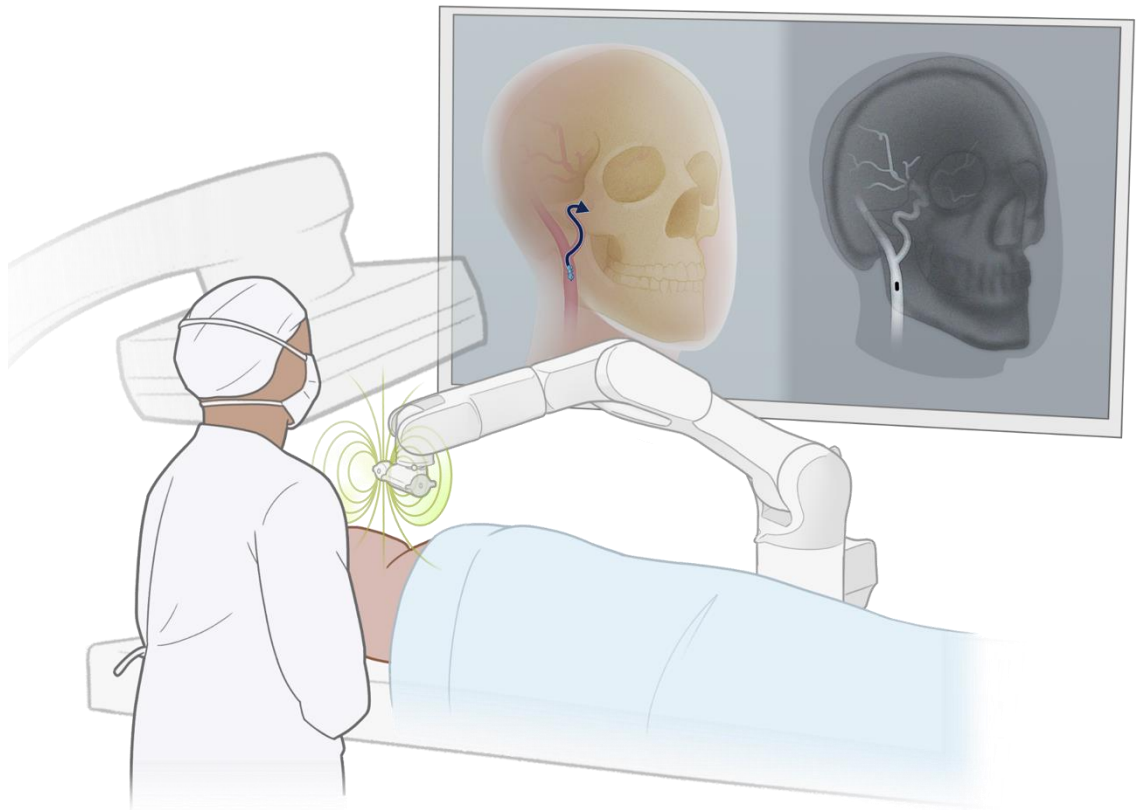
Lessons learned from ARPA

- “It takes more than a moonshot”






TIMELY & PERSONALISED CARE
ECONOMICALLY & SOCIALLY THRIVING
REDUCE DEMAND FOR LABOUR
COLLABORATION
EDUCATION
OPTIMIZED CARE PLANNING
HOSPITAL WITHOUT WALLS
IMAGING
DESIGN FOR HEALTHY BEHAVIOUR
AI & DATA-DRIVEN
CARE ROBOTICS
REDESIGN
PERSONALISED TREATMENT
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OF THE
ITURE
regio
Twente
FOUNDATION:
EVIDENCE & DATA



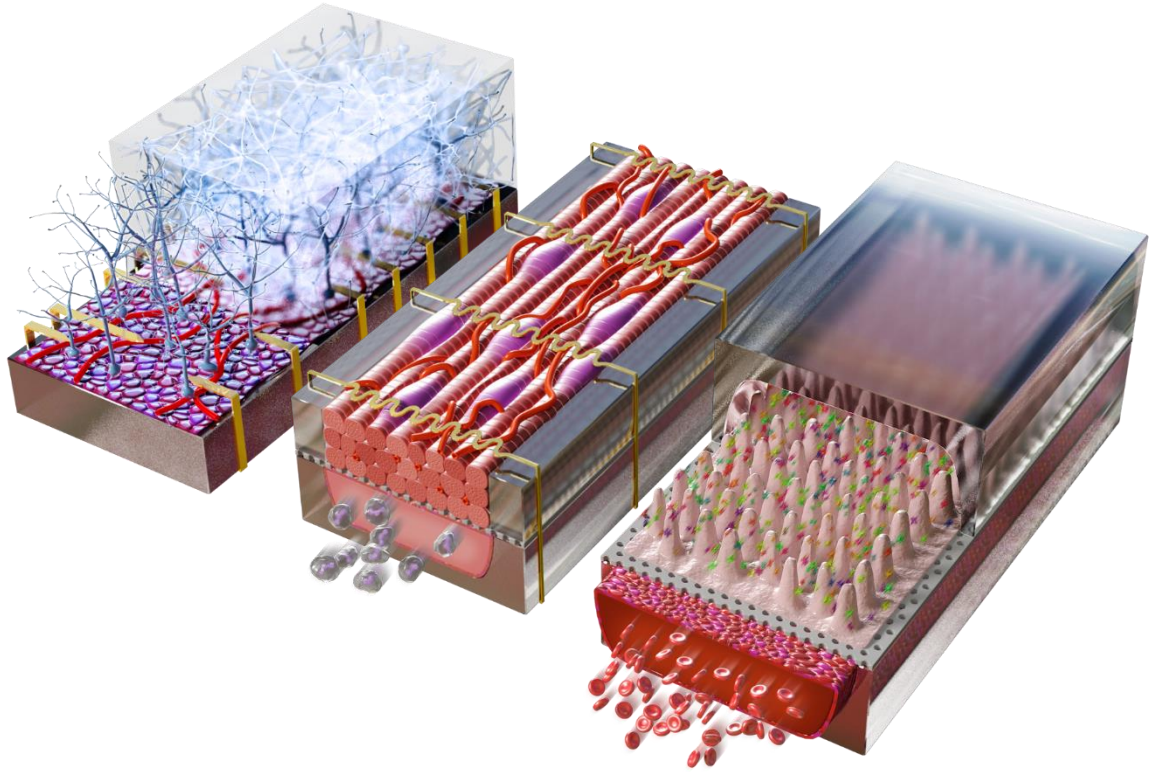
Navigate microrobot inside patient’s body by magnetic field

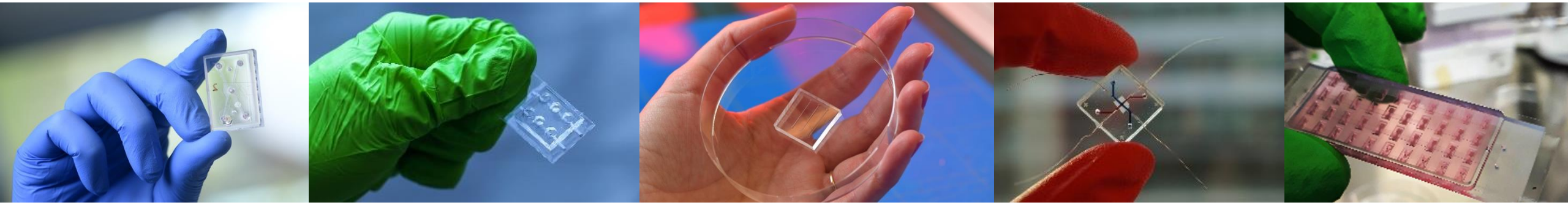
Work by Islam Khalil and colleagues, UTwente, MST & Radboudumc


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Organs-on-Chips

Need to test **safety** and **efficacy** of therapeutics and **predict** how they will affect **human** health





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Hip dysplasia

Occurs in 2-4% of infants




HIP
by ARDIM
Start new scan
MENU

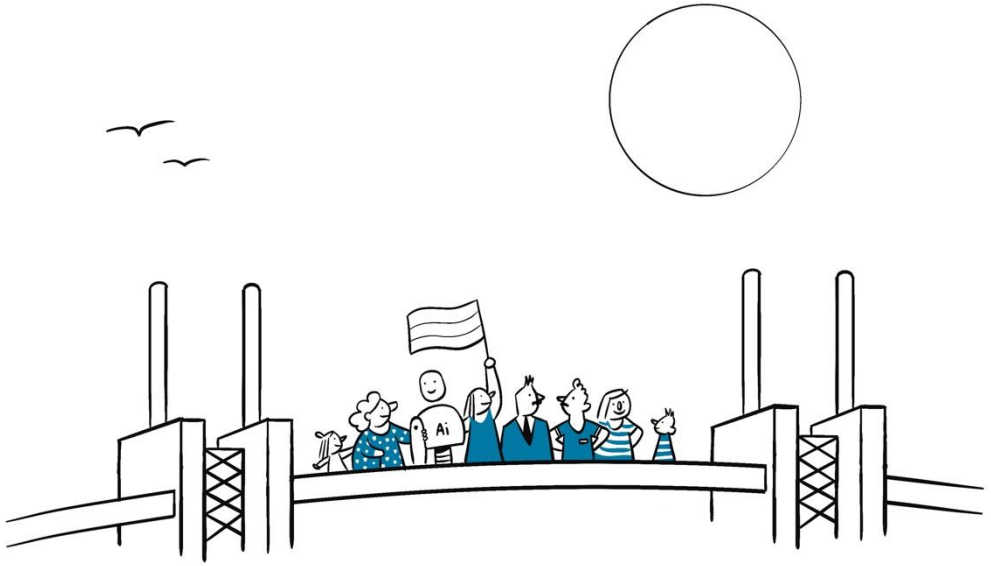


What does future demand

- Commitment and jointly targeting our spare capacity in this direction

- Data accessibility as foundation for collaboration, science and innovation and acceleration

- Asks for an accelerator ecosystem
  - Beyond point solutions
  - No more re-doings
  - Make use of existing infrastructures
  - Connect stakeholders
    → less fast but with more impact
  - Beyond a focus on ourselves
  - …



To discuss….

- The scientific breakthroughs of tomorrow will be realised in open ecosystems, not within the walls of a single institution

- Moonshots in healthcare will increasingly require collaboration between hospitals, universities, industry, governments, and citizens from the very start

- If every organisation wants to be excellent in everything, society will end up with excellence nowhere