

# Smart Vital Urban Areas

*Health data for innovation – Opportunities and societal challenges*

**Marc van der Zande**

[zande@sportsandtechnology.com](mailto:zande@sportsandtechnology.com)  
[www.sportsandtechnology.com](http://www.sportsandtechnology.com)



# Cluster Sports & Technology:

*operating from the heart of Brainport region, South Netherlands*

**Brainport region:**  
Leading technology region in Europe

Create innovative solutions for societal challenges

Open innovation

International network

**Cross overs**  
*sport, society, health, nutrition, design*

# The Challenge

## Inactivity kills, and we're sitting on a ticking time bomb

Deaths caused in Europe every year by not moving enough:

500,000

(over 1 in 10 deaths)



If we do nothing, lack of exercise could soon cause **more deaths than smoking**. But the burden isn't shared equally – some countries are more inactive than others.

Lack of exercise contributes to diseases that cost Europe over 80 billion Euros every year



**Total: €80.4bn**

which is more than:



# How can we use innovation and smart technology...



Measurement  
of air quality



Measurement  
of UV exposure

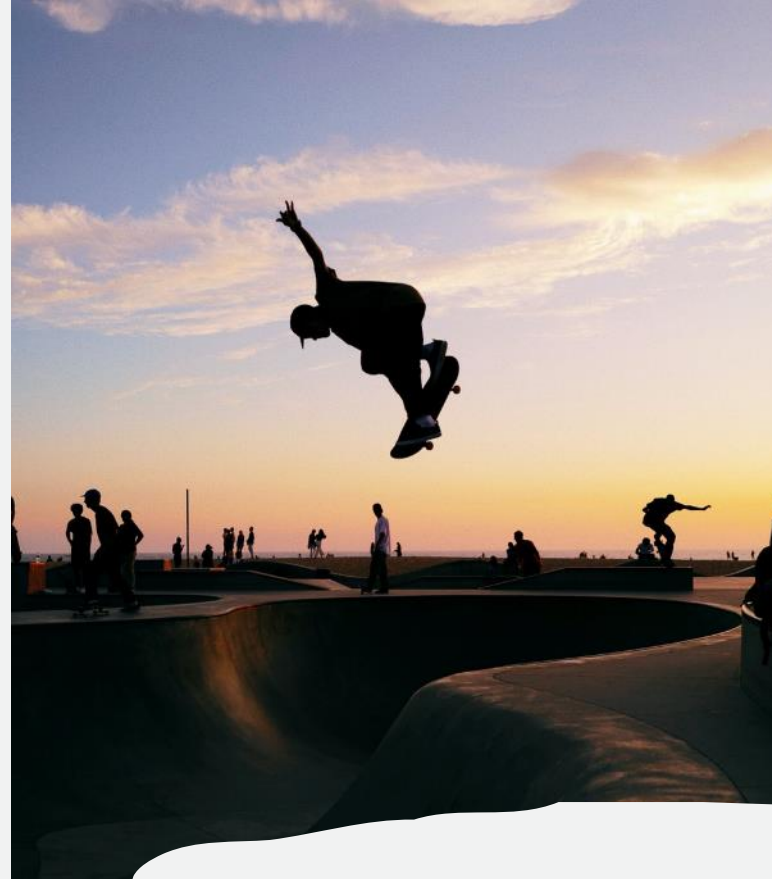


Measurement  
of de-hydration

...



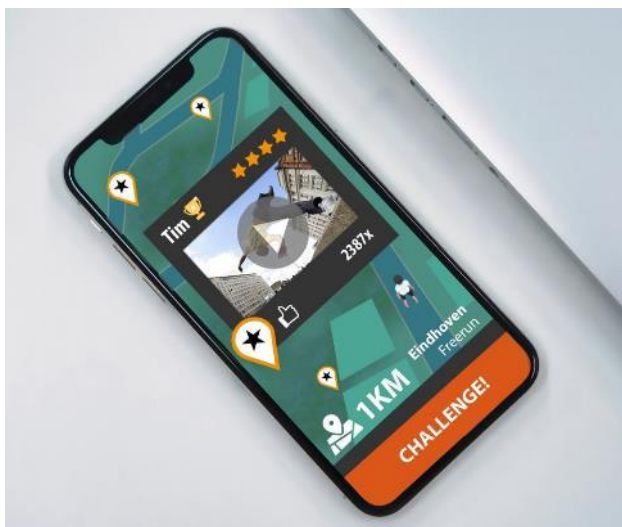




...to stimulate healthy  
active lifestyle ...



... and  
create fun  
on top of  
exercise ...



# ...in Smart Vital Urban Areas.

- Q-helix cluster collaboration at a cross-regional level ...
- ...to foster public-private investments & revenues in innovative projects...
- ...to create **smart vital areas/cities/regions**
  - Strong Cluster/SME involvement
  - Public-Private business cases
  - Co-creation (Living lab approach) of non-obtrusive, intuitive innovations
  - Data driven; evidence based



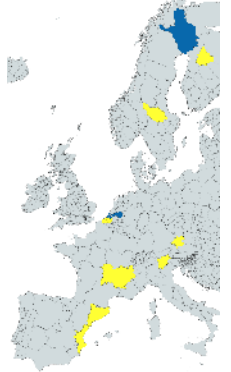
Generate relevant **data for innovation and business development** by identifying market demands



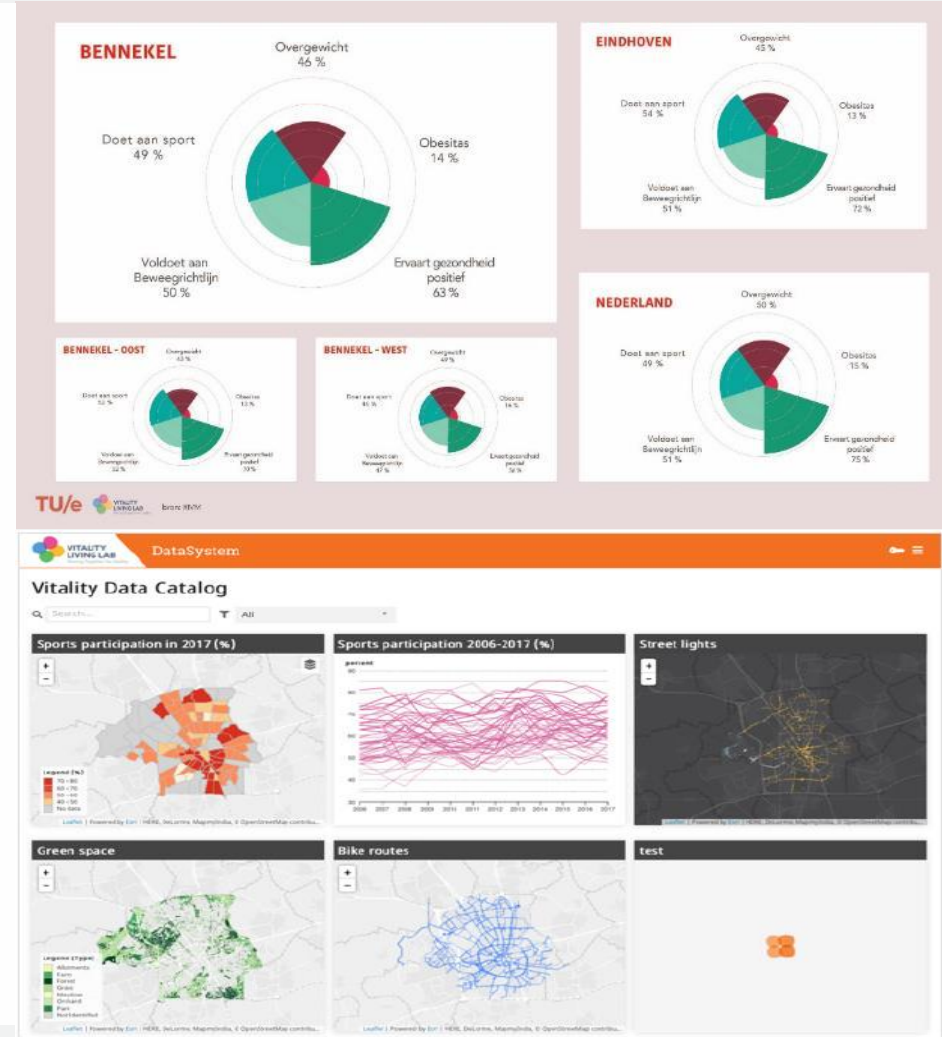
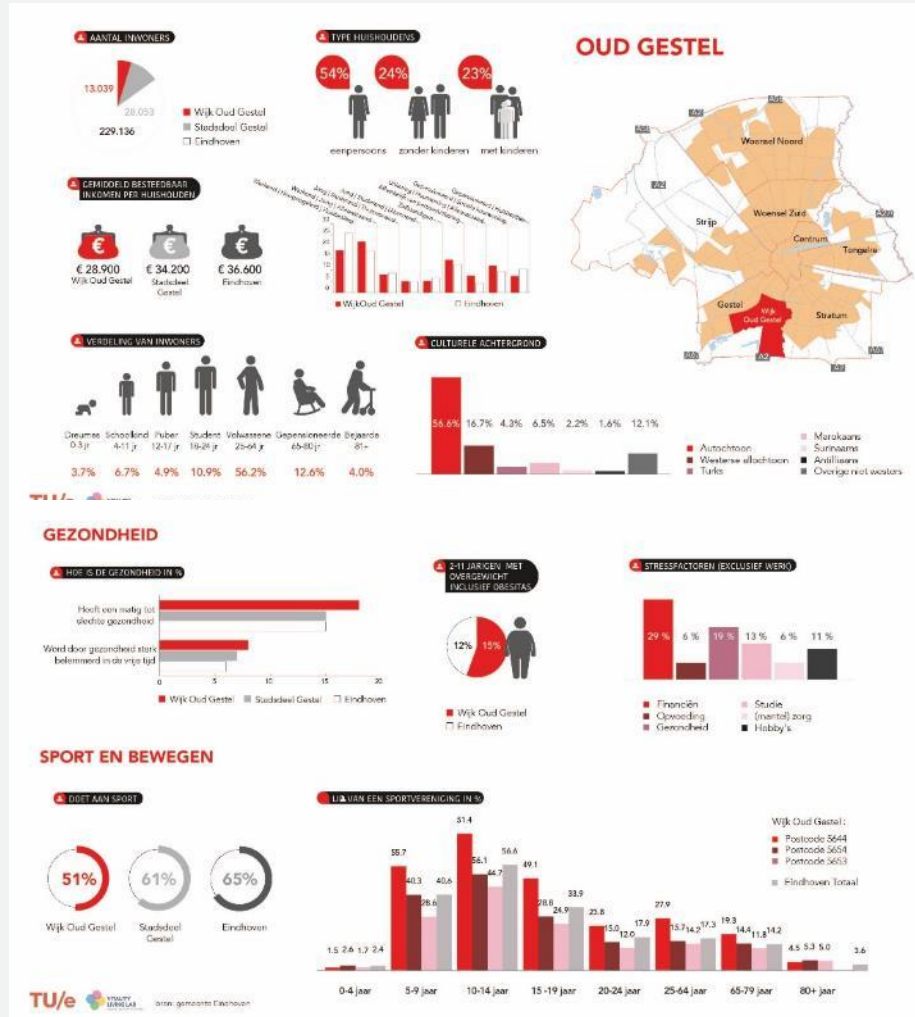
Create **smart innovative solutions** (products and services)



**Scale up of business** by new business models and **public-private partnerships**

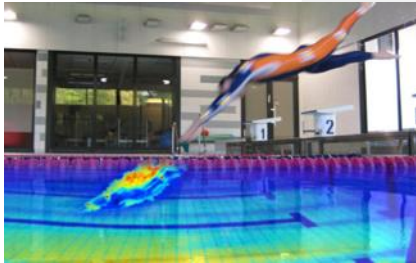








# ...to create innovative ideas and bring them to projects, start-ups and business...





# ...and create smart engaging urban areas.



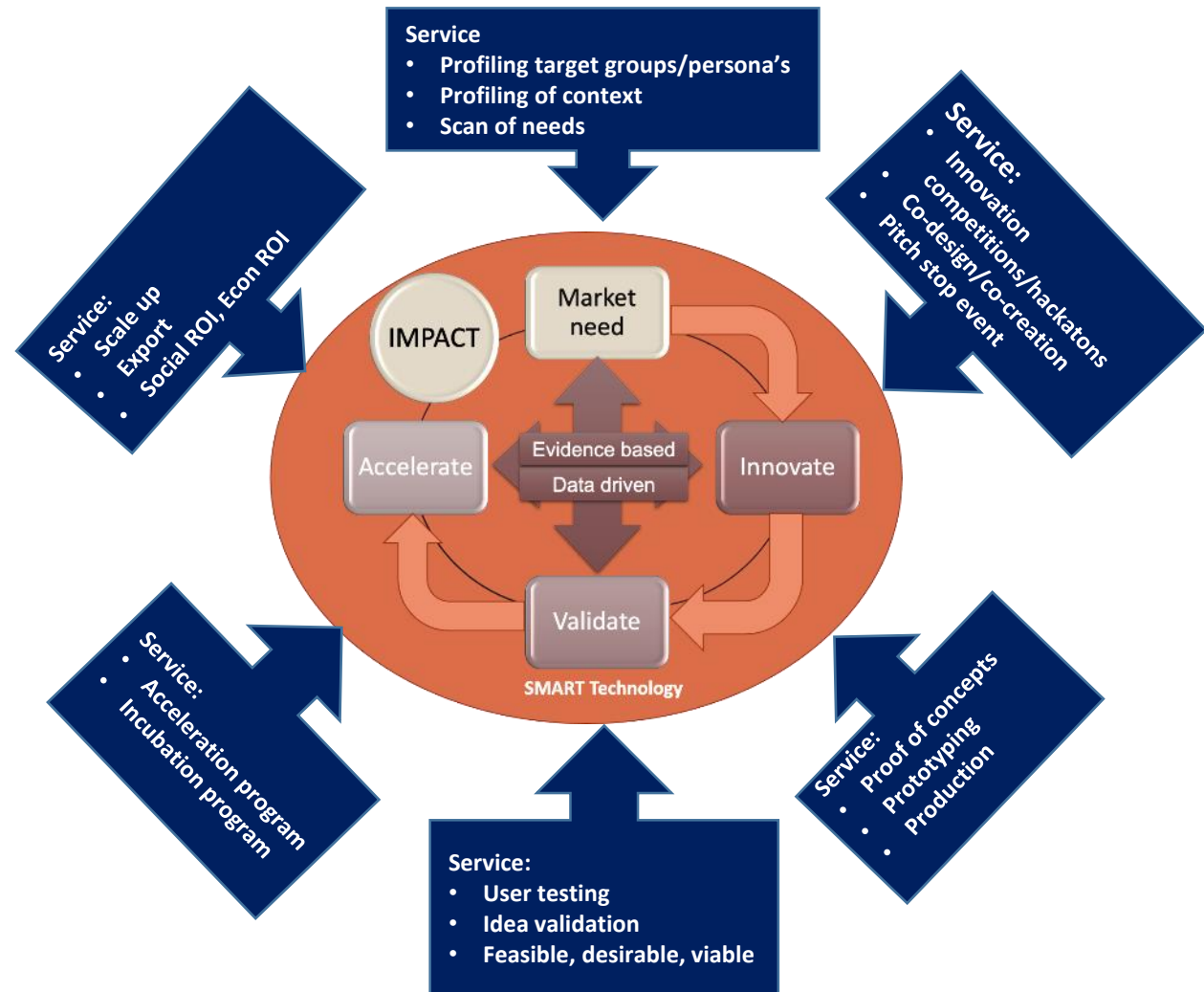


# We use a structured innovation cycle...

## Collaboration and coordination

- Knowledge parties to provide expertise & IP
- Innovation parties to support businesses
- Living labs to support innovation & validation
- Business support parties for acceleration & incubation
- Municipalities to provide market & citizen access

## Data as a support mechanism for the innovation process



# ...in a Q-helix Innovation Cluster for Sports & Vitality.



>130 companies (SME)

10 independent **SportFieldLabs** (living labs) within region

Excellent **Knowledge network** IMEC, TNO, TU/e, ..

Link to **public sector**

***A breeding place for innovation and business creation in sports and vitality***





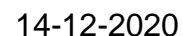
- Combining excellences of 14 regions and clusters
- Building upon regional ambitions and excellences
- 5 submitted projects; 9 in pipeline

## Active in EU Projects (e.g.):

- Profit Project, Interreg NWE, Strengthening the field lab concept (4 regions, 6,0 M€)
- Inno4Sports, Interreg EU, Sport for Growth and Vital Communities, (4 regions EPSI; 1,5 M€)
- Nano4Sports, Interreg VL/NL, Sensor applications for Sports & Vitality, (2 regions, 4,4 M€)
- SmartSports4GoodLife, Cluster Excellence, on Sports & Vitality (4 Clusters. 0,4 M€)
- Vitality Living Lab, ERDF, Innovation ecosystem on sports & Vitality (South NL, 5 M€)



## ECCP Bronze cluster label



## ... with regional and EU support...

- Regional coordination
- Interreg Europe Inno4Sport project.
- Reconfirm, S3, Industrial Modernisation
- TAF support

**Provincie Noord-Brabant**

**Inno4Sports**  
Interreg Europe



**ReConfirm**





- 
- Diagram illustrating the relationship between the number of sportsmen and annual costs savings in the health system:
- Increasing the number of sportsmen by 50,000 results in 8.5 m Euro in annual costs savings.
  - Increasing the number of sportsmen by 100,000 results in 17 m Euro in annual costs savings.
  - Increasing the number of sportsmen by 500,000 results in 85 m Euro in annual costs savings.

**SpEA**  
SportsEconAustria



## Conclusion: Investment in Sport & Vitality pays off

- An emerging network exists
  - *Market needs and business opportunities as driver for innovation cycle*
- Transition from societal challenges into public-private business models
  - *Investing in health without investing in health systems*
- Data as a support for the innovation process:
  - *public and private innovation, validation & acceleration*
  - *change public-private paradigm on investment and ROI*