

Mine your own body  
&  
data enabled design

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Where innovation starts

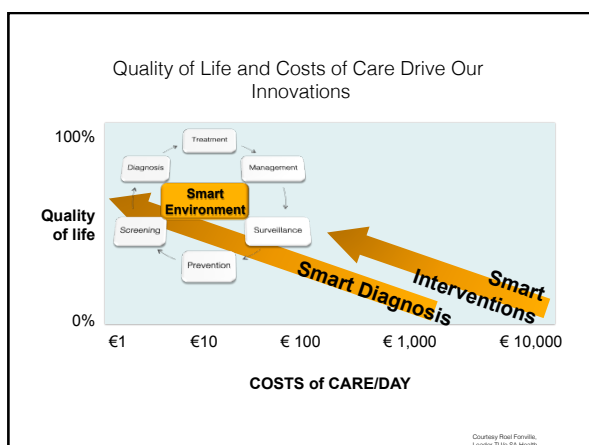
- If people would maintain their car in the same way they currently maintain their body the roads would be empty



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### The challenge

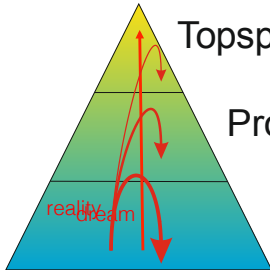
- Many/most people in the "developed world" lead a strongly sedentary lifestyle with a severe impact on public health  
The escalating pandemics of obesity and sedentary lifestyle (Manson 2004)
- Strong imbalance between calorie intake (I) and energy use (E)
  - Average energy balance adult female (USA): use approx 2000 kCal; intake approx 2500-3000 kCal. Medicine and Science in Sports and Exercise [2001, 33(12):2145-2156]
- Reinforced by a double demographic development
  - More people at risk, also getting older (?)
- How can we prevent a serious societal problem
  - Many people suffering from chronic diseases
    - Low quality of life
    - Exponentially growing costs

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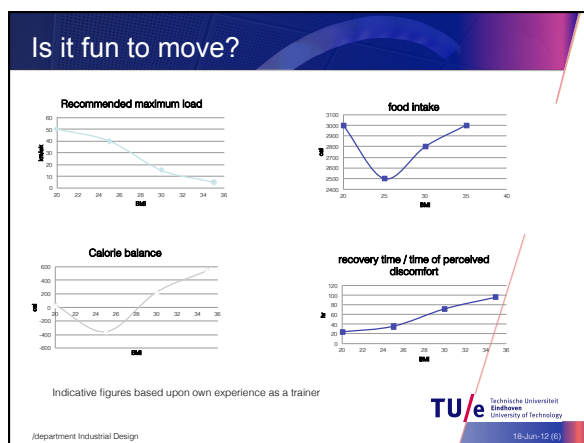
### Main paradigm in sports



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## The paradox in sports for the masses

- Sports/leading a physically active lifestyle is definitely good for your health
- The traditional paradigm “suffer and sweat gives success” works only for a limited group of people for a limited amount of time
- Therefore extrinsic motivation does not work for many people
- What about intrinsic motivation???

Does your body/mind itself reward you for leading an active lifestyle?

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## Sport is inherently *unfair*!

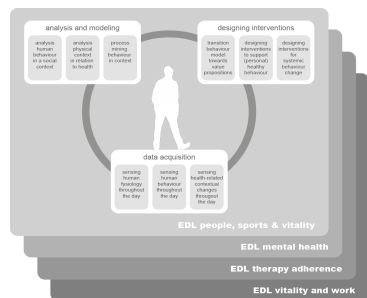
- The more you need it the fewer the rewards
- Extrinsic rewards (medals, records, ...) are out of reach
- The relative effort required to achieve “something” (weight loss, improved stamina, ...) increases (exponentially) for people with increasing BMI
- Similarly the relative discomfort per effort increases for less trained people
- The bandwidth for training profiles is narrow
  - Too much: overstress/injury
  - Too little: no effect

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## Research structure



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## Experiential Design Landscapes

- Already available now:
  - Running/playful interaction (“Op Noord”)
  - Swimming (NZE/Tongelreep)
  - Football (FC Eindhoven)
- In principle every FieldLab/InnoSportsLab has the potential to become an EDL
- The creation of new systems is rapidly taking off....

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## Partners

- Academic: Utrecht University, Katholieke Universiteit Leuven, Fontys University of Applied Technology
- Industry: Philips, Tom Tom, Adidas, Pro-Task
- Other: City of Eindhoven, InnoSport NL, Sports and Technology, GGzE, NOC/NSF

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## Aim: Horizon2020 proposal

Looking for partners with specific sports knowledge, kinesiology, relevant technological knowledge (measuring on the human body)

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