



BÈTA & TECHMENTALITY

Developing education with impact

Introduction

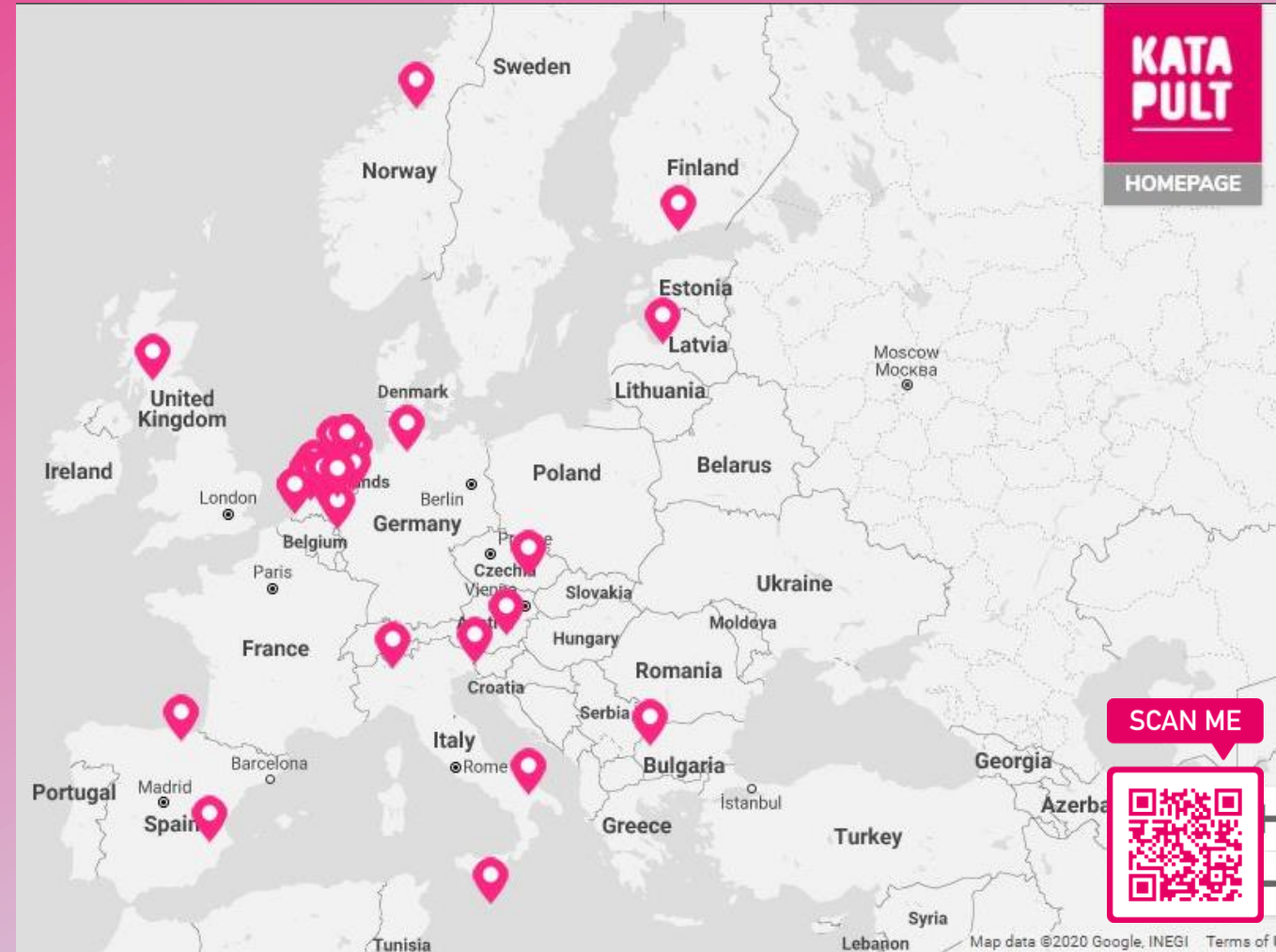
Youth's technical talents
and interests to discover

Boudewijn Grievink
sr project manager internationalization



KATAPULT NETWORK

- 450+ public private partnerships in VET and professional education in NL
- 10 years of not reinventing the wheel: sharing knowledge, best practices & lessons learned
- Open source learning community
- Spreading throughout Europe: Centers of Vocational Excellence
- Part of the Dutch STEM Platform
- Non-profit, funded by Dutch government
- www.ptvt.nl
- www.wearekatapult.eu





Safety Expert

Mathematician

Audiologist

Biologist

Photographer

Designer

Constructor

Doctor



True or false?

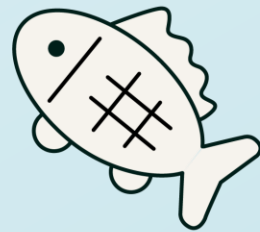
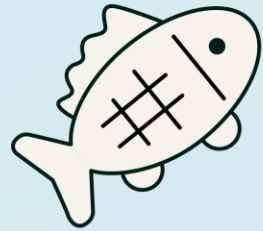
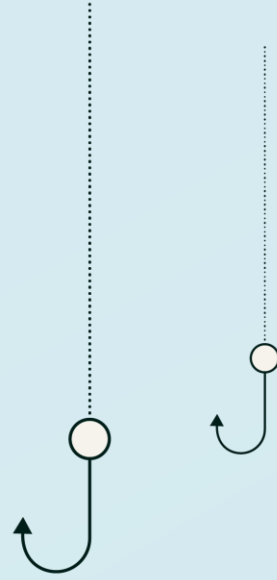
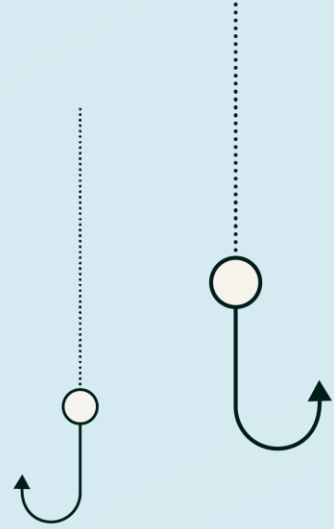
We can interest 100% of all teenagers for Bèta & Tech.

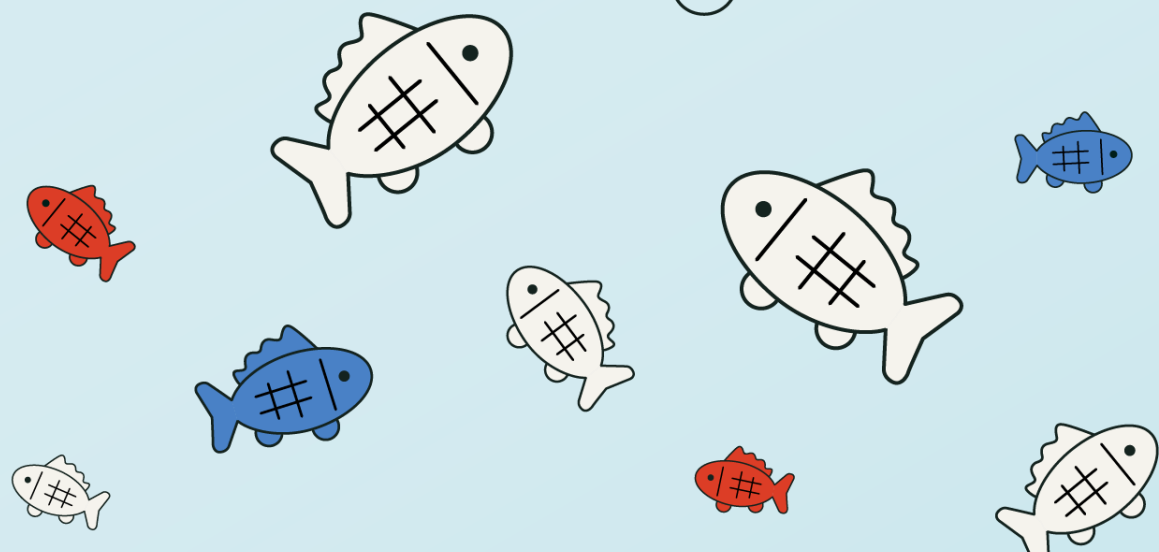
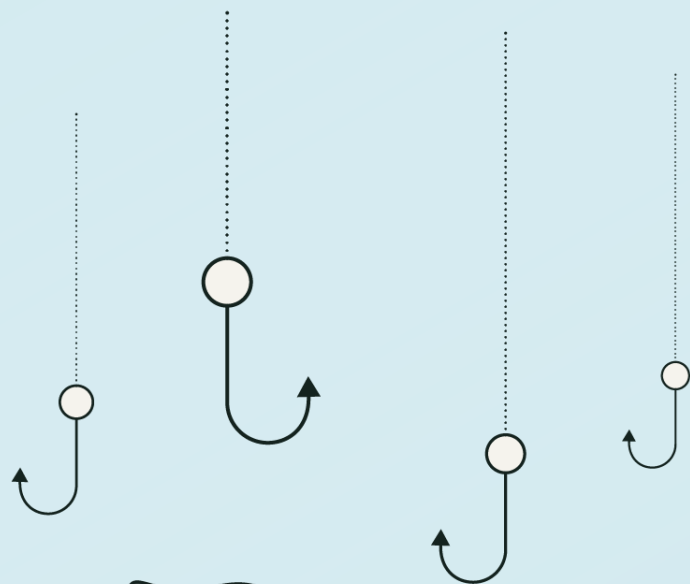


True or false?

We can interest 100% of all teenagers for Bèta & Tech.







Bèta&TechMentality 2019

- 9-17 y/o
- 30 duo-interviews (face to face)
- 1472 online questionnaire (interviews)
- Motivaction Research & Strategy and Youngworks



The Bèta&TechMentality-model

Drives, triggers and barriers

7 dimensions

-  Self-confidence in science and technology
-  Confidence in technological progress
-  Interest in new technology
-  Appreciation and respect
-  Social responsibility
-  Technology can be learned
-  Practical orientation

Dimension 1: self-confidence in science and technology

- I'm not smart enough to do anything with technology*
- It's hard to do well in scientific subjects*
- I frequently do not understand the teacher's explanations of technical or scientific subjects*
- I'm afraid I'm not smart enough for science and technology subjects*

In summary, they have great confidence in their technical capacity. That's why a technical education is for them.

Dimension 2: confidence in technological progress

- Scientific and technical people are important to society
- Technology can help people
- Technology is becoming increasingly important in the world
- I have confidence in the progress of technology

In summary, technology is and will remain important for people and society. They have great confidence in technological advances.

Dimension 3: interest in new technology

- It would be fun to make my own games
- I think robots are cool
- I would like to design new things

In summary, technological developments are cool, not only to use but also to develop themselves.

Dimension 4: appreciation and respect

- I want to have a profession that my parents/guardians can be proud of
- A good salary is important to me
- It's important that my job is prestigious
- I would like others to be proud of me

In summary, pride and recognition from others are important. This is now mainly about the appreciation of parents and others, and later will also include tangible rewards in a professional situation.

Dimension 5: social commitment

- I would like to commit myself to society
- I think it's important to do something for the environment
- I would like to someday have a job in which I can dedicate myself to society

In summary, it's important to be involved in society by doing something for the people around you and/or the environment.

Dimension 6: technology can be learned

- Everyone is suited to technology
- Technology can be learned, even if you have less talent for it
- You don't have to be handy to do something with technology

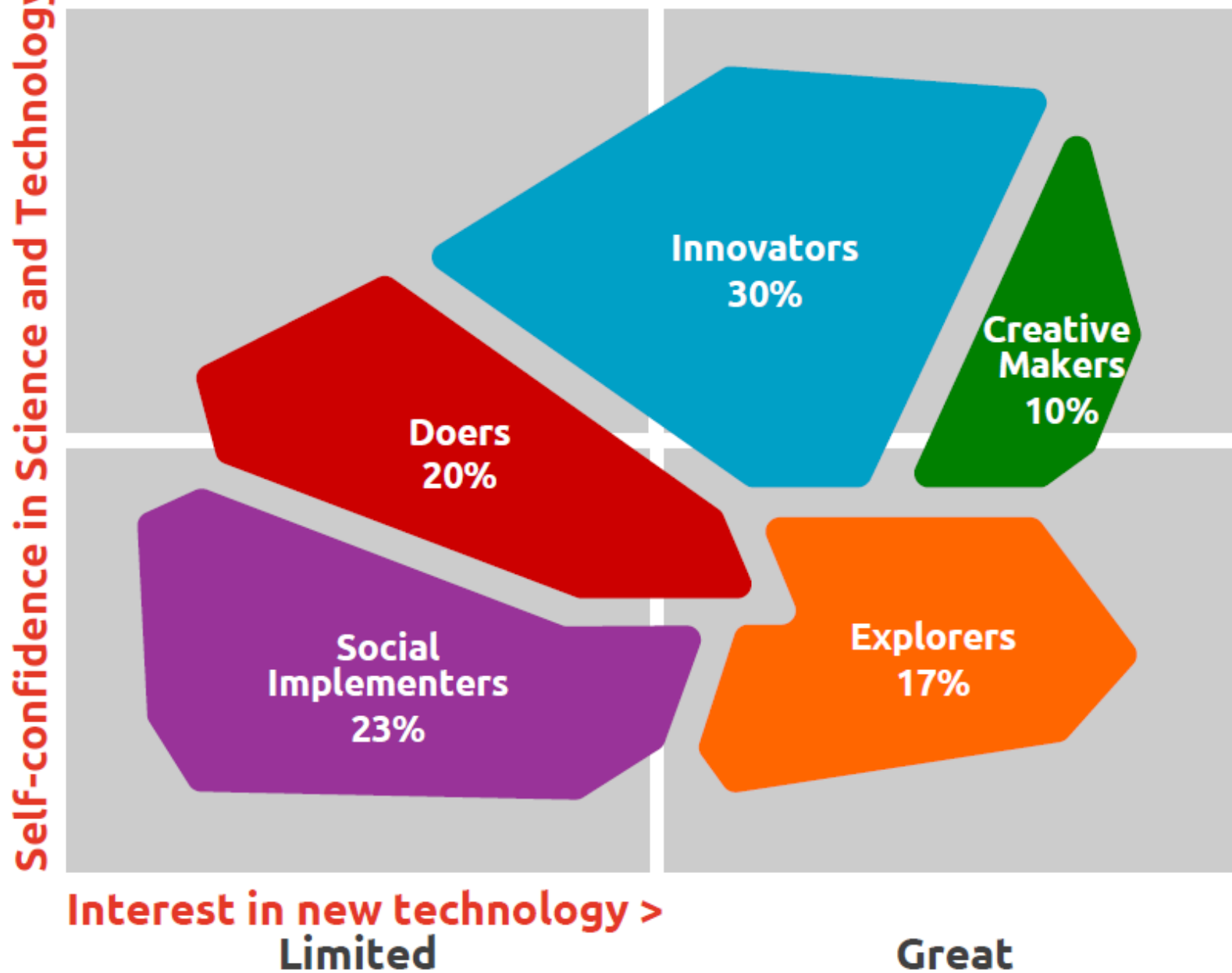
In summary, technology is there for everyone. If someone does their best, they can become good at it.

Dimension 7: practical orientation

- I like practice more than theory
- I want to do something with my hands in the future
- I like studying and reading books more than making something with my hands*

In summary, making something concrete or doing something technical is much more fun than learning the theory behind it or thinking about the technical design.

Bèta&TechMentality



SCAN ME

Creative maker

Who am I?

"Tech is my hobby. Technical subjects are easy for me."

How can you interest me?

- ✓ Challenge me!
- ✓ Social issues (environment / sustainability)
- ✓ Relationship with ICT, media and science
- ✓ Design or programming
- ✓ Combination theory & practice, abstract & concrete



Innovator

Who am I?

"I love being surrounded with technology and I'm good at it too. I like it when I have achieved something".

How can you interest me?

- ✓ New technologies (high tech)
- ✓ Future-oriented issues
- ✓ Challenge
- ✓ Interwoven with people and society
- ✓ Growth opportunities / salary / status
- ✓ More examples in the lesson



Social Implementer

Who am I?

"I have difficulties with science and technology and focus on helping people and society.

How can you interest me?

- ✓ Added value & impact for people and society
- ✓ Success experiences; 'I can do it!'
- ✓ Make technology easy, in small steps
- ✓ Role models



Doer

Who am I?

"No idea if technology is interesting. I want to get to work."

How can you interest me?

- ✓ Don't focus on the term 'technology'; 'don't convince me'.
- ✓ Little theory
- ✓ Do
- ✓ Show concrete professions



Explorer

Who am I?

"I don't know what's right for me. Maybe something with technology, care or something economic."

How can you interest me?

- ✓ Possibilities beta and technology? Show examples!
- ✓ Success experiences; 'I can do it'.
- ✓ Develop / come up with solutions
- ✓ New technologies / innovations
- ✓ Logs and images
- ✓ Possibilities own company

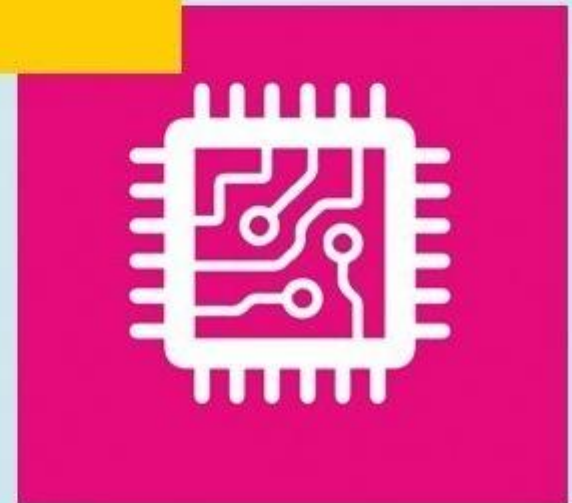


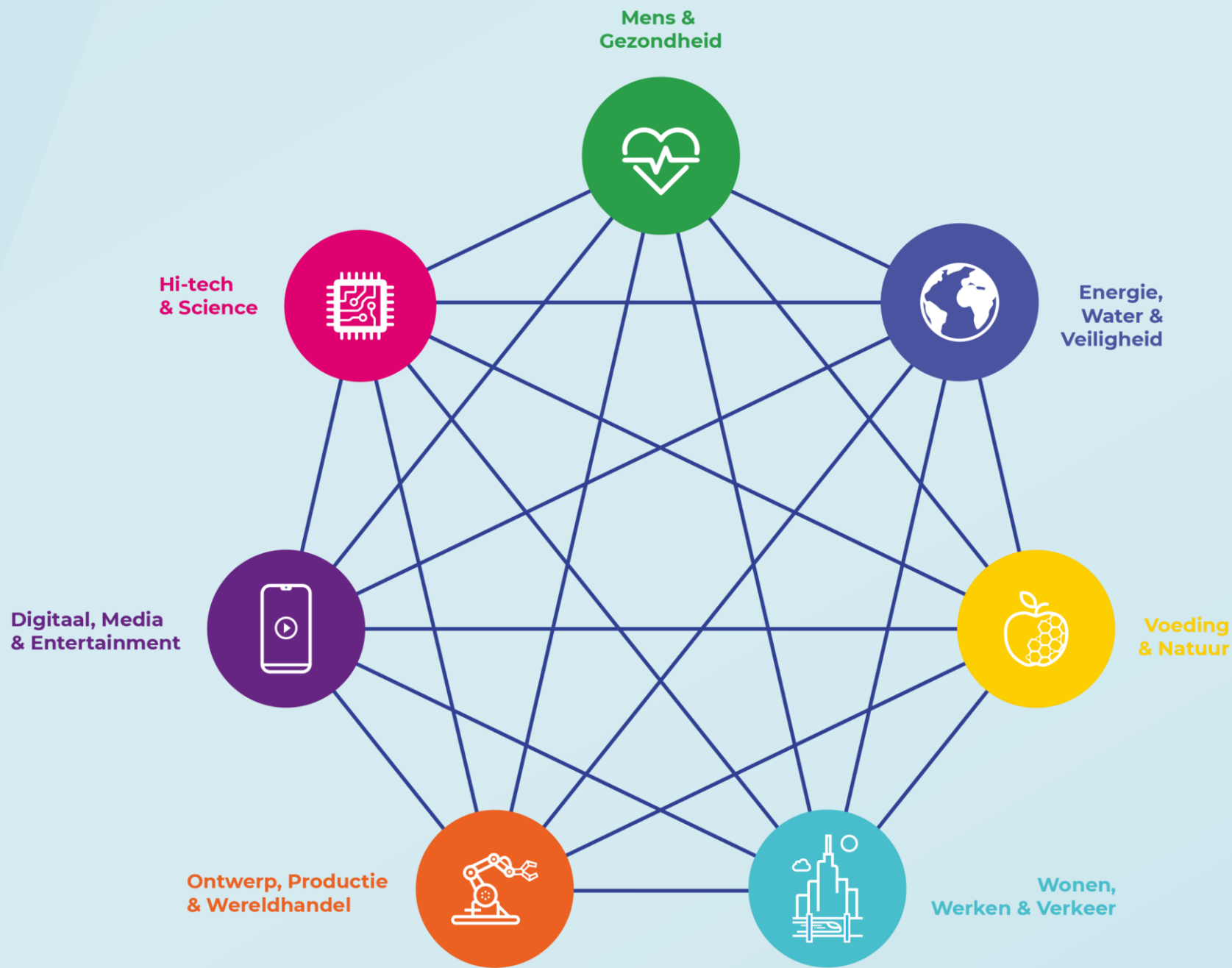
What can you do?

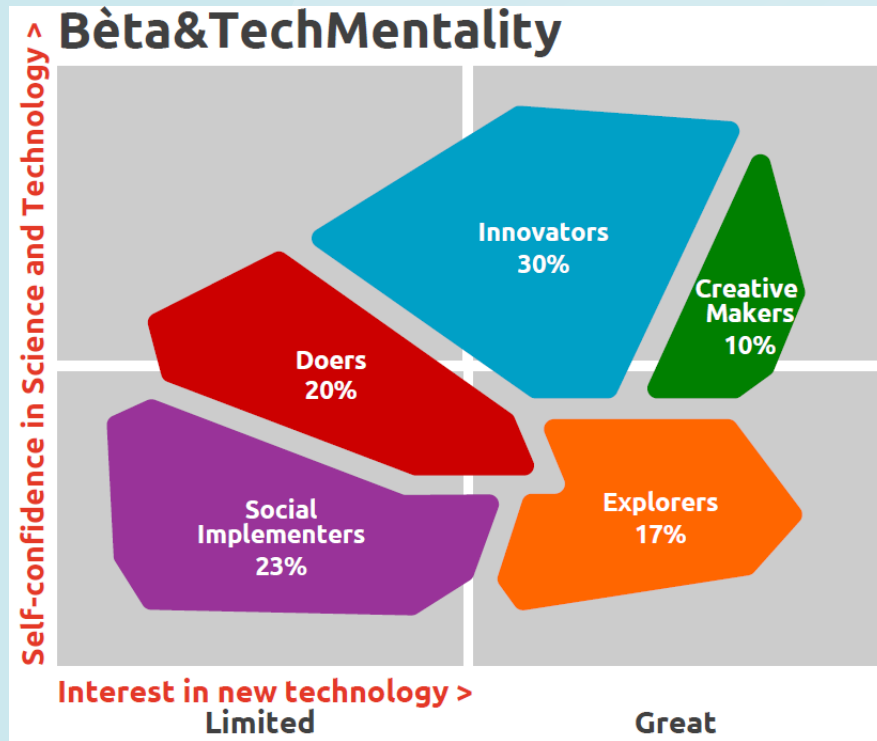
Actions on various dimensions

- **Increase self-confidence** by challenging young people at their own level, letting them learn in small steps and encouraging them when they need it.
- **Bring the outside world into education.** There are many tools you can use to make these choices. The '7 Worlds of Technology' can help you find stories from the labor market and society and bring them to life.

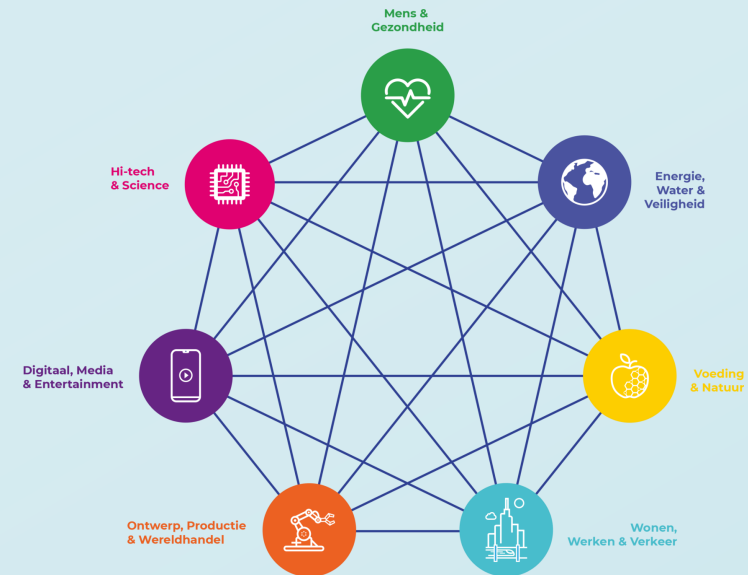
Connecting with the perceptions of teenagers





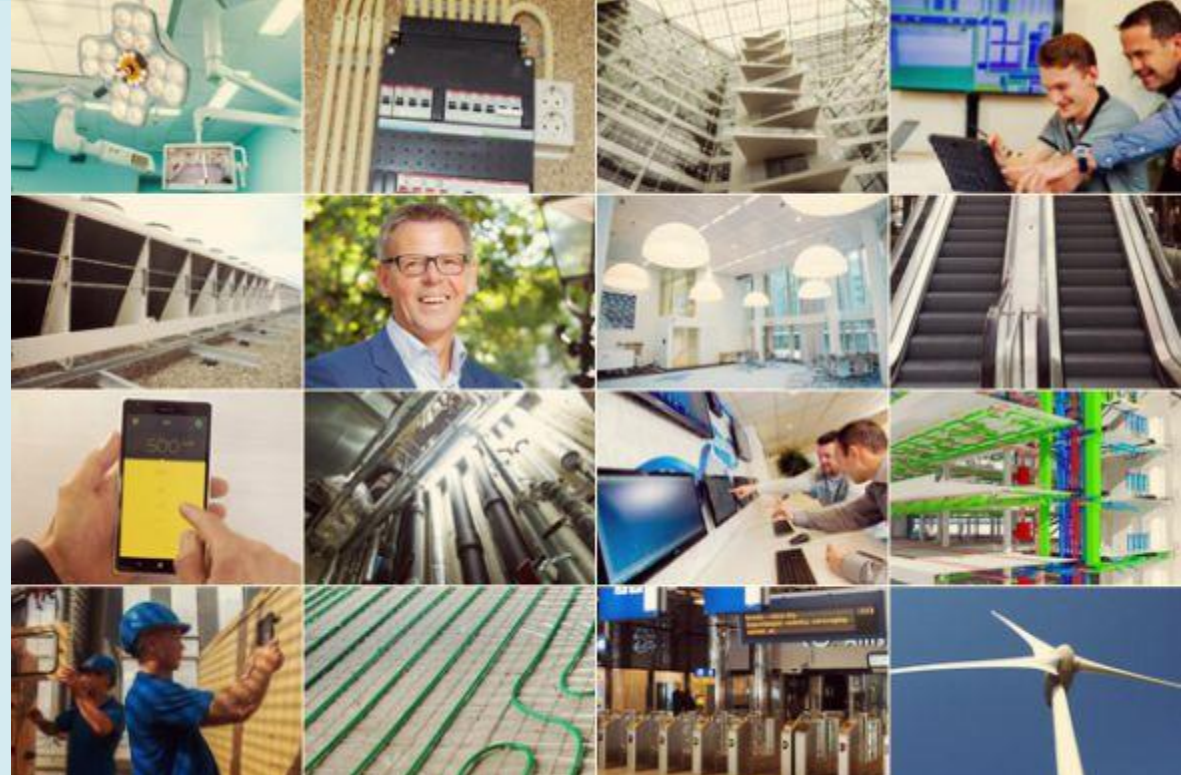


Drives, triggers en barriers



Perspective and context

Good-practice: Public Private partnership Installation Technology Amsterdam



VTi Amsterdam



Martin de Haan MEL · 1st 

Programmadirecteur bij PPS VTi - Vakschool Technische Installaties

Amsterdam Area, Netherlands · [500+ connections](#) · [Contact info](#)

Message

More...

VTi Amsterdam

VTi - Vakschool Technische
Installaties



Universiteit van Amsterdam





< hoe werkt
Ziekenhuis het
AMC



Bijzondere locatie **Ziekenhuis het AMC**

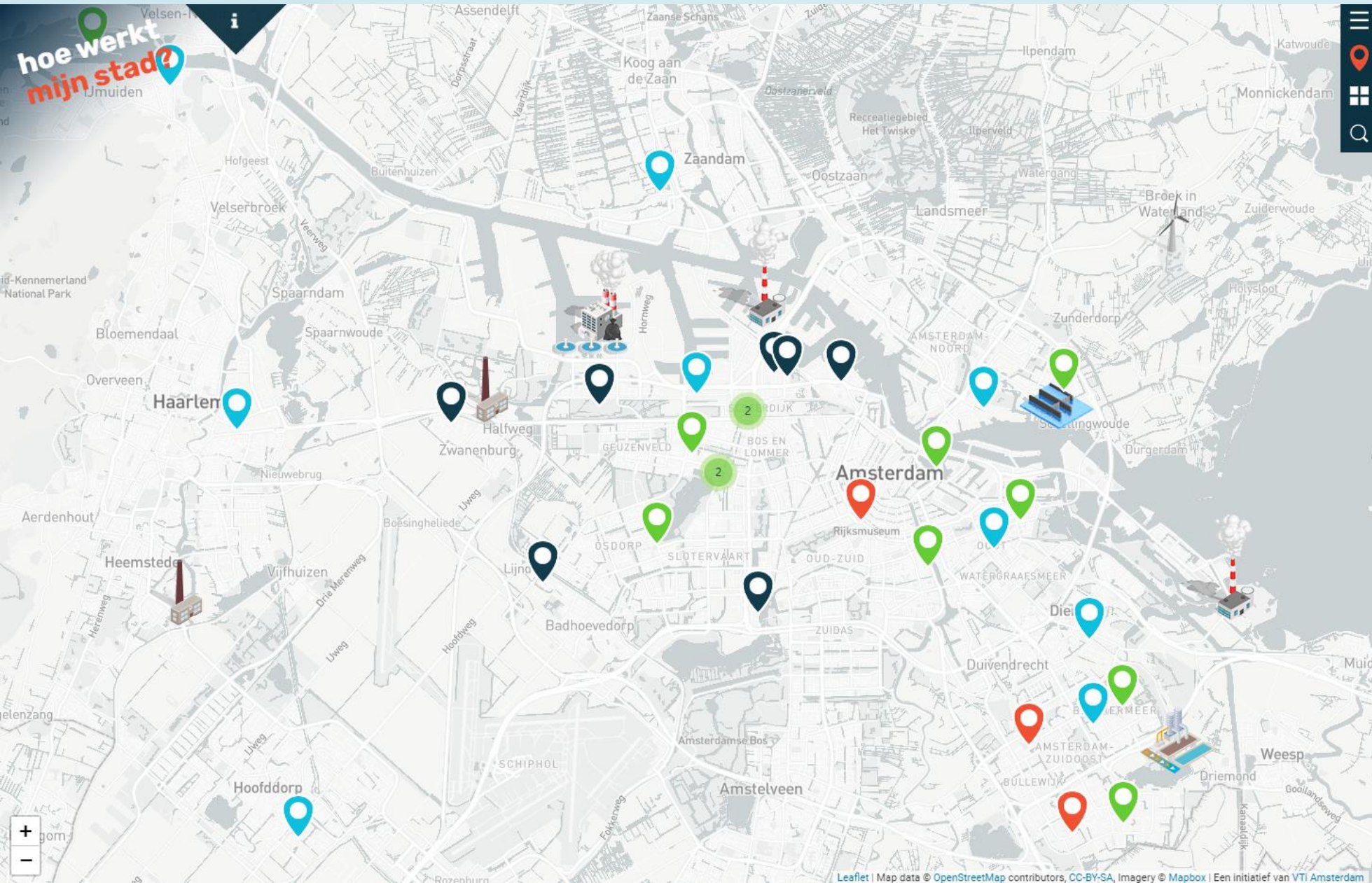
- Elk jaar 100.000 patiënten
- Een eigen energiecentrale
- Duurzaamheid hoog op de agenda



Hier redt energie letterlijk levens

Elektrotechniek, Installatietechniek





Alliander Technische Bedrijfsschool

Praktijklokaal



Werken onder spanning

Bonarius

Bedrijf



In de winter brengen wij warmte

Bredero Beroepscollege

Praktijklokaal



Onze techniek wacht op jouw creativiteit

DeLaMar

Bijzondere locatie



Bezorg duizenden mensen de avond van hun leven

Dmissi Electro

Bedrijf



Geen spanning is ons te hoog

What is the impact?

- The intake has grown with 20 percent each year
- The number of drop-outs went down
- We expected that the percentage of girls would grow.

Things to consider

- Language
- Images
- Role models

Possible project funding

- Erasmus Forward
Looking projects
(deadline March):
attractiveness of VET
- Erasmus Centers of
Vocational Excellence

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<https://wearekatapult.eu/betatechmentality-model/>
www.betatechmentality.nl