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› FOR SOCIETY

WELCOME

Ethics, technology & law

Why it is important to think about the impact of technology on humans and society

(and how to put those thoughts to action!)

Presentation for VH Conference June 13th 2022
Jo-An Kamp, Fontys Hogeschool ICT
Colette Cuijpers, Juridische Hogeschool Avans - Fontys

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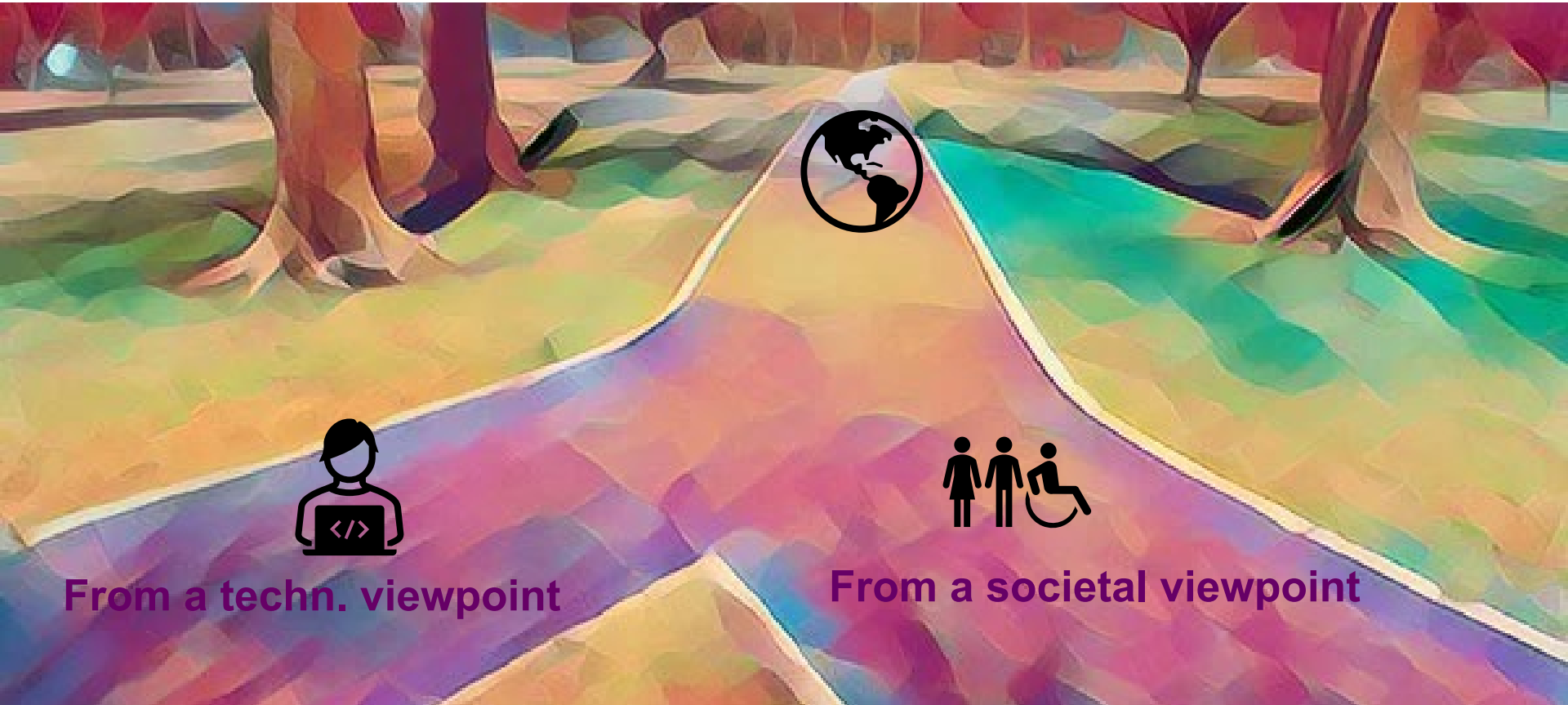
Impact technology on society



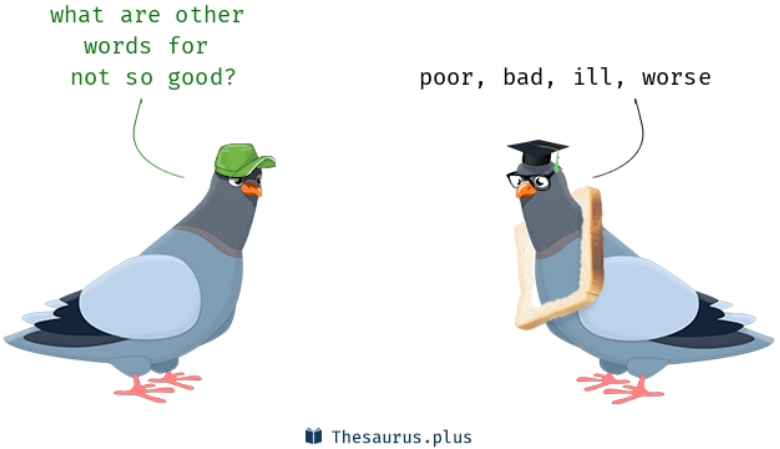
From a techn. viewpoint

From a societal viewpoint

Assignment

- I will show you a video prototype from a first year ICT and Media Design student
- Please write down everything you see that can be explained as either *good* or *not so good* (for now and in the future)

(The video is 2.30 minutes long. Prepare for a quick shout out afterwards. Let's go!)



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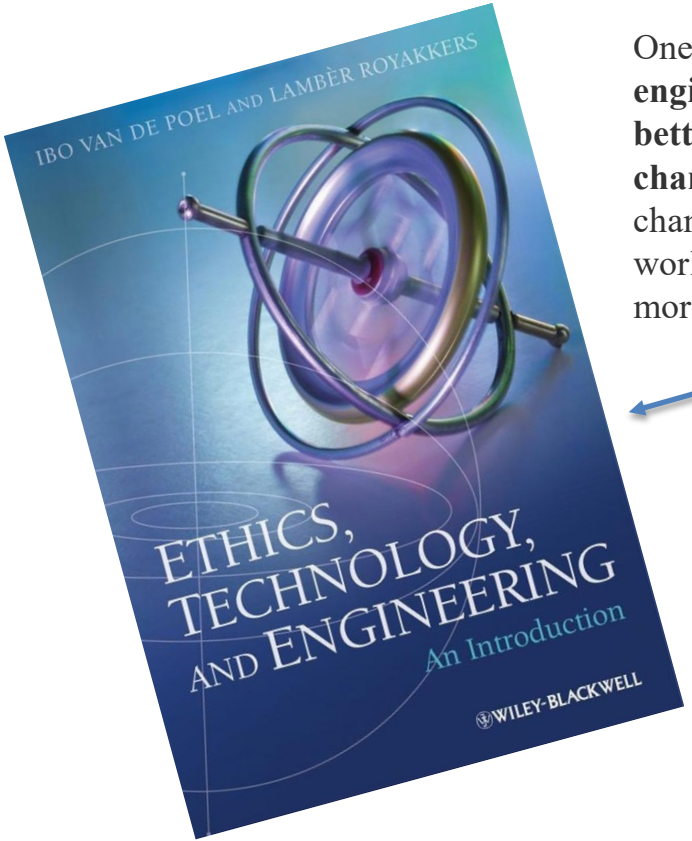
Recap: Shout out

"The more Artificial Intelligence enters our lives, the more essential Ethics & Philosophy become."

(THE AI THOUGHT BOOK)

Introduction

One of the **main differences between science and engineering is that engineering is not just about better understanding the world but also about changing it.** Many engineers believe that such change improves, or at least should improve, the world. In this sense engineering is an inherently morally motivated activity.



Therefore, we also need ethics at the design table, at the start of the process (‘ethics at the front door’). This is a bottom-up, design approach that incubates ethics when constructing new technologies.

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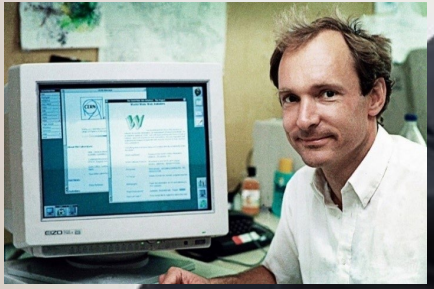
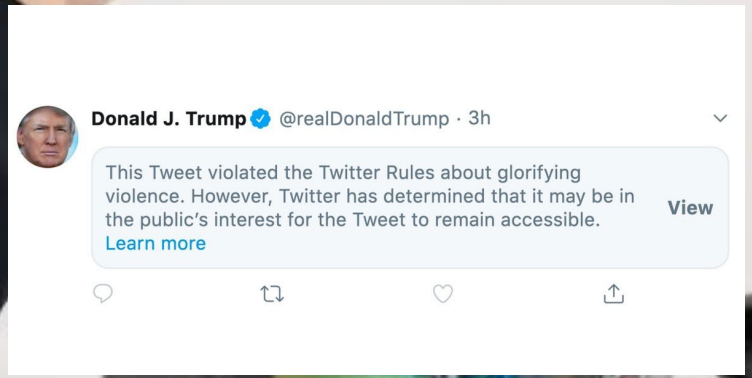
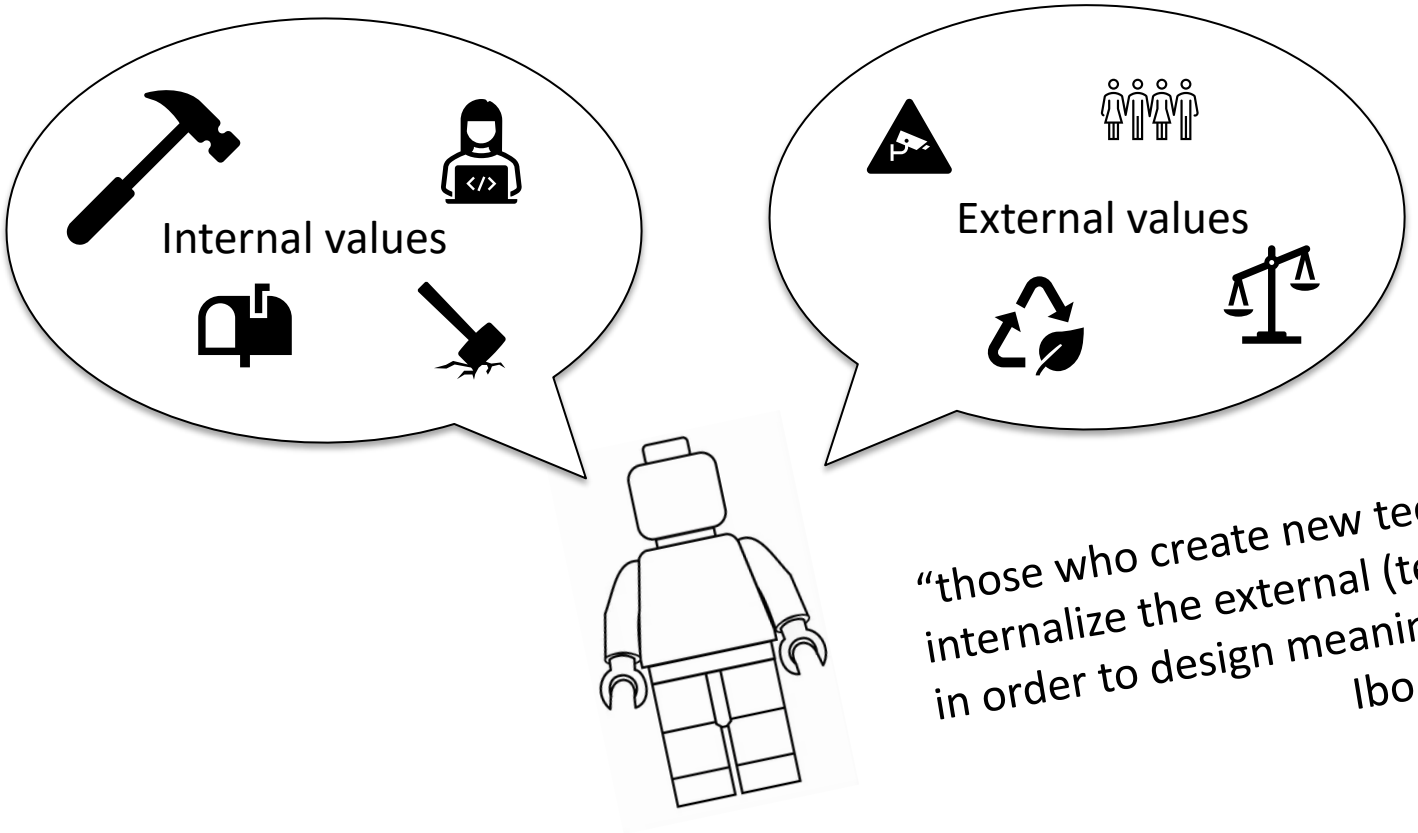
Avoid becoming a ‘tech regret’

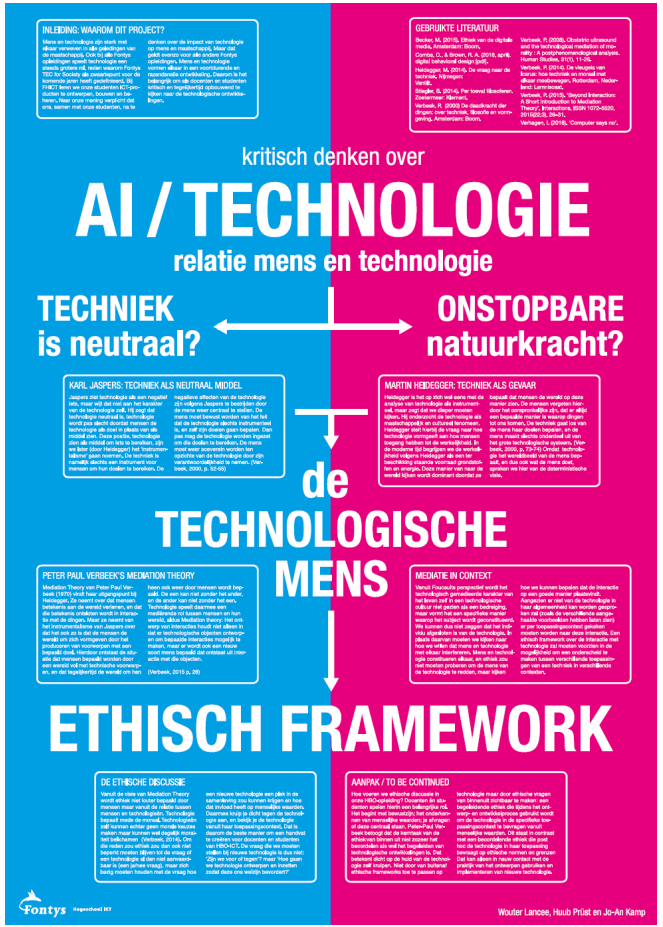




Engineers have a natural tendency towards internal values



"those who create new technology should internalize the external (terminal) values in order to design meaningful innovation"
Ibo van de Poel, 2015



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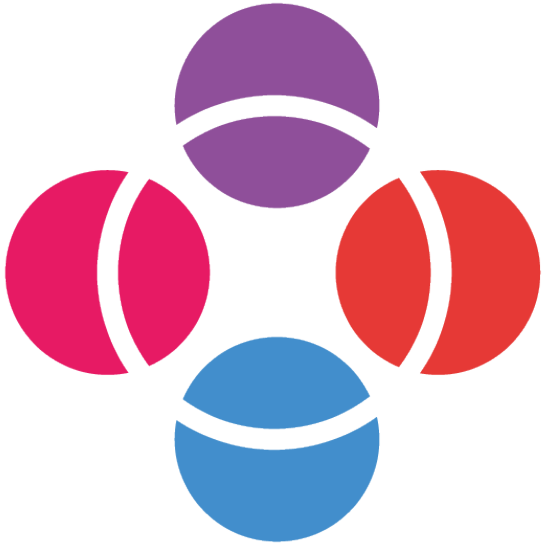

TICT

A FREE TOOLKIT THAT HELPS USERS TO MAKE BETTER DECISIONS ON THE IMPACT OF TECHNOLOGY

WWW.TICT.IO

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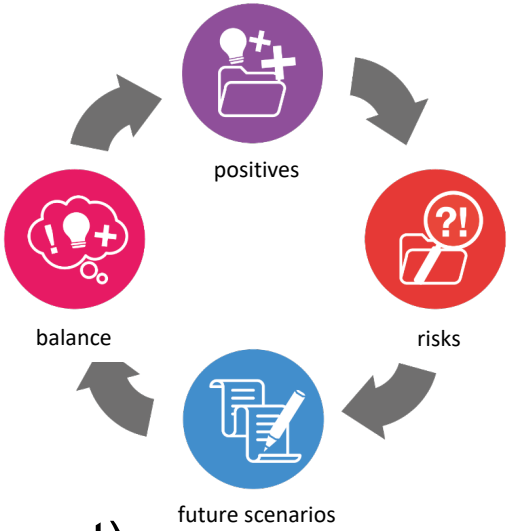
Starting points while developing the tool:

1. Technology = multidisciplinary
2. Ethics as a driving force for innovation
3. Non-judgmental (you can be as good/evil as you want)
4. Part of the (design cycle) process
5. Context is king



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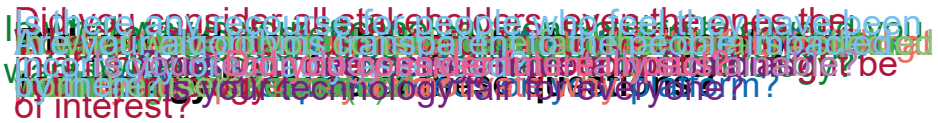
Questions, a lot of questions…



Impact | Bad actors | Privacy | Human values | Stakeholders | Data | Inclusivity | Transparency | Sustainability | Future

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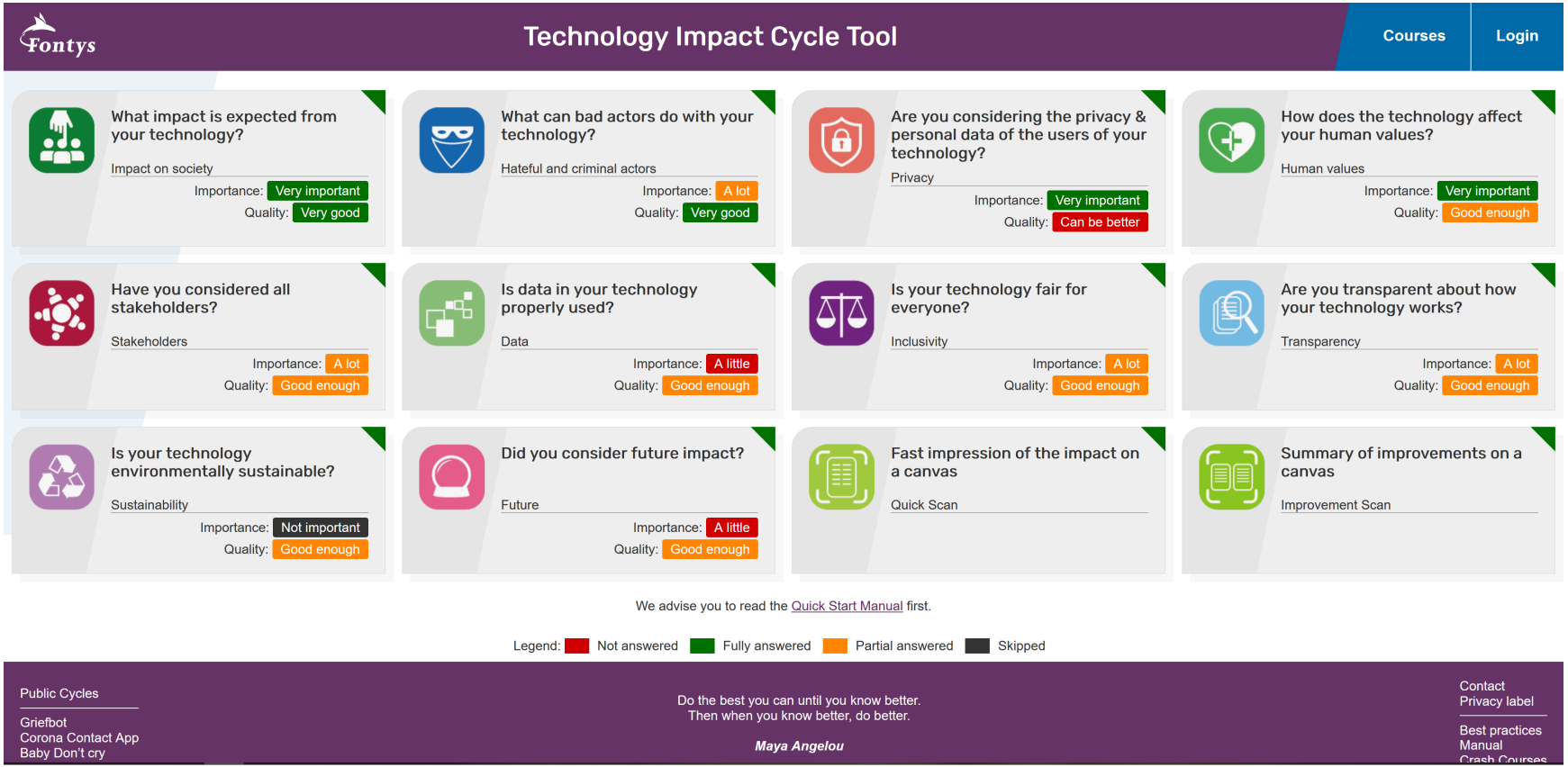
Interface



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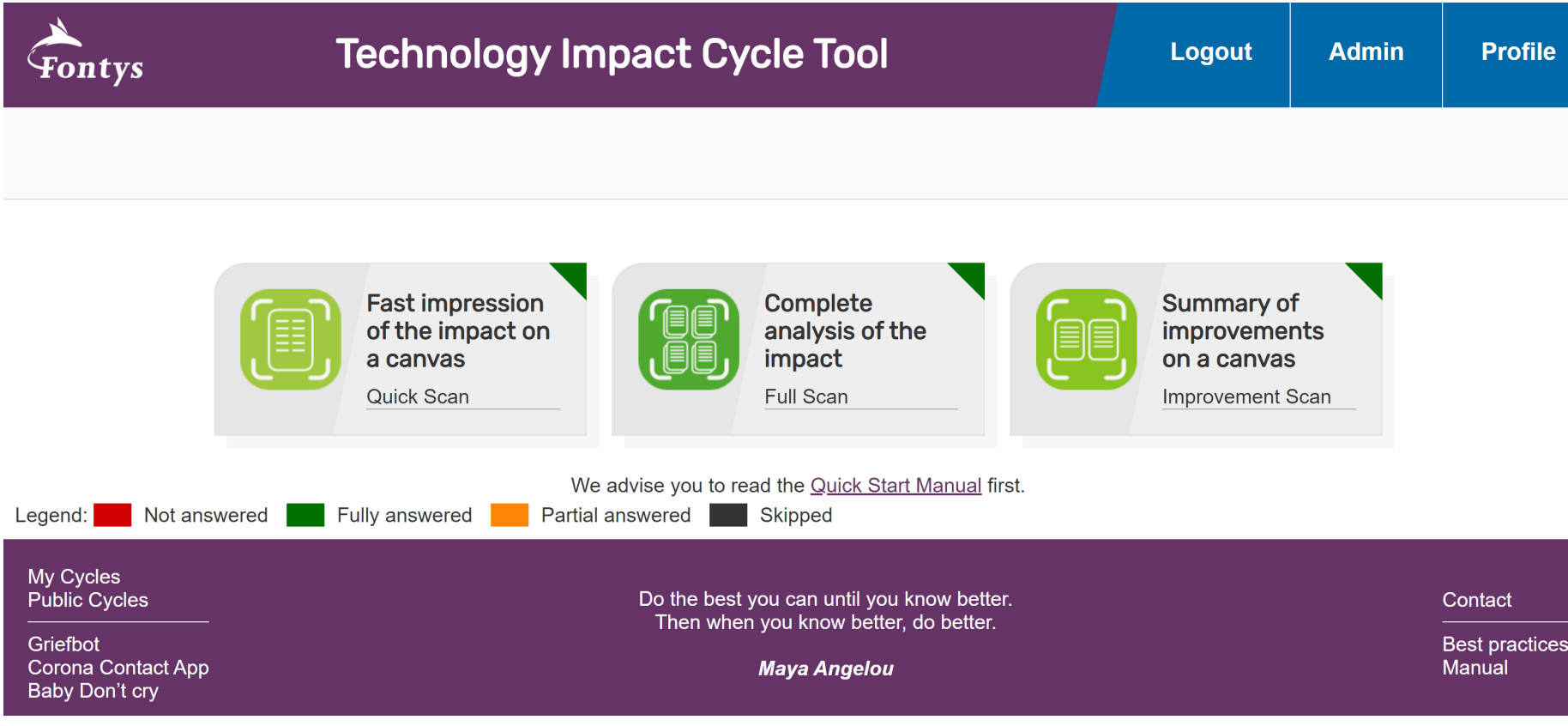
Quick / Full / Improvement Scan



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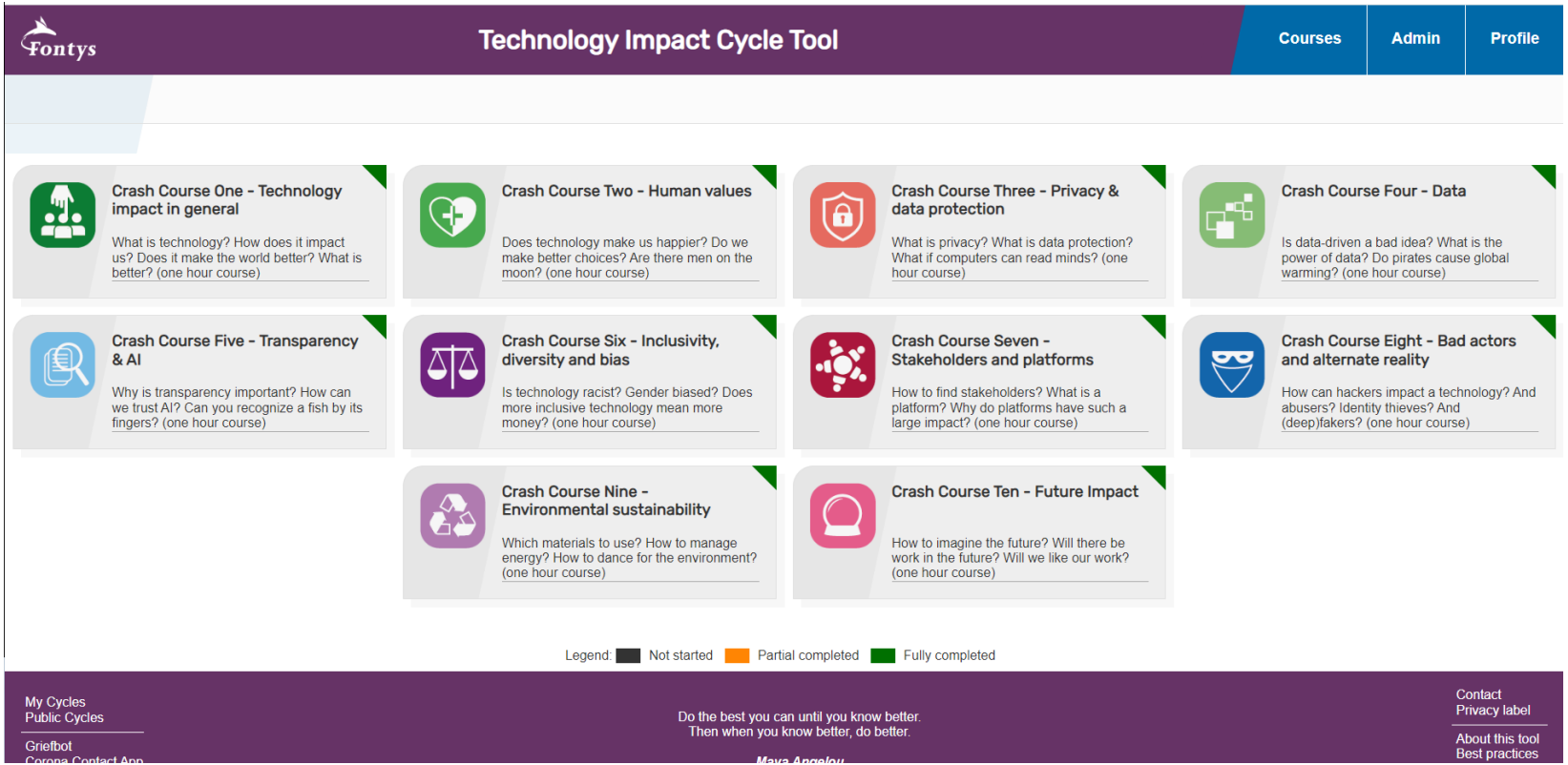
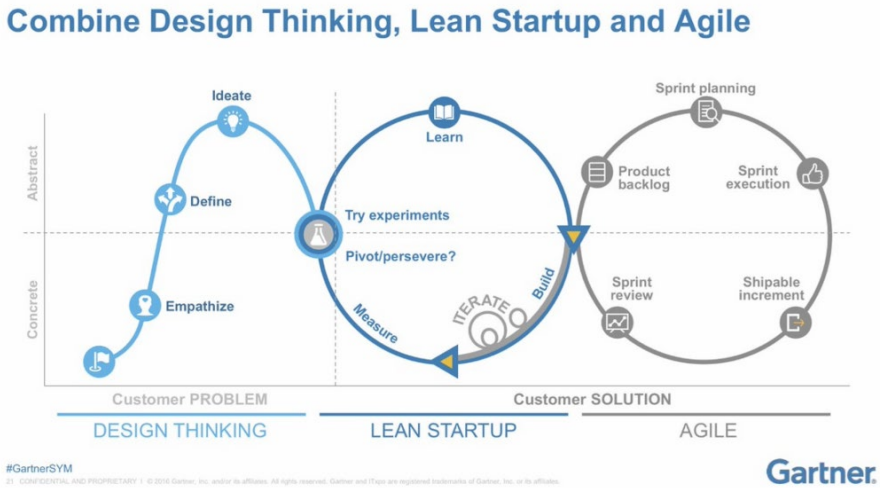
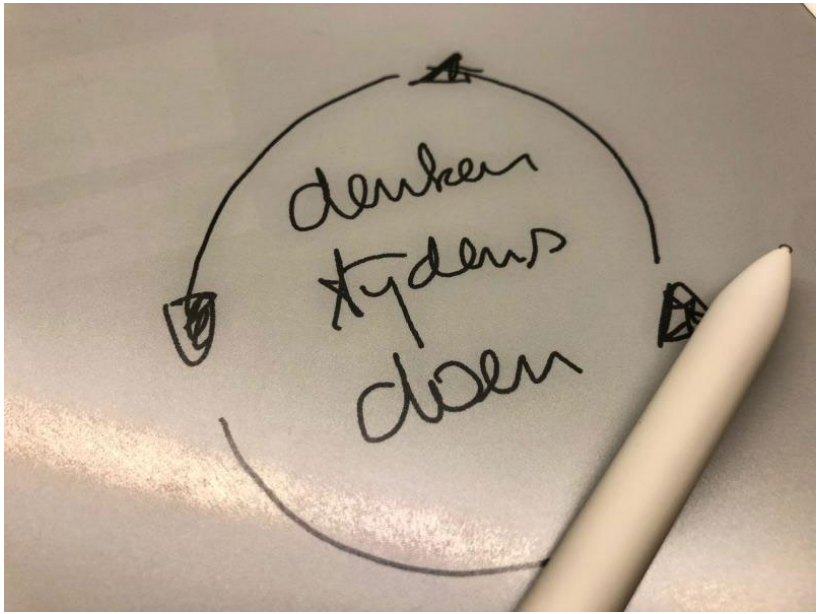
Crash courses



Cycle: in all stages of the process





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Do the best you can until you know better.
Then when you know better, do better.

Maya Angelou

But this often requires incentives…

https://www.willeke.nl/ik-mis-een-stok-achter-de-deur/

Which can be embedded in law

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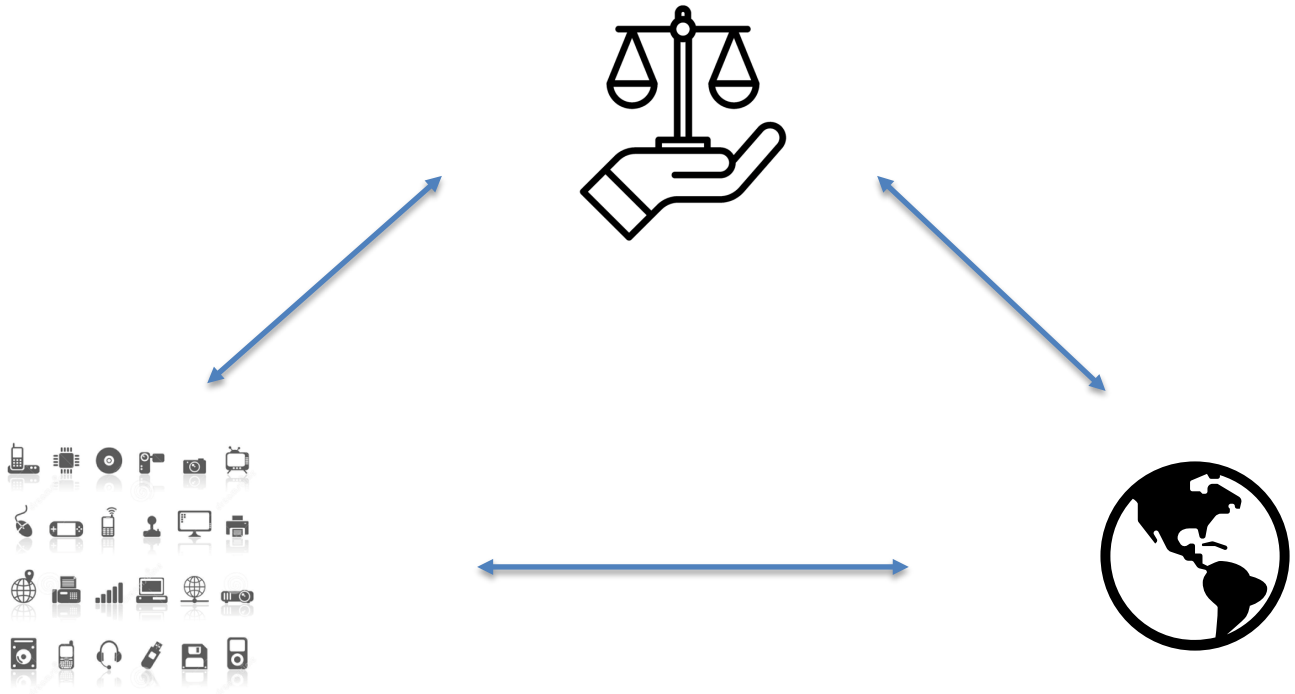
Mutual shaping of Law, Technology, and Society



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Example: Google Glass

2012

Google Glass 2 (enterprise edition 2)

https://www.smartbril.info/google_glass.html

2017

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Many challenges…

Exploring the best of innovations presented in January 2021

As 2020 has had a miscellaneous impact on humankind, 2021 is expected to be a revolutionary year in terms of breakthrough innovations. Organizations have seen accelerated digital transformation in the last few years, making a substantial business change to drive innovation. They are actively exploring and developing new digital capabilities in order to build resilience and prepare for the post-pandemic world. However, as keeping up with fast-moving technology innovations is critical, Analytics Insight presents a list of the top 10 innovations that have taken place in January 2021 so far.

https://www.analyticsinsight.net/top-10-innovations-to-watch-in-january-2021/

https://www.businesstoday.in

Function creep

Pacing dilemma

Collingridge Dilemma

…

“In wake of rapid technology development, regulators are faced with key challenge: How to protect citizens, ensure fair markets and enforce regulations, while allowing new technologies and businesses to flourish?” *bizshifts*

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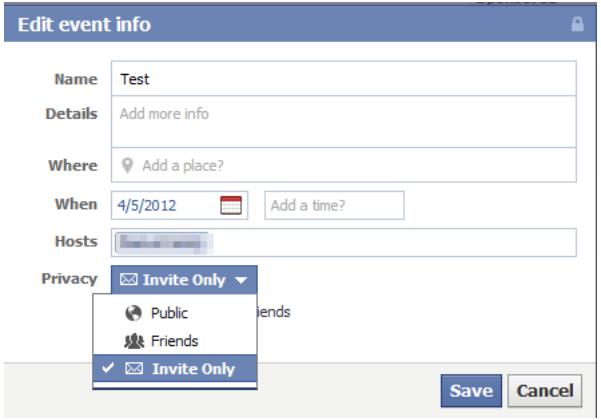
Clear interaction between law and technology

The example of privacy by design and default

https://bauhaus.nl/gdpr-privacy-by-design-in-praktijk/



https://webapps.stackexchange.com/questions/26366/how-to-disable-wall-posts-on-a-facebook-event

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Importance of taking different perspectives into account, in designing both technology and the rules governing (the impact of) technology

Internal values	External values
Technological enthusiasm	Safety
Effectiveness	Health
Reliability	Wellbeing
Robustness	Sustainability
Maintainability	Justice
Compatibility	Democracy
Quality	Inclusiveness
Rationality (rational process)	

Van de Poel, I., 2015. Values in Engineering and Technology.
In: Gonzalez, W.J., (ed.) New Perspectives on Technology, Values, and Ethics.
Boston Studies in the Philosophy and History of Science, Volume 315, Springer,
Cham, Switzerland, pp. 29-46.

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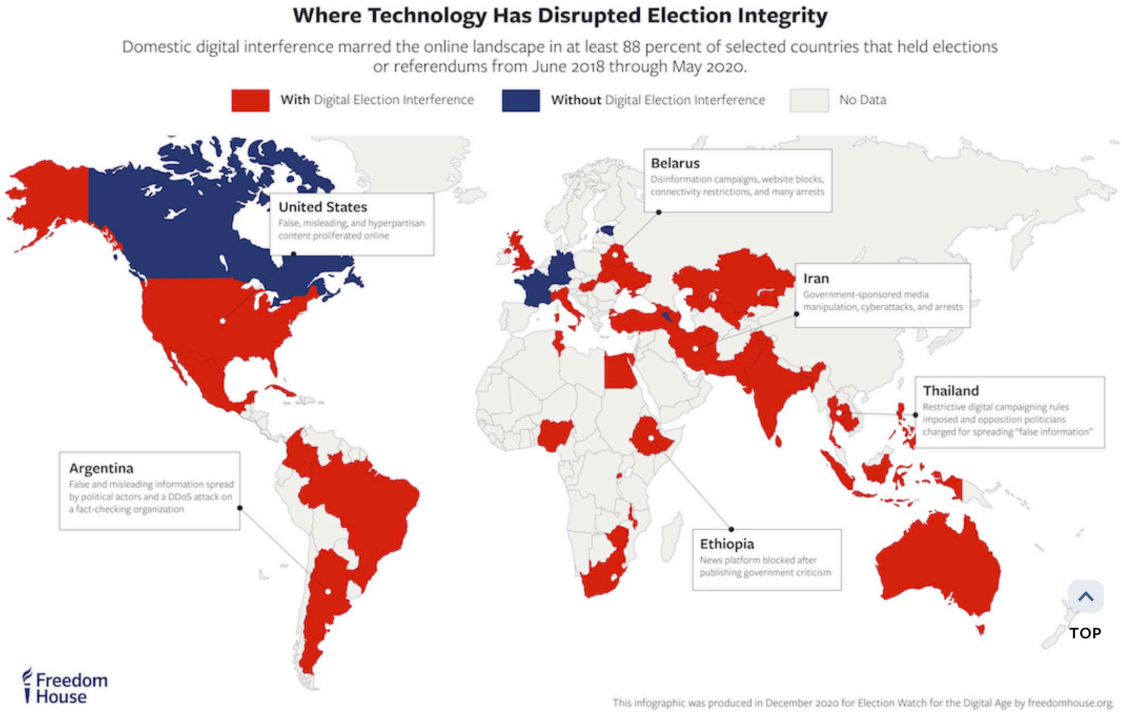
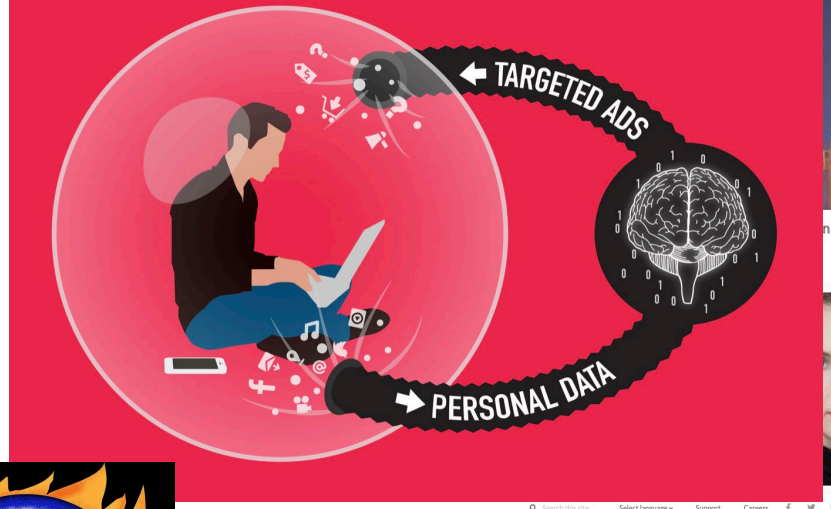
Democracy as example…

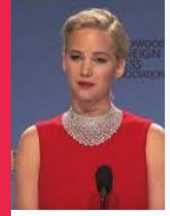


From Bond et al, 2012

SCIENCE | NOT EXACTLY ROCKET SCIENCE

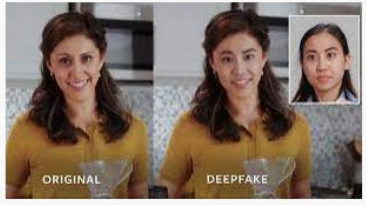
A 61-million-person experiment on Facebook shows how ads and friends affect our voting behaviour



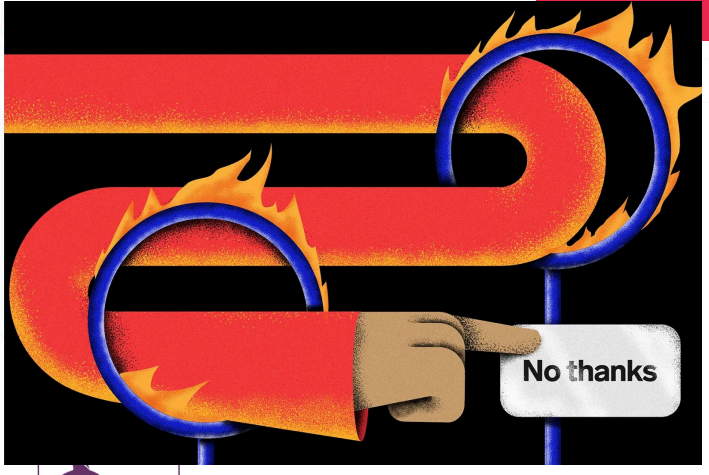


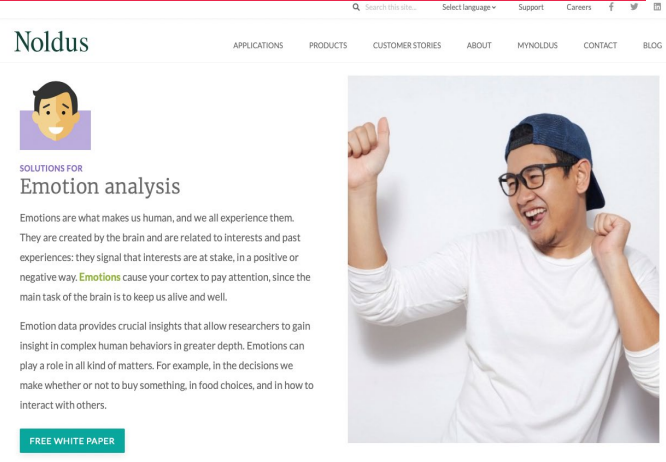
n het probleem ...

Detecting deepfakes by looking closely ...
phys.org



Deepfake Detection Challenge ...
spectrum.ieee.org





Deepfakes Are Getting Better. But They ...

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Bronnen plaatjes: Google, Noldus, Sticky digital, Wired

Role of Technology and technology providers

The impact on democracy, but also the democratic legitimisation of rulemaking…

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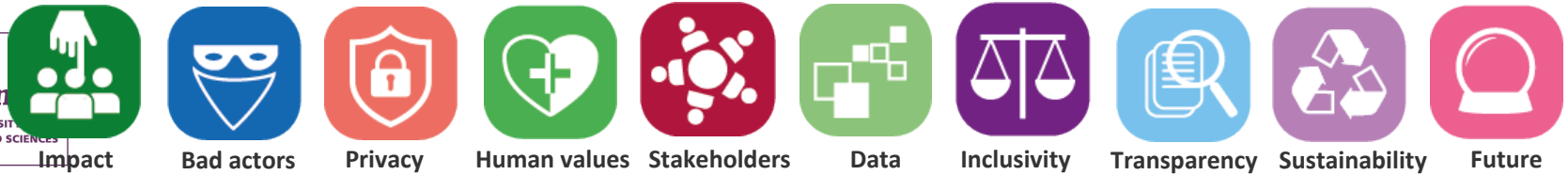
Emotion Recognition

Questions, a lot of questions…
Can foster responsible innovation

What kind of questions pop up?



Responsible innovation requires multidisciplinary education!

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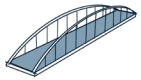

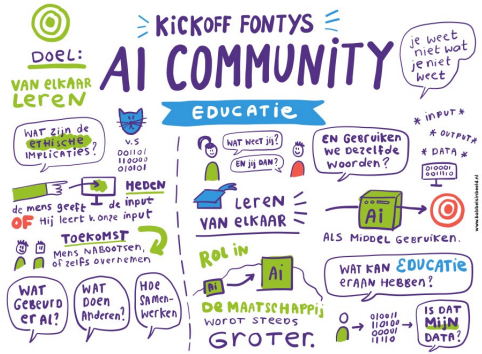

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THANKS FOR LISTENING!

Questions?

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