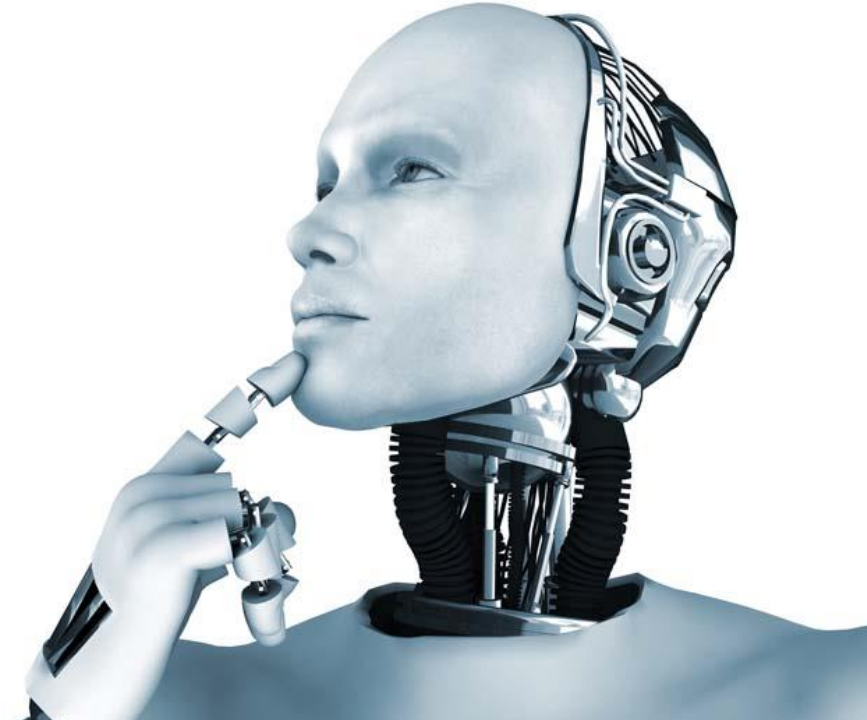




**What is “good” technology?**

**What is “good” AAL?**

**What is “good” digital health?**



# Do The Right Thing: The Ethics of Digital Health

Jaco van Duivenboden  
Michiel Faber

AAL Forum 2019, Arhus

Workshop 11

Nictiz  Better health through  
better information

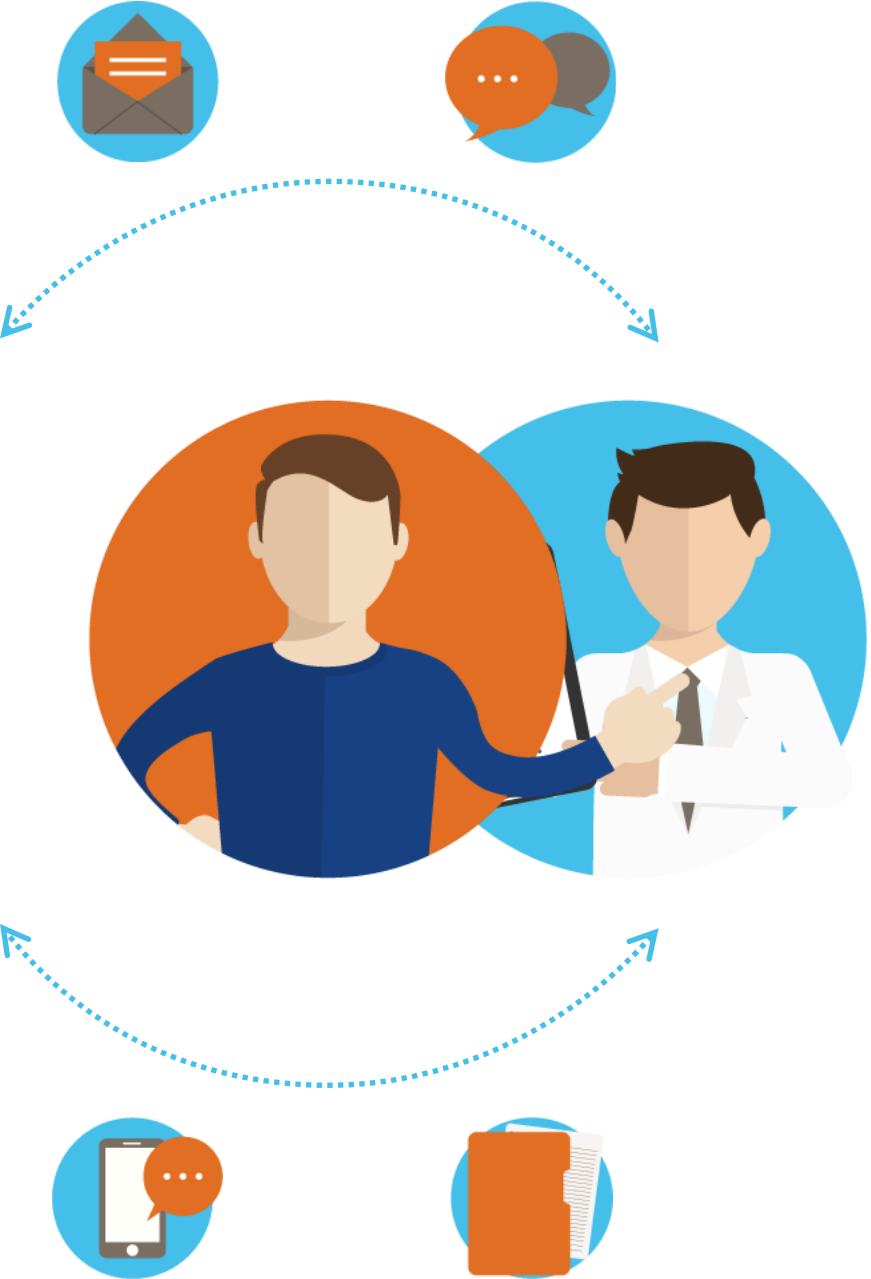




# Schedule

<b>11.00 – 11.20</b>	<b>Ethics and digital health</b>
<b>11.20 – 11.25</b>	<b>The DEDA model</b>
<b>11.25 – 12.20</b>	<b>Subgroup discussions</b>
<b>12.20 – 12.30</b>	<b>Joint discussion &amp; conclusions</b>

# Future healthcare



# Nictiz: expertise centre for e-health



Better health through better information



# **Ethics & digital health topics**

**Ethics & digital health**

**Four approaches to ethics & digital health**

**Typical ethical challenges**

**Examples**



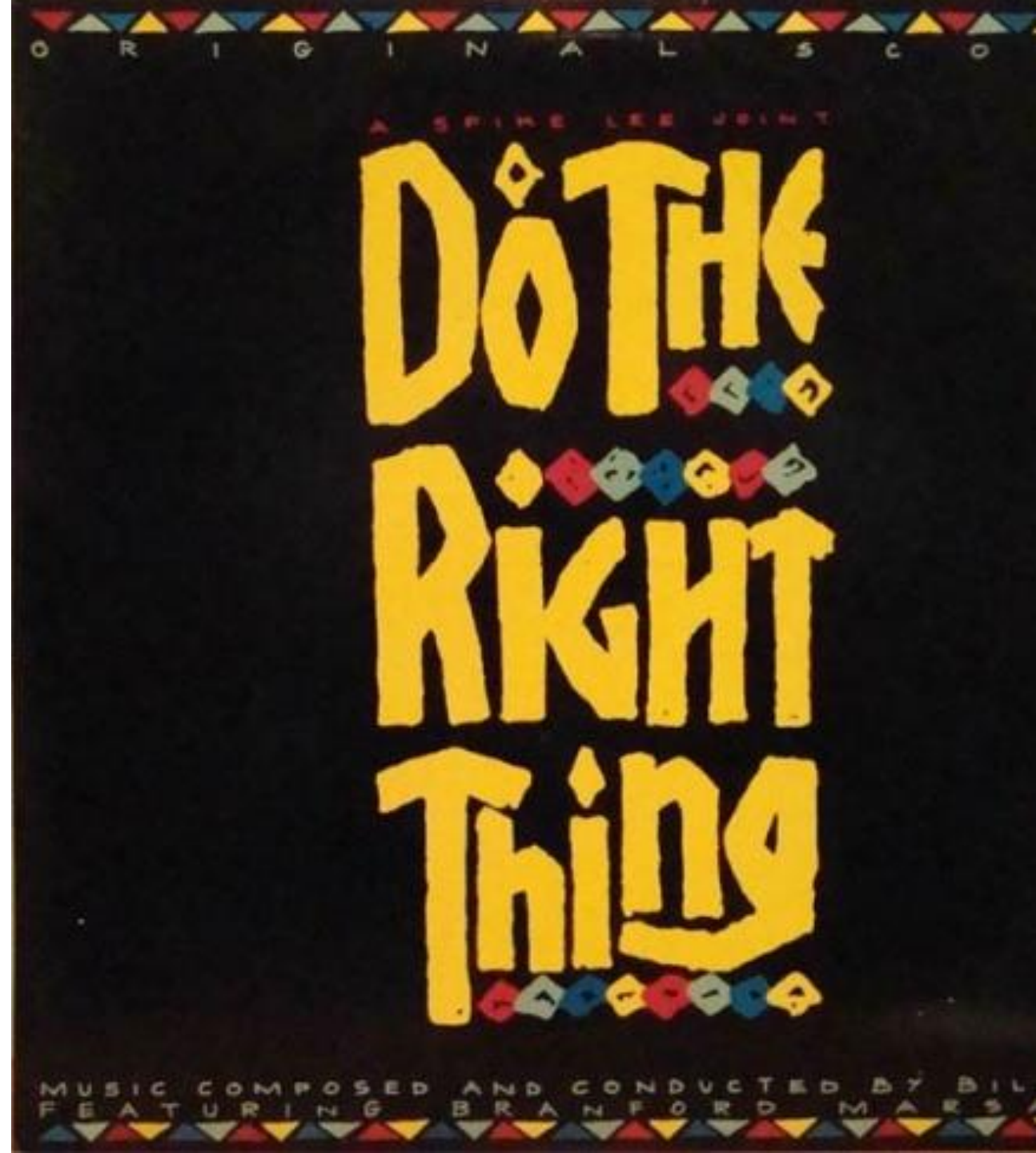
# Ethics & digital health

Why is ethics important?

The role and position of ethics

“Low” and “High” ethics

Ethics in a “VUCA world”





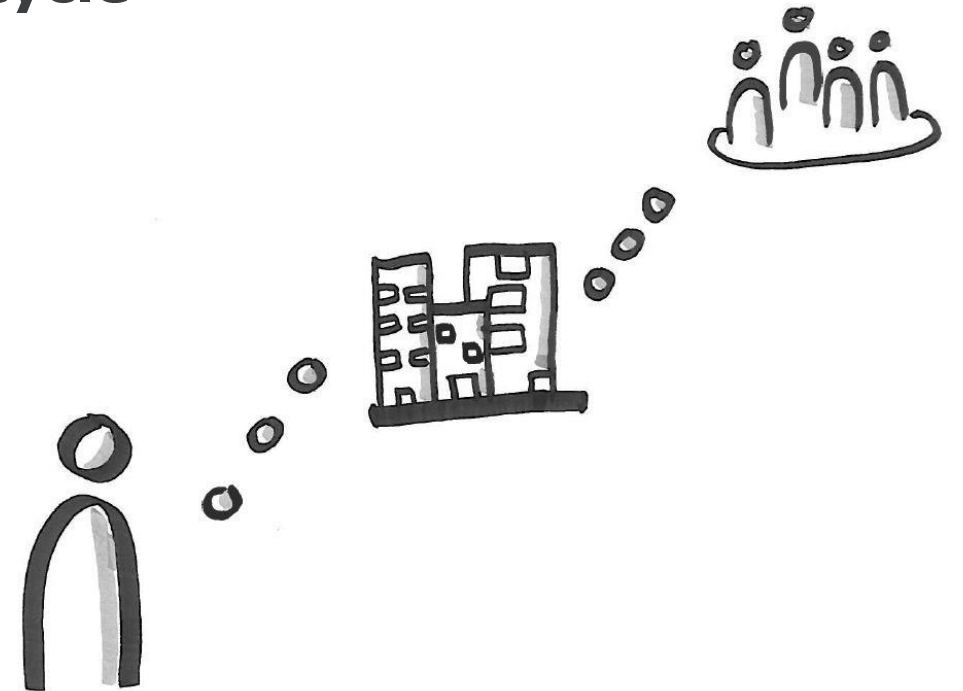
# **Four approaches**

**Ethics-by-all**

**Ethics as a guide**

**Ethics in different stages of the product lifecycle**

**Ethics on organisational levels**



# **Typical ethical challenges**

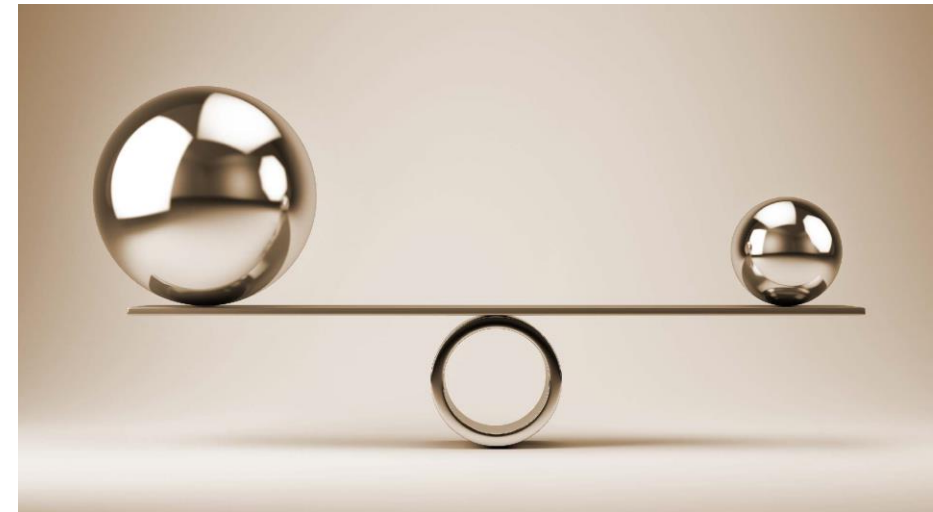
**Impact of data-driven healthcare**

**Inequal access to care**

**Intrusive technology**

**Evidence based technology**

**Changing patient-professional relationship**







**INFLAMMATORY**  
**50c a Bottle.**



**ARTICLE.**  
**50c a Bottle.**

# **SNAKE OIL**

**RELIEVES INSTANTANEOUSLY**

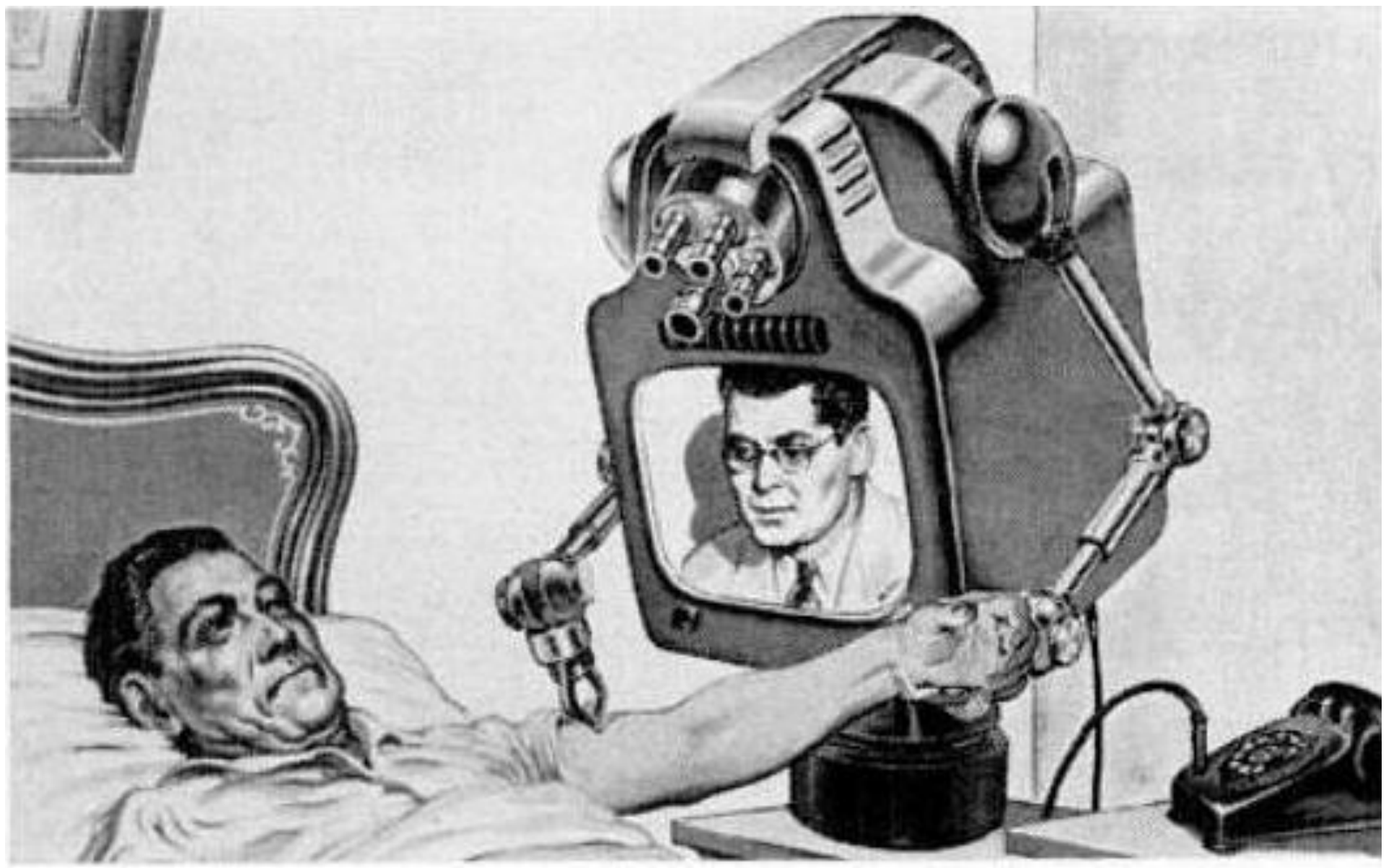
**AND CURES HEADACHE, NEURALGIA, TOOTHACHE, RHEUMATISM, BRUISES, SWELLINGS, SPRAINS, SORE THROAT, SWELLING OF THE THROAT, CONTRACTED CURS AND MUSCLES, STIFF JOINTS, WELLS, DEMONSTRATION CUTS AND SCALDS.**

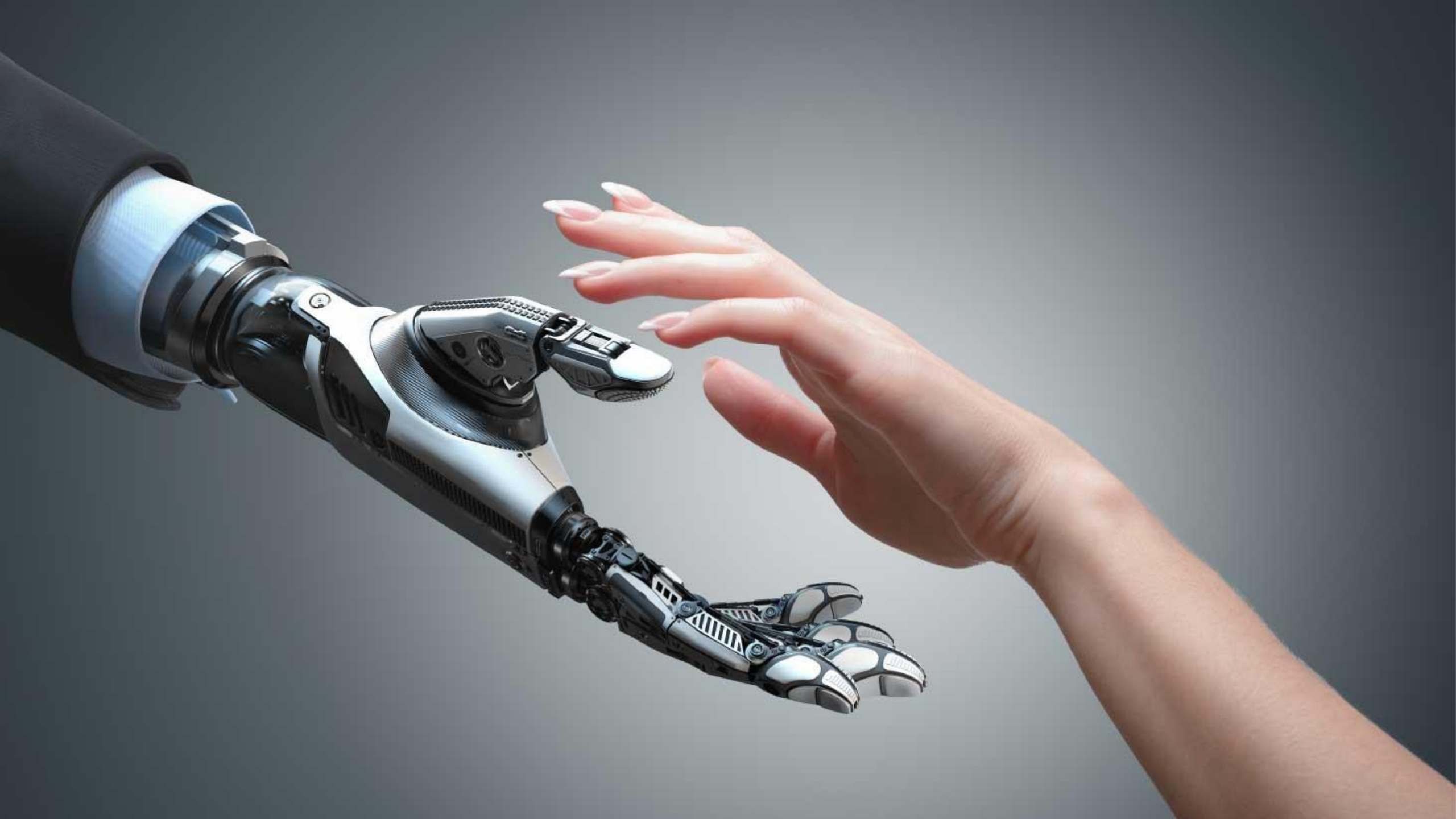
*It quickly takes out the nervous and inflammatory from the system, blood and digestive tract.*

*The best External Preparation for RHEUMATISM and ATHELETIC. It makes the Man be every*

**AND PAINS.**









# Typical ethical challenges

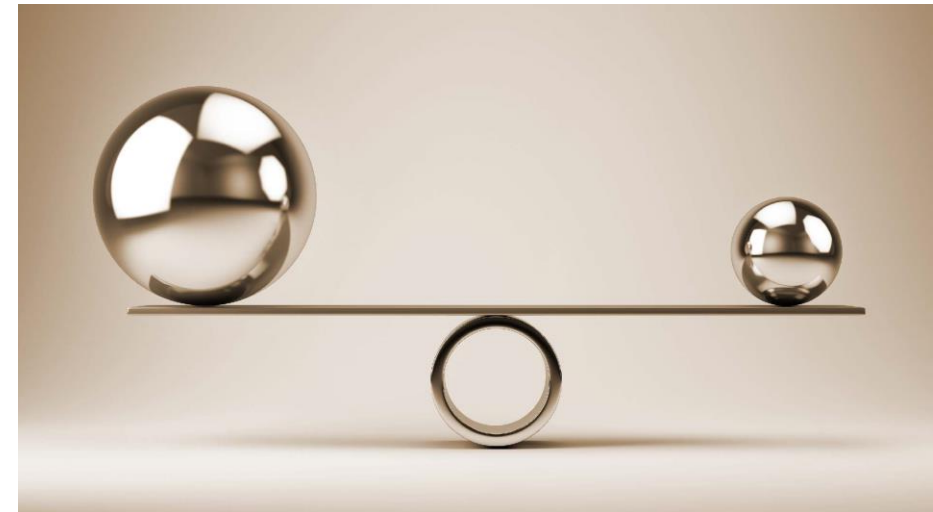
**Impact of data-driven healthcare**

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**Evidence based technology**

**Changing patient-professional relationship**





# **Ethics & e-health in the Netherlands**

**eHealth4all initiative**

**DEDA: Data Ethics Decision Aid**

**Ethics in policy making**

**Moral deliberation**

**Quality framework (Dutch Health Inspectorate)**

# eHealth4all (Pharos)

**“E-health should be**

- 1. Understandable for all**
- 2. Easy to find and use**
- 3. Include coaching by professionals**
- 4. Included in local/regional prevention and care”**



**eHealth4All**  
EEN INITIATIEF VAN PHAROS



1



2



3



4

# E-health quality framework

Good governance  
&  
Responsible innovation

Patient  
Inclusion/Participation

Implementation and use of e-health products and services

Network cooperation & digital  
data registration and exchange

Information security &  
continuity

# Case #1

**Remote monitoring of elderly  
with chronic heart failure**



# Case #2

## Position monitoring system preventing dangerous situations



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# **To take home...**

**Ethics can enable better technology in healthcare**

**“Good” technology needs a multi-stakeholder approach**

**Ethics should be included in the full product life-cycle**

**Ethics goes beyond checklists: it’s all about dialogue**

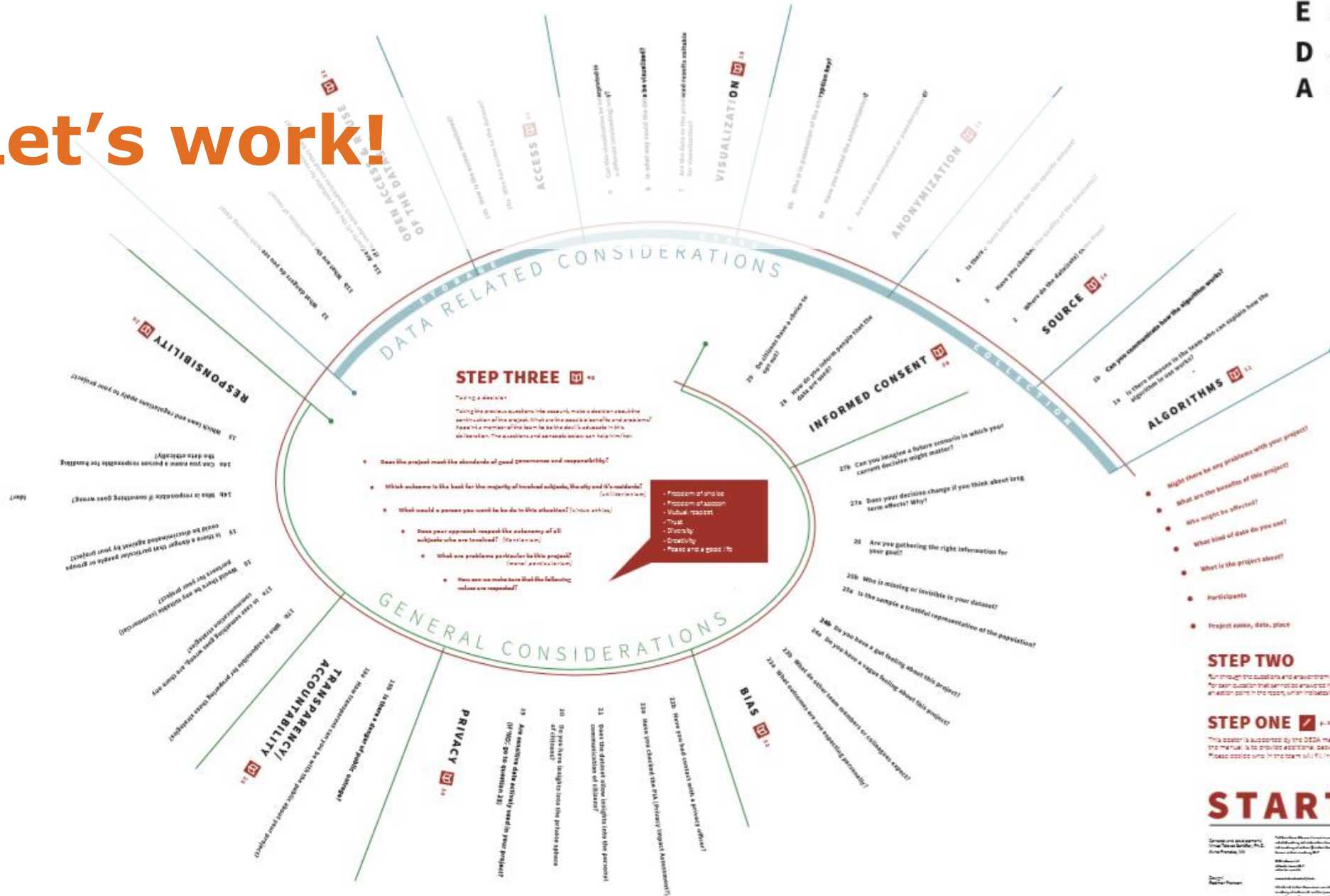






# Let's work!

Data  
Ethics  
Decision  
Aid



- Might there be any problems with your project?
- What are the benefits of this project?
- Who might be affected?
- What kind of data do you use?
- What is the project about?
- Participants
- Project name, date, place

## STEP TWO

Run through the questions and answer them with books. For each question that cannot be answered right away, you will find an action point in the report, which includes further data.

## STEP ONE

This section is supported by the DDA manual. The function of the manual is to provide additional background information. It also includes a list of questions that you will fill in the report.

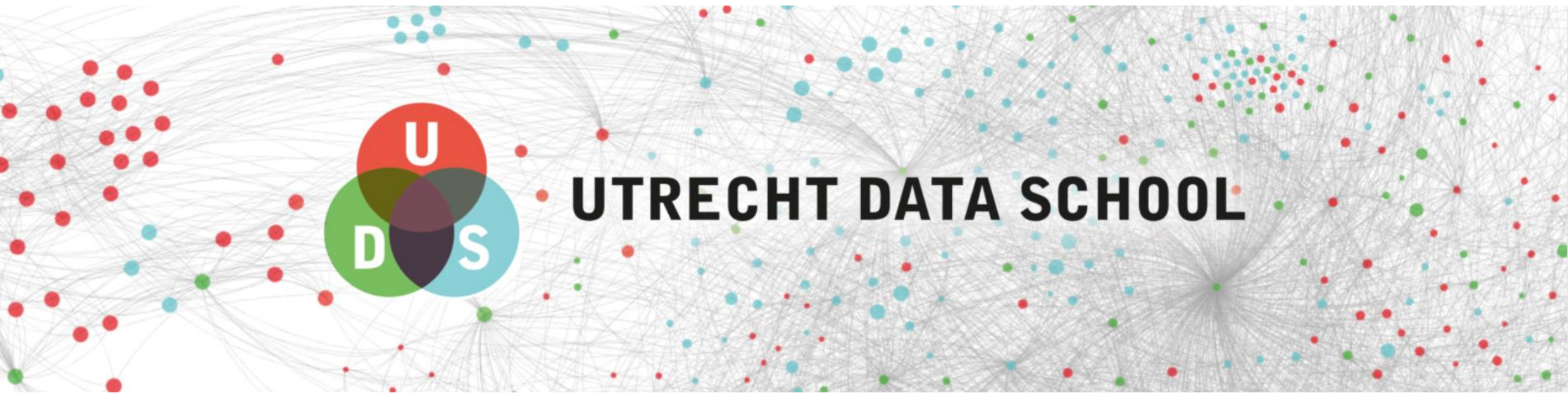
# START

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DFG: German Research Foundation  
BMBWF: Federal Government of Germany

DFG: German Research Foundation  
BMBWF: Federal Government of Germany

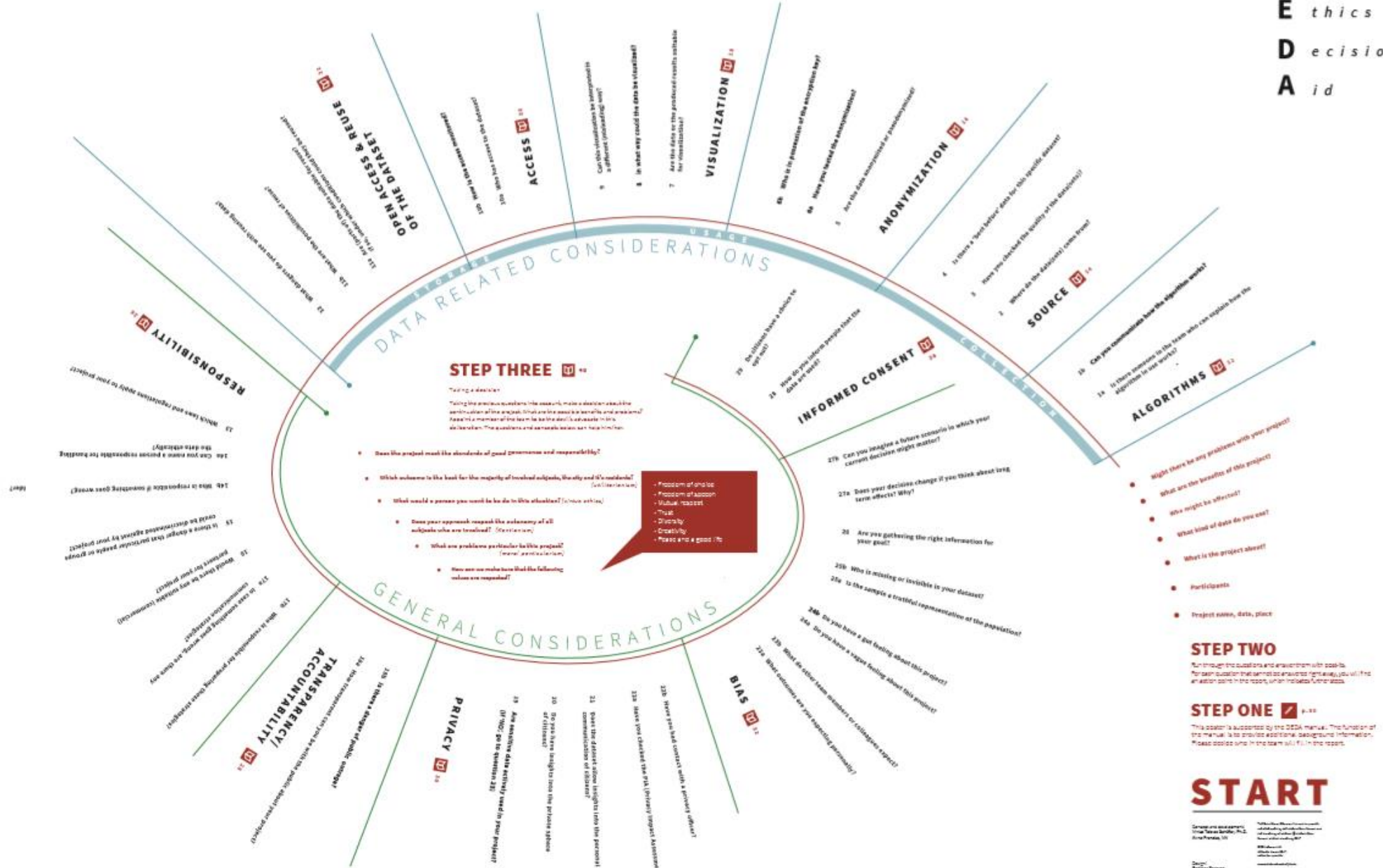
DFG: German Research Foundation  
BMBWF: Federal Government of Germany



# UTRECHT DATA SCHOOL



**D**ata  
**E**thics  
**D**ecision  
**A**id



- Might there be any problem with your project?
- What are the benefits of this project?
- Who might be affected?
- What kind of data do you want?
- What is the project about?
- Participants
- Project aims, data, place

**STEP TWO**  
 Run through the questions and answer them with books. For each question that cannot be answered right away, you will find an action point in the report, which includes further details.

**STEP ONE 1**  
 This section is supported by the DDA manual. The function of the manual is to provide additional background information. It also includes a list of questions that you can ask in the team that will fill in the report.

**START**





# Instructions

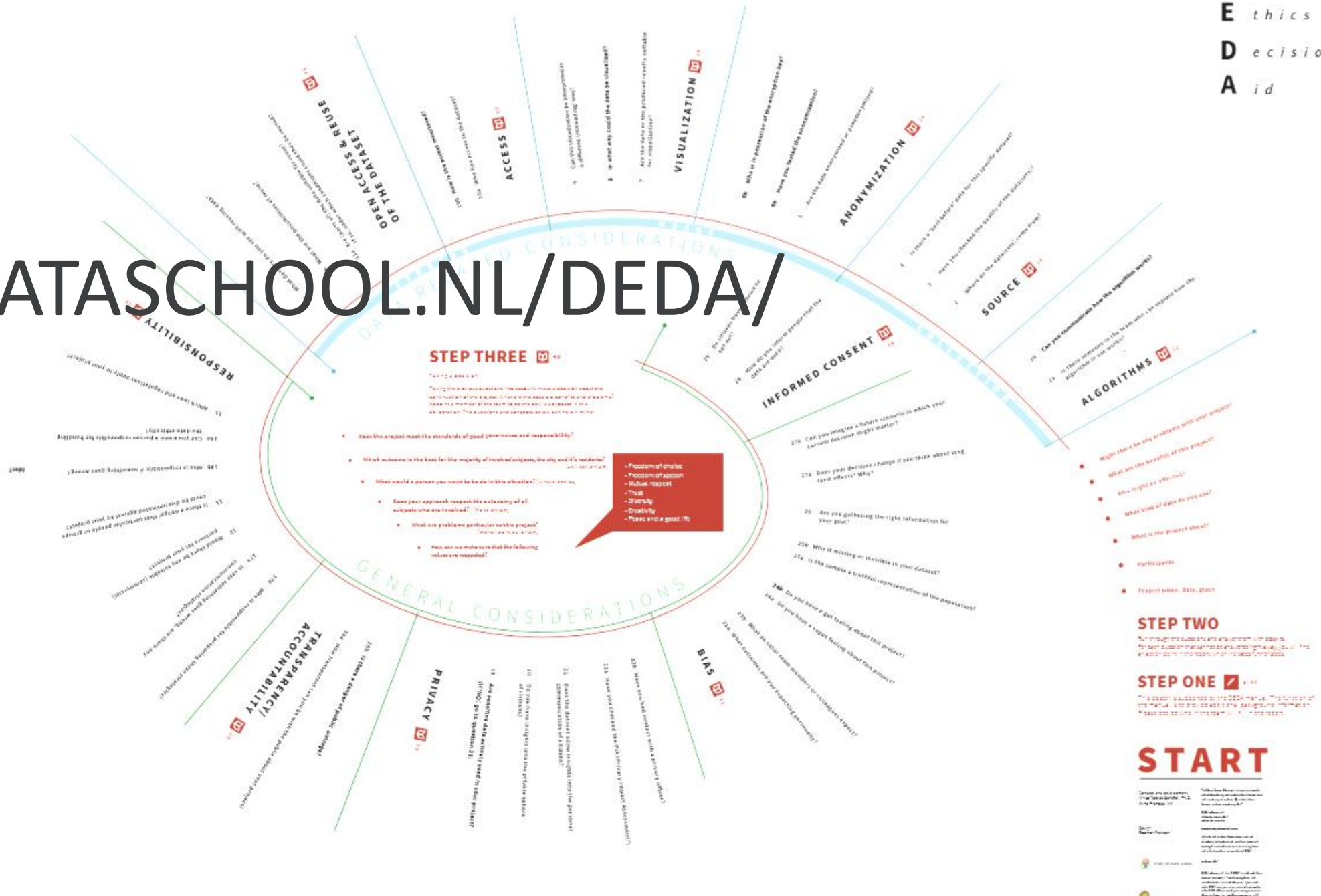
- Read the case**
- Read the instructions**
- Appoint someone who will give feedback to the group**
- Start and enjoy your discussion!**
  
- ✓ **Keep asking yourselves: what's the right thing to do?**
- ✓ **Approach the case from different perspectives (caregiver, client, developer, etc.)**



D  
E  
D  
A

data  
ethics  
decision  
aid

# DATASCHOOL.NL/DEDA/





# **Do you still agree?**

**Ethics can enable better technology in healthcare**

**“Good” technology needs a multi-stakeholder approach**

**Ethics should be included in the full product life-cycle**

**Ethics goes beyond checklists: it’s all about dialogue**



# Thank you!

**Contact & connect:**

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(@JacoDuivenboden)**

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