



Panel

How to Design for Digital Healthy Living?

Moderators

Marike Hettinga Windesheim University of Applied Sciences, the Netherlands

Alma Leora Culén University of Oslo, Norway

Participants

Panelists

Paolo Perego, Politecnico di Milano, Italy

Veronica Janssen, Leiden University, the Netherlands

Tone Bratteteig, University of Oslo, Norway

Maurizio Caon, University of Applied Sciences and Arts Western Switzerland, Switzerland

Carolien Smits, Elderly Care | Windesheim University of Applied Sciences, the Netherlands

Cristiana Degano, Gruppo SIGLA S.r.l., Italia

Shaleea Shields, NHS Human Services, USA

Invited demo

Rune B. Rosseland, University of Oslo, Norway

The Health Conductor - Bodily Interaction with Music for the Promotion of Seniors' Health and Well-being

Motivation for having the panel

- What is Digital Healthy Living?
- How do we design technology to support wellbeing?
- How do we cross field boundaries at Digital World conferences and look into designing for digital healthy living from cross-disciplinary perspectives?
- Can we move beyond presentations and enable real cooperation across different fields?

Demo

Why demo?

It is an example of design for well-being.

It offers a possibility to reflect (from different disciplinary perspectives) on its design and start a conversation

Open Discussion



Innovating with Older Adults





Research Group Innovating with Older Adults

MISSION:

Practice based scientific research into innovations concerning older adults. The research is conducted in collaboration with professional and educational practice and older adults themselves. We develop and evaluate innovations focussing on the profession itself and technological improvements. By developing, sharing and implementing knowledge our research group wants to improve the lives of vulnerable and healthy older adults.

3 Research Programs

1.

Shared decision making in complex situations

2.

Collaboration and Participation

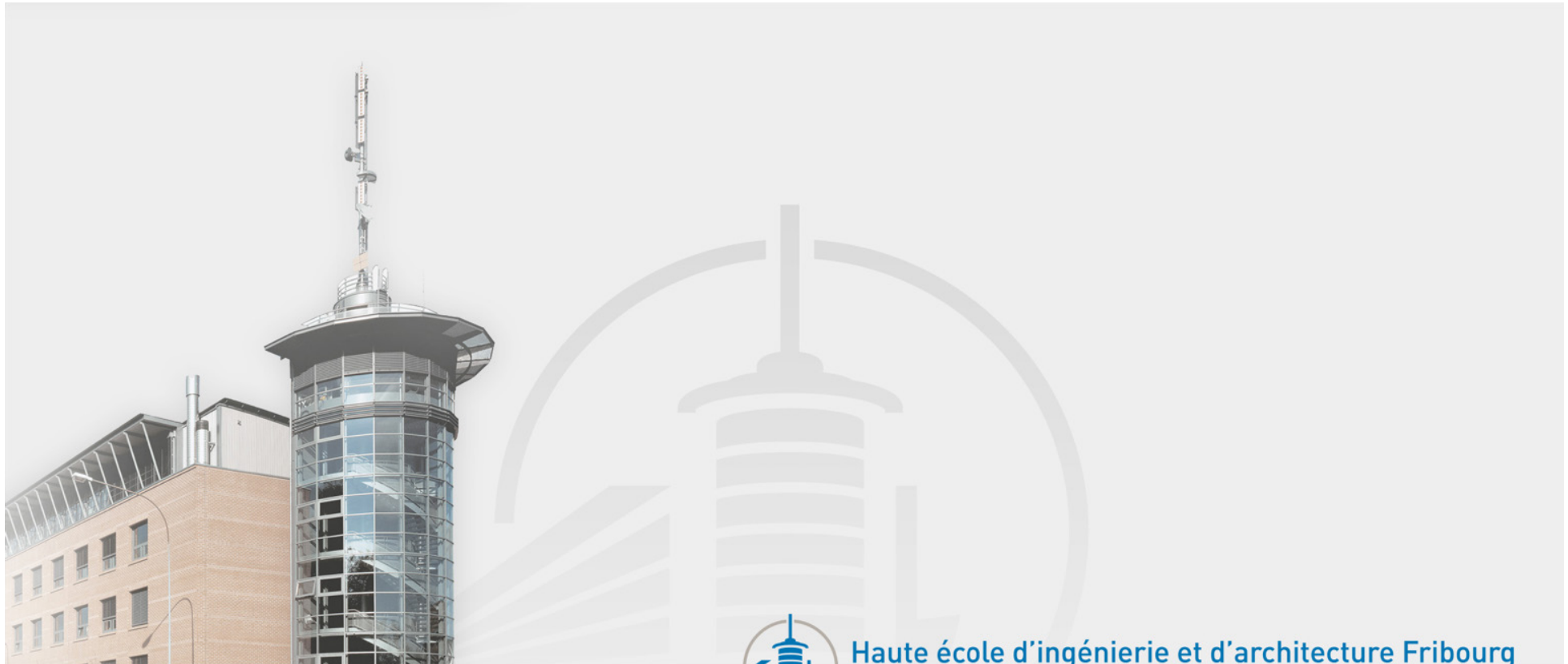
3.

ProMemo: Centre of Expertise on dementia



Interdisciplinarity:

- Vulnerable and healthy older adults require partly different expertise
- Innovations concern all aspects of life of older adults; therefore:
- Interdisciplinary research group: psychology, nursing, social work, social science, health science, gerontology, ICT
- Professional and technological innovation: multiple domains
- Multiple steps in the knowledge cycle
- Applied research and innovation requires interaction between students, lecturers, professionals and researchers, e.g. in living lab.



Haute école d'ingénierie et d'architecture Fribourg
Hochschule für Technik und Architektur Freiburg

HumanTech

Technology for
Human Wellbeing Institute

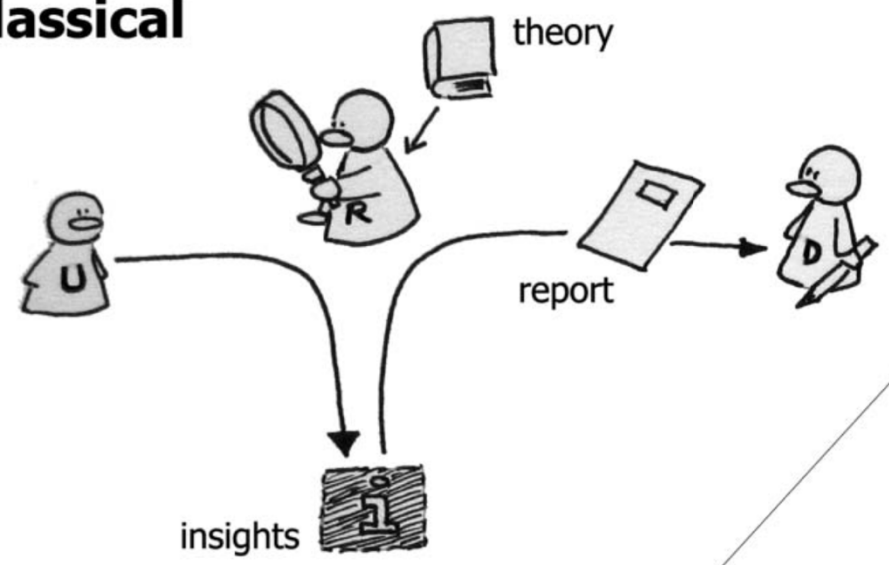
Hes·so

Haute Ecole Spécialisée
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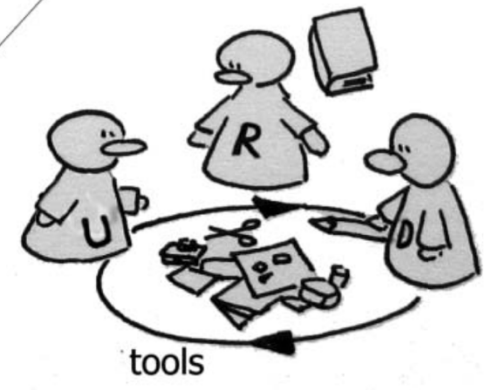
How to Design for Digital Healthy Living?

Maurizio Caon, PhD

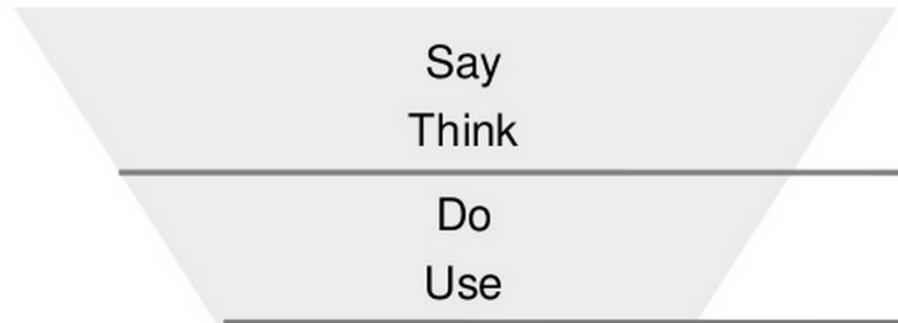
classical



co-design



Sanders, L. (2008). ON MODELING An evolving map of design practice and design research. interactions, 15(6), 13-17.



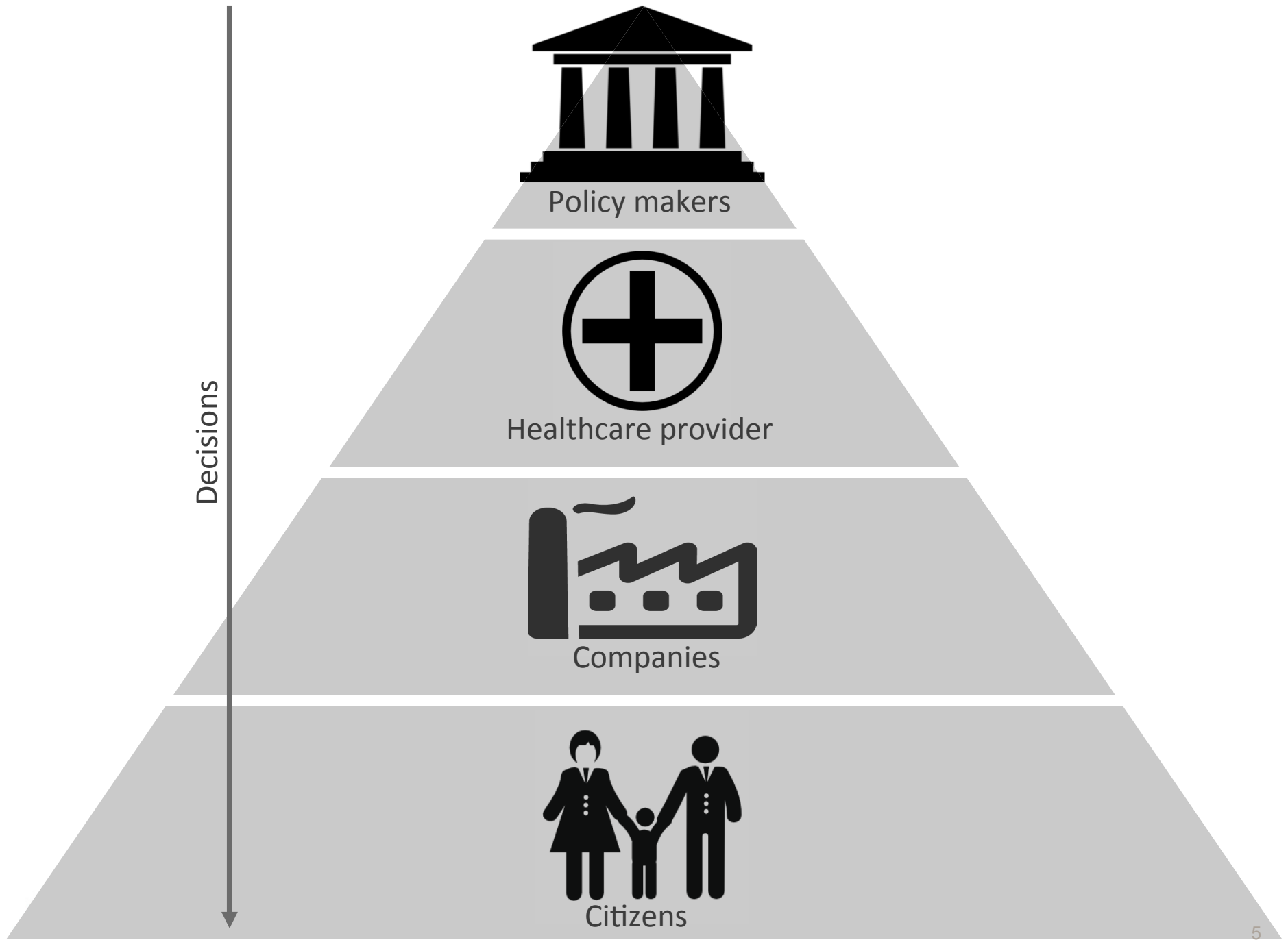
User-Centred Design

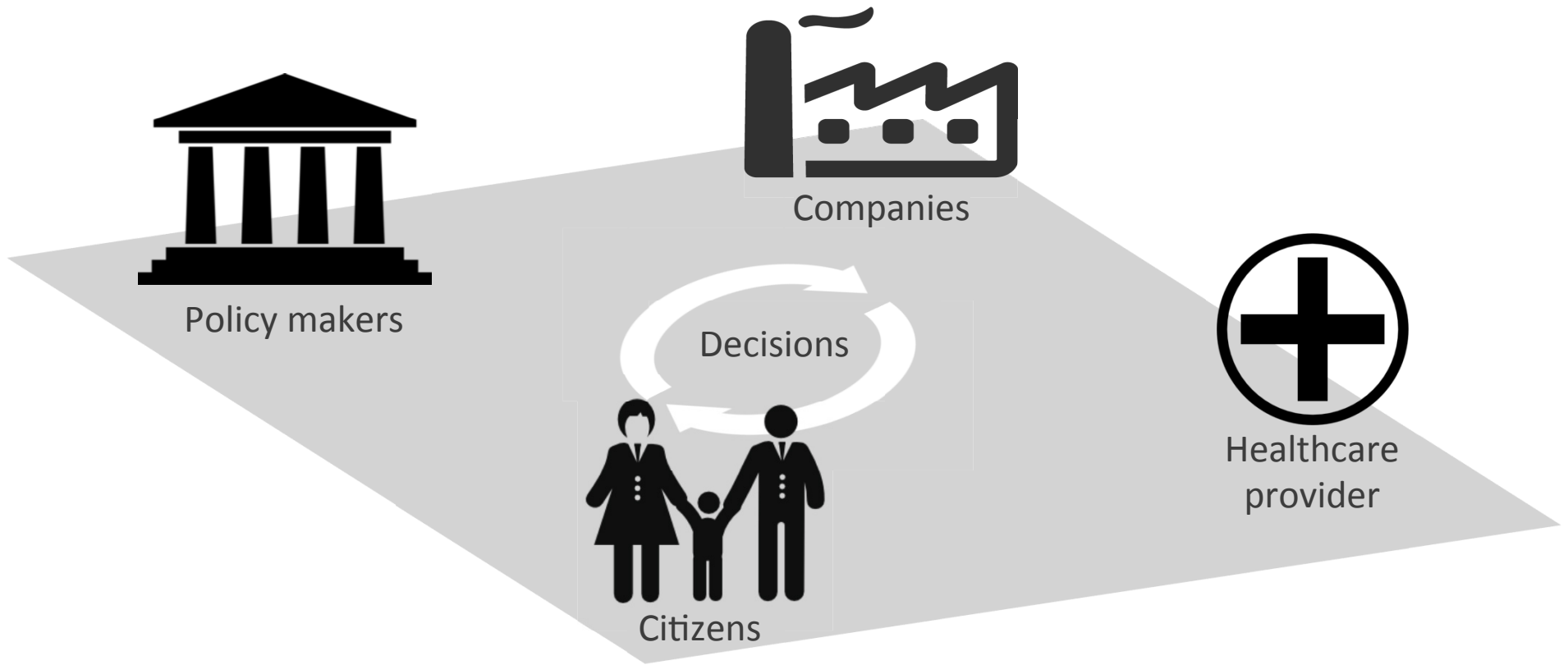
Participatory Design

Sanders, E. B. N. (2002). From user-centered to participatory design approaches. Design and the social sciences: Making connections, 1-8.

Benefits of Participatory Design

- Higher quality user requirements
- New ideas generation
- Including all typologies of users
- Increase users' acceptance
- Opportunity for education
- Ensures sustainability of programs



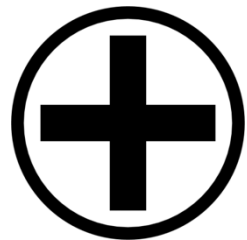




Policy makers



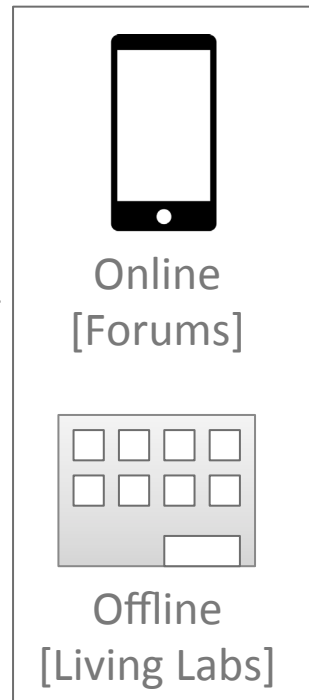
Companies



Healthcare provider



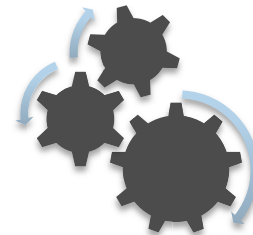
Citizens



Meeting points



Community



Collaborative Work



Service/
Product

Thank you!

Maurizio Caon

maurizio.caon@hes-so.ch

IARIA DIGITAL WORLD 2016
VENICE, 24-28 APRIL 2016

PANEL

HOW TO DESIGN FOR DIGITAL HEALTHY LIVING?

Cristiana Degano
Head of Research



mHealth – Barriers to overcome

- mHealth for Home Care: problem of adoption of the mobile devices. How can overcome it?
- The six technology barriers to overcome:
 - Easiness
 - Ergonomic
 - No invasive
 - Reliability
 - Availability
 - Efficiency



In tight collaboration with Children Gaslini Hospital and the Pediatric Palliative Home Care Center, **iCARE platform** (*Telematic Platform for the Improvement of Home Care Services for Pediatric Palliative Care*), mobile and cloud based platform, has been designed and developed.

UCD approach has been applied together with an **interdisciplinary** work over:

- Medical doctors
- Psychologists
- Nurses
- Families
- Children

Results

- Rationalize communications among the clinical team members and the clinical team and the family
- Simplify tools
- Improving the patient's and family's self-confidence in performing the care activities



POLITECNICO
MILANO 1863

DIPARTIMENTO DI DESIGN

APRIL 25TH, 2016

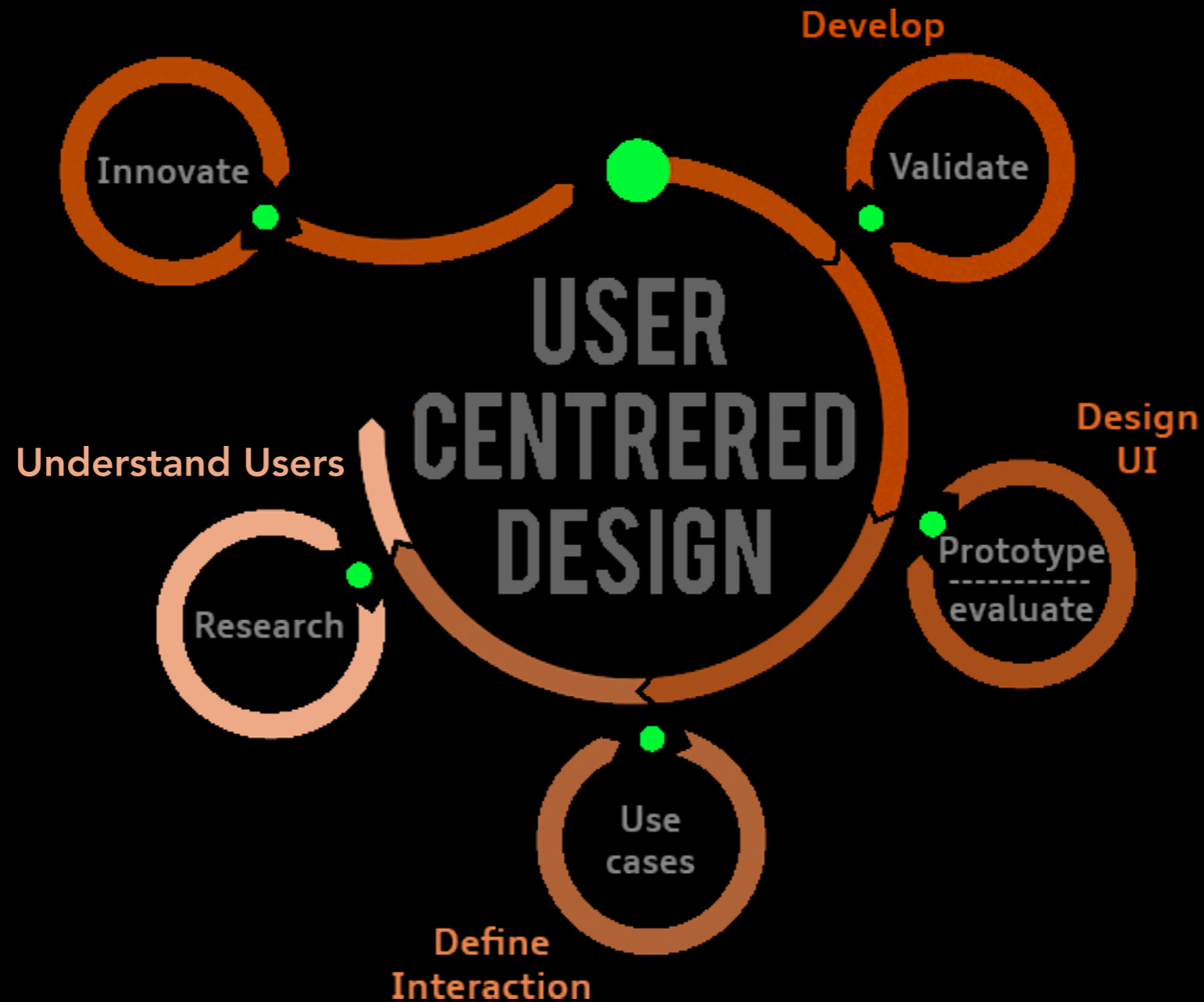
PAOLO PEREGO

RESEARCH FELLOW at POLITECNICO DI MILANO

DIGITAL WORLD 2016

APRIL 24-28, 2016 - VENICE ITALY

USER CENTERED DESIGN IN HEALTHCARE DESIGN, FACT OR FICTION?



USER CENTERED DESIGN IN HEALTHCARE DESIGN, FACT OR FICTION?

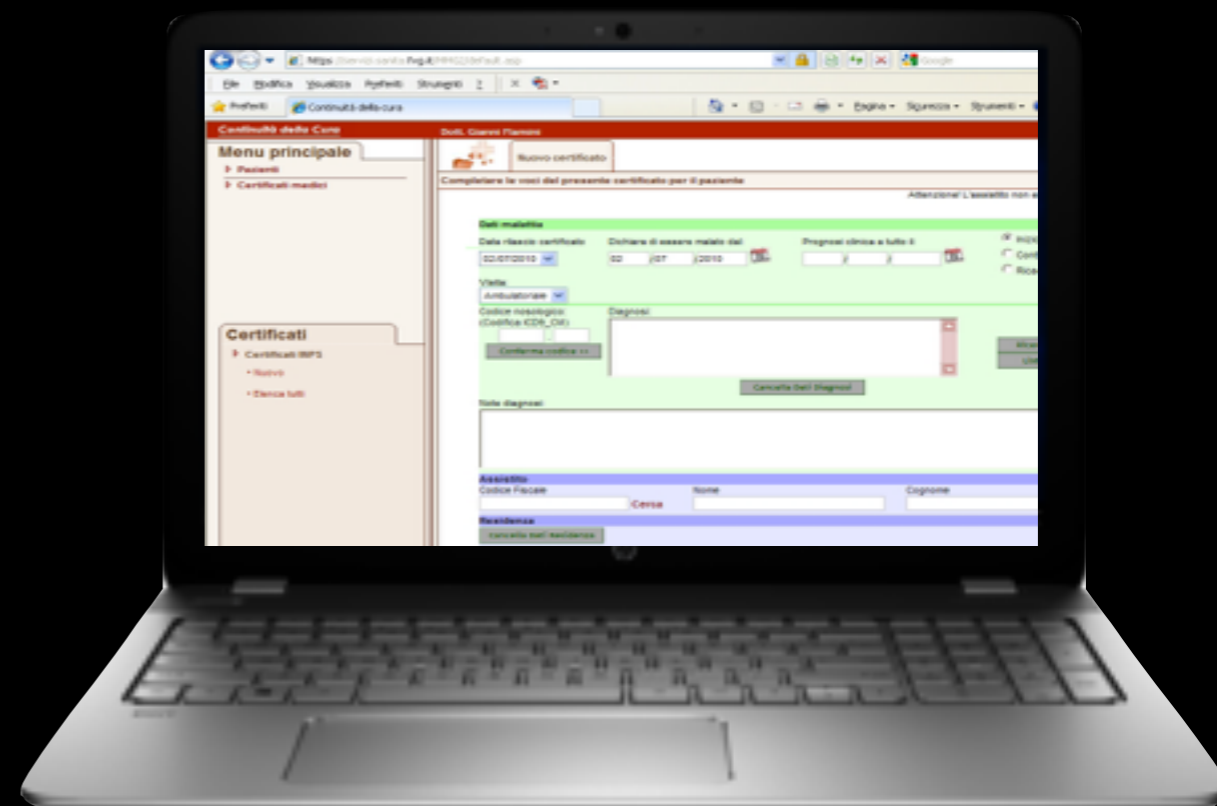
- UCD is an approach in which USERS are the main aspects of the development process.
- USERS in healthcare are different and numerous:
 - Patient;
 - Parents;
 - Doctors and healthcare workers;
 - ...
- Regulatory issues could be very compelling. Are certification authorities user?
- Can UCD be applied to healthcare design?!?!?!?

Ivation Pills Reminder



Newborn monitoring

Health Italian portal

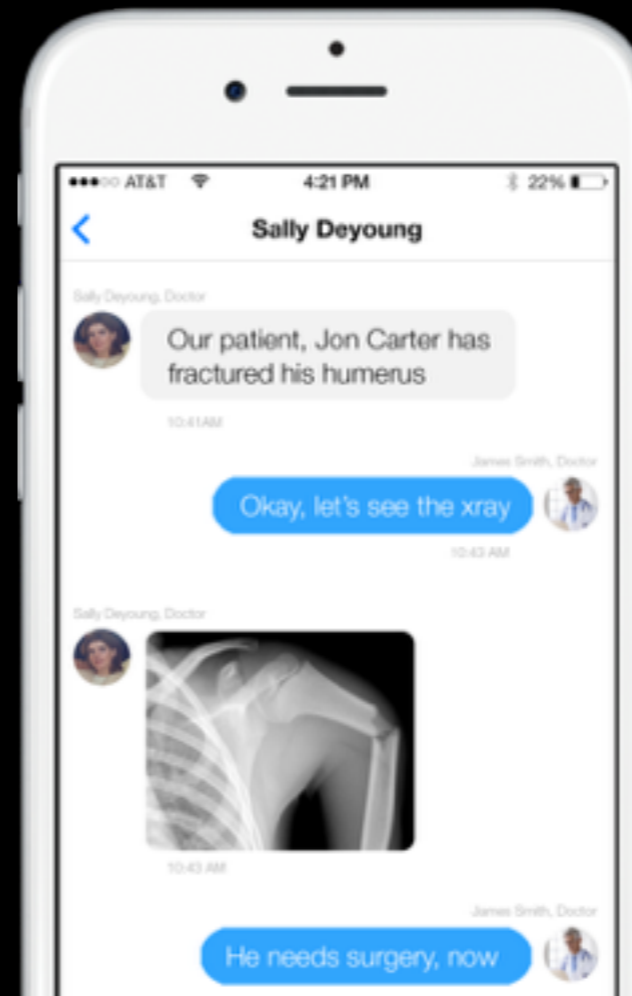




AdherTech - Smart
Wireless Pill Bottles

CozyBaby

Wearable Newborn
monitoring



OhMD

Secure texting
for healthcare

INVISIBLE TECHNOLOGY: HOW WEARABLE DEVICES CAN IMPROVE WELLBEING?



Mirror

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TRENDING WILLIAM SHAKESPEARE ROYAL FAMILY THE SMILER PRINCE DEAD WEATHER

Technology Money Travel

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Teen's life saved by Fitbit after device detects potentially fatal heart condition

08:27, 11 JAN 2016 | UPDATED 12:25, 11 JAN 2016 | BY TOM DUFFY, GEMMA MULLIN

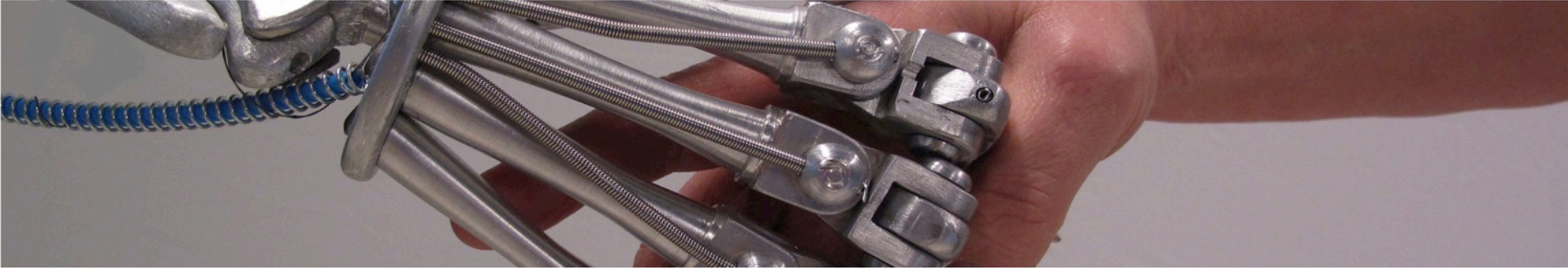
Sarah-Jayne McIntosh, 18, was revising for exams when she noticed her heart rate had soared from to 210bpm on her new Fitbit Surge

1365

2

★ Recommended In





UiO : **Institutt for informatikk**

Det matematisk-naturvitenskapelige fakultet

How to Design for Digital Healthy Living

– *a Participatory Design perspective*

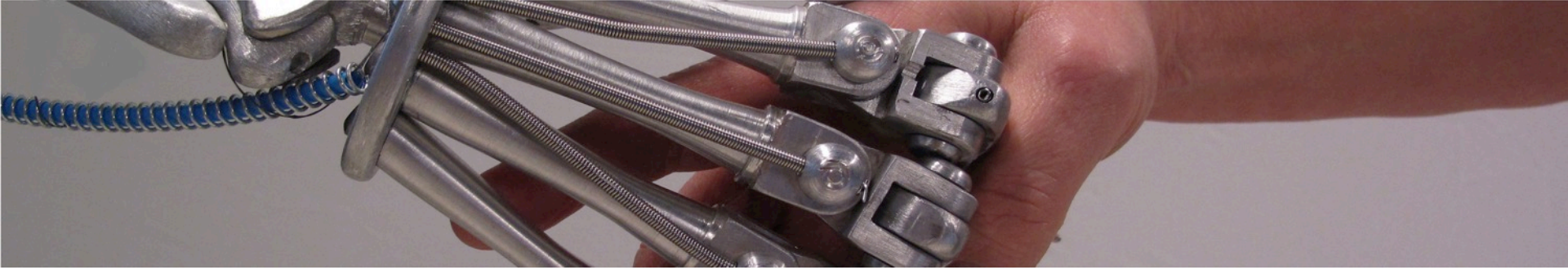
Tone Bratteteig

Design of Information systems, Department of Informatics, University of Oslo



panel Digital Healthy Living, Mestres 25/4 2016





UiO • **Institutt for informatikk**

Det matematisk-naturvitenskapelige fakultet

How to Design for Digital Healthy Living

– *a Participatory Design perspective*

- *all digital solutions are designed by someone,
& for someone*
- *who decides what “healthy living” is?*

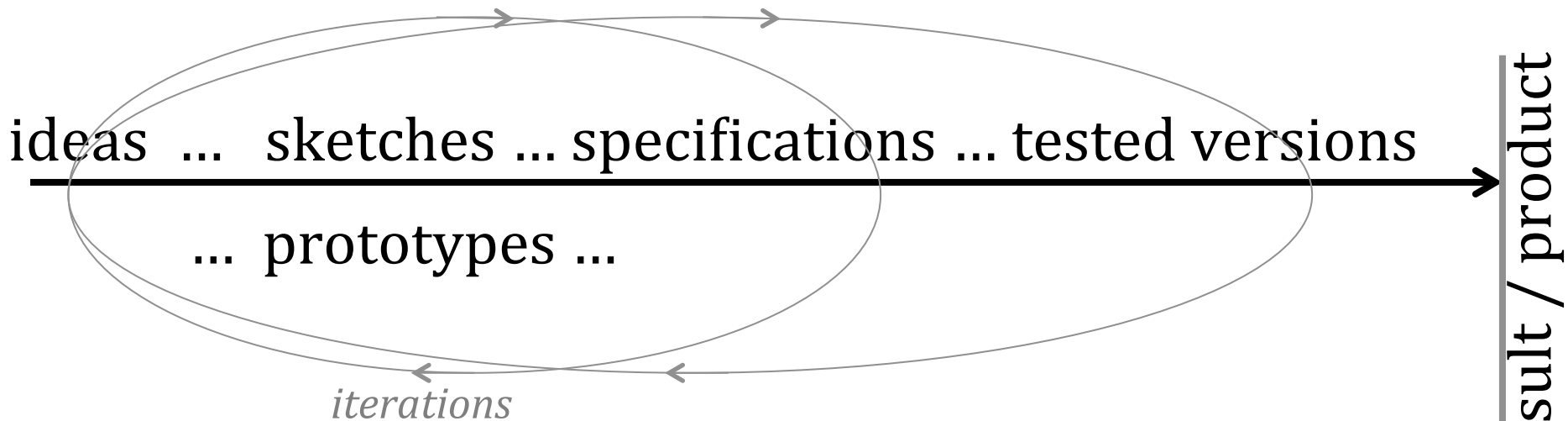


panel Digital Healthy Living, Mestre 25/4 2016



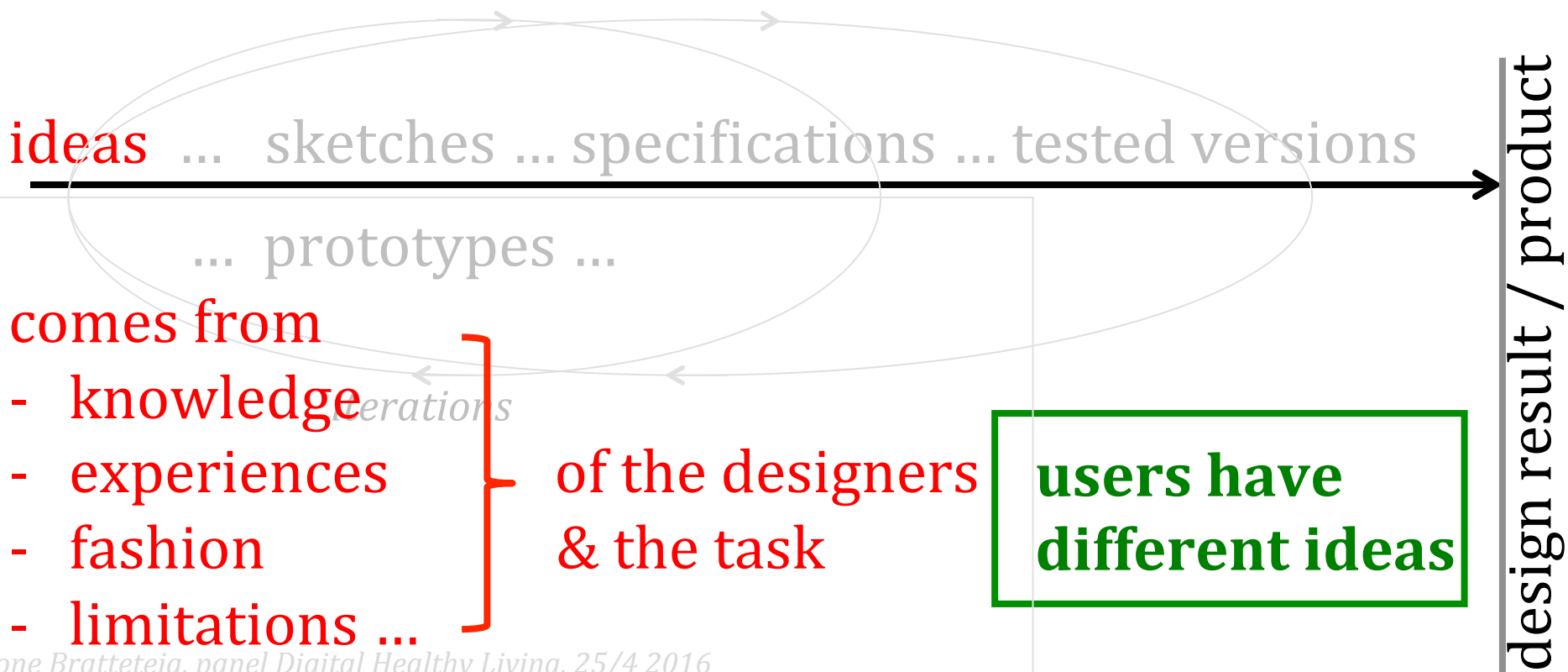
User participation in design: why

the design process

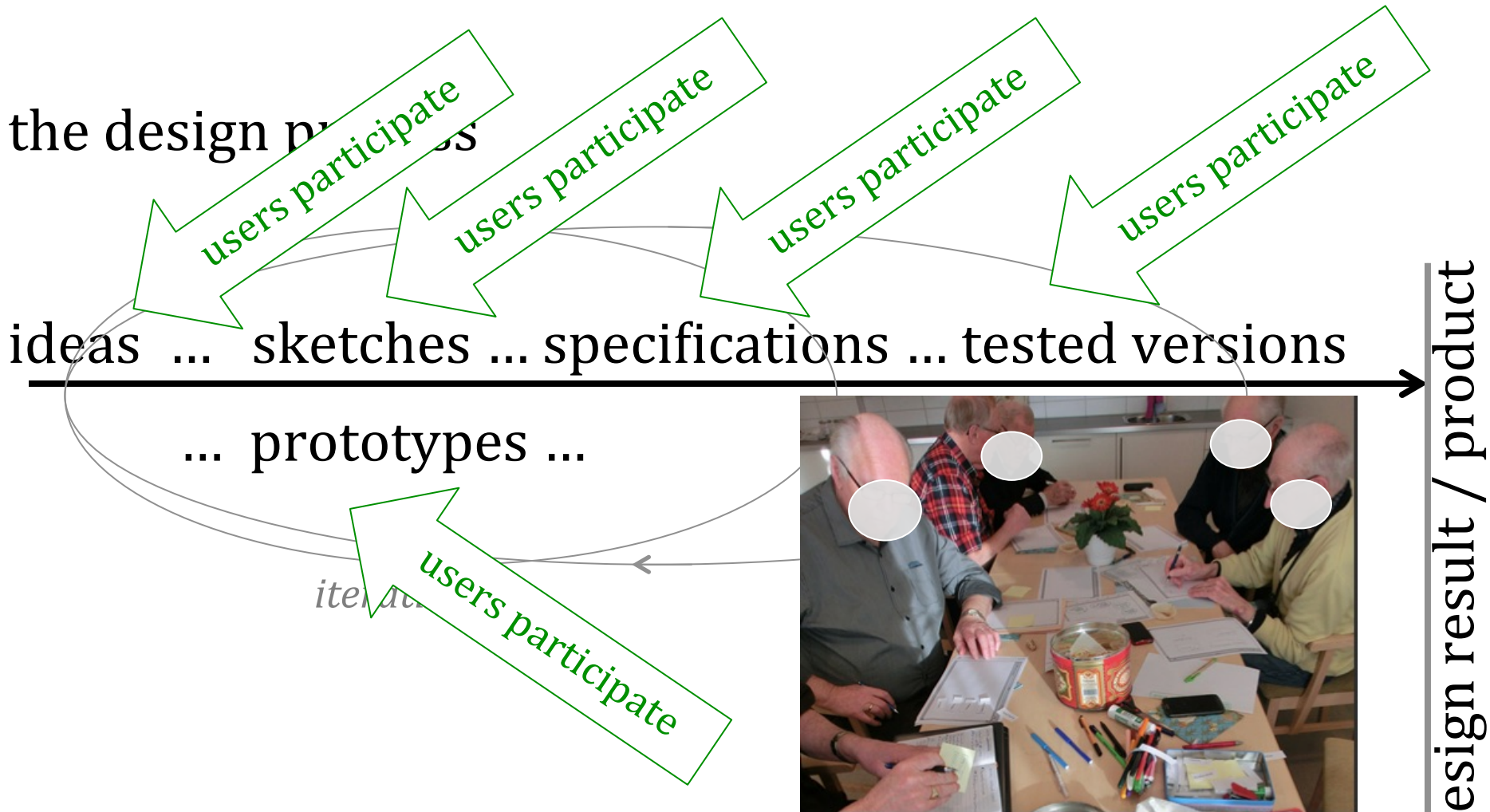


User participation in design: why

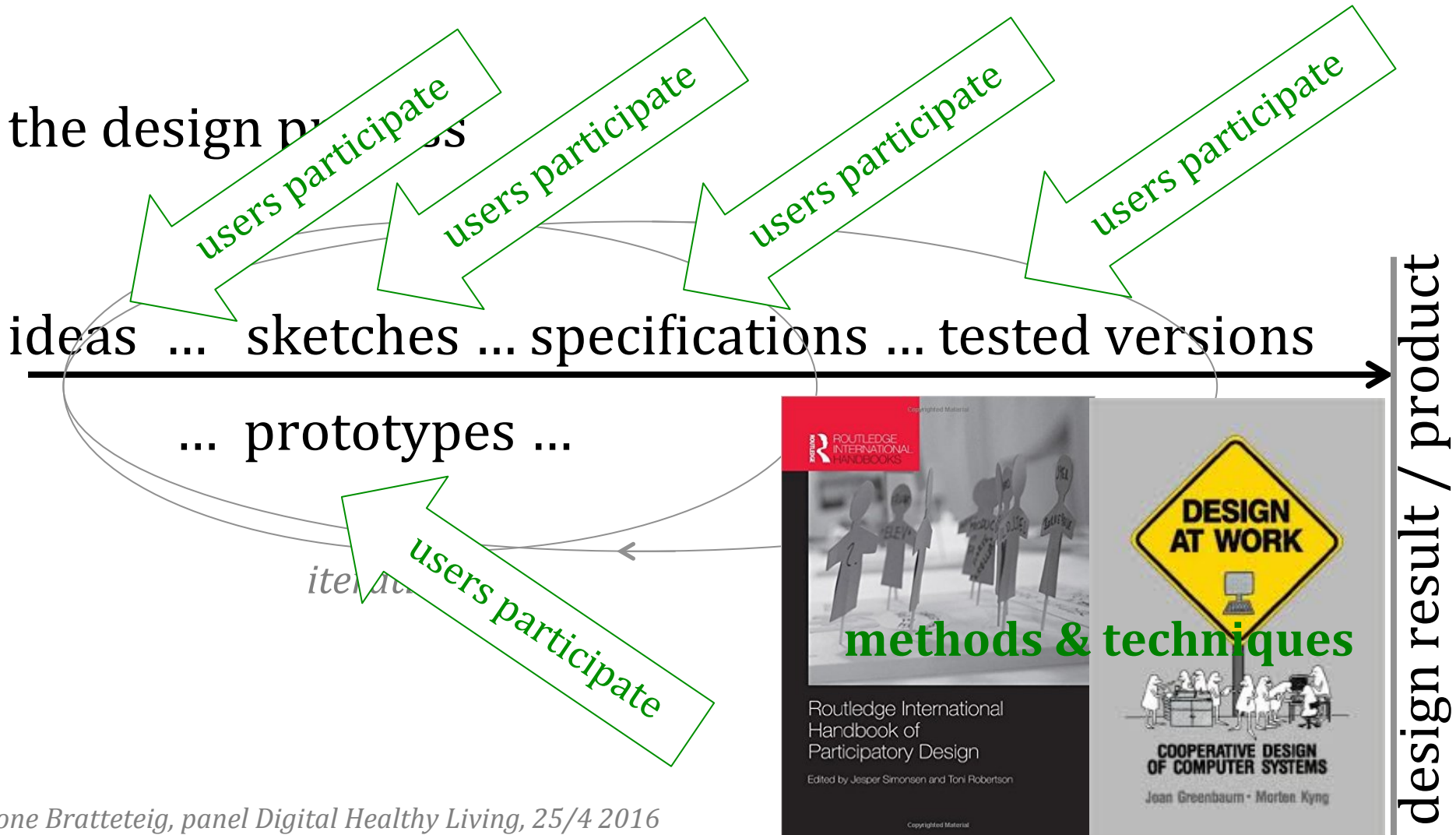
the design process



User participation in design: why

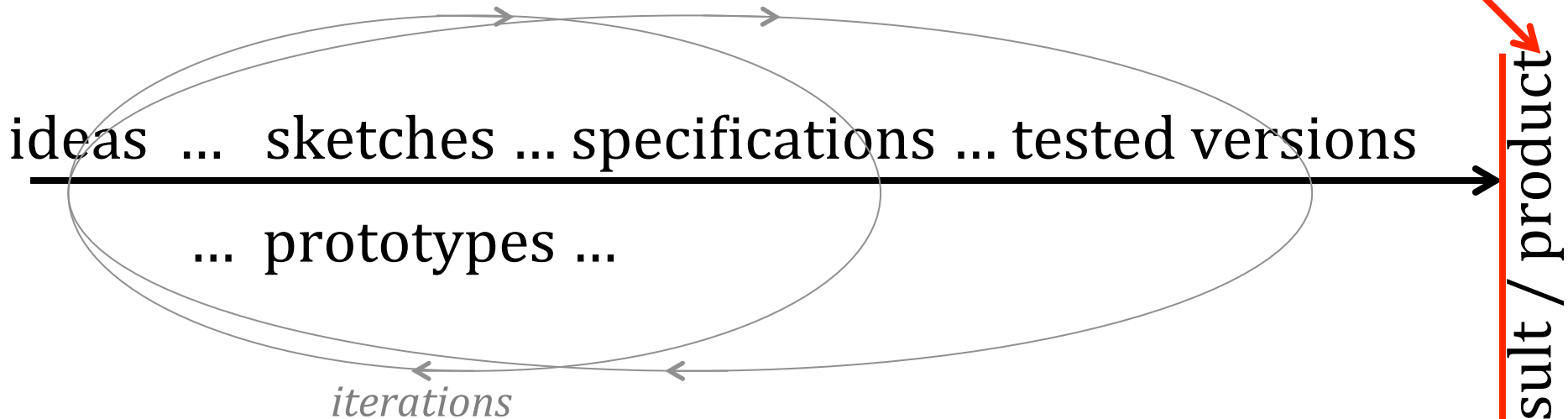


User participation in design: why



But use practices matter most

the design process



But use practices matter most

how people use digital artifacts
- over time

different patterns of use

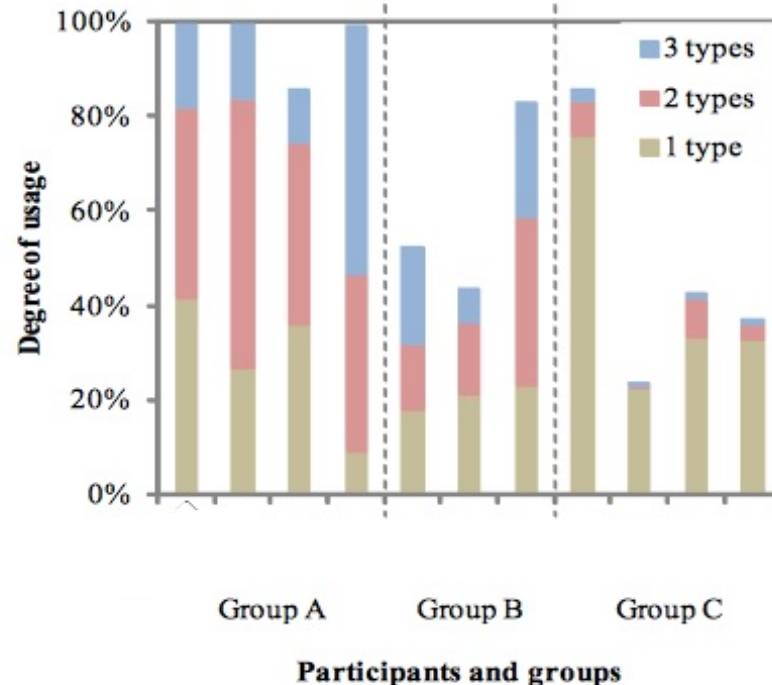
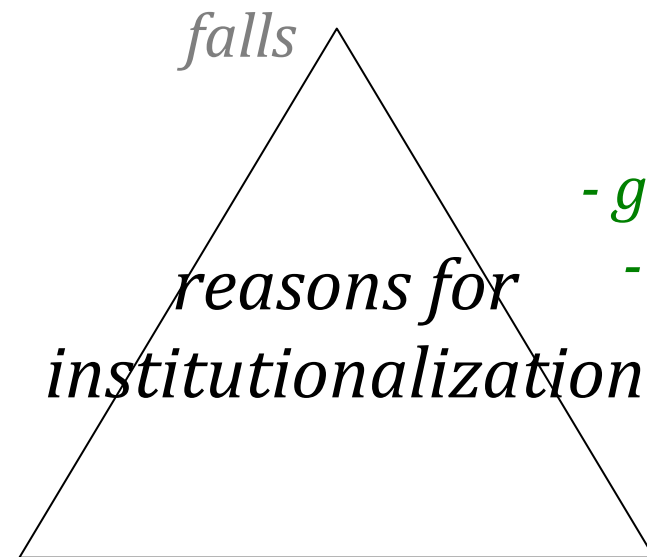


Figure 2 – Degree of FTA usage depending on the number of data types recorded

Supporting healthy living

ambition: living longer independently @ home

- responsibility
for one's own health
- quality of life
different views
- autonomy
*space for action
& choice*



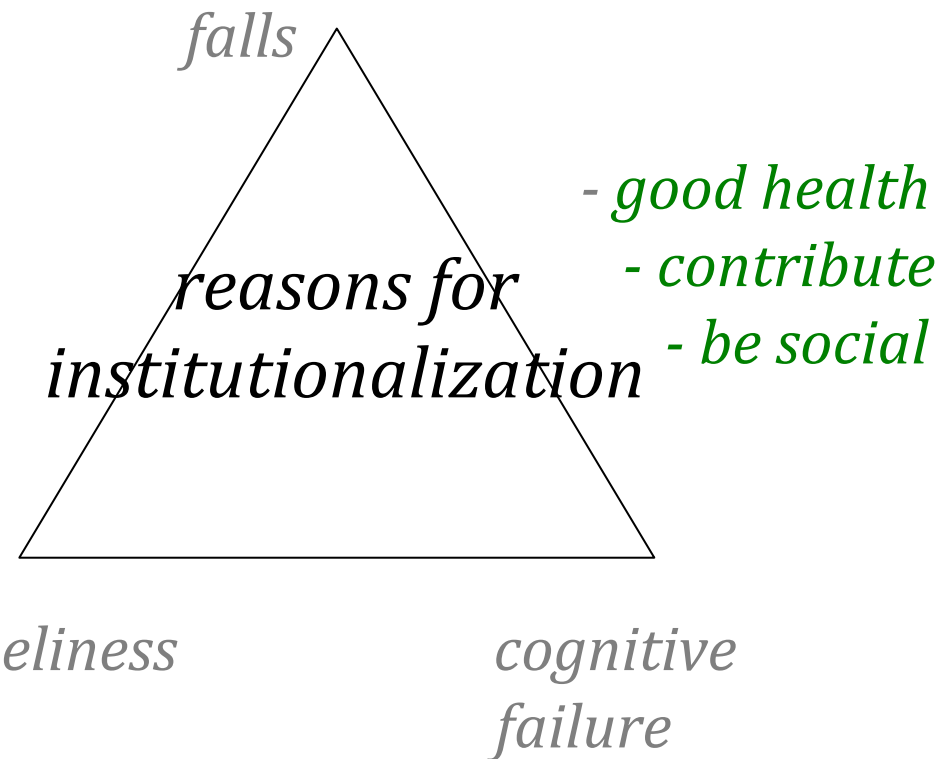
as seen from the user *loneliness*

*cognitive
failure*

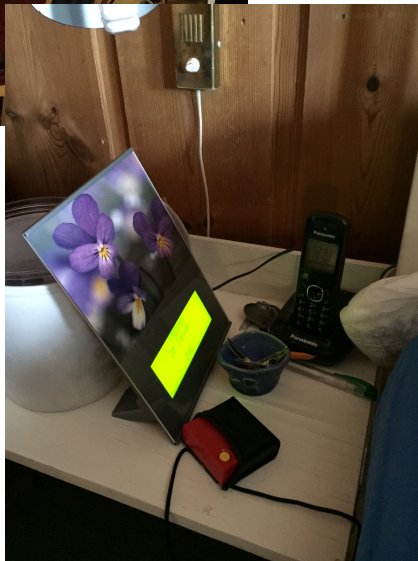
Supporting healthy living as seen from the user



Elderly centers / Care+ housing



Supporting healthy living as seen from the user



Espen Johnsen et al,

Do-It-Yourself Health Care: A Three-Step Approach to Supporting Patient Self-Management in Clinical Practice

Veronica Janssen
Health, Medical & Neuropsychology
Leiden University

Roderik Kraaijenhagen
Hearts4People
Amsterdam



Universiteit
Leiden
The Netherlands

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Supporting self-management in practice: a 3-step approach

1. Set of tools and techniques to help patients change their health and illness behavior
2. Set of tools and techniques to help transform patient-caregiver relationship
3. Integrate multiple partners involved in disease-management and embed in care routine



cardiovitaal

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But...

- How do we make self-management tools of added value?
- How do we empower people?
- How do we keep people engaged?
- How do we involve significant others (and keep them involved)
- How do we tailor to seniors, low SES, low eHealth literacy etc.?

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Current work

- Multi-center implementation
- Dynamic implementation-evaluation
- Loyalty programs 3.0:
 - Developing an advanced loyalty program to aid maintenance of healthy lifestyle
 - Involve environment, community, commercial partners

LOYALTY IS JUST A SCAN AWAY

Keep Your Business Moving with
MOBILE REWARDS





How to Design for Digital Healthy Living?

Shaleea Shields

NHS Human Services, USA

www.nhsonline.org



Connection

- Connection is a need for marginalized populations
 - Mainstream technologies are not designed for them

Benefits of Connection

- Digital world is a key to freedom
- Self – advocacy
- Quality of life



Culture Shift towards Technology

- Technology is “part of the job”
- Showcase benefits to individuals who are supported and their staff
- Promote ownership of projects



Sustainable Implementation

- Products that are simple and sustainable
- Usability (not just accessibility)
- Support from the top down