Waardegedreven eHealth in de langdurende zorg

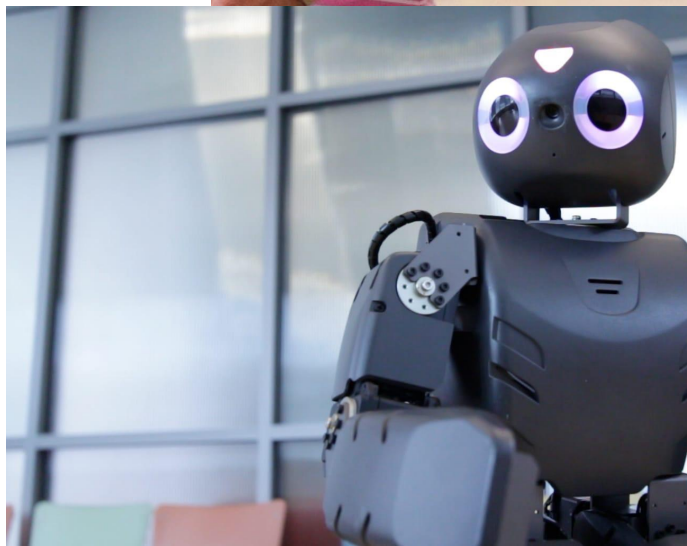
Onderzoek, implementatie & impact

AcademieNieuwezorg

Dr. Henk Herman Nap

Vilans

TU/e
EINDHOVEN
UNIVERSITY OF
TECHNOLOGY



- Vilans & Me
- Opportunities for the Seniors of Today
- How we Work
- Innovations & Integration
- Learn from Failures

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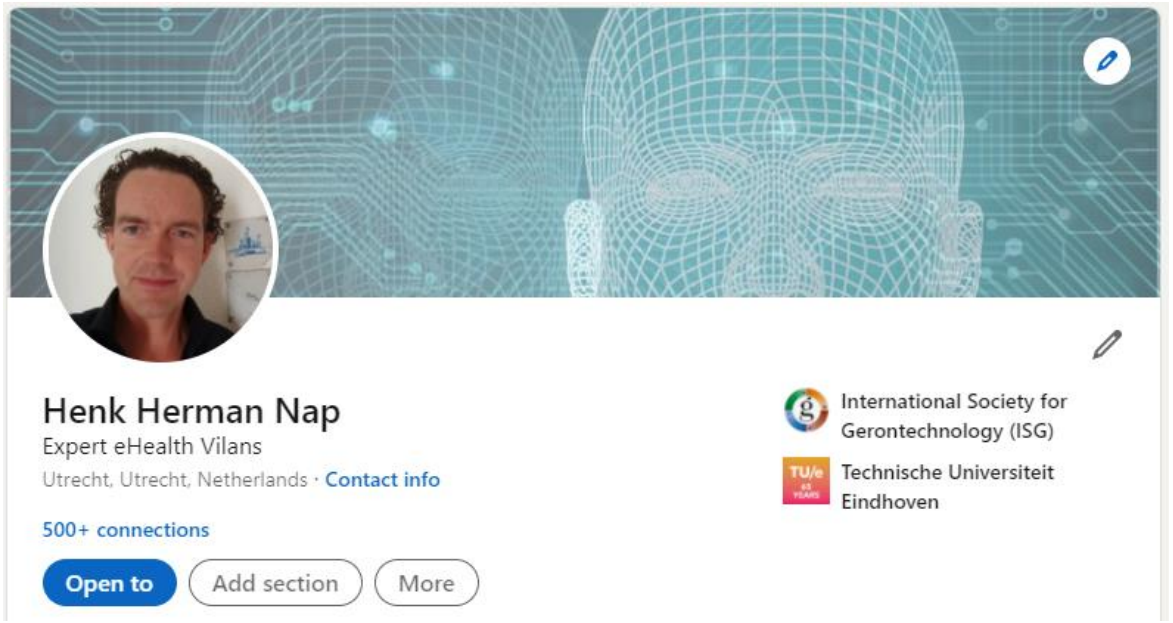
ME



linkedin.com/in/henkhermannap/

International Society for Gerontechnology (ISG)
5 yrs 10 mos

Board Member
Sep 2020 – Present · 10 mos

ISG encourages and promotes technological innovations in products and services that address older peoples' ambitions and needs on the basis of scientific knowledge about ageing processes including cultural and individual differences.

Associate Editor of Gerontechnology Journal
Sep 2015 – Present · 5 yrs 10 mos

Gerontechnology: An international journal concerning technology to serve the aging society

http://www.gerontechnology.info

Technische Universiteit Eindhoven
4 yrs 6 mos

adviesraad Klinische Informatica
Jun 2017 – Present · 4 yrs 1 mo
Eindhoven, Provincie Noord-Brabant, Nederland

Senior Researcher (visiting)
Jan 2017 – Oct 2020 · 3 yrs 10 mos
Eindhoven

Part-time senior researcher at Human-Technology Interaction (HTI) research group.

International Ambassador
European Knowledge Tree Group
2017 – Present · 4 yrs
London, United Kingdom

Senior Researcher - Innovation & Research eHealth
Vilans
Sep 2014 – Present · 6 yrs 10 mos
Utrecht

Project management NL & EU eHealth projects / teaching and supervisor of students / advisor on eHealth research and implementation / acquisition of NL & EU projects (Horizon2020, AAL).

Vilans

With expertise we cooperate to improve long-term care.

Personlized knowledge accessible for all, supported by digital transformation and to enhance the knowledge infrastrcuture.

- Independent
- Co-creation
- (Applied) Knowledge
- Hybrid financing
- Not for profit

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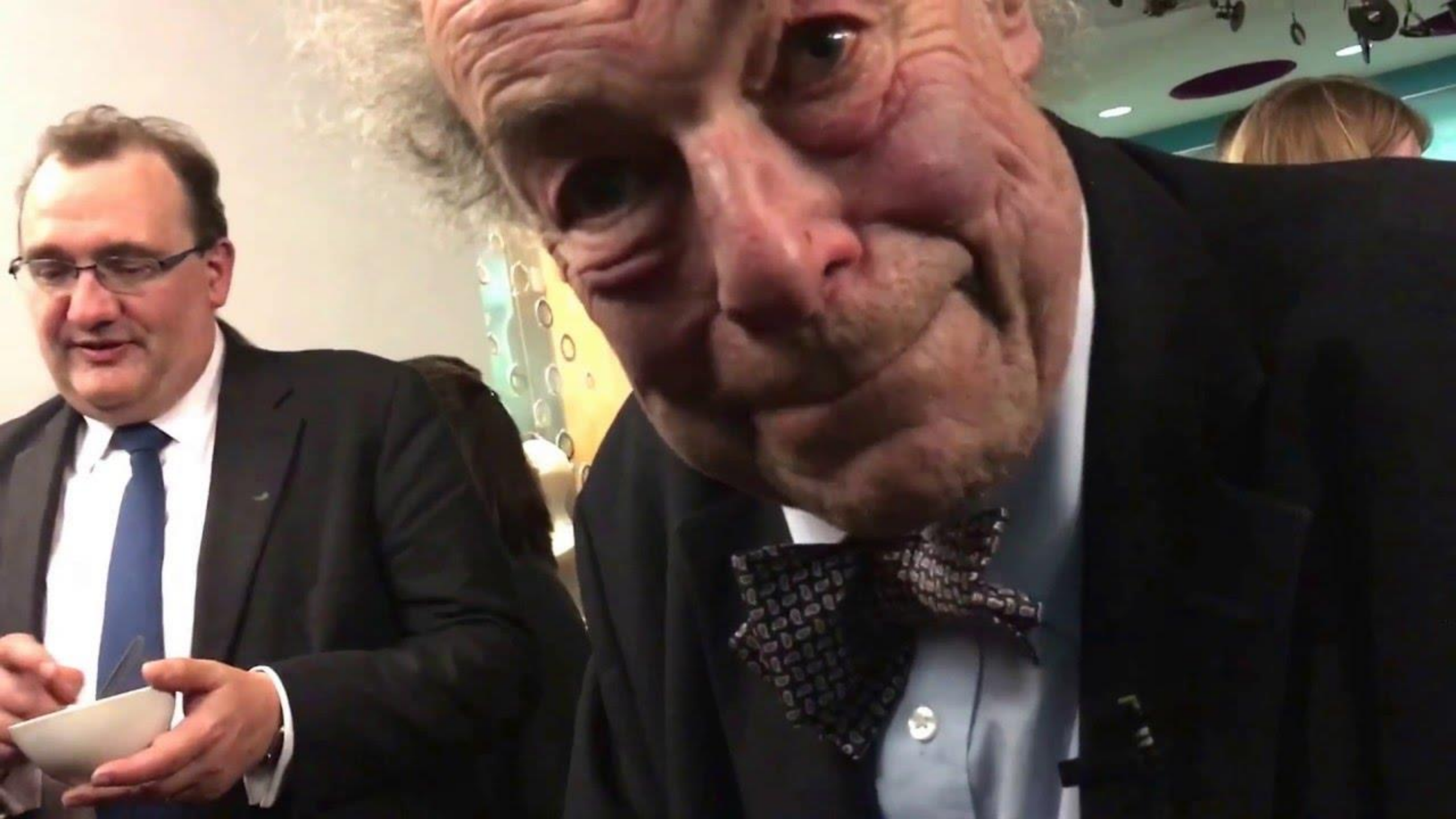
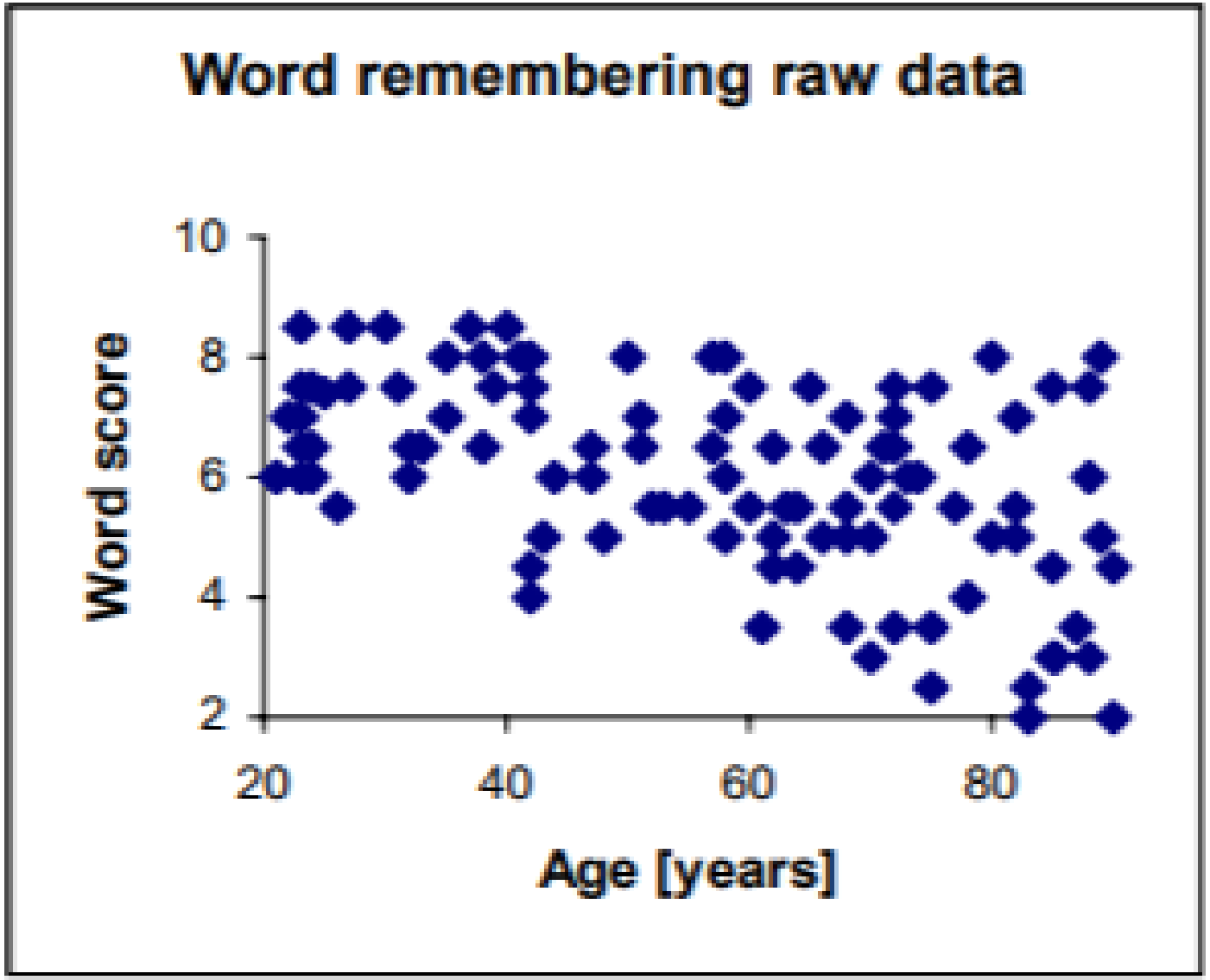
FESTIVAL
2017

NEW YORK CITY




Word remembering raw data
Word score
10
8
6
4
2
20
40
60
80
Age [years]

TECHNOLOGY GENERATIONS

DIVERSITY IN PREFERENCES, ABILITIES, HEALTH, EXPERIENCES, KNOWLEDGE

SENIORS DIFFER MORE THAN YOUNG ADULTS

AGETECH SHOULD BE CUSTOMIZABLE, PERSONALIZED & ADAPTABLE

AGETECH/GERONTECHNOLOGY/EHEALTH/AAL TECHNOLOGY…

URGENCY

Opportunity

- Independent living
- Silver economy
- Eco-systems approach
- Informal carers working live
- Work efficiency of formal carers

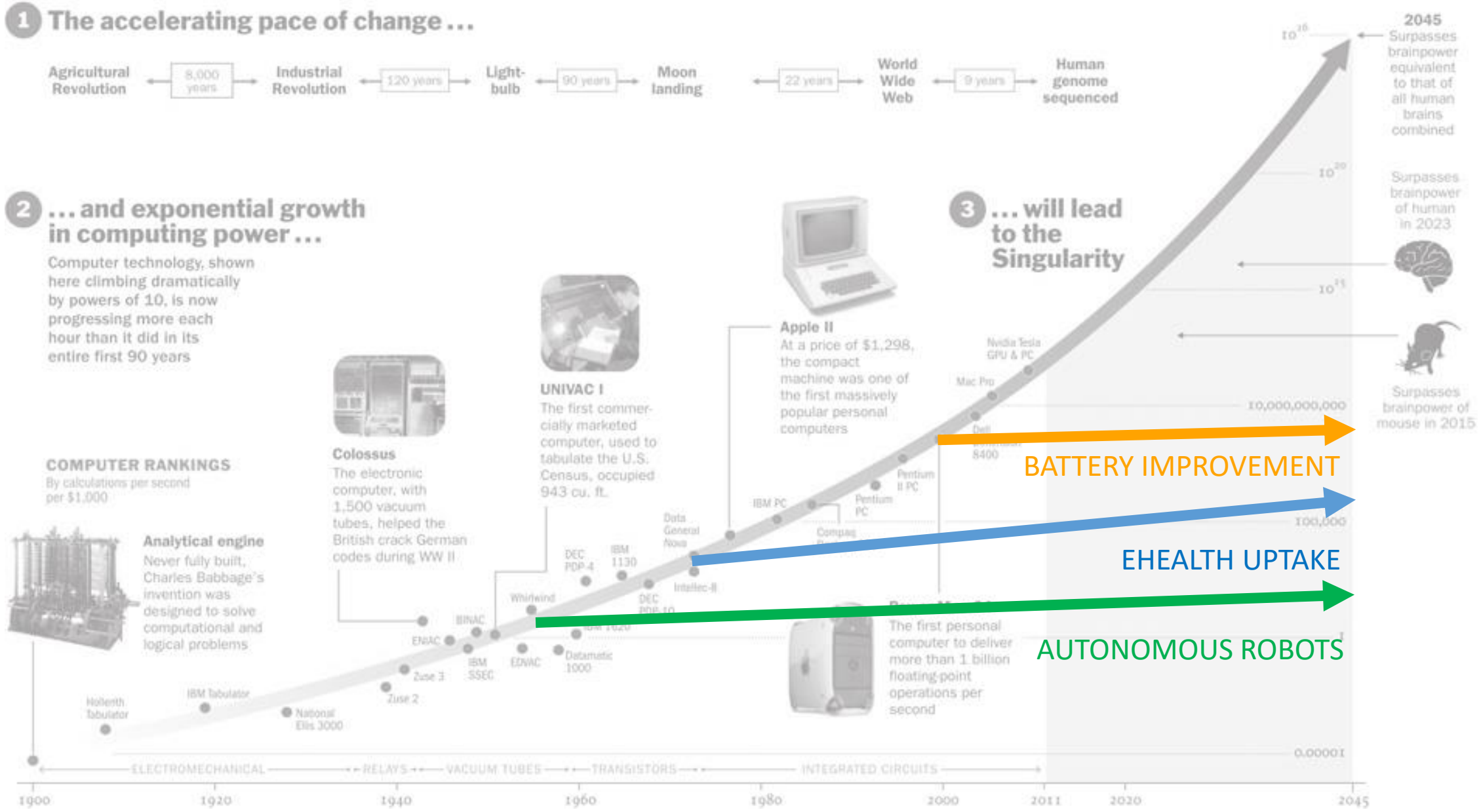
eHealth in The Netherlands 2014-2019*

Increase in Electronic Patient Records, Online double-checks medication, & teledermatology, medication

‘Slow’ uptake eHealth:

- eHealth not always ‘plug and play’
- Unclear needs & benefits
- Process innovation difficult
- Cost-effectiveness unclear
- Shared vision
- Possibilities not always known by end-users
- Create Awareness
- People experience insufficient added value

*eHealth Monitor (Nictiz, 2014; 2016; 2017; 2018; 2019)


1 The accelerating pace of change ...
Agricultural Revolution
8,000 years
Industrial Revolution
120 years
Light-bulb
90 years
Moon landing
22 years
World Wide Web
9 years
Human genome sequenced
2 ... and exponential growth in computing power ...
Computer technology, shown here climbing dramatically by powers of 10, is now progressing more each hour than it did in its entire first 90 years
3 ... will lead to the Singularity
2045
Surpasses brainpower equivalent to that of all human brains combined
Surpasses brainpower of human in 2023
Surpasses brainpower of mouse in 2015
Apple II
At a price of $1,298, the compact machine was one of the first massively popular personal computers
UNIVAC I
The first commercially marketed computer, used to tabulate the U.S. Census, occupied 943 cu. ft.
Colossus
The electronic computer, with 1,500 vacuum tubes, helped the British crack German codes during WW II
COMPUTER RANKINGS
By calculations per second per $1,000
Analytical engine
Never fully built, Charles Babbage's invention was designed to solve computational and logical problems
The first personal computer to deliver more than 1 billion floating-point operations per second
BATTERY IMPROVEMENT
EHEALTH UPTAKE
AUTONOMOUS ROBOTS
Hollerith Tabulator
IBM tabulator
National Ellis 3000
Zuse 2
Zuse 3
ENIAC
BINAC
IBM SSEC
EDVAC
Datamatic 1000
Whirlwind
DEC PDP-4
IBM 1130
DEC PDP-10
Intellec-8
Data General Nova
IBM PC
Compaq
Pentium PC
Pentium II PC
Dell
Mac Pro
Nvidia Tesla GPU & PC
ELECTROMECHANICAL
RELAYS
VACUUM TUBES
TRANSISTORS
INTEGRATED CIRCUITS
1900
1920
1940
1960
1980
2000
2011
2020
2045

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- My Life My Choice

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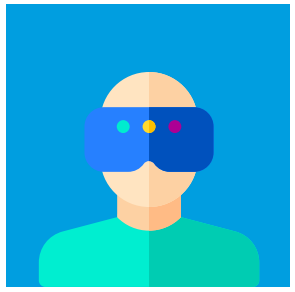
eHealth - Gerontechnology

Vilans

Dr. Henk Herman Nap

research



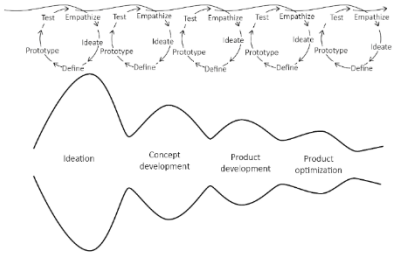
co-design

advise

Enhancing long-term care with expertise!

Our vision on eHealth

- Technology should be an integrated part of the regular care processes
- End-users as a crucial success factor in implementation



Mission:

Improve care with the support of gerontechnology

2019-2021
Challenge Verpleeghuizen van de Toekomst

Ministerie van Volksgezondheid,
Welzijn en Sport

Innovation-impulse

care for people with dissabilities

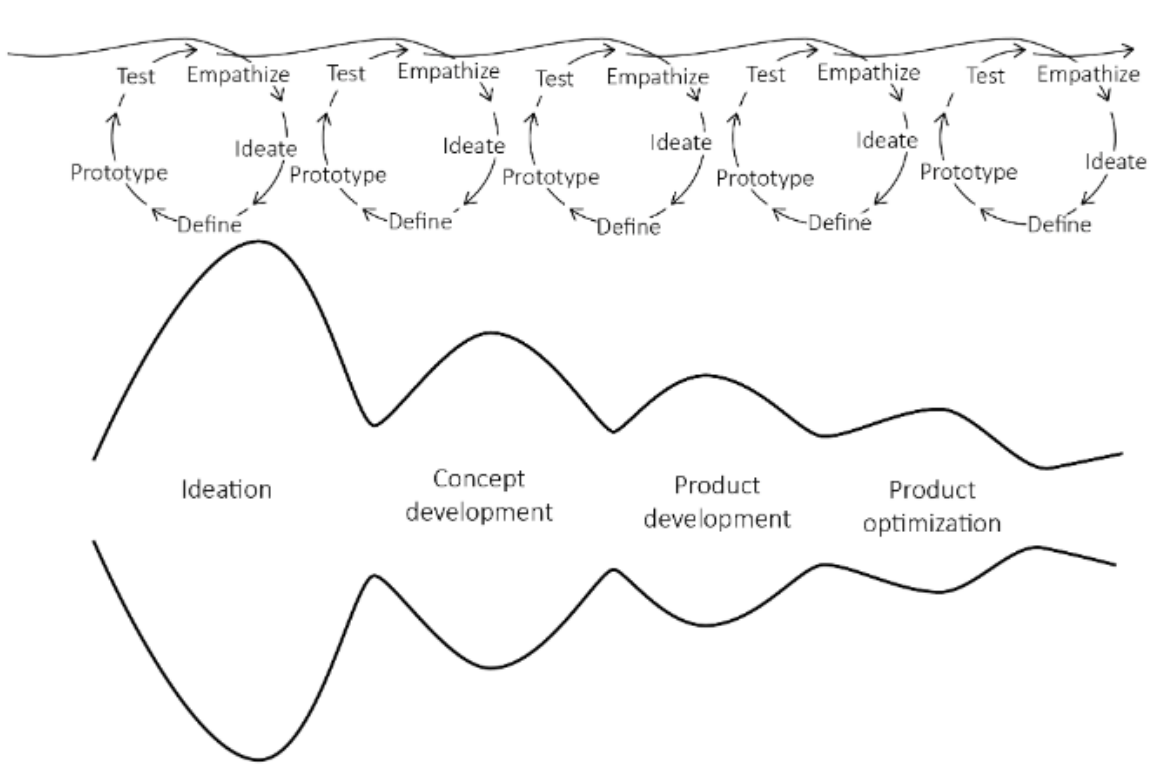
Almost 30 organizations
learn, implement & innovate together

Vilans

HC

ACADEMY
HET DORP

Working methods



100% predictability = 0% innovation

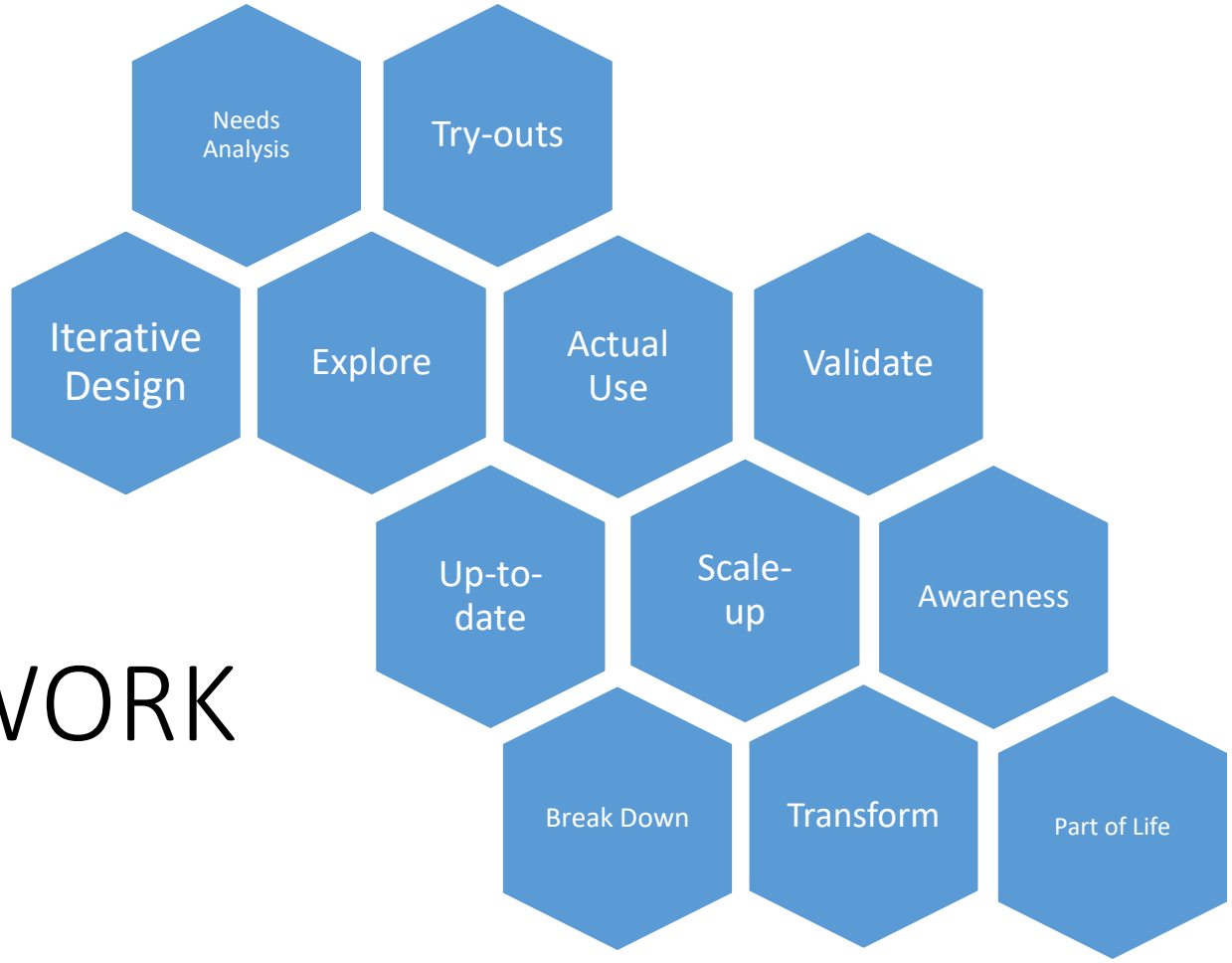
Value delivery > Plan fulfilment

NAVIGATING IN THE MIST

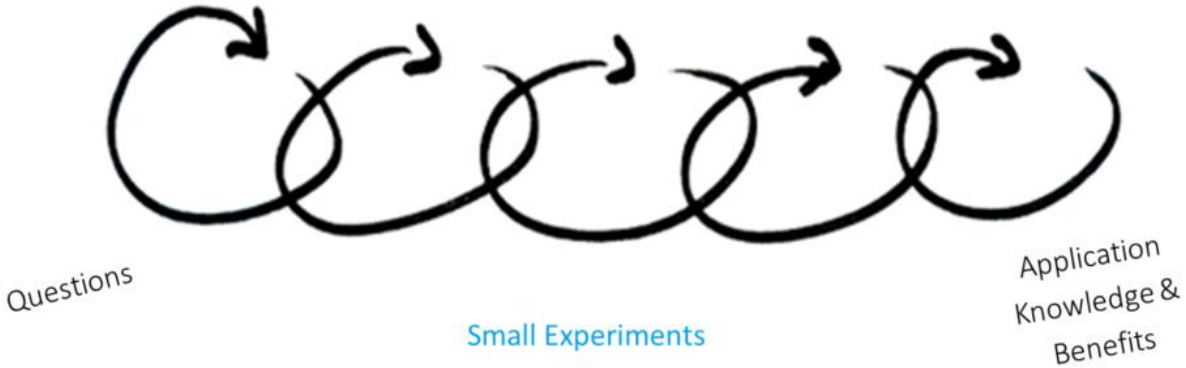
DESIGN FOR VALUE

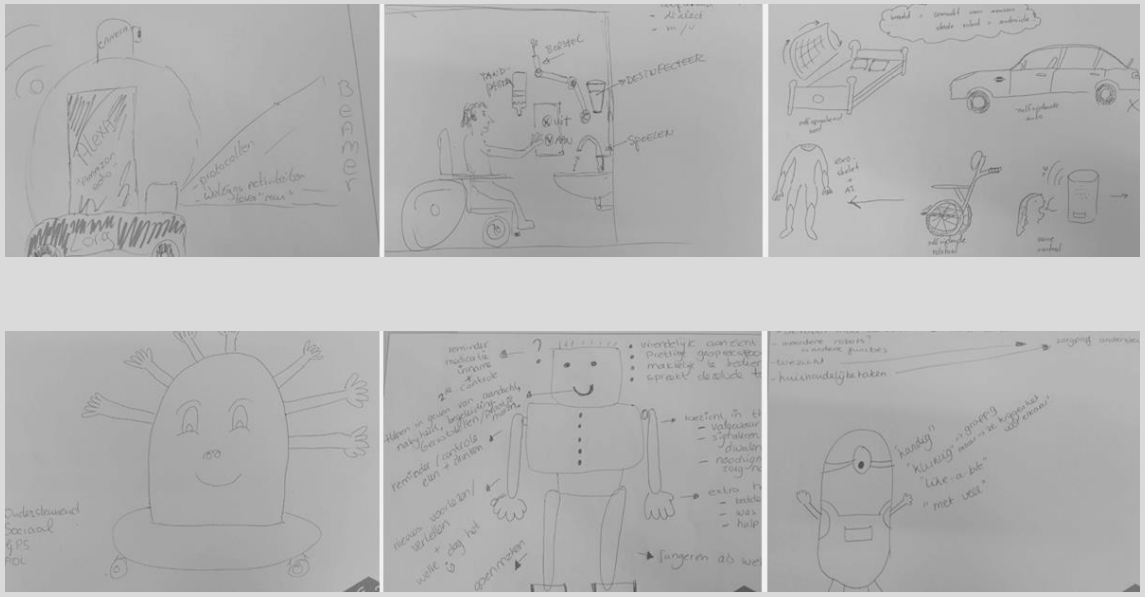
BESCHIKBARE BANDBREEDTE

THE WAY WE WORK



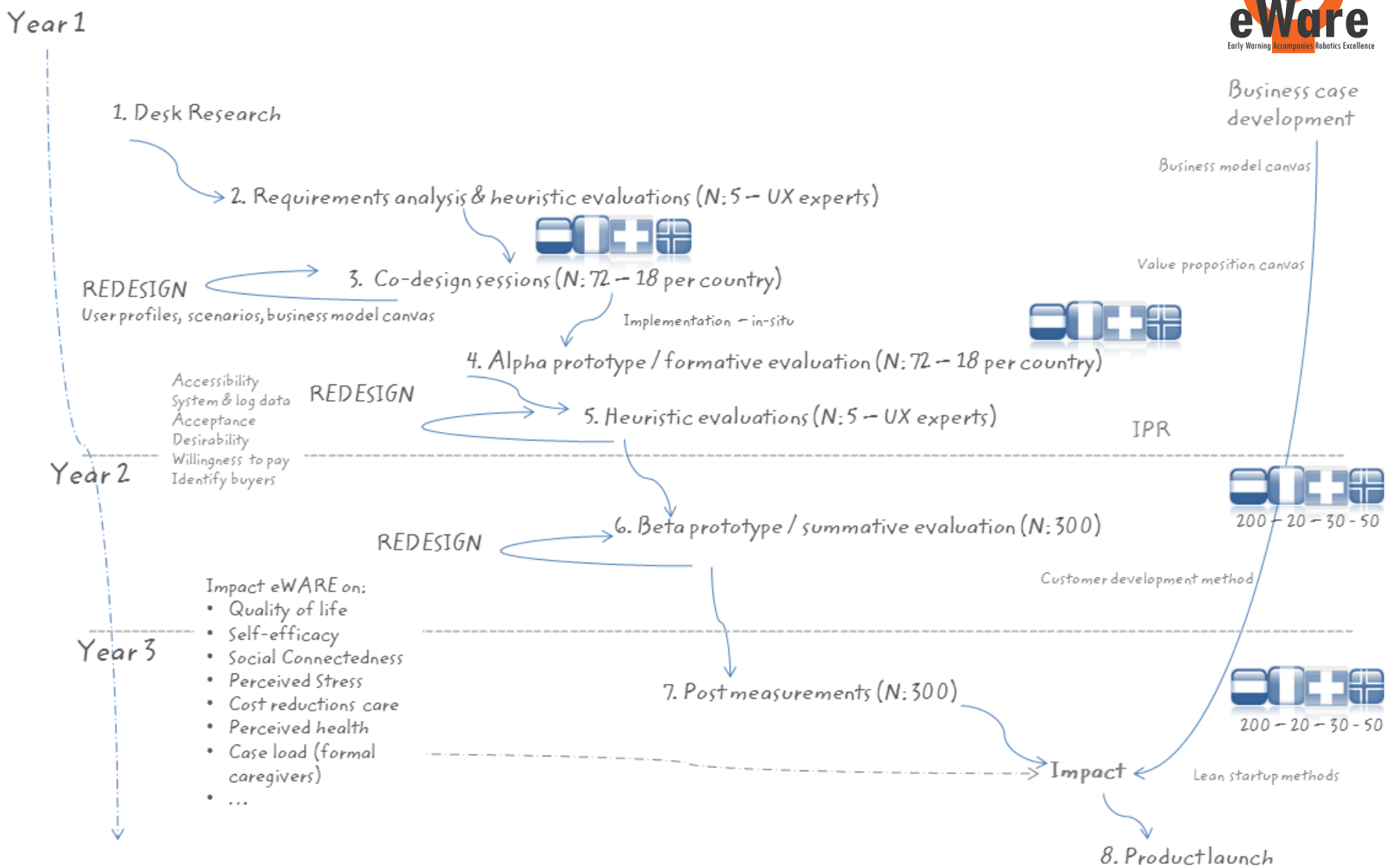
MEANINGFUL TRY-OUTS





Ideal robot for long-term care

WERKPLAATS
Zinvolle Robotica
in de Zorg


Year 1
1. Desk Research
2. Requirements analysis & heuristic evaluations (N: 5 – UX experts)
Business case development
Business model canvas
REDESIGN
User profiles, scenarios, business model canvas
3. Co-design sessions (N: 72 – 18 per country)
Value proposition canvas
Implementation – in-situ
4. Alpha prototype / formative evaluation (N: 72 – 18 per country)
Accessibility
System & log data
Acceptance
Desirability
Willingness to pay
Identify buyers
REDESIGN
5. Heuristic evaluations (N: 5 – UX experts)
IPR
Year 2
200 – 20 – 30 - 50
REDESIGN
6. Beta prototype / summative evaluation (N: 300)
Customer development method
Impact eWARE on:
• Quality of life
• Self-efficacy
• Social Connectedness
• Perceived Stress
• Cost reductions care
• Perceived health
• Case load (formal caregivers)
• …
Year 3
7. Post measurements (N: 300)
200 – 20 – 30 - 50
Impact
Lean startup methods
8. Product launch

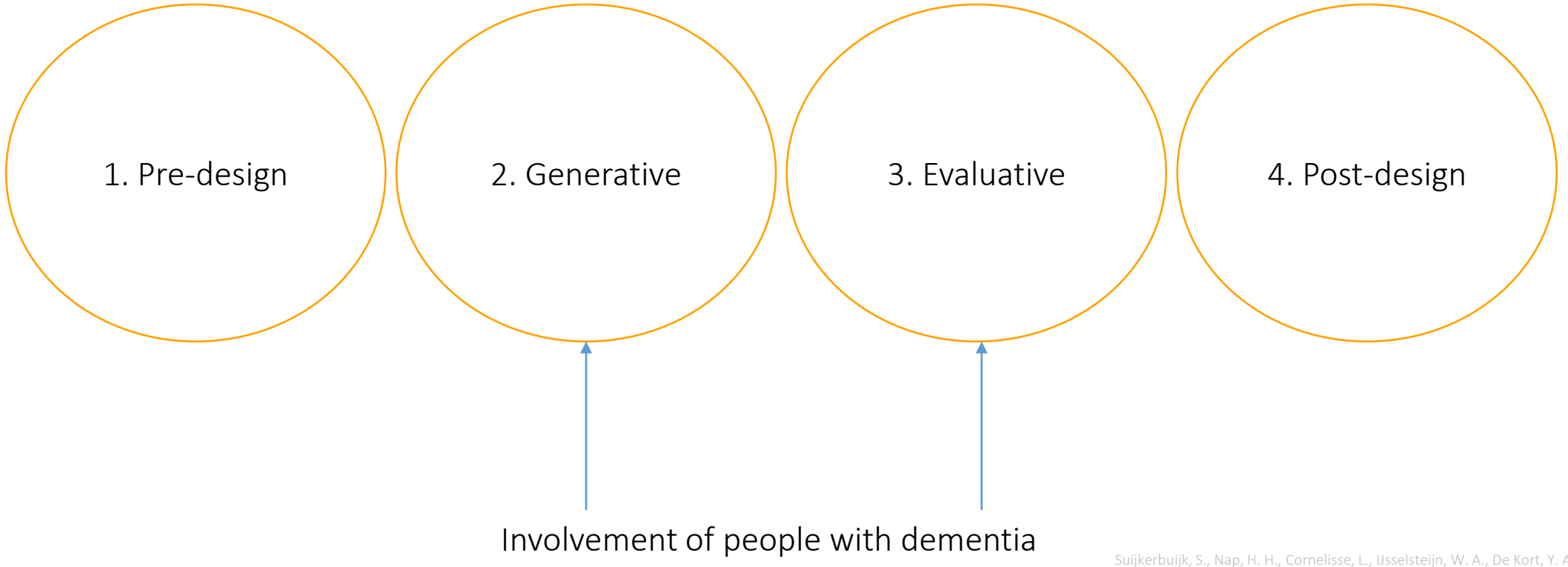
Journal of Alzheimer's Disease 69 (2019) 1041–1065
DOI 10.3233/JAD-190050
IOS Press

Active Involvement of People with Dementia: A Systematic Review of Studies Developing Supportive Technologies

Sandra Suijkerbuijk[a,b,*], Henk Herman Nap[a,b], Lotte Cornelisse[a], Wijnand A. IJsselsteijn[b], Yvonne A.W. de Kort[b] and Mirella M.N. Minkman[a,c]
[a]*Vilans, Centre of expertise Long-term care, Utrecht, The Netherlands*
[b]*Human Technology Interaction, University of Technology, Eindhoven, The Netherlands*
[c]*Tilburg University, TIAS School for Business and Society, Tilburg, The Netherlands*

Handling Associate Editor: Francesca Baglio

4 phases of technology development



Suijkerbuijk, S., Nap, H. H., Cornelisse, L., IJsselsteijn, W. A., De Kort, Y. A. W., & Minkman, M. M. N. (2019). Active involvement of people with dementia: a systematic review of studies developing supportive technologies. Journal of Alzheimer's Disease, 69(4), 1041-1065. DOI: 10.3233/JAD-190050

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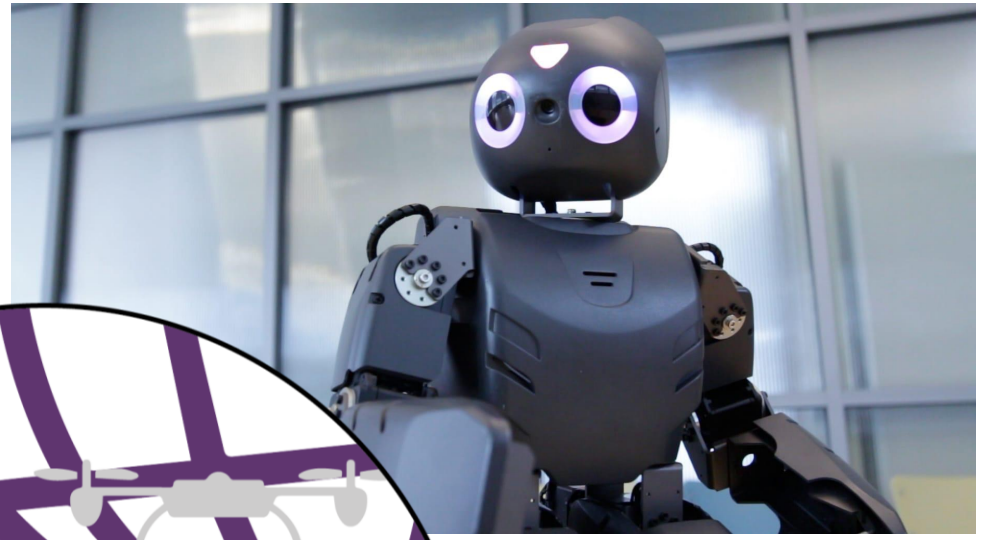
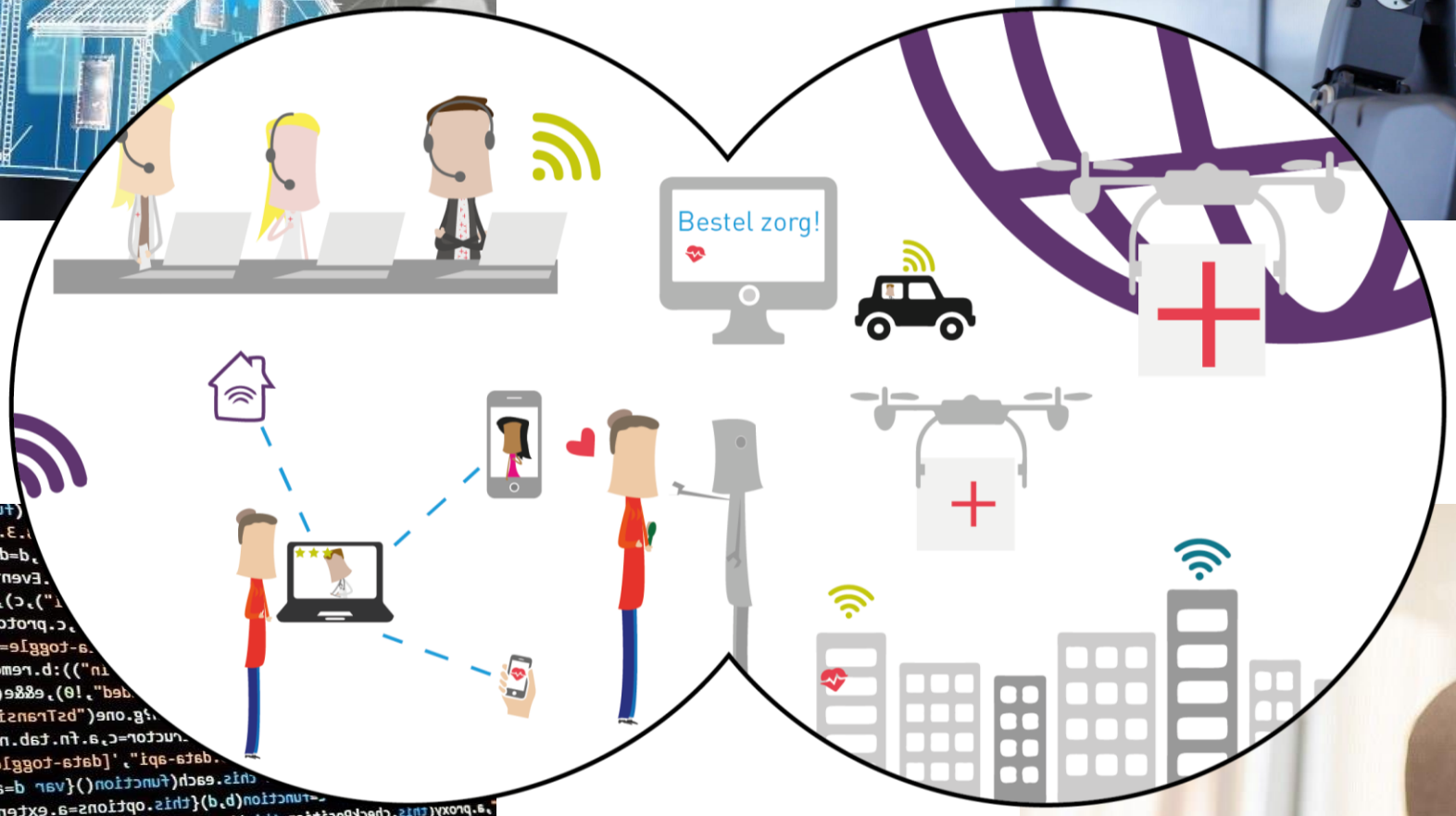
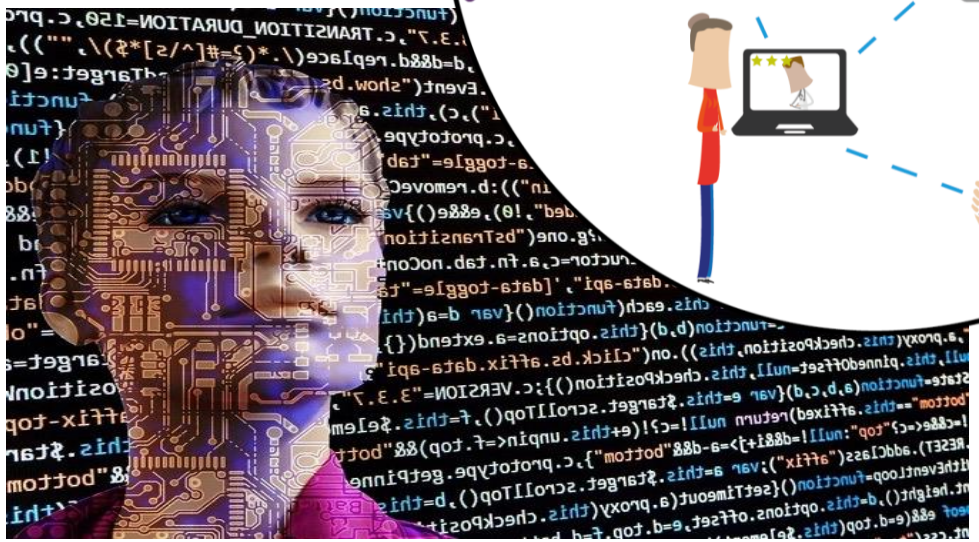
- Learn from Failures




Bestel zorg!

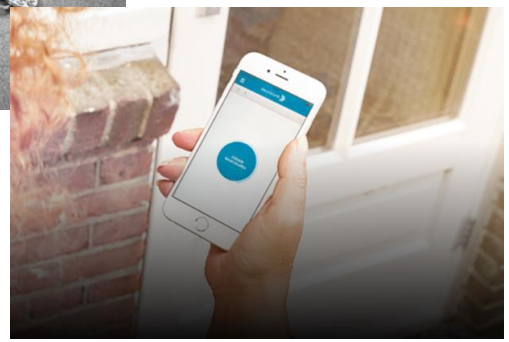


INDEPENDENT LIVING

Innovations in Europe

- European scheme with: Austria, Belgium, Canada, Cyprus, Denmark, France, Hungary, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Switzerland, Taiwan, UK
- Time to market 2-3 years after project
- Budget 1-7 million Euros
- Active end-user involvement
- Create business
- At least 3 countries involved
- 1 business/1 SME, 1 end-user
- 50% EU funding, 50% national

Digital key solutions



GPS

are you okay today

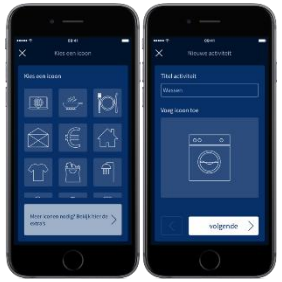
Lifestyle monitoring

Smart Diapers

Hip Airbag

Smart Home applications

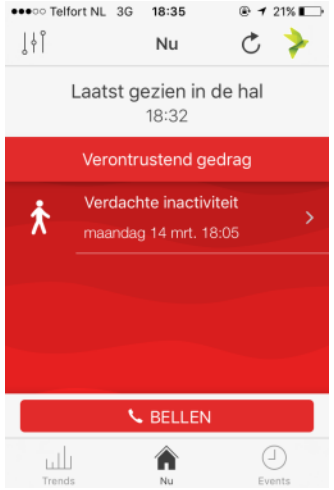
Medicine dispensers

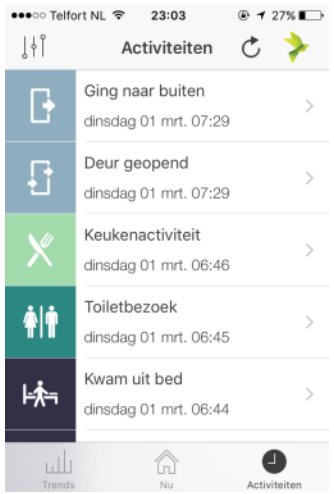


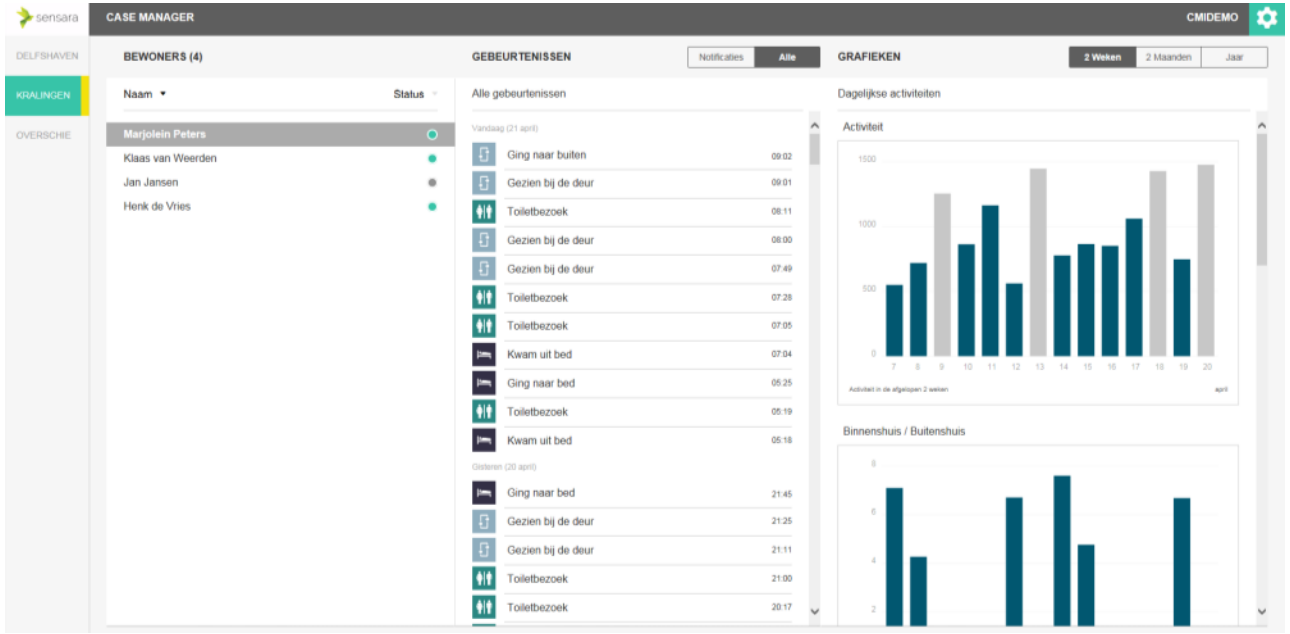
Support daily structure

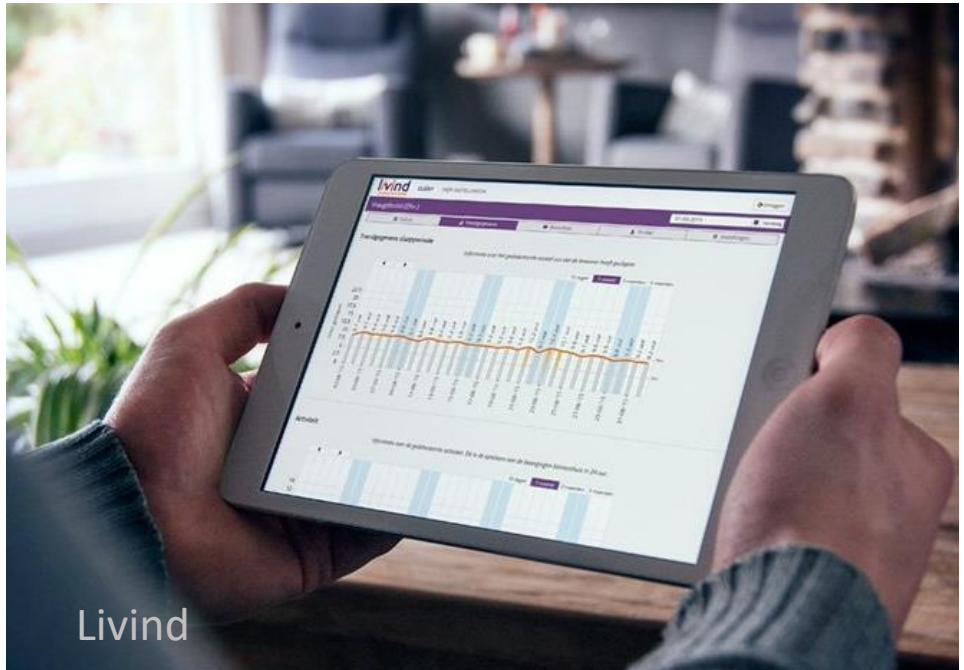
Network of sensors

Sensara

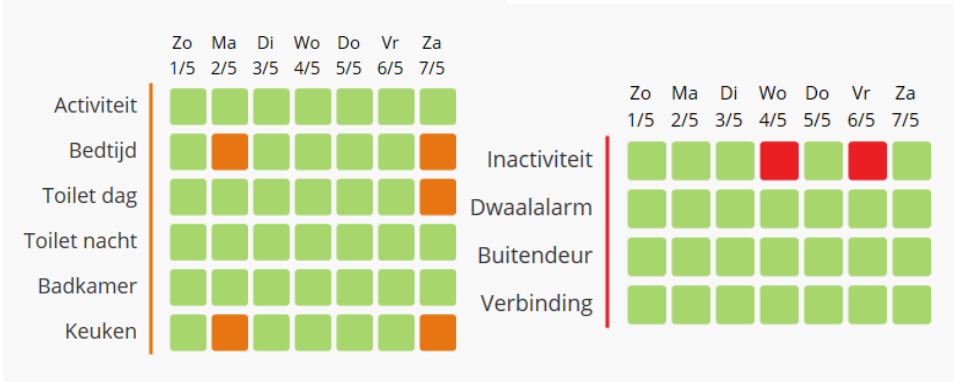




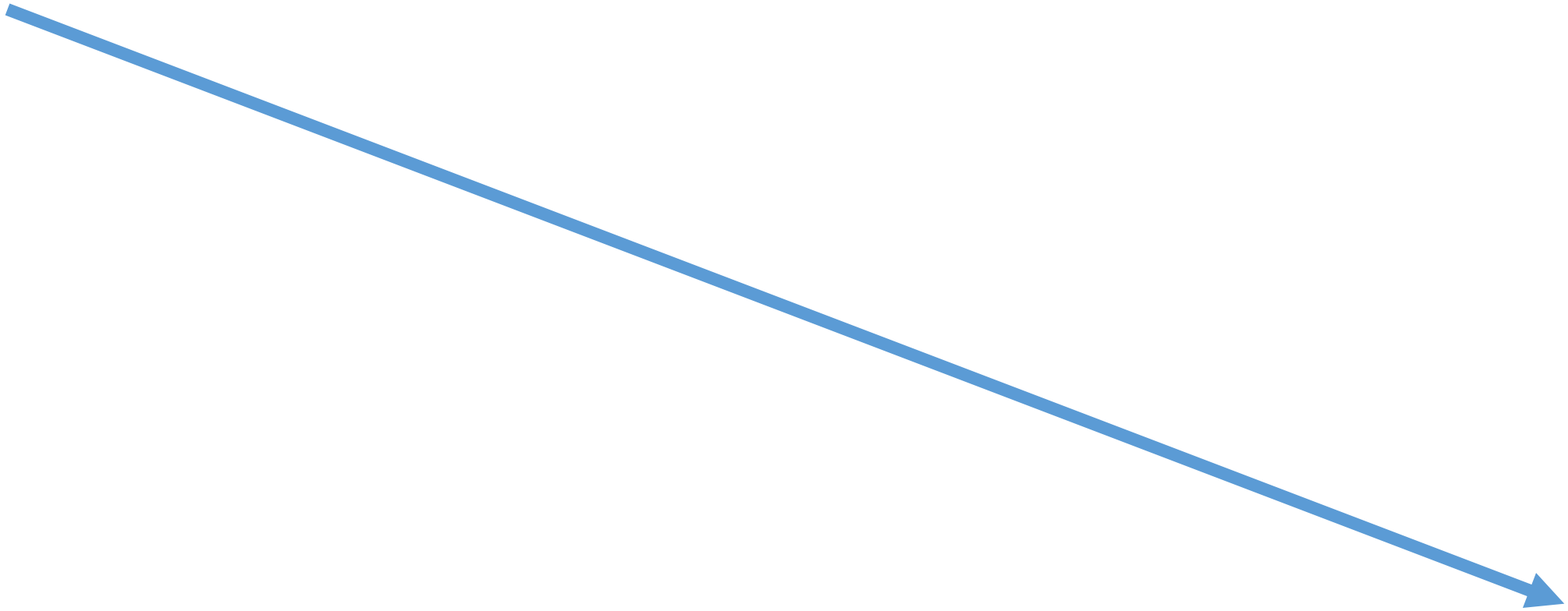




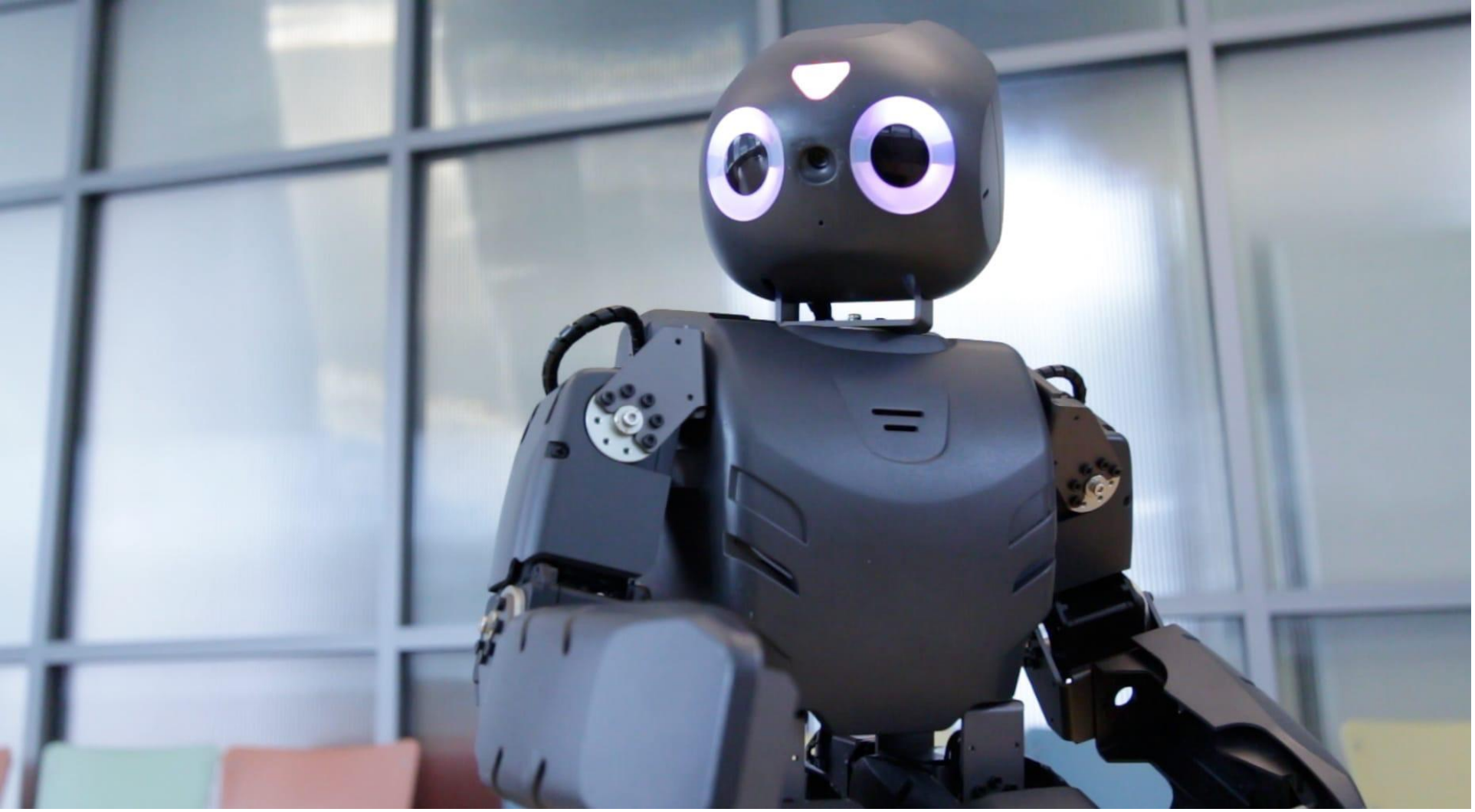
Presentation of daily activity



Care Giver Strain



Vilans



Robotics

Vilans

Pleo

Robot dog

Qbi

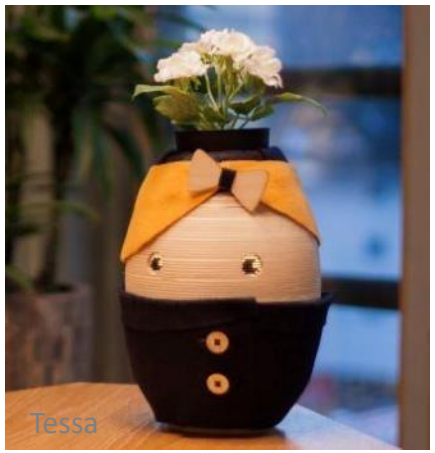
Alice

Paro

Robotcat

Zora

Justo Cat



Tessa

QBI

Pepper

Nest & consumer electronics

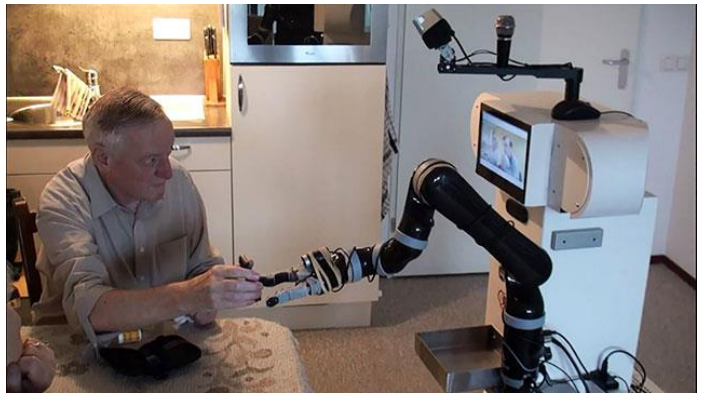
WEMO

Robot duster

Robot Maatje

Lea

HUE

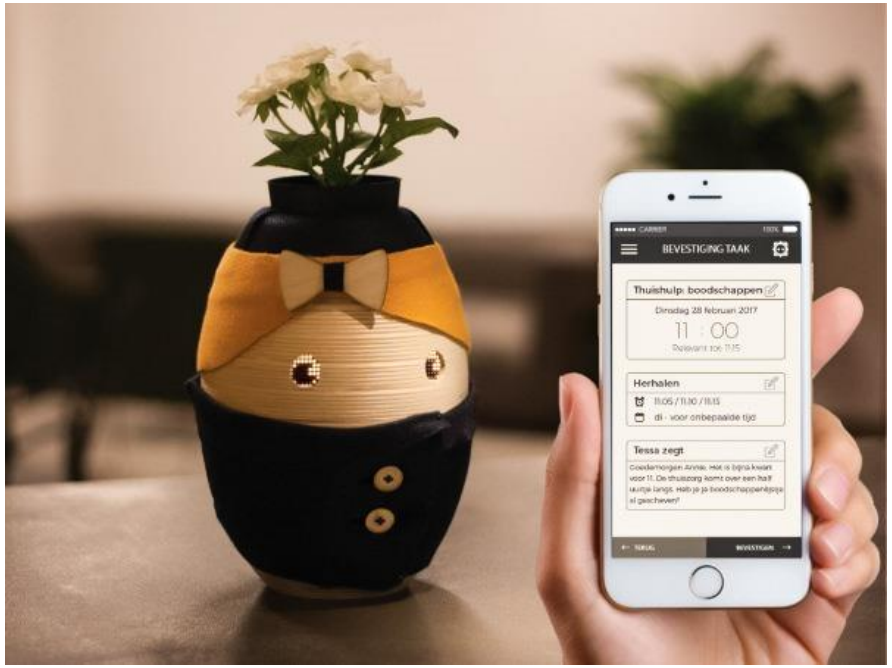


Companion robots

Phi / Pepper

Kompai

Conversation / talking robots



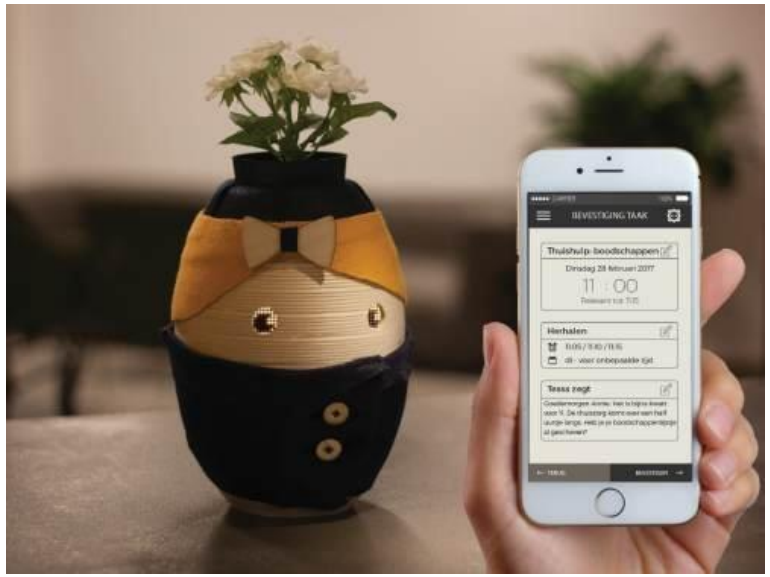
UNIDIRECTIONAL

TO

BIDIRECTIONAL

&

CONTEXT-RELEVANT MESSAGES



eWare
Early Warning Accompanies Robotics Excellence

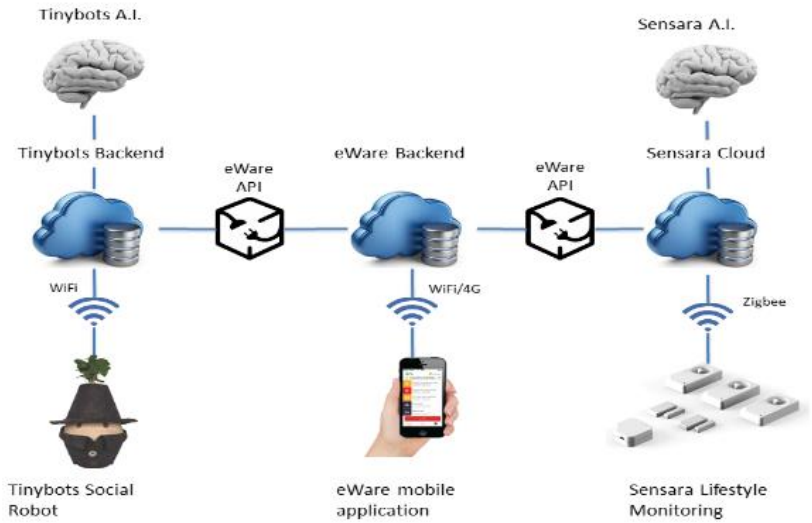


Figure 2 eWARE eco-system architecture

Vilans

Consortium

Vilans

sensara

tinybots

NTNU

ZZG zorggroep

UNIVERSITÀ POLITECNICA DELLE MARCHE

JEF KNOWLEDGE APPLICATIONS

Stjørdal kommune

ascom

terz Stiftung

STJØRDAL KOMMUNE

NTNU Norwegian University of Science and Technology

Vilans

Information

AAL PROGRAMME

AAL Joint programme Call AAL 2014-2020

Duration
01 June 2017-31 May 2020

Coordinator Contact
PhD Henk Herman Nap
Vilans
E-Mail: h.nap@vilans.nl
Phone: 0031 6 22810766

Communication Contact
PhD Sara Casaccia
Universita' Politecnica delle Marche
E-Mail: s.casaccia@univpm.it
Phone: 0039 0712204273

Project web site
www.aal-eware.eu

The eWare project is co-financed under the Active and Assisted Living Joint Programme of the European Commission (www.aal-europe.eu) and the National Funding Agencies of Netherlands, Italy, Norway and Switzerland.

eWare

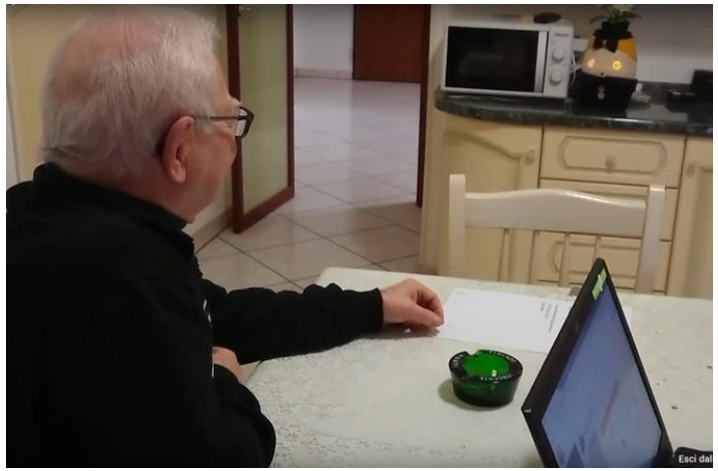
Early Warning Accompanies Robotics Excellence

eWare introduces a novel eco-system to support the wellbeing of people with dementia and their informal carers

www.aal-eware.eu

AAL-eWare

eWare
Early Warning Accompanies Robotics Excellence



She eats breakfast regularly, and the informal caregivers have noticed a big change in her health status which they think can be related to the regular eating habits.

>10% of end-users a positive impact

Tessa helps her to remember the afternoon medicine and now, in the morning, she remembers medicine without Tessa

Before the system was installed, the person never took his medicine. Now he remembers to take it thanks to Tessa's messages

She heard the message to call his children several times and called them more often

Vilans

Guardian: Social robots in long term care

Vilans

AAL PROGRAMME

Guardian

Partners

Guardian

AAL PROGRAMME

Participant organisation name	Country
Vilans	The Netherlands
ConnectedCare	The Netherlands
smartrobot.solutions	The Netherlands
JEF	Italy
Eindhoven University of Technology	The Netherlands
University of Geneva	Switzerland
Hospital University of Geneva	Switzerland
Università Politecnica delle Marche	Italy
INRCA	Italy
Zorggroep Noordwest-Veluwe	The Netherlands

Vilans

smartrobot.solutions

connectedcare

jef digital innovation

TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

UNIVERSITÉ DE GENÈVE CENTRE UNIVERSITAIRE D'INFORMATIQUE

HUG Hôpitaux Universitaires Genève

UNIVERSITÀ POLITECNICA DELLE MARCHE

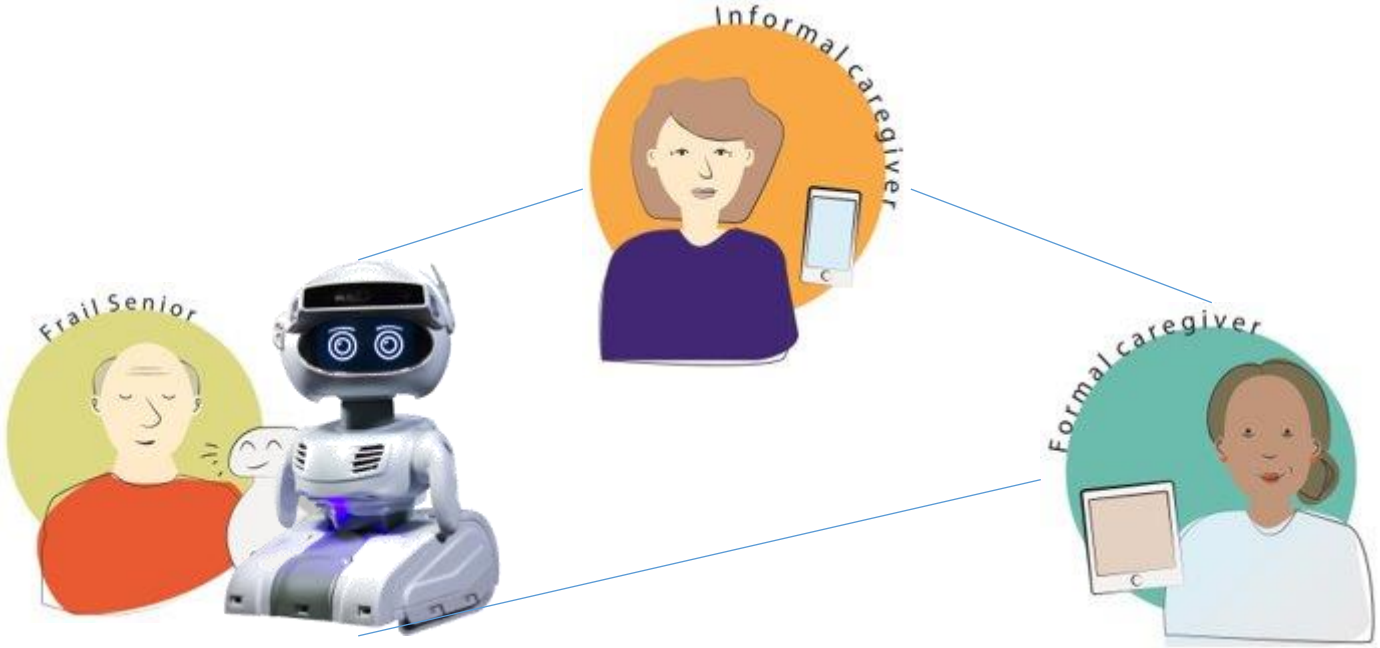
INRCA Istituto di Ricovero e Cura a Carattere Scientifico HEALTH AND SCIENCE ON AGING

Stichting Zorggroep Noordwest-Veluwe Wonen, zorg en welzijn

www.aal-europe.eu
www.aalforum.eu

Guardian: Main Functionalities

- **Social Companion** (dialogues, personality, identity)
- **Monitoring** (mental well-being, physical discomfort)
- **Coaching** (reminders, medication, food -> behaviour change)



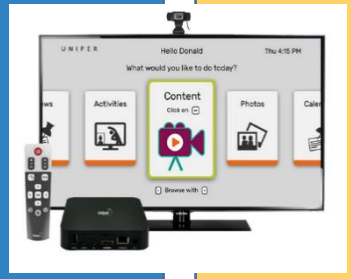
HAAL

LIGHT MEMORY LOSS

MILD DEMENTIA

MID STAGE DEMENTIA

ADVANCED DEMENTIA



Vilans

Compaan

gemeente Haarlemmermeer

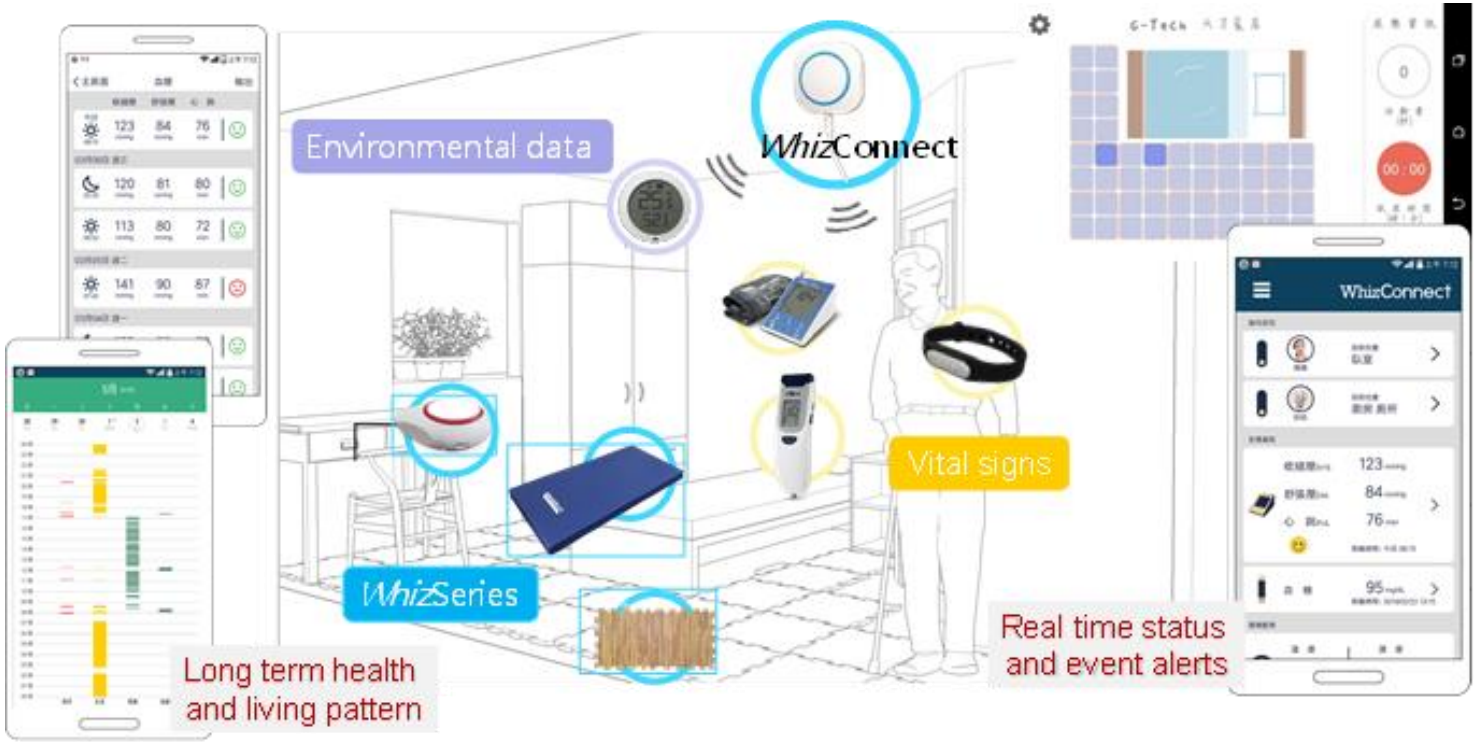
GTech

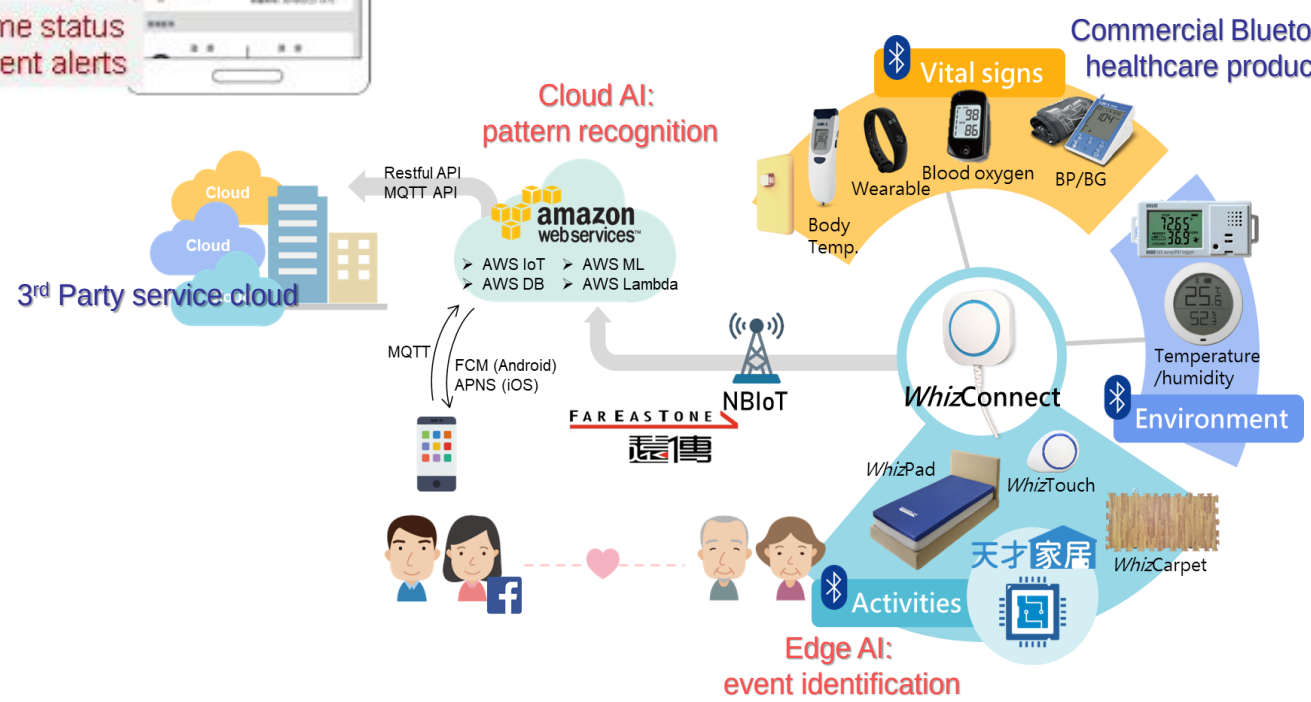
JEF KNOWLEDGE APPLICATIONS

AARHUS KOMMUNE

Quanta Computer

1 2 3 4 5 6 7


Environmental data
WhizConnect
Vital signs
WhizSeries
Real time status
and event alerts
Long term health
and living pattern

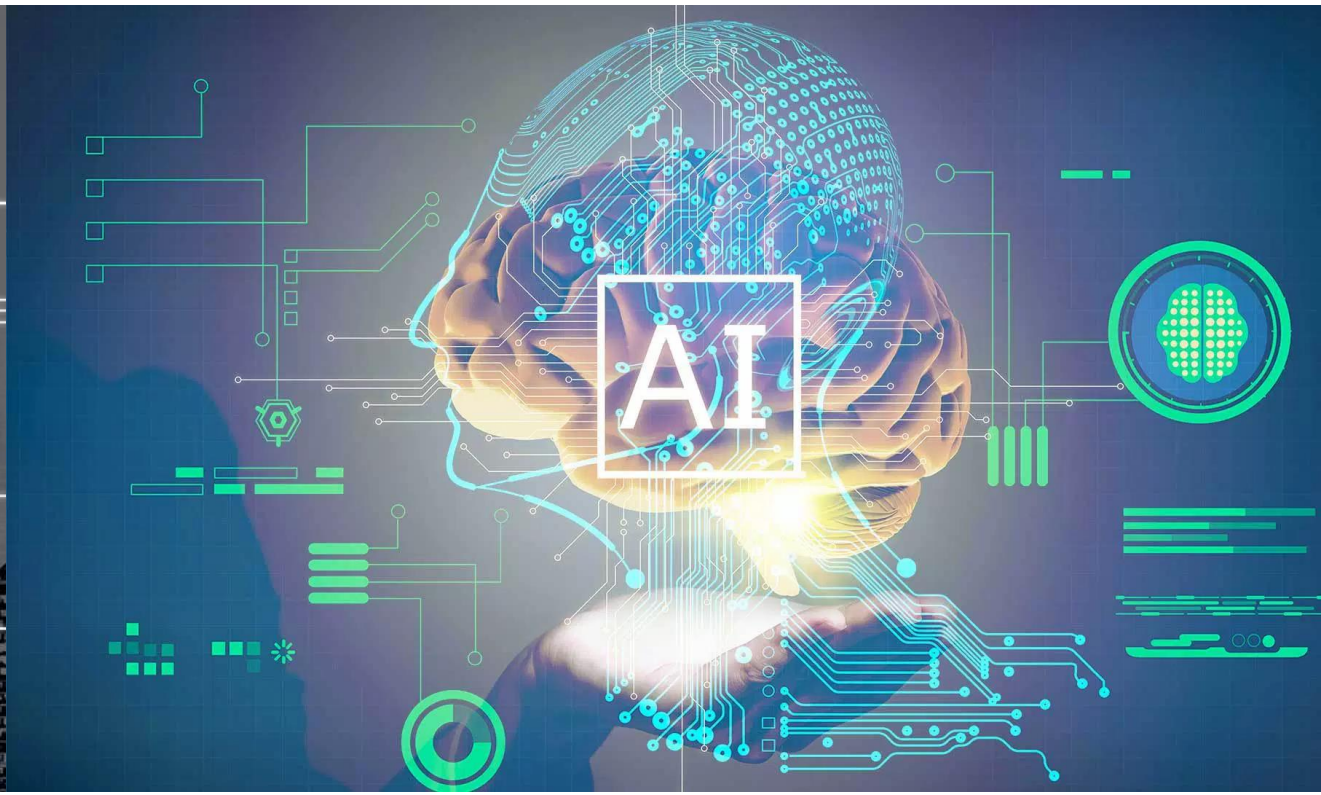

Cloud AI:
pattern recognition
Commercial Bluetooth
healthcare products
Vital signs
Wearable
Blood oxygen
BP/BG
Body
Temp.
Restful API
MQTT API
Cloud
Cloud
3rd Party service cloud
amazon
web services
AWS IoT
AWS ML
AWS DB
AWS Lambda
MQTT
FCM (Android)
APNS (iOS)
NBIoT
FAREASTONE
遠傳
WhizConnect
Temperature
/humidity
Environment
WhizPad
WhizTouch
天才家居
WhizCarpet
Activities
Edge AI:
event identification

HAAL

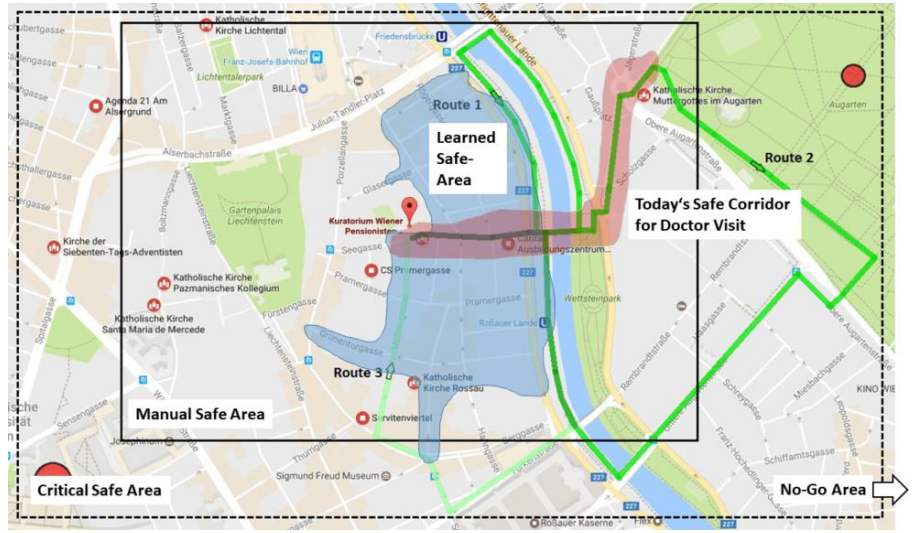
Measuring & Data

We measure a lot…

BIG DATA


AI

Free Walker



Vilans

European Commission

AAL PROGRAMME

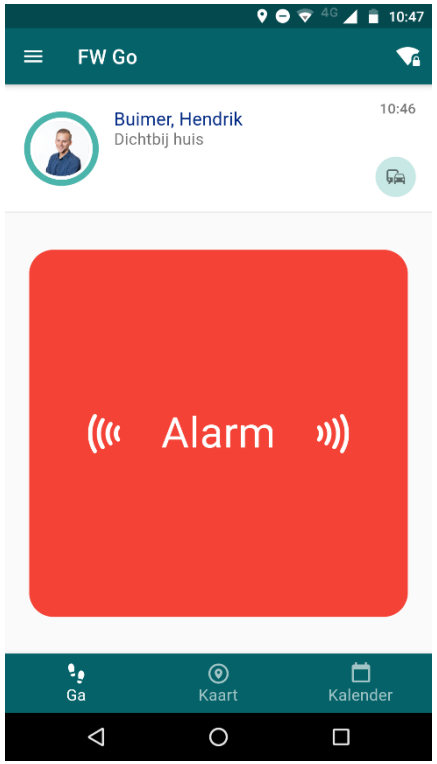
FreeWalker Users

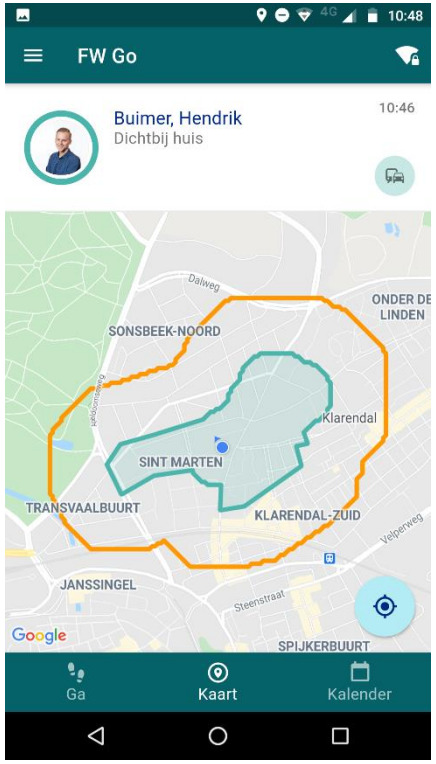
Mona is a care professional
She uses:
FW Portal of **FW Care**

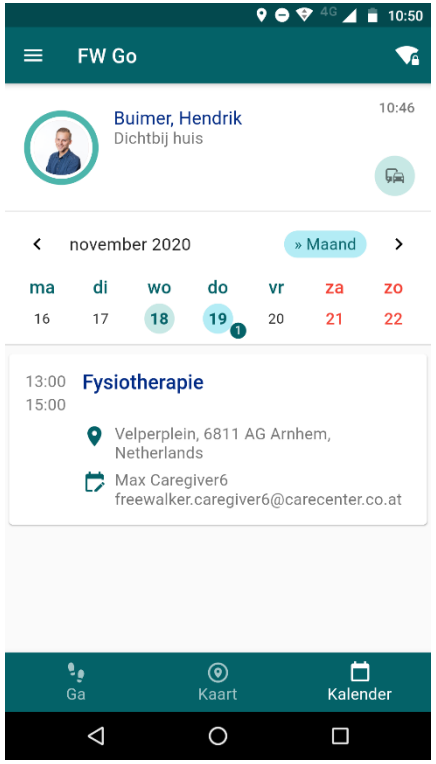
Hans is the client
He use the:
FW GO of **Mopas Lite**

Tina is the contact person of the client (informal carer)
She uses:
FW Care

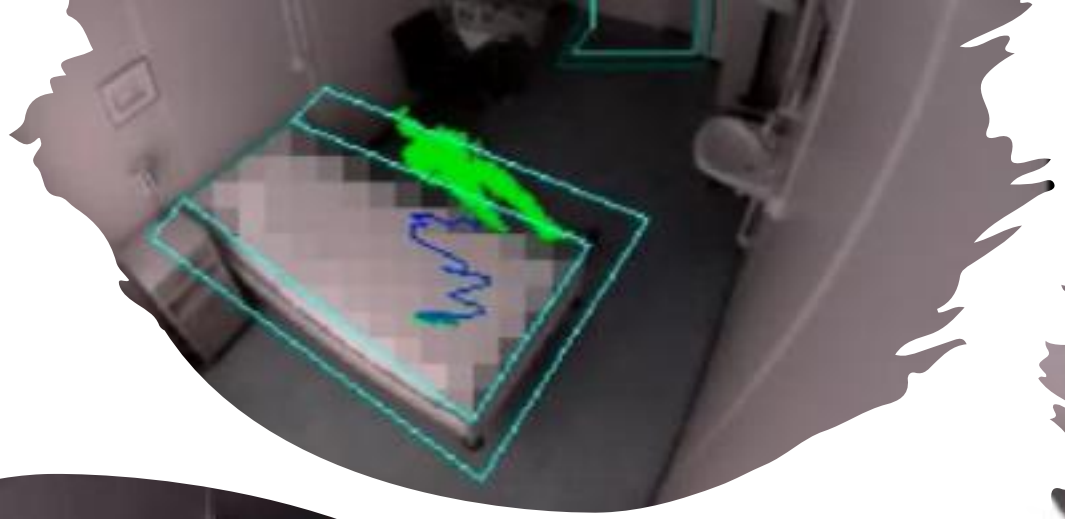
FW Go of GPS-tracker

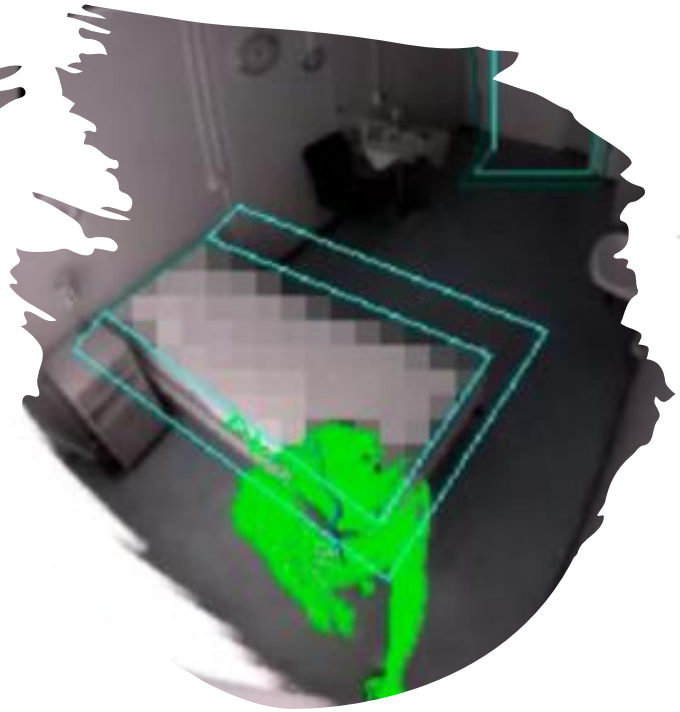


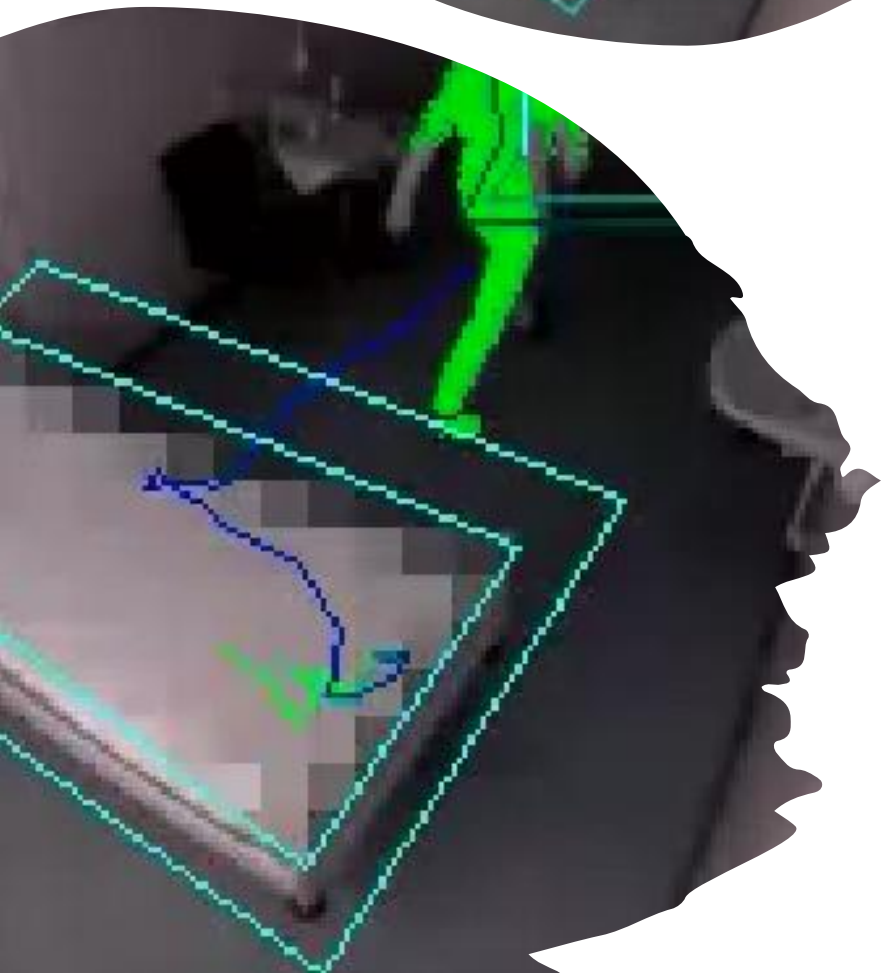




Focus on software, hardware is ‘open’



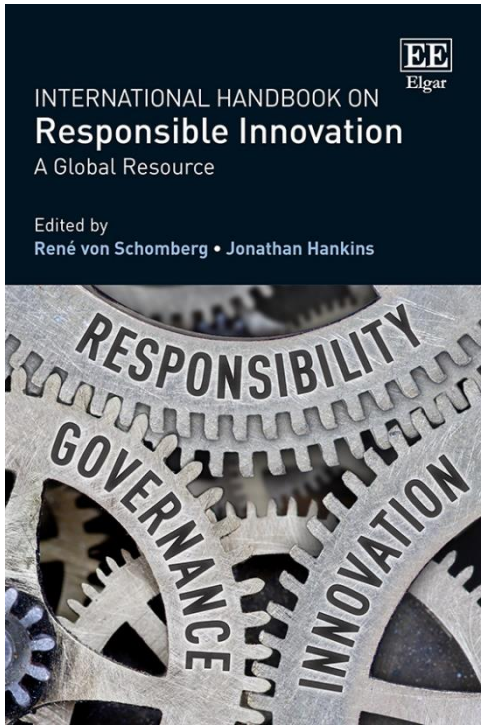




Co-creation of data

- Objective & subjective data
- Confirmation by end-users on data
- Training care professionals
- New professional
- Annotation of data

Responsible AI



TOP 10 PRINCIPLES
FOR ETHICAL ARTIFICIAL
INTELLIGENCE

nature machine intelligence
PERSPECTIVE
https://doi.org/10.1038/s42256-019-0088-2

The global landscape of AI ethics guidelines

Anna Jobin, Marcello Ienca and Effy Vayena*

Entertainment and activation

Qwiek melody

Digital floor

CRDL

Pillo

Qwiek up

Qwiek play

MagicTable

Prepdoc | The Virtual Training Doctor is a **Communicate** product

Codesign with older people and general practitioners

FATHER FEEL THE ROUTE

connectedcare

alzheimer nederland

BRUSANO
Vers des soins intégrés de proximité
Op weg naar integrale buurtzorg

Vilans

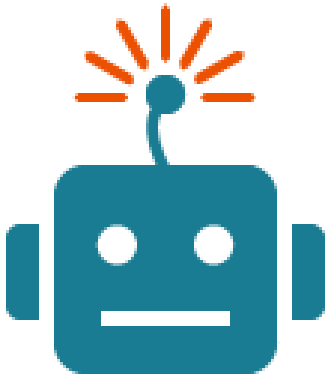
UNIVERSITY OF TWENTE.

UNIVERSITÉ DE GENÈVE

HUG Hôpitaux Universitaires Genève

TRANSFORM WORK

Well-being & Efficiency – Care Home



2019-2021

Challenge Verpleeghuizen van de Toekomst

2019-2021
Challenge Verpleeghuizen van de Toekomst

Omring

Amstelring

wvo zorg

vitalis woonzorg groep

zorggroep sint maarten

Coördinatie

Zorgverzekeraars Nederland

+ Partners

+ Jury

Nieuwe Implementatie

Opschaling

patyna

schakelring
van mens tot mensen

Sint Jacob

tante Louise
de beste zorg waar thuis ook is

inter zorg

Kennisdeling

Vilans

Advies & Onderzoek

2019-2021
Challenge
Verpleeghuizen
van de Toekomst

Vilans

2019-2021
Challenge
Verpleeghuizen
van de Toekomst

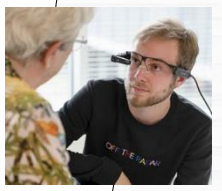
Vilans

Dental Robotics

Medeye

Douche-WC

Domotica & Data



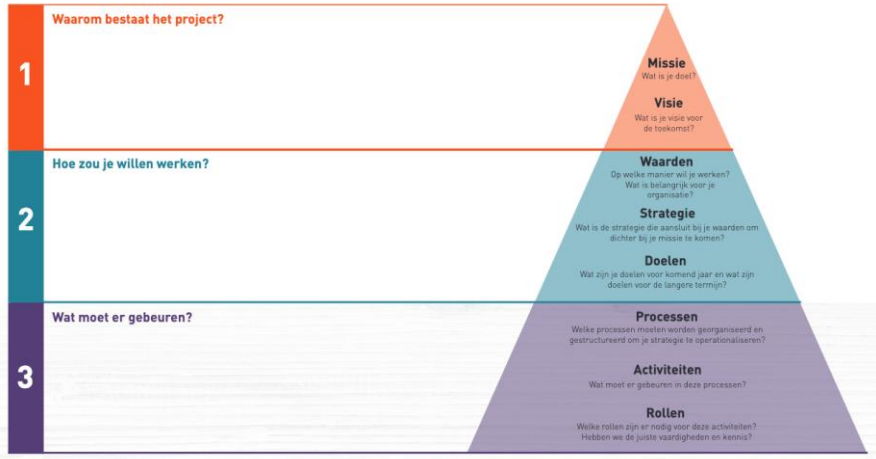
Smart glasses

Travis Translator

WOLK Heupairbag

Sprekende beelden

Leefcirkels



Henk Herman Nap

Hugo de Jonge - Dutch Minister of Health, Welfare and Sport

ANDERS WERKEN in de zorg

> 17 organizations in West-Brabant

volckaert
Ruitersbos
PARK Zuiderhout
HET•HOGE•VEER
Groenhuysen
zorgplein Maaswaarden
care innovation center west brabant
tante Louise de beste zorg waar thuis ook is
Vilans
Thebe 100 jaar
Raffy
surplus zorg
1minuut zorginnovatie
De Riethorst Stromenland Samen fijner leven
Avoord Wat vindt ú belangrijk?
De Leystroom Zorg voor elkaar
ABENA

ANDERS WERKEN
in de zorg

Change the way we work in long-term care

tante Louise
de beste zorg waar thuis ook is

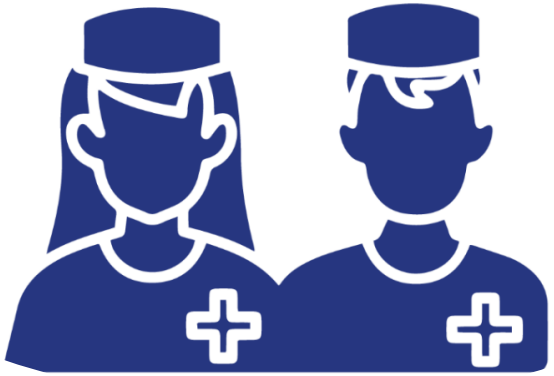
Vilans

Smart Diapers

Reduction wrong medication

Expertise at a distance

Happy Employees



Happy Clients

Higher Work Productivity

ANDERS WERKEN
in de zorg

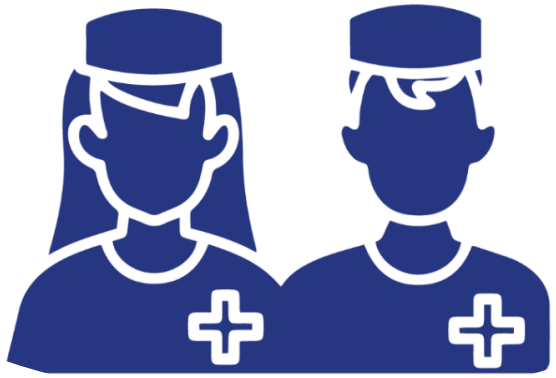
Change the way we work in long-term care

tante Louise
de beste zorg waar thuis ook is

Vilans

Smart Diapers

Happy Employees



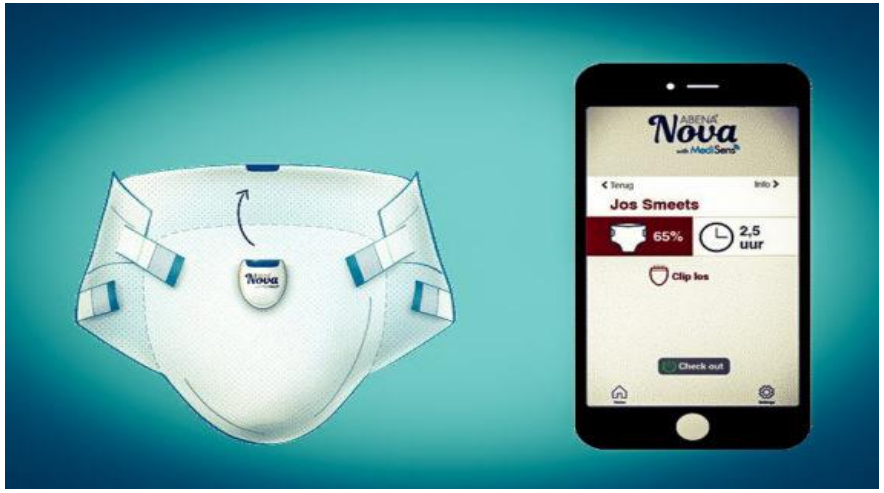
Happy Clients

Higher Work Productivity

Mixed-Methods Research:

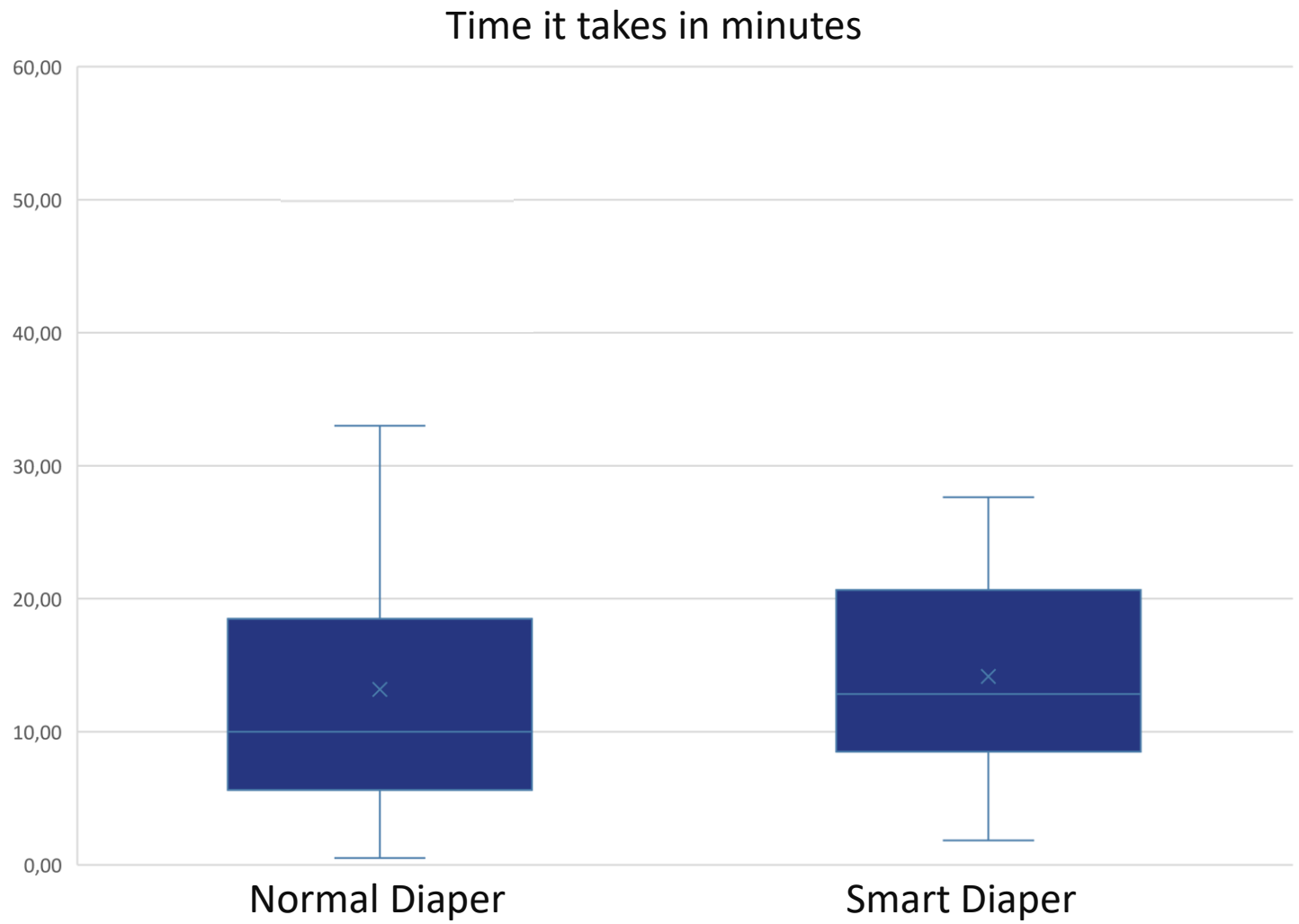
- 37 employees involved
- 12 interviews with project leaders and innovation managers
- 80 clients participated in pilots
- > 90 time measurements during diaper change
- 5 care organizations filled in a cost-benefit questionnaire

ANDERS WERKEN
in de zorg

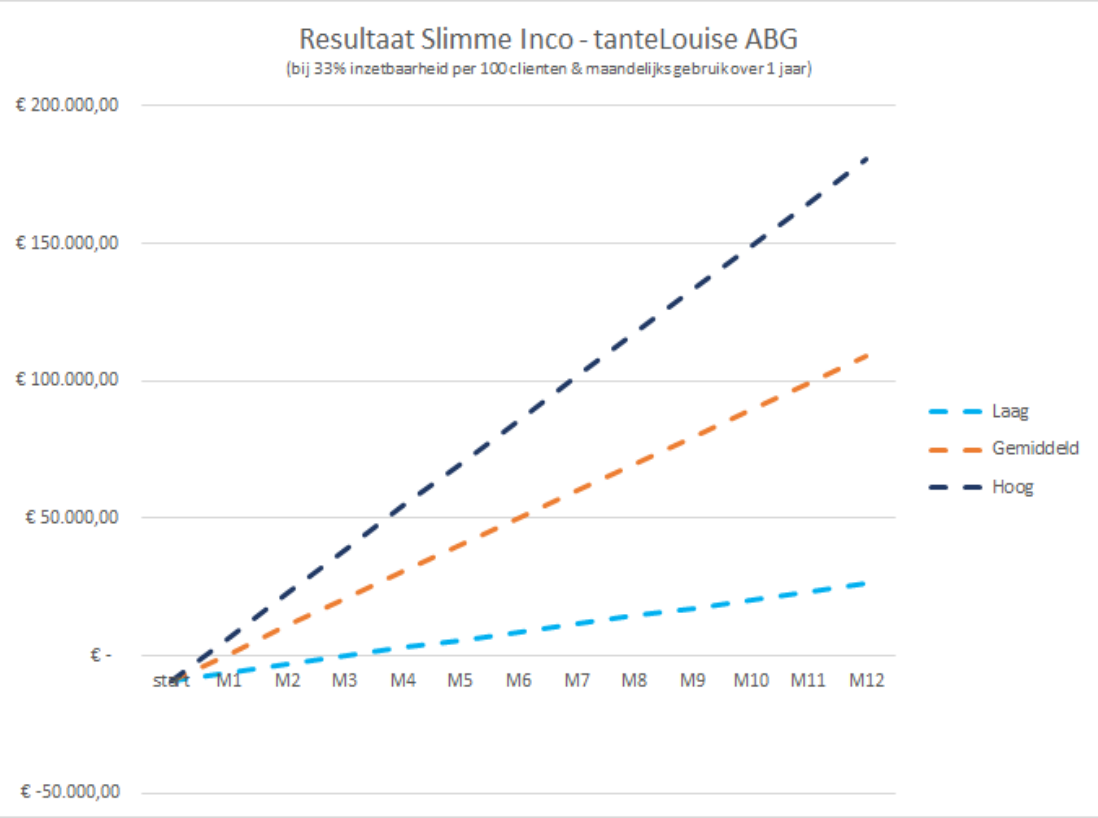


Smart Diapers

Research on Smart Diapers

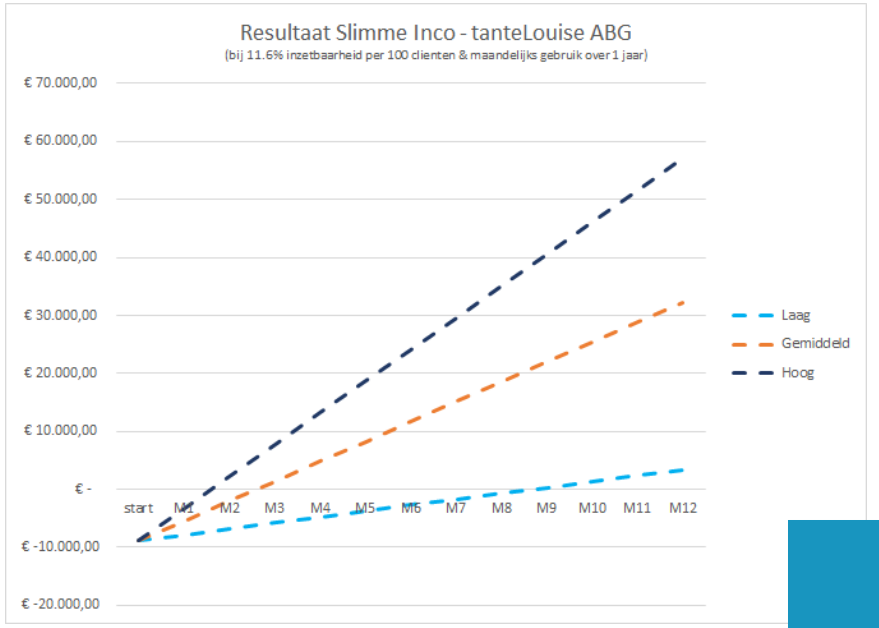


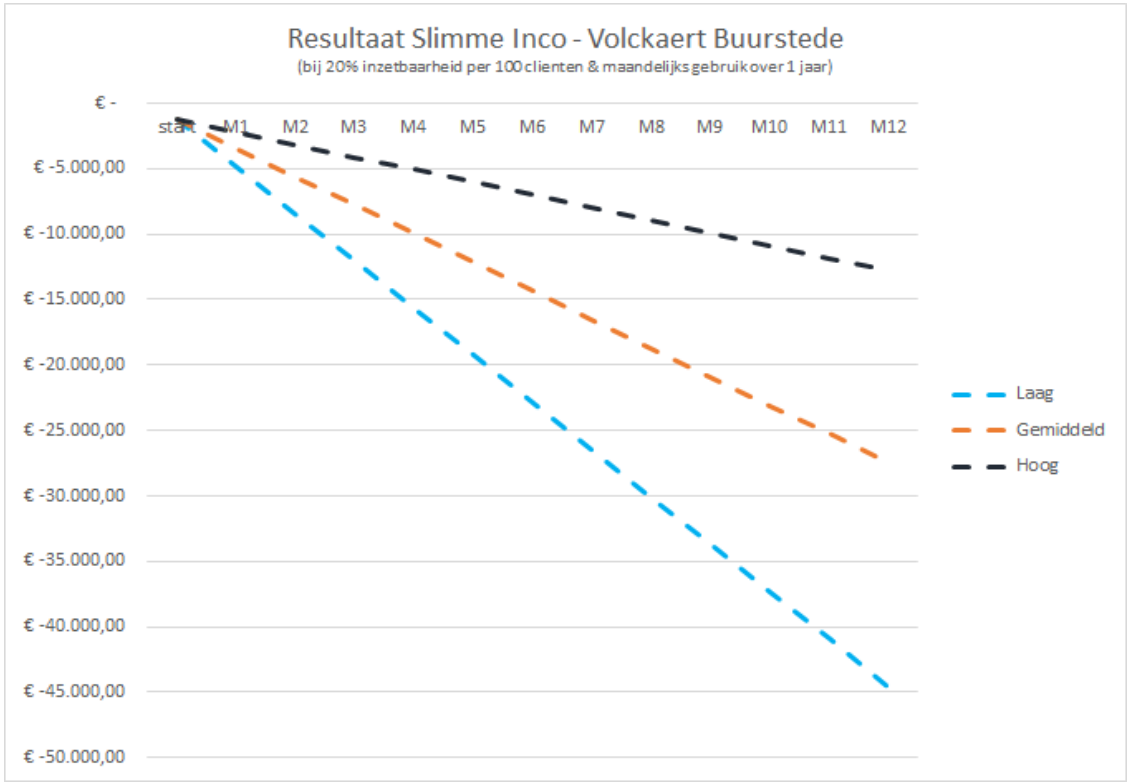
tanteLouise

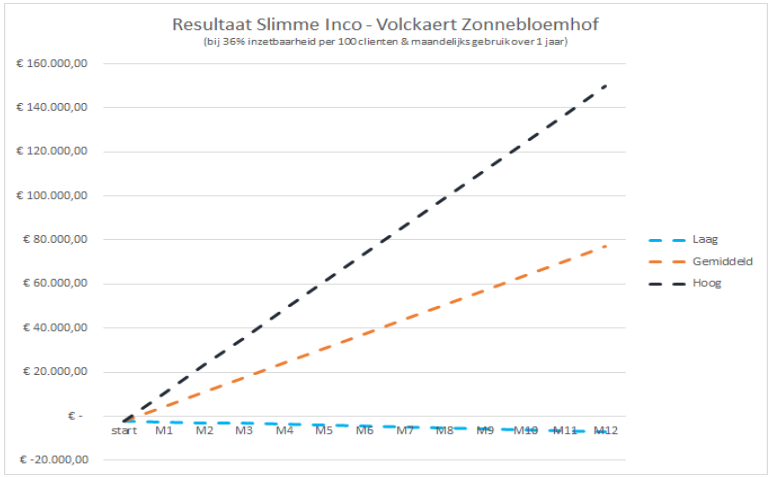


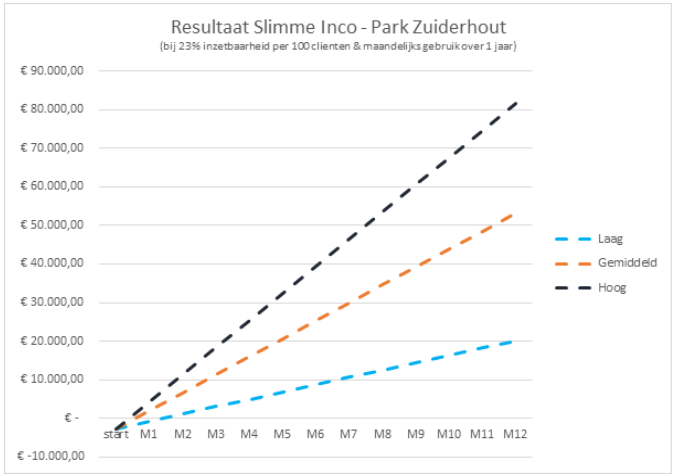
"I have 7 teams at one location and because of the time savings through the use of smart diapers, all teams were able to reduce an intermediate shift from 4 to 3 hours. In short, I save 49 hours a week and with that I can pay the extra costs for this innovation."

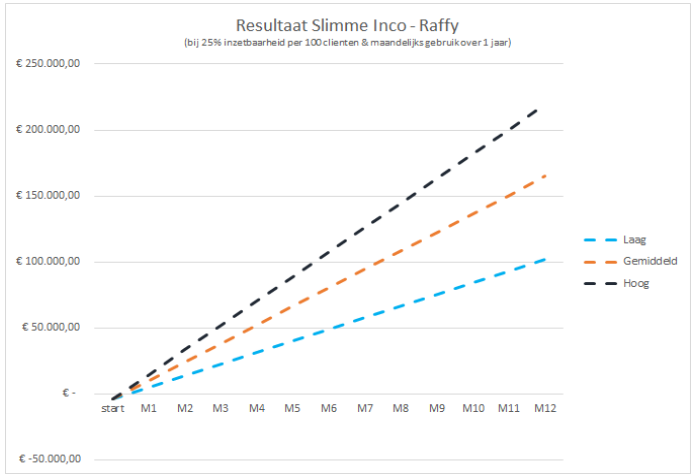
Team leaders always say: "Smart Diapers deployed = fewer actions" at the bedside. "

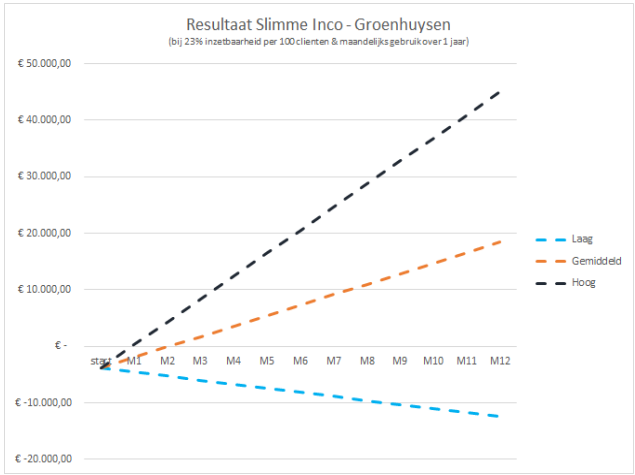



Resultaat Slimme Inco - Volckaert Buurstede
(bij 20% inzetbaarheid per 100 clienten & maandelijks gebruik over 1 jaar)
€ -
€ -5.000,00
€ -10.000,00
€ -15.000,00
€ -20.000,00
€ -25.000,00
€ -30.000,00
€ -35.000,00
€ -40.000,00
€ -45.000,00
€ -50.000,00
start M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Laag
Gemiddeld
Hoog


Resultaat Slimme Inco - Volckaert Zonnebloemhof
(bij 36% inzetbaarheid per 100 clienten & maandelijks gebruik over 1 jaar)
€ 160.000,00
€ 140.000,00
€ 120.000,00
€ 100.000,00
€ 80.000,00
€ 60.000,00
€ 40.000,00
€ 20.000,00
€ -
€ -20.000,00
start M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Laag
Gemiddeld
Hoog


Resultaat Slimme Inco - Park Zuiderhout
(bij 23% inzetbaarheid per 100 clienten & maandelijks gebruik over 1 jaar)
€ 90.000,00
€ 80.000,00
€ 70.000,00
€ 60.000,00
€ 50.000,00
€ 40.000,00
€ 30.000,00
€ 20.000,00
€ 10.000,00
€ -
€ -10.000,00
start M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Laag
Gemiddeld
Hoog


Resultaat Slimme Inco - Raffy
(bij 25% inzetbaarheid per 100 clienten & maandelijks gebruik over 1 jaar)
€ 250.000,00
€ 200.000,00
€ 150.000,00
€ 100.000,00
€ 50.000,00
€ -
€ -50.000,00
start M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Laag
Gemiddeld
Hoog


Resultaat Slimme Inco - Groenhuysen
(bij 23% inzetbaarheid per 100 clienten & maandelijks gebruik over 1 jaar)
€ 50.000,00
€ 40.000,00
€ 30.000,00
€ 20.000,00
€ 10.000,00
€ -
€ -10.000,00
€ -20.000,00
start M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Laag
Gemiddeld
Hoog

*"We can **always call and ask the developer for support**"*

*"We **do not have to wake clients** during the night, need less cleaning of beds and clients need less changing"*

*"Thanks to the project **we learned from other care organizations how to change the care** with support of technologies"*

*"To which extent the smart diapers are **deployable** is essential for the size of the benefits"*

*"Since we focus on emotion-oriented care, smart diapers **do not save** time when clients do not want to be changed"*

Possible time savings per location

MACRO LEVEL IN NL / SAVES >4.500.000 hours

- tanteLouise – Het Nieuwe ABG: 8.08 hours per day
- Volckaert Buurstede: none
- Volckaert Zonnebloemhof (Dongepark): 5.72 hours per day
- Raffy-Lale-Leystroom: 12.20 hours per day
- Park Zuiderhout: 5.44 hours per day
- Groenhuysen: 1.36 hours per day

Happy Clients

- Better night rest through the use of smart diapers
- Enhanced privacy

Cost-Benefits

- Reduction in wet beds
- Reduction in frequency of cleaning
- Reduction in unnecessary checks

Happy Employees

- Less unnecessary checks
- Reduction in controls without cleaning
- Reduction in cleaning beds
- Reduction in washing

Do’s and don’ts

Sessies najaar 2020

Vilans

tante Louise
de beste zorg waar thuis ook is

Thebe

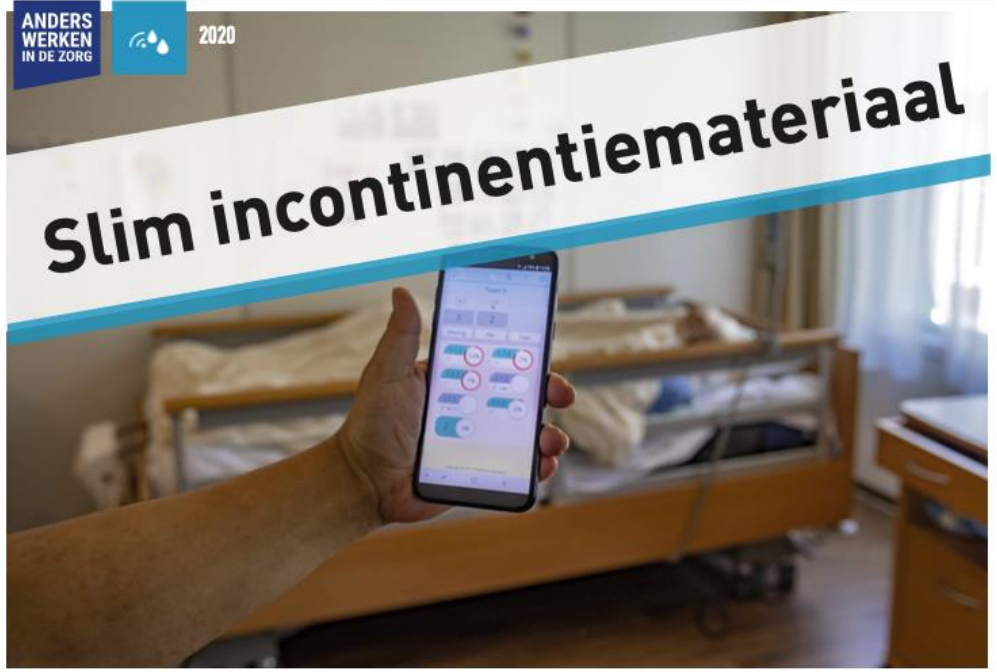
surplus

Avoord
Wat vindt ú belangrijk?

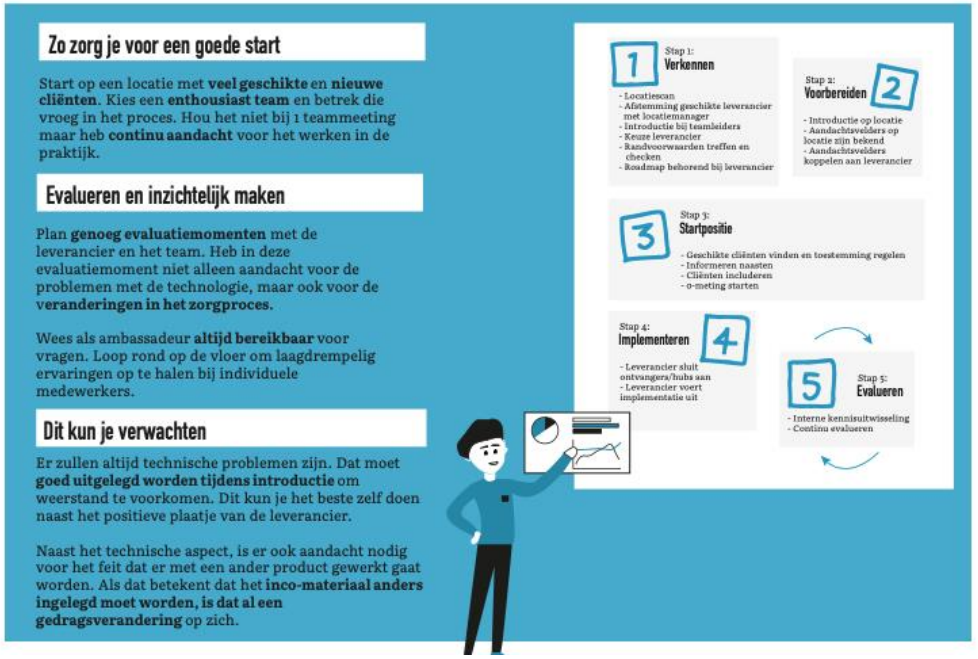
HET •HOGE• VEER

Raffy Lâle
De Leystroom

volckaert



“Richt een halfjaarlijkse evaluatie in om grip te houden op het gebruik van slim incontinentiemateriaal in de teams en eventueel bij te sturen als dat nodig blijkt.”



ANDERS WERKEN IN DE ZORG 2020

Heupairbag

"Door medewerkers van alle betrokken disciplines vanaf het begin te betrekken bij de invoering van de Wolk heupairbag wordt deze nu succesvol ingezet bij de juiste clienten"

Zo zorg je voor een goede start

Stel een goede projectgroep samen, waarbij **verschillende disciplines** bij betrokken zijn.

Wijs **sleutelfiguren** aan die met goede uitleg en sprekende voorbeelden informatie kunnen doorspelen aan hun collega's. Zorg daarnaast voor een **aanspreekpunt**. Hier moeten medewerkers terecht kunnen met al hun vragen over de heupairbag.

Tips voor inzet bij clienten

Bekijk zorgvuldig **per client** of de heupairbag geschikt kan zijn. Zorg ervoor dat je enkel de clienten selecteert die **baat hebben** bij het gebruik van de heupairbag. Gebruik de **inclusie/exclusie criteria** van Wolk als richtlijn. Voeg ook eigen inzichten toe. Wees kritisch.

Betrek de familie van de client bij het proces. Mocht er weerstand zijn van de client probeer dan om steeds het **doel uit te leggen** en te benadrukken wat het op kan leveren.

Tips om op te letten bij evaluatie

Het is belangrijk te kijken naar **welk beleid** er wordt gevoerd binnen de organisatie gericht op valpreventie.

Kijk bij de evaluatie niet alleen naar het **aantal voorkomen vallen en heupfracturen**, maar ook naar **andere aspecten** ten gevolge van het inzetten van de heupairbag. Dit kunnen zowel **kosten als baten** zijn voor verschillende betrokkenen; clienten, medewerkers, familieleden, organisatie, etc.

Blijf met elkaar in gesprek en ontdek wat nodig is voor **vertrouwen** in het systeem en of er aanpassingen gedaan kunnen worden om andere maatregelen af te schalen; bv minder sensoren.

Dit kun je verwachten

De heupairbag is **redelijk eenvoudig** in gebruik en medewerkers zien de **meerwaarde** ervan in. Toch is de Wolk iets nieuws en hier moet men aan **wennen**. Dit kost tijd.

Er zullen **verschillen zijn in acceptatie en gebruik** per client. Houd hier rekening mee en grijp in waar nodig.

ANDERS WERKEN IN DE ZORG 2020

Expertise zonder afstand

"Voor opschaling is het belangrijk dat er meerdere brillen op locaties liggen. Zo kun je het vaker toepassen en krijgt het een soort vliegwiel effect. Ook een bril-spreekuur kan helpen."

Zo zorg je voor een goede start

Net als met andere innovatie projecten is ook hier een **ambassadeur** cruciaal. Een aanspreekpunt binnen het team maakt het makkelijker om snel te kunnen ondersteunen in gebruik. **Zorg voor back-up!**

Maak iemand uit het proces verantwoordelijk voor het project en het gebruik van de bril. Geef die persoon de taak om **draagvlak** te creëren.

Ook een enthousiaste behandelaar is nodig. Laat hen bij de eerste training **direct een account** aanmaken. Dan kunnen ze meteen aan de slag.

Tips voor inzet bij locatie of team

Het uitproberen van de bril kan prettig zijn bij een **grote locatie, omdat er meerdere behandelaren** zijn en meer use-cases geprobeerd kunnen worden.

Als je de bril wilt implementeren is het belangrijk dat de toegevoegde waarde van de bril duidelijk zichtbaar is. Dit is vaker het geval op **kleinere locaties** als de behandelaar **daadwerkelijk op afstand** is.

Tips om op te letten bij evaluatie

Bedenk samen met de teams en de behandelaren wat het voor hen op kan leveren. Zeker voor medewerkers die de bril dragen, kan het lijken alsof het vooral tijd kost. Wat brengt het **jou, de cliënt en de organisatie**?

Richt **de evaluatie strak** in: wie doet er mee, wat gaan zij uitproberen, welke andere casussen zijn voorbij gekomen? Inzichten hierin kunnen helpen om **MT en directie verder te adviseren** over de inzet (of opschaling) van de bril.

Dit kun je verwachten

Begin klein en besteed genoeg aandacht aan **training en evaluatie**. Houdt tijdens het testen een open vizier voor de andere mogelijkheden met de bril, maar blijf gefocust om meerwaarde per use-case te kunnen toetsen.

Als organisatie kun je het werken met de smart glass **als uitgangspositie** nemen in bepaalde situaties. Zo is het voor een team en behandelaren duidelijk dat dit de **standaard manier van werken** is in deze situatie.

ANDERS WERKEN
in de zorg

Totaal 12 18 > 200

2019

Vilans

AcademieNieuwezorg

Besparingen zijn afhankelijk van de daadwerkelijke verschoningsduur en hoeveelheid inco materiaal van de geïncludeerde cliënten.

Studentenonderzoek
Technisch testen
Gebruikers-gemak

Pilot & onderzoek
Huidige bril niet geschikt voor wondzorg
Positieve ervaring met leerlingen ondersteunen
Situaties nu veelal gecreëerd, gebruik nog niet ingebed
34

Expertise zonder afstand

Awareness sessies
Wat verwachten organisaties?
Wat is er nodig?
11
April & mei 2019

Pilot & onderzoek
Gemiddelde duur van verschoningsmoment is 13,76 minuten.
Geen verschil in duur met slimme inco
Vooral zwaardere mobiliteitsklassen profijt
7
192
Observaties Interviews Metingen Meelopen

Slimme inco

9
Observaties Interviews Vragenlijsten

Werkplaats #3
Kennis is macht, kennis delen is kracht
37
Geertruidenberg
november 2019
Ervaringen van medewerkers

Kennismaken met elkaar

Werkplaats #1
Klaar voor de start
Ervaringen Tante Louise
15
Roosendaal
juni 2019

Werkplaats #2
Let's go
Hoe samenwerken in de regio?
25
Etten-Leur
september 2019

Zowel TRL (technology readiness level) als ORL (organisation readyness level) spelen een belangrijke rol in de resultaten.

"De trainingen voor het inco materiaal inleggen was al erg waardevol."

"Het voelt wel even raar, omdat ik het niet gewend ben."

"Ik had de slimme inco graag bij meer cliënten ingezet."

"De bril halen, opzetten en aanzetten kost soms te veel tijd."

RESULTAAT

Cliënten niet onnodig verschonen
Mantelzorgers hebben minder was

Cliënten beter begrijpen op afstand
Cliënten geen bezwaar tegen Smart Glasses

Mogelijke tijdsbesparingen

Tijdsbesparing is afhankelijk van de inzetbaarheid.

tanteLouise - ABG: 8,08 uur per dag
Raffy - Leystroom: 12,20 uur per dag
Volckaert - Zonnebloemhof: 5,72 uur per dag
Groenhuysen: 1,36 uur per dag

Vilans

Conclusion

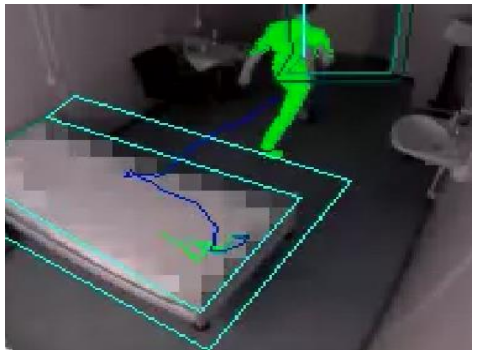
- Positive BC of smart diapers (context dependent)
- Further exploration and BC smart glass
- ‘Organization Readiness Level’ plays an important role and the results made and a successful scale-up.
- The ‘Work Differently’ programme is beyond the try-out and pilot phase.
- Continue the work from 2020-2021 on Fall impact reduction, smart floors, AR/VR trainings, and other high-potential innovations.

VARIETY OF LONG-TERM CARE TECH THAT CAN SUPPORT CARE AT A DISTANCE DURING COVID-19

Equality & Inclusion

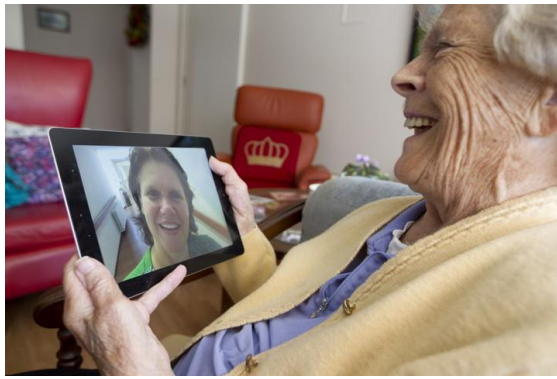
PROMISING CARE TECH ON DUTCH MARKET

Lifestyle monitoring



3rd and 4th generation surveillance technologies

GPS tracking/life cirkels/PERS systems



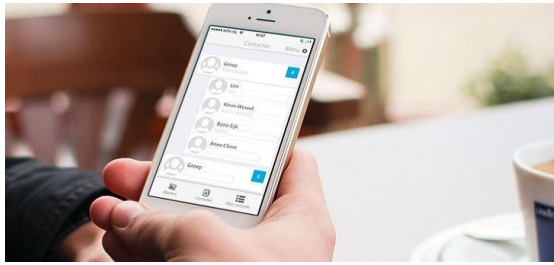
Screen to screen care

Social care & communication platforms

Medicine dispenser

Smart Diapers

Double medication check



Social robotics (Tinybots)

Hip Airbag

Games for Health

SCREEN-TO-SCREEN CONTACT DURING COVID-19

Nettie
Goed geregeld

Quli

BeterDichtbij

MOBILÉA
Pure eenvoud in beeldzorg

therapieland

ZAURUS

FaceTalk™
uw virtuele spreekkamer

GoToMeeting

WeSeeDo
Beeldbellen op de juiste manier

Webcamconsult

StayClose

focuscura

MiBida

…and many others

zoom

Digital Day-time Activities

Pilots in The Netherlands during COVID-19

- Support social contacts, meaning during the day/week, loneliness
- Supports people with mobility problems, people on a waiting-list

Lower stress…lower pain

TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

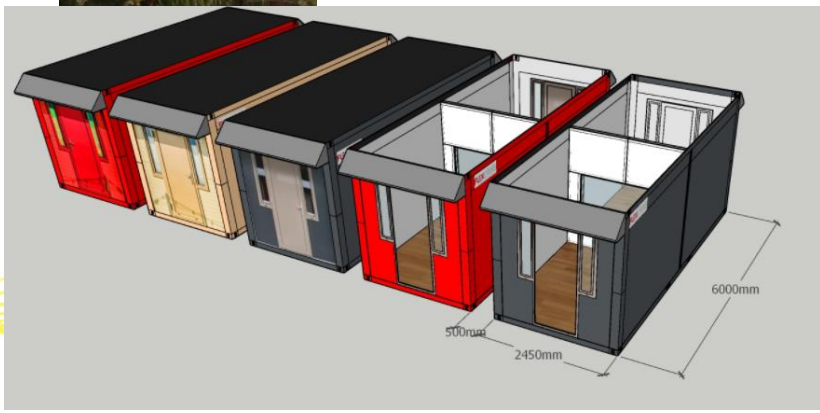
Vilans

UP!

Nederlands	Nederlands	Nederlands
Vrijdagmiddag	**Vrijdagmiddag**	**Vrijdagmiddag**
4 september, 14.00 uur	11 september, 14.00 uur	18 september, 14.00 uur
Thema: Hoop	Thema: Vriendschap	Thema: Moed
SELECTEREN	SELECTEREN	SELECTEREN

FLEXotels
Short Stay Solutions

weart
touch the future



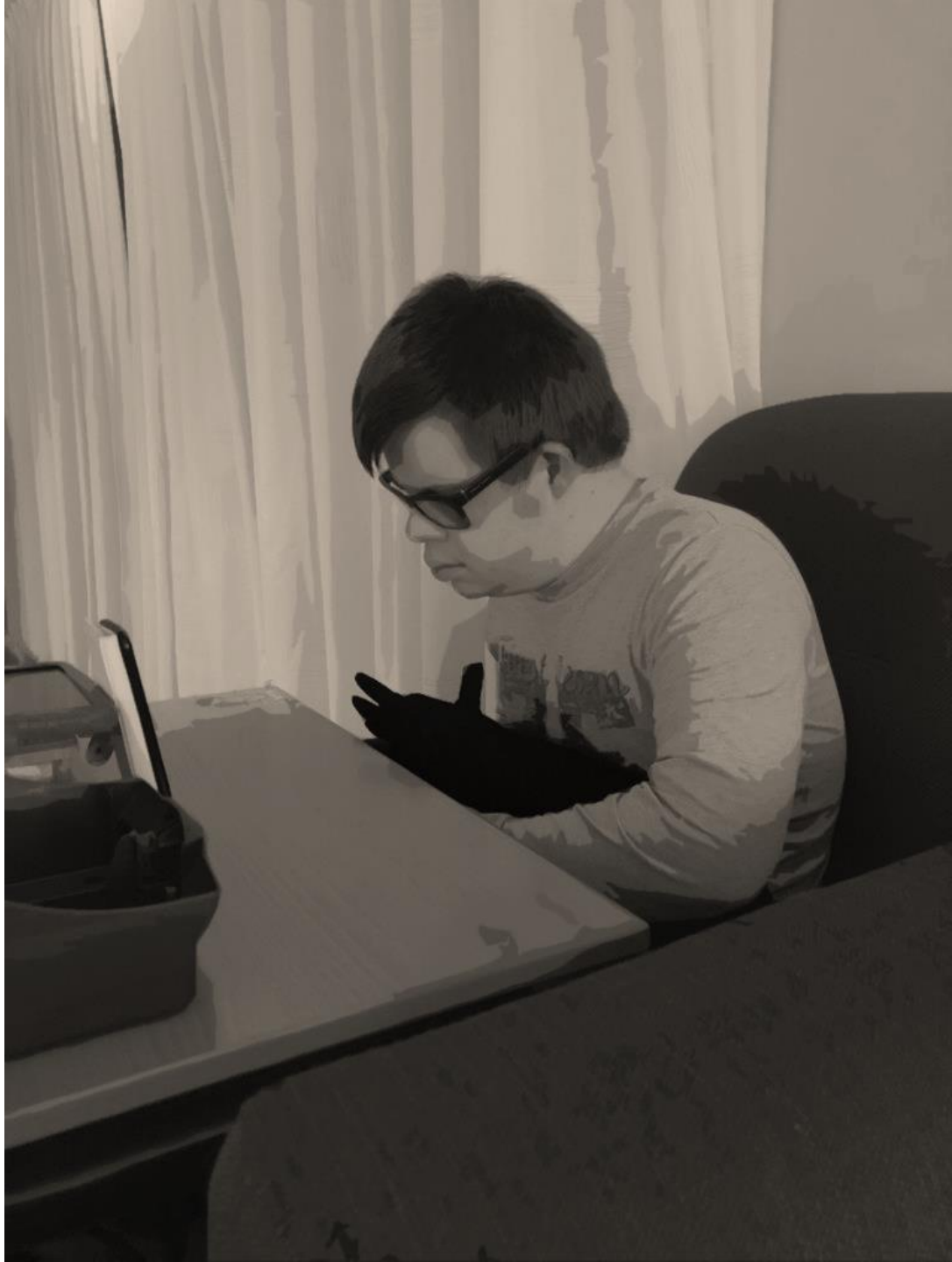
Feel hey

WARM CONTACT

Meaningful try-out during pandemic

Preliminary results

- Relaxing, more focus, quality of conversation
- Products not directly related to social aspect, yet connected to video calling
- Personalized approach needed



- Vilans & Me
- Opportunities for the Seniors of Today
- How we Work
- Innovations & Integration
- Learn from Failures

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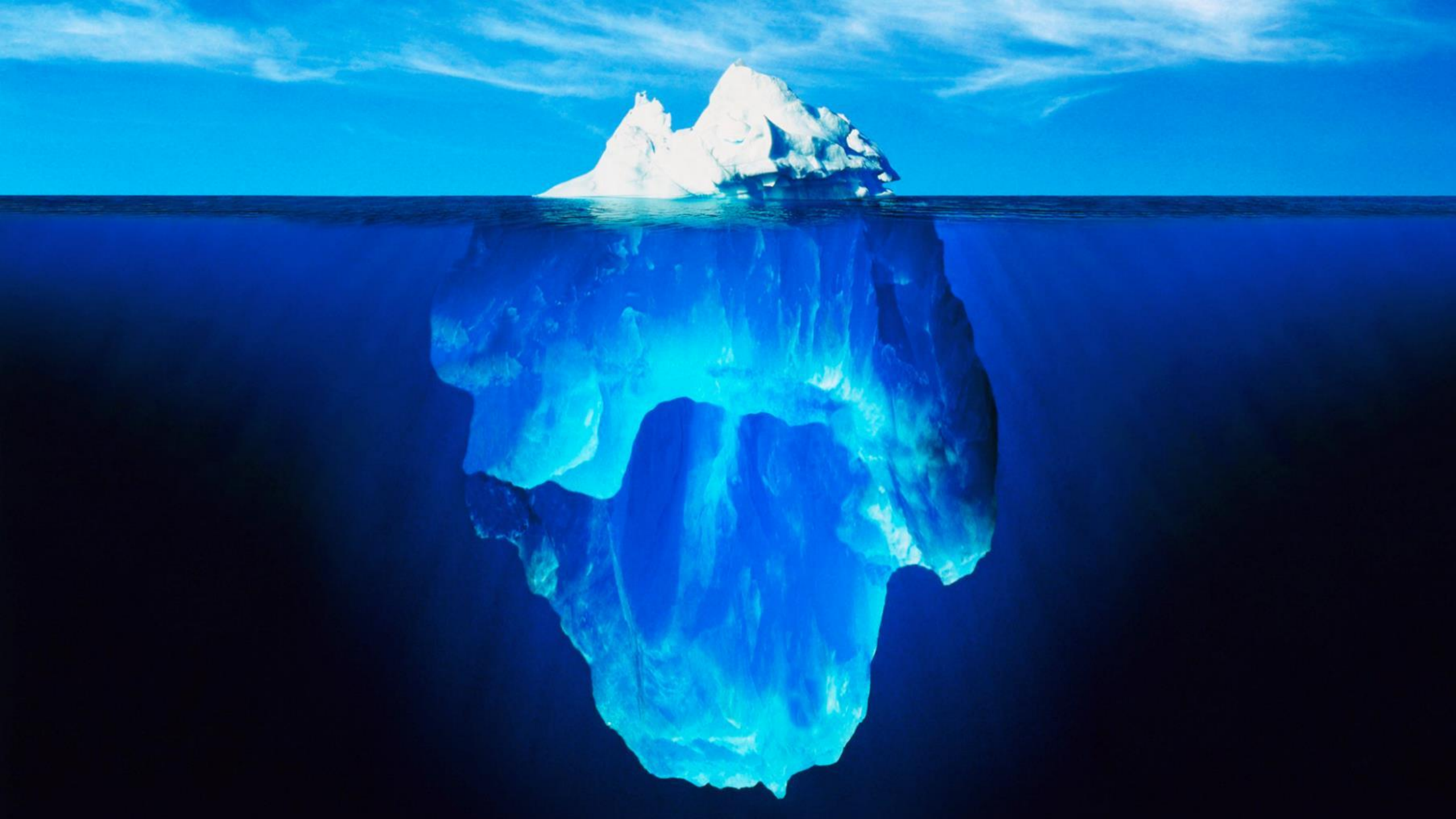
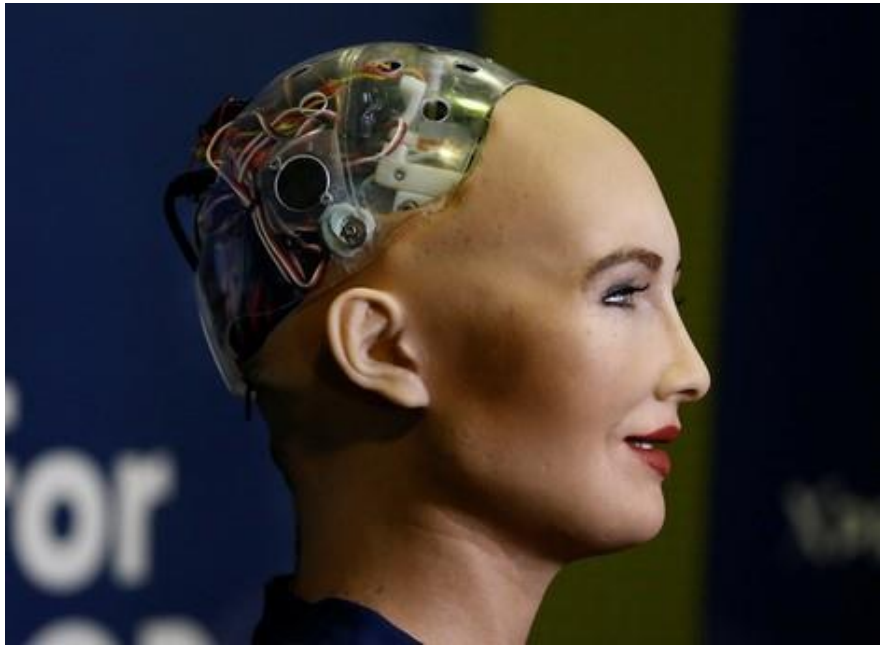
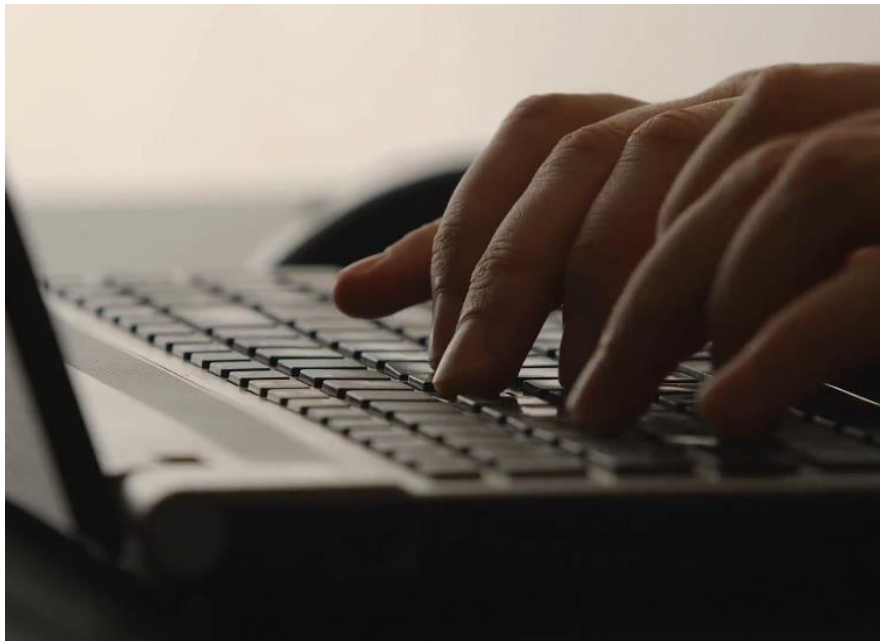


"Positive findings are around twice as likely to be published as negative findings. This is a cancer at the core of evidence-based medicine."

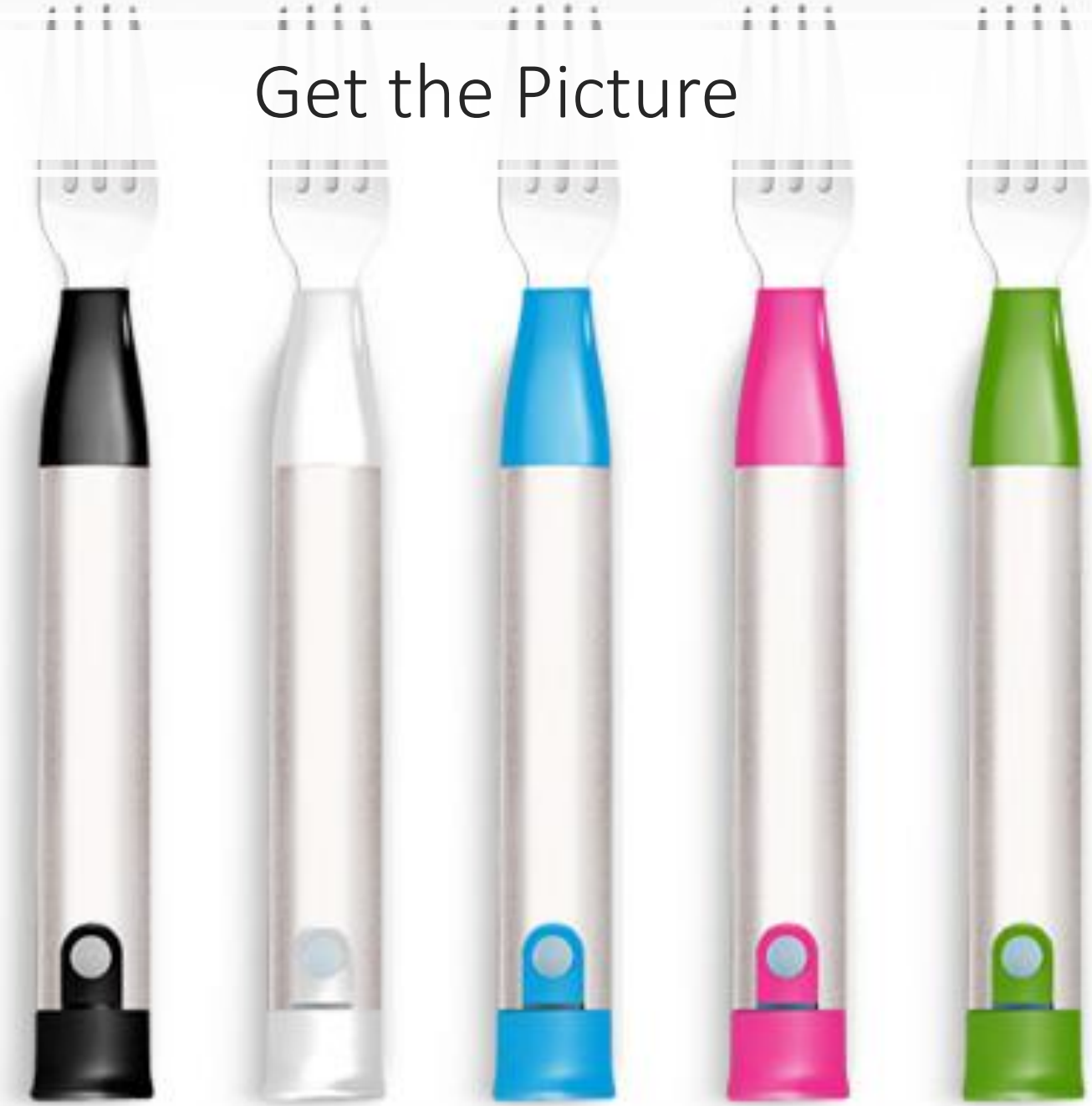
- Ben Goldacre

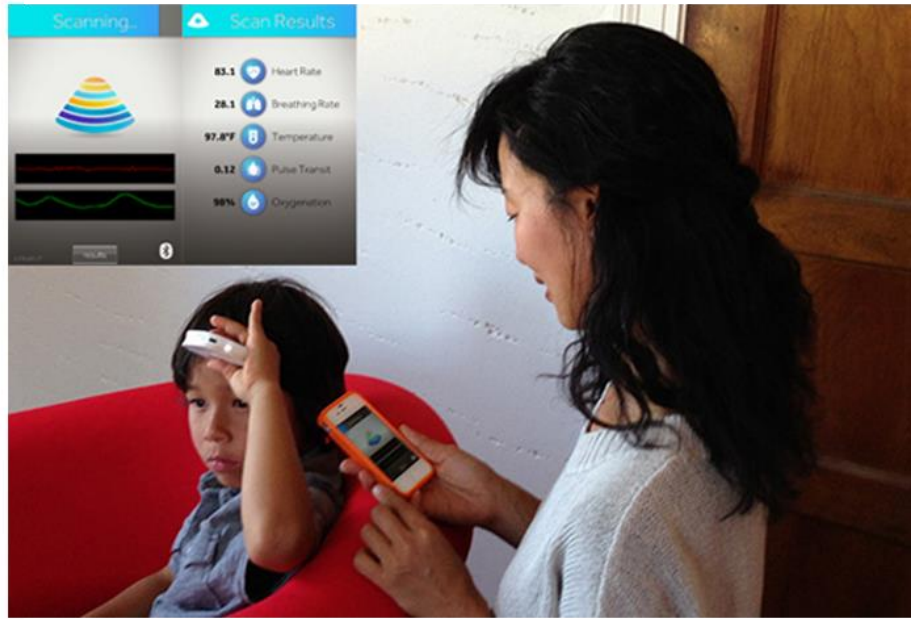




More Human than Human? “Sophia”

Get the Picture





Gebruikersrecensies

dennis sonsbeek 21 juni 2015

★☆☆☆☆

Useless Does not work and no support.

Hans Jacobs 15 april 2015

★★★☆☆

Werkt ok maar kan qua nauwkeurigheid en reproduceerbaarheid wel wat beter

Victor Beffers 27 februari 2015

★★★☆☆

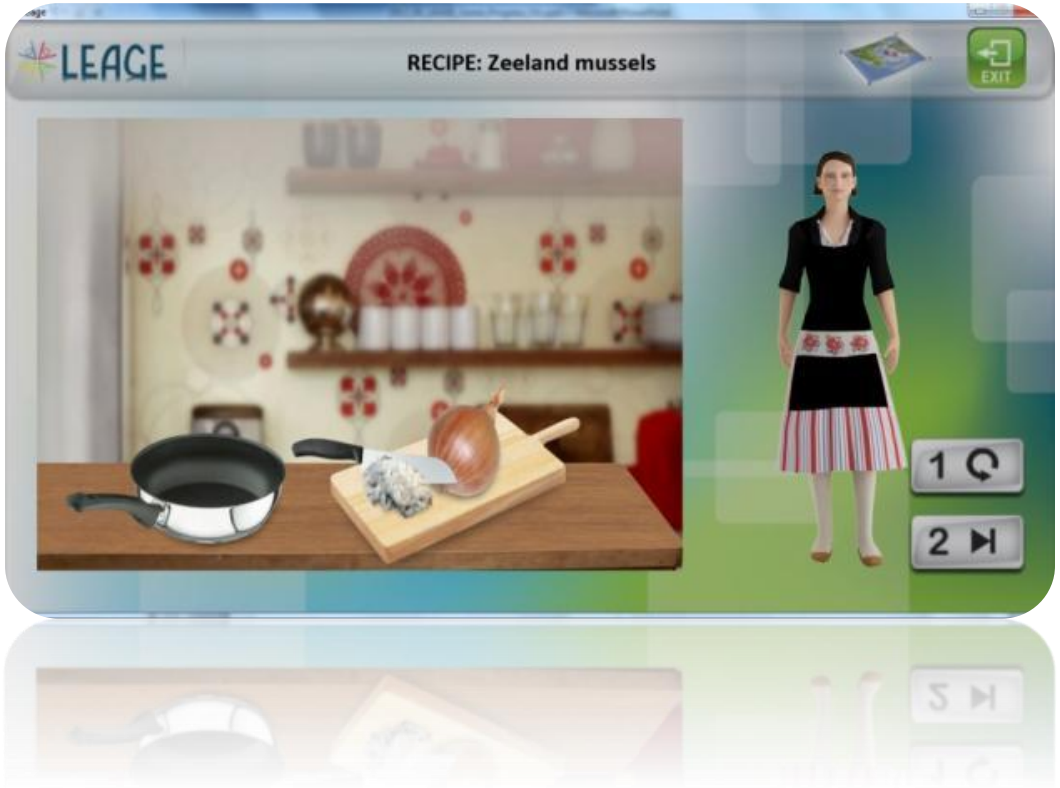
Nice but can be improved
Temperature worked just few times, limited info (but innovative nevertheless)

Steven Hanekroot 15 maart 2015

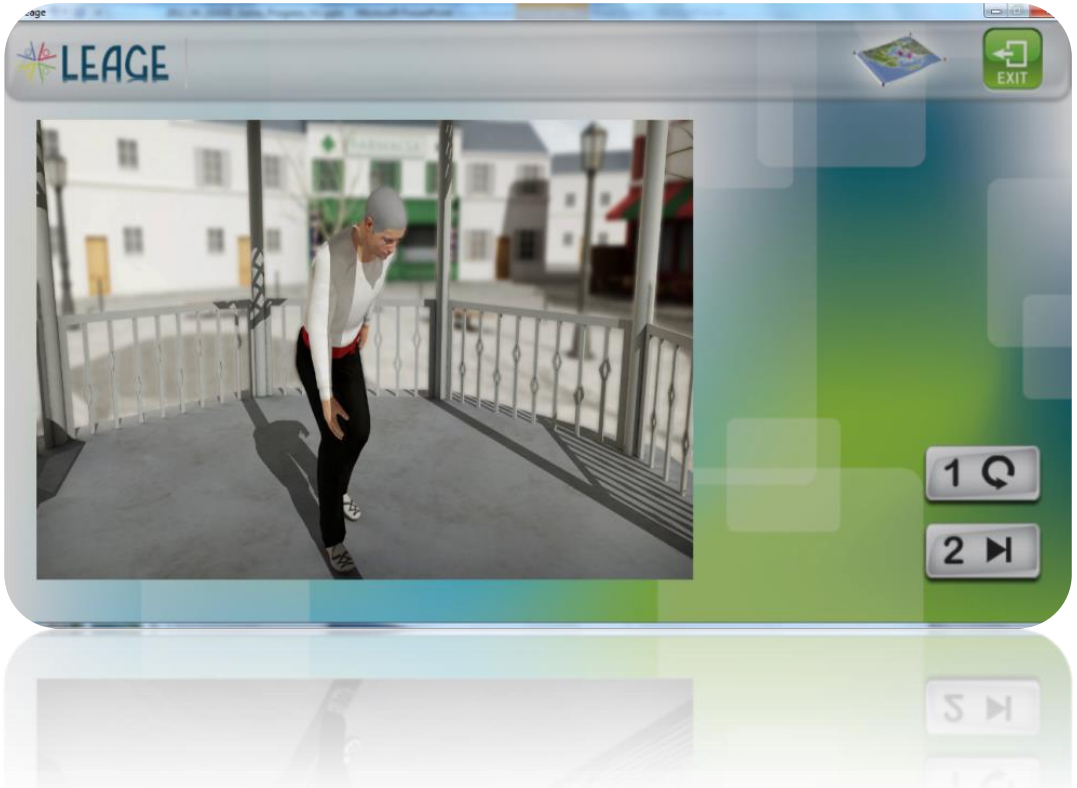
★★★★★

The next step in quantified self; very interesting data Easy to use, implications far reaching. Now me and the people around me can scan important vital signs quick and easy in different situations and monitor them daily. Eg it looks like my heart rate is too low and blood pressure high when sitting down and working long stretches. So I guess I should take more short walking breaks. Now I want to combine these readings with fitbit, blood and other monitoring data. Fab start ☺

Cooking games



Physical games



Teaching Older Adults to Play Minecraft

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ABSTRACT

Digital games have become a popular pastime among older adults and are increasingly used in therapeutic interventions for this age group. Nonetheless, the literature on how to instruct older gaming neophytes to a new medium is scarce. The goal of this paper is to contribute to the body of knowledge on game instruction for older adults through the exploratory, in-depth analysis of a 5-session workshop with 3 retired older adults (aged 64, 67 and 78). During this course, the older adults were introduced to the game Minecraft. The paper provides a number of recommendations with regards to the instruction, as well as an overview of how the participants perceived the game and the potential added value it holds for their lives.

Categories and Subject Descriptors

I.6.8 [**Types of Simulation**]: Gaming - K.8.0 [**General**]: Games

Keywords

the game is popular with young children, and the prospect of getting to know a hobby of their grandchildren was expected to be enticing to our target age group [13].

In Minecraft, there are thousands of additional content sources and game modifications (known as "mods") that extend the base game to a large extent, but for the workshop we relied on "vanilla" (i.e., unmodified) Minecraft. Primarily, we aimed to avoid overwhelming the participants with unnecessary complexity. This is to increase comfort and familiarity as the participant increases their aptitude for the game. This can be called "progressive disclosure", characterized by slowly introducing incrementally more complexity only as quickly as the player is comfortable [8].

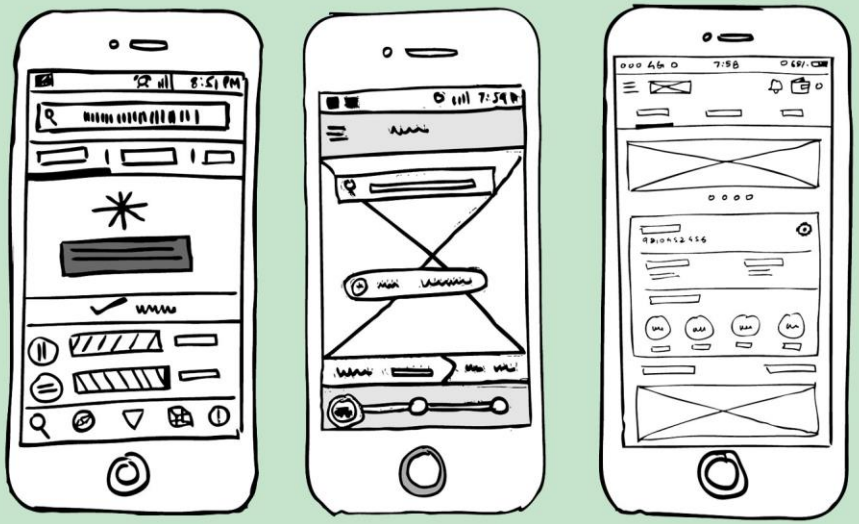
The study had the following research goals:

1. to study the introduction of Minecraft in the lives of older adults (through a classroom experience),
2. to research the possibilities and challenges of playing

FROM CONSTRAINTS TO ABILITIES

FAILING FAST AND OUT LOUD

Julie Arts (AAL Forum 2019)



PROTOTYPING

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BE HONEST ABOUT POSSIBILTIES
DOWN TO EARTH

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- Learn from Failures

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Thank you!

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