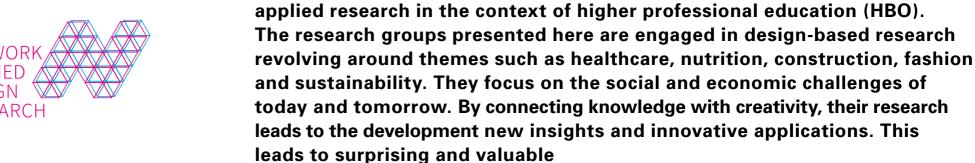


### WWW.WRKNPRGRSS.NL

Research carried out at universities of applied sciences is made possible through financial and other support from the Task Force for Applied Research (SIA). SIA's sponsoring of this exhibition is an example of such support. The Task Force for Applied Research (SIA) is part of the Netherlands Organisation for Scientific Research (NWO).









## results for individuals, for organisations and for society as a whole.

For the Work in Progress exhibition, various universities of applied sciences have come together for the first time to present their design-based research. The exhibition presents a broad overview of some of their results, ranging from useful innovations such as energy-generating carpets and a unique bridge made of natural materials to edible green walls.

The exhibition is the joint initiative of the Network Applied Design Research (NADR) that has joined forces to improve the quality and visibility of applied design research. Both the collaboration within the network as well as some of the projects presented here are still in the development phase, hence the name of the exhibition: Work in Progress.

With design-based research, universities of applied sciences are contributing to the realisation of the Strategic Research and Innovation Agenda (SRIA) of CLICKNL | DESIGN, the representative of the Dutch top sector Creative Industry. While each of the research groups uses a different approach, there are roughly three basic directions:

- Research into design: research that aims to describe or explain the way designers work.
- Research for design: research that aims to provide knowledge that can be used in design projects.
- Research through design: research that uses the design process to generate knowledge.

### Amsterdam University of Applied Sciences (HvA)

The Technical Innovation & Enterprise research group does design-based research on circular materials, products, systems and business models that could help lead to the realisation of a circular city.



### HU University of Applied Sciences Utrecht

The Co-Design research group develops and validates tools and methods for involving people throughout the process of designing people-product-service systems, with a focus on systemic innovations that empower people to care for themselves, for each other and for the environment.



#### Rotterdam University of Applied Sciences

Creating 010 conducts practice-oriented research on new types of knowledge created in transdisciplinary collaboration between artists, designers, ITers and other professions.



### The Institute of Network

The Institute of Network Cultures (INC) analyzes and shapes the terrain of network cultures through events, publications, and online dialogue.

Avans University of Applied

Sciences and the Centre of

group aims to collect, develop, valorise and disseminate knowledge

about the application of biobased

materials in construction and civil

of Expertise Biobased Economy

The Research group Innovation of

the Building Process & Technology

focuses on integrated building- and

the Centre of Expertise Sustainable

avans

design processes and the required

collaboration. It collaborates with

Innovation of Avans.

(CoE BBE).

engineering. In doing so, they work closely together with the Centre

**Expertise Biobased Economy** 

The Biobased Construction research

institute of network cultures

#### NHL University of Applied Sciences

The university-wide Open Innovation research group investigates how innovative 'non-design' professionals can develop new products and services in designoriented ways within their own working environments.

#### NHL

### Saxion University of Applied Sciences

The Industrial Design research group designs products based on applied research focused on target group centered design, innovative materials & technologies, and sustainability. Saxion FabLab Enschede is its experimentation lab.



### HAN University of Applied Sciences

The Royal Netherlands Society of Engineers (KIVI) sponsored chair and multidisciplinary research group *Architecture in Health* focuses on innovations in the area of building for health and for a smart living environment.



#### ArtEZ University of the Arts

Under the title Exploring the New Domestic Landscape, the Product & Interior Design research group researches, together with the Centre of Expertise Future Makers, future scenarios for living environments.

ArtEZ

## Fontys University of Applied Sciences

The Health Innovations & Technology (HIT) research group are experts in designing technology and care concepts and in acceptance and implementation issues, always with a key role for the user.



#### CLICKNL | NextFashion Innovation Network

The NextFashion Innovation Network is responsible for the innovation agenda for the fashion sector within CLICKNL. The network focuses on the value of fashion, the relationship between fashion, technology and sustainability, and reinforcing the innovation system of the fashion sector.







Designer of the Unusual (Eric Klarenbeek)

## **COMPOSING THE NEW CARPET**

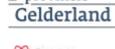
ArtEZ University of the Arts

















#### Project Partners

Carpets for Buildings (Marcel Kronenburg), Designer of the Unusual (Eric Klarenbeek), Studio for Object Oriented Information Design & Research (Richard Vijgen), Studio Siem + Pabon, Studio Tjeerd Veenhoven, Bonar, Industry Park Kleefse Waard, Modint, Weltevree and the Food & Biobased Research group at Wageningen University and Research Centre (WUR).

#### **Funding**

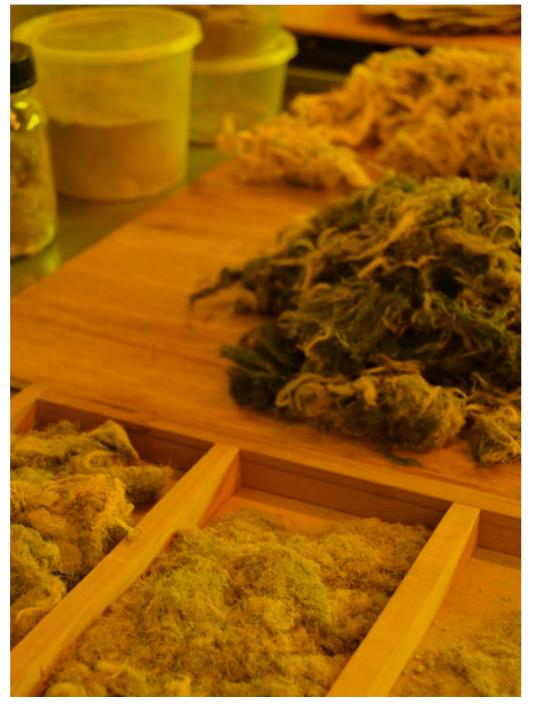
The Province of Gelderland, ArtEZ University of the Arts and all project partners.

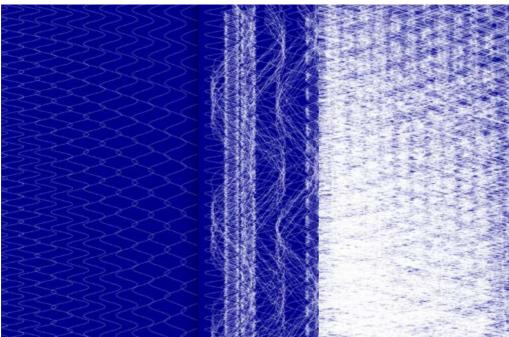
## Gazing into the crystal ball of carpet innovation

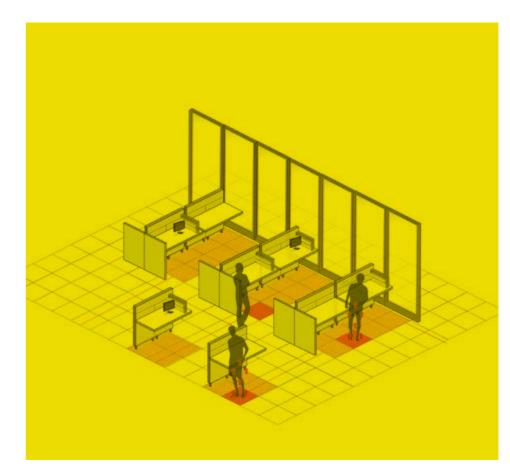
#### RESEARCH QUESTION

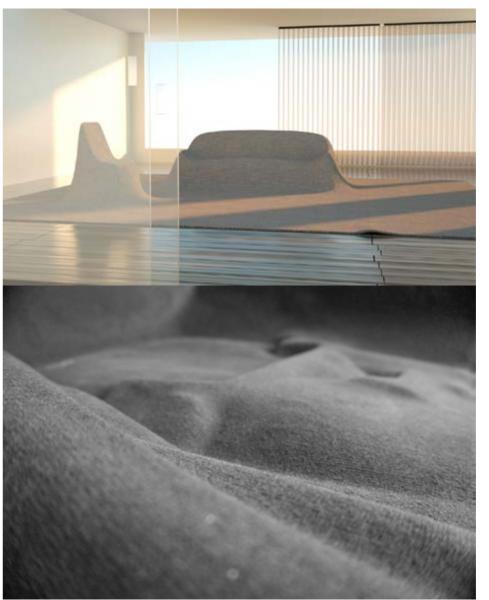
How can designers contribute to the Dutch carpet industry's innovation agenda? In 2012, the Dutch trade association for the fashion, interior, carpet and textile industries (Modint) drew up a roadmap, identifying (potential) opportunities and threats for the carpet industry in the period leading up to 2030. The report concluded that innovations will be needed in the areas of;

- The sustainable, circular and flexible (on-demand) production and the use of (biobased) materials
- New applications on the basis of digital technologies in carpets
- New 3D applications for carpets (and carpet waste products).









#### INNOVATION

The research aims to achieve innovations in the carpet industry that will involve applying existing (natural) materials (e.g. algae) and technologies (e.g. 3D printing, smart textiles) in entirely new and innovative ways.

#### **METHOD**

Five designers were asked to conduct research through design (RTD) to come up with new scenarios that would contribute to innovations in the carpet industry. Using the RTD method,

a researcher reflects not on what already exists, but rather on what could exist. In an iterative process between reflection and creation, between personal motivations and societal needs, the design researcher studies how a new product or service could contribute to a better living environment.

Left top Studio Tjeerd Veenhoven
Left bottom Studio for Object Oriented
Information Design & Research (Richard Vijgen)

<u>right top</u> Siem + Pabon (Siem Lenders) <u>right bottom</u> Carpets for Buildings (Marcel Kronenburg)





# PREMIÈRE: BRIDGE MADE ENTIRELY FROM BIOCOMPOSITES

#### **Project Partners**

Project 1: 'Biocomposites for construction and civil engineering applications: Biobased Bridge': The Centre of Expertise Biobased Economy (Eindhoven University of Technology and InHolland University of Applied Sciences), RO&AD Architecten, NPSP Composites, Poly Products, MC Technics, as well as Pantanova, Stapper Duurzaam Advies, Modified Materials, Millvision, Antea Group, Virida, C-Max Technologies, and SBRCURnet.

Project 2: 'B3 Fully biobased pedestrian bridge': Eindhoven University of Technology,

Delft University of Technology, the Centre of Expertise Biobased Economy, NPSP Composites.

#### Funding

'Biocomposites for construction and civil-engineering applications':

The RAAK funding scheme of the Taskforce for Applied Research (SIA). 'B3 Fully Biobased Pedestrian Bridge': 3TU Lighthouse programme and all project partners.



Due to a lack of familiarity with the technical properties of biocomposites and how those relate to existing regulations, no bridges made entirely from biocomposites have ever been built anywhere in the world. Our main research question was to determine the feasibility for such a fully biobased bridge. A huge effort was undertaken to investigate the mechanical and other properties of flax- and hempbased composites.

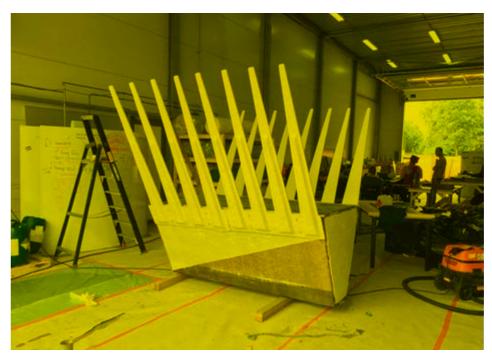
Subquestions included the following:

- What does the market for biocomposites look like?
- What are the properties of biocomposites?
- How can we design with those properties?
- How do the properties of biocomposites relate to the current regulations and user requirements?
- How can biocomposites be produced in a cost-effective way, with a beneficial environmental impact and less chance of failure?
- How can we design a biobased bridge?





# Feasibility and demonstration of a fully biocomposite pedestrian bridge



With these two projects, we demonstrate our newly accumulated knowledge by constructing a 14-metre-long pedestrian bridge spanning the Dommel river on the campus of the Eindhoven University of Technology (TU/e), made entirely from composites. The bridge is made of a combination of flax and hemp fibres and epoxy resins, applied around a core of PLA foam. This unique combination has never been demonstrated until now. This exhibition forms the première: you can see part of the first bridge ever to be made of biocomposites.

#### **METHOD**

By using an iterative design research methodology we could develop, test and improve the functionalities and production process of biobased materials, components and the total bridge. This by means of thorough material research at InHolland's Composites Lab in Delft and tests at TU Eindhoven. Further testing / prototyping and developing of components and the total bridge is realized at the SPARK Lab (Rosmalen), with all project partners.

#### INNOVATION

Due to technical requirements regarding factors such as adhesion and resistance to water and UV light, no bridge has ever been made entirely from biocomposites anywhere in the world so far. We looked for – and (to a large extent) found – solutions for those requirements, including the use of flax and hemp fibres, biobased epoxy resins, the vacuum infusion process and biobased coatings.









Sustainable Textile Development

## CLICKNL | NEXTFASHION INNOVATION NETWORK















<u>left</u> Digital Patterns <u>right top</u> TMO RetailLab right bottom 3D Printed Dress

## Research network stimulates innovations in fashion & textiles





#### **RESEARCH QUESTION**

With an annual turnover of EUR 20bn, the Dutch fashion and textile sector comprises large, internationally operating companies but also small designer labels, each facing innovation challenges of its own. To be able to bring about innovations within the sector, there need to be alliances between knowledge institutions and companies (sometimes from different 'Top Sectors', such as High **Tech Systems and Materials** (HTSM) or Logistics).

The urgency to collaborate in innovation projects is quickly increasing due to the effects of the growing attention for:

- sustainability in both social (fair wear) and environmental (circular textile) aspects
- the globalisation of production chains
- the digitisation of design, production and sales processes
- the rise of new business models.

This calls for cross-border and cross-discipline research and innovation.

#### **METHOD**

CLICKNL | NextFashion is an innovation network. It played a major role in building up a close collaboration between its partners, both knowledge institutions and companies. This collaboration came about by means of:

- regular consultations and knowledge exchange
- knowledge-sharing in connection with project proposals (NWO, SIA, Horizon 2020)
- meetings between relevant contacts from each person's business network
- joint development and execution of research projects.

#### INNOVATION

Fashion design and textile research forms an enormous impulse for new technology and business innovation. Examples include:

- developing sustainable materials and circular production chains
- digitising the design and production processes
- developing smart textiles and wearables
- testing retail technologies with consumers.

On an international level, there is a lively spin-off in the form of the NETFAS network, but also involvement in European research projects via the European Technology Platform for the Future of Textiles and Clothing.

nextfashion@clicknl.nl







# THE EATABLE WALL: TOWARDS A GREEN AND ACTIVE LIFE







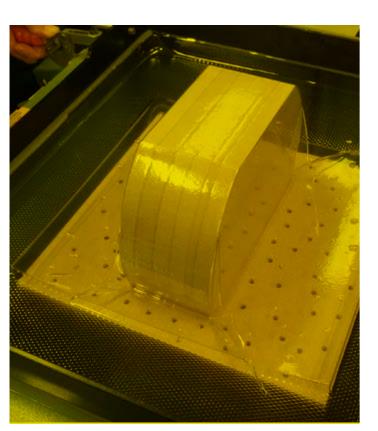
#### Project Partners

The Royal Netherlands Society of Engineers (KIVI) chair Architecture in Health (research) and the Bachelor programme in Industrial Product Design at the Institute of Engineering (education), both at HAN University of Applied Sciences, and the Bachelor programme in Garden and Landscape Architecture at VHL University of Applied Sciences (education).

#### Funding

HAN University of Applied Sciences.

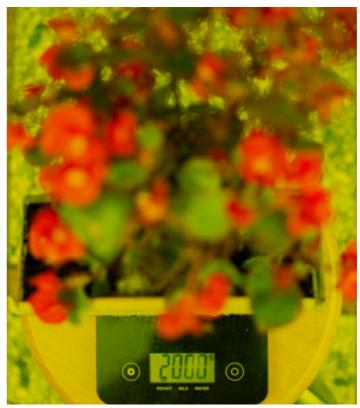
Despite an ageing population, the available budget for elderly care is being cut year after year and everyone is expected to continue living independently at home to a later age. The Royal Netherlands Society of Engineers (KIVI) sponsored chair and research group 'Architecture in Health' (AiH) at the HAN University of Applied Sciences designs and develops prototypes that can support elderly people and others who need assistance in their activities of daily living (ADL), while also encouraging them to remain active. The research question of this specific project is: to what extent can an eatable green wall stimulate the elderly and wheelchair users to eat healthy food and to remain physically active in their own residential environment?





Indoor gardening by means of an interactive wall helps the elderly remain fit





#### **METHOD**

By means of research through design and a process of interdisciplinary co-creation, students of the bachelor programmes Industrial Product Design at HAN University of Applied Sciences and Garden and Landscape Architecture at VHL University of Applied Sciences have made designs together with researchers and designers from the AiH research group that combine the principles of sensory and self-sufficient design. One of the prototypes will be placed in the living lab of the Fit the Future project at 'Industriepark Kleefse Waard' in Arnhem. The effects that the indoor greenery and gardening will have on the inhabitants will be investigated there.

#### INNOVATION

The eatable wall is a new combination of greenery and smart technologies. It is not only interactive but also dynamic in terms of its height, which means that people who have limited mobility (e.g. the elderly and wheelchair users) will be able to enjoy gardening inside their own home and thus

- remain active
- eat healthy food
- · continue to enjoy a (former) hobby.



Research group Co-design, project team Powertools, University of Applied Sciences Utrecht

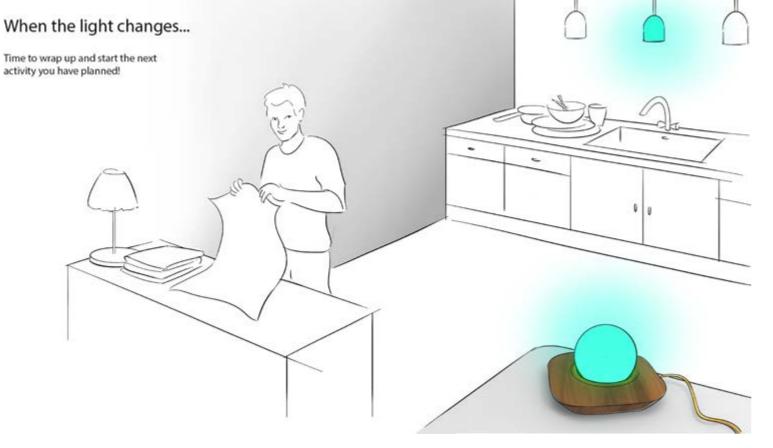
## **POWERTOOLS**

#### Project Partners

The Co-Design research group at HU
University of Applied Sciences Utrecht, the
Zorg voor mensen met een verstandelijke
beperking research group, the Lokale
dienstverlening vanuit klantperspectief
research group and the Levensloopbegeleiding
bij autisme research group, all three at the
HAN University of Applied Sciences, the
Human Centred Design department at the
University of Twente, TNO, Siza, Philadelphia,
Intermetzo, Kaliber, NoXqs, Oneseconds,
and U CREATE Centre of Expertise Creative
Industries.

#### Funding

Taskforce for Applied Research (SIA) and all project partners.

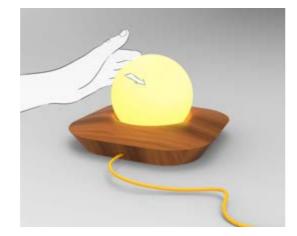




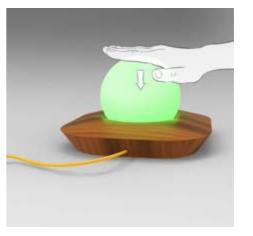
## Designing for empowerment

#### **RESEARCH QUESTION**

People with either a minor intellectual disability or autism often find it difficult to learn the practical skills they need for day-to-day life. The ability to live independently, without depending on a caregiver, is nevertheless becoming more and more important in our society. There are special technological tools that can empower such clients, including apps that help give structure to their days. While such tools are promising, they are often driven by the technological possibilities. If the talents, skills and needs of the users would form the basis for such tools instead, they would have a much greater chance of actually supporting people in daily life. This requires a participatory approach in which designers develop the necessary technology together with clients and caregivers.







#### **METHOD**

This project makes use of the participatory 'research through design' (RTD) approach, which centres on the development of empowering technologies together with clients and caregivers. While carrying out design cases at three care facilities, we are developing new knowledge about the content of the technology (design principles for this target group) and the participatory design process (applied design method).

#### INNOVATION

The expected results of this study include the following:

- Design methods and principles for the participatory design of technology that will help empower people with an intellectual disability.
- Guidelines for the professional practice of caregivers to facilitate the introduction of new empowering technology for their clients.
- Three technological tools aimed at making people with an intellectual disability better able to perform their activities of daily living more independently.





NHL













Frisian Design Factory, NHL University of Applied Sciences, Stenden University of Applied Sciences, Boei BV, Friesland College, D'Lab Fablab.

**Project Partners** 

The Frisian Design Factory is a member of the Design Factory Global Network, together with Aalto University in Helsinki and Design Factories in cities around the world including Shanghai, Melbourne, Santiago de Chile, Seoul, New York, Geneva, Porto and Riga



## FRISIAN DESIGN FACTORY & OPEN INNOVATION HUB **BLOKHUISPOORT**



How can a former prison be transformed into a regional Open Innovation Hub? And how can such an innovation hub lead to the successful development of new products, services and activities for companies in the north of the Netherlands?

Those are the questions underlying the development of the Frisian Design Factory, situated in Leeuwarden's former Blokhuispoort prison.

The development of physical and organisational collaborative platforms --- where various actors can work together to solve complex social challenges -- is expected to help strengthen the innovative force of the north of the Netherlands.

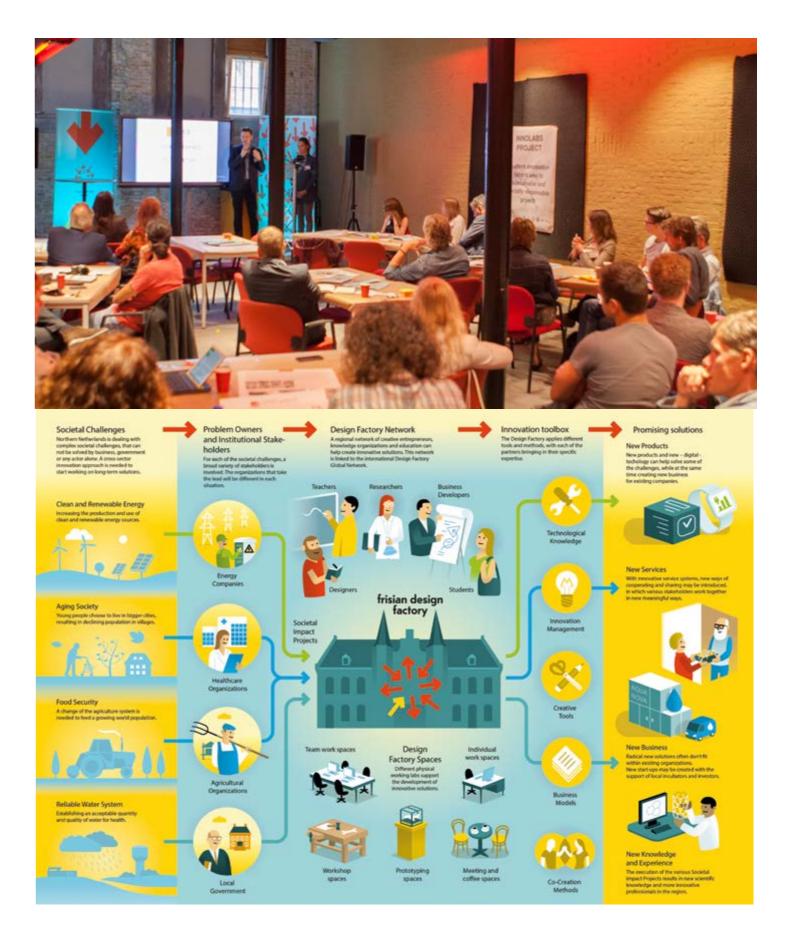
#### **METHOD**

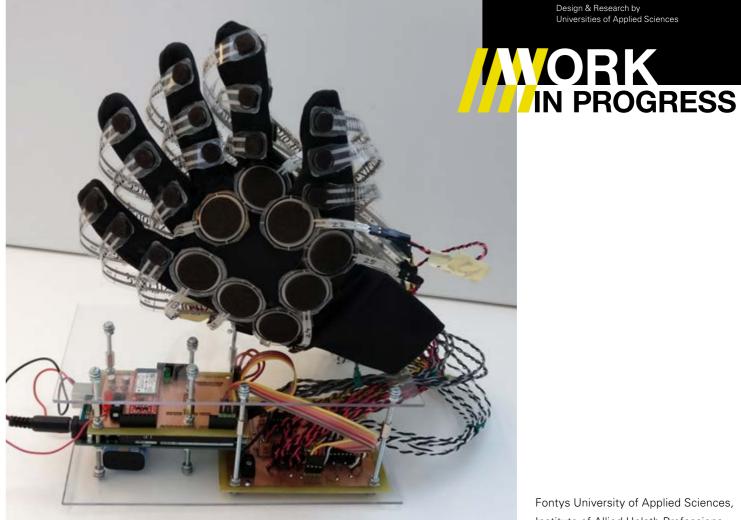
The development of the Frisian Design Factory and Open Innovation Hub Blokhuispoort can be seen as design-based action research. During the research project, the new location is being designed, developed and tested. The evaluation of this strategic intervention involves, among other things, a systematic network analysis to specify the relationships between the various regional stakeholders. This PhD research is executed in a cooperation between the NHL Open Innovation research group and Delft University of Technology.

#### INNOVATION

This way of collaborating and the development of the physical and organisational environment of the Frisian Design Factory and Open Innovation Hub Blokhuispoort form part of a transition at the level of the regional innovation system. In other words, it concerns an innovation on the level of society. Within this environment, new products and services are being created together with local companies and organisations. An example is the development of a number of ambitious visions of the future, each of which shows how the city of Leeuwarden can better deal with water and energy by using an Eco-Acupuncture approach. This project is executed together with students from Melbourne University.

## turning a former prison into a passion-based co-creation platform





Fontys University of Applied Sciences, Institute of Allied Helath Professions

Design & Research by Universities of Applied Sciences

## THE DIGITAL SMART **GLOVE DESIGN PROCESS**





















# Digital measurement replaces an unpleasant casting process

#### RESEARCH QUESTION

Some 100,000 people in The Netherlands use an ankle-foot orthosis (AFO). AFOs are used by people who have lost control of the muscles in their feet, including those who have had a stroke or people with talipes equinus (clubfoot).

The traditional method for casting an AFO involves plaster, which is uncomfortable for the patient. This method also lacks an objective means of measuring how much pressure is exerted to correct the position of the foot. Orthopaedic service providers need a more patient-friendly casting process that allows them to measure the pressure exerted while also making the geometry visible. Hence our research question: 'What device can we design to measure and visualise both pressure and geometry?'





#### INNOVATION

This new measuring instrument contributes towards the digitisation of measured healthcare data. The digital measurement will replace the plaster of Paris method.

Equipped with position and pressure sensors, the smart glove will enable a specialist to digitally determine the geometry of the lower leg, while at



the same time measuring how much pressure is being applied to a particular part of the body. It is expected that this innovation can also be applied in related specialist areas such as physiotherapy or within the serious gaming industry.

#### **METHOD**

The iterative design process began with a study of the relevant literature on concepts of existing methods, sensors and materials. The partial solutions of existing methods and measuring principles were then positioned on a morphological map and a proof of principle was made. To visualise the data obtained, special software is under construction.











Yanti Slaats and Inge Oskam of the Urban Technology research programme, students from the Product Design major and from the Intelligent Environments minor, all at Amsterdam University of Applied Sciences (HvA); the 'Knowledge Mile' living lab community; Parus Plant Light, Grown.

The Urban Technology research programme of Amsterdam University of Applied Sciences (HvA) and the Amsterdam Creative Industries Network (i.e. the joint centre of expertise of Amsterdam University of Applied Sciences (HvA), InHolland University of Applied Sciences and Amsterdam University of the Arts).





## **SMART URBAN FARMING**

Smart urban farming involves the production of food using LED grow lights, climate control and other innovative cultivation technologies. With this technique it is possible to cultivate crops in cities, locally and demand-driven, and hence to contribute towards realising a circular economy. To demonstrate the possibilities of this new technology, various different prototypes have been made. But how do you design products with a technology that is radically different from what users are accustomed to? And how do you get that technology to meet the users' needs and preferences? We posed ourselves the following research question: What are design criteria for a smart urban farming unit that will enable users to grow vegetables at home?





Growing your own food in a high-tech greenhouse in the city?



#### METHOD

The project involved qualitative, exploratory research consisting of

- conducting interviews
- developing prototypes.

The interviews focused on users' attitudes with regard to smart urban farming and their needs and preferences in terms of vegetable-cultivation units for home use. The prototypes were developed using human-centred design and were used to get the participants to appreciate the significance of the radical innovation.

#### INNOVATION

This research project generates knowledge about the design of radically innovative consumer products. It demonstrates how design criteria can be formulated – already at an early stage of the design process – on the basis of the needs and preferences of future users. The research contributes to the human-centred design process for vegetable-cultivation units, which will enable a more circular food supply.



















## **DESIGNING FOR CAREGIVERS**

### Ontwerpen voor zorg thuis

OVER ZORGVERLENERS THUIS V ONTWERPCASES

ONTWERPTOOLS & ERVARINGEN

ALLE DOCUMENTEN Q



Hoe ontwerp je slimme en bruikbare producten voor thulszorgmedewerkers of mantelzorgers? Ben je op zoek naar praktische Informatie en ontwerptools? Wij hebben het in kaart gebracht. > Lees meer over ons.



#### **OVER ZORGVERLENERS THUIS**

Leer de doelgroep kennen

Praktisch overzicht van kenmerken en werkzaamheden van thuiszorgverleners

Lees meer >



#### **ONTWERPCASES**

Ontwerpvoorbeelden voor de thuiszorg Voorbeeldcases waarbij de thuiszorgverlener centraal staat in het ontwerpproces



#### **ONTWERPTOOLS & ERVARINGEN**

Praktijkervaringen van (student)ontwerpers

Methodes die volgens ontwerpers geschikt zijn voor ontwerpen voor de thuiszorg

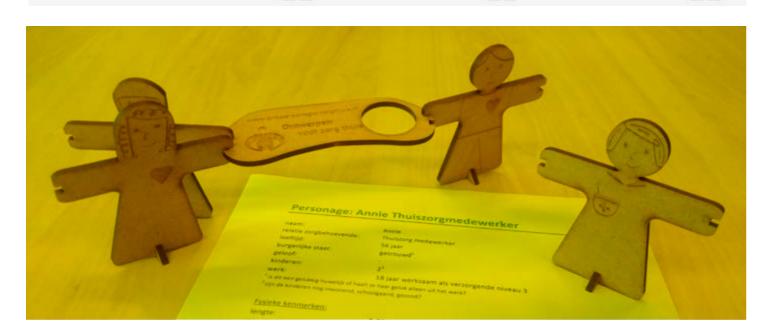


Wensen en behoeften mantelzorgers Problemen van mantelzorgers.



Training in hulpmiddelgebruik Tips bij de ontwikkeling van instructievideo's.





top The web-based toolbox 'Designing for homecare'

bottom The role-play game with personality

right User research with the hoist

#### RESEARCH QUESTION

#### **How can SME entrepreneurs** or product designers develop products that will better match the wishes and mindset of caregivers?

Despite the tireless efforts and intense involvement of caregivers, homecare is not always as effective as it could be. Both professional homecare providers and informal caregivers run up against various problems when using care products. Those who develop innovations for homecare usually focus on the client, while the role of the caregiver is crucial. Entrepreneurs (SME) and designers often appear to have little knowledge about caregivers. As a result, this target group is often simply 'forgotten'.

#### INNOVATION

The 'Designing for homecare' toolbox supports designers, companies and institutions that want to innovate for homecare.

The knowledge gained about the target group and the experience gained with design tools have been brought together on the (Dutch) website www.ontwerpenvoorzorgthuis.nl. It also contains a list of best practices. User research has shown that the use of hoists at home is an obstacle for many. For this reason the Wup, a hoist designed especially for homecare, was developed.

#### **METHOD**

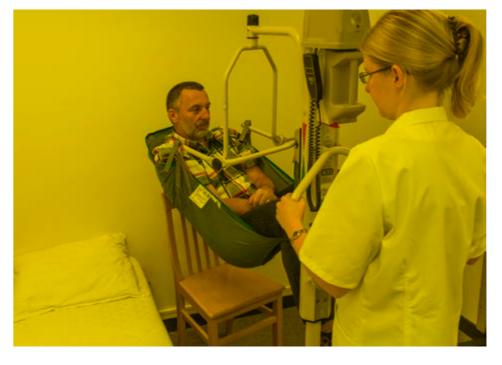
The target group was carefully mapped out and various design cases are implemented in cooperation with the caregivers. In the process, experience with various design and research tools was gained, namely

- User research in practice: shadowing caregivers, observing, interviewing and conducting panel discussions.
- Development of a role-play game: scenarios based on personality types were designed to increase empathic skills of designers.

www.ontwerpenvoorzorgthuis.nl

## Toolbox for successful innovation in homecare







## WUP: THE HOIST FOR USE AT HOME









#### Project Partners

JOYinCARE, NieuweWeme, the Industrial Design research group and the Mechatronics research group at Saxion University of Applied Sciences.

#### Funding

TechForFuture, Saxion University of Applied Sciences, JOYinCARE, and NieuweWeme.



How would the ideal hoist for homecare look? This question came up during the 'Designing for Caregivers' project.

As people live longer and need intensive medical care at home, patient hoists are becoming increasingly common in homecare. Due to small living spaces, thresholds and carpets, mobile hoists often require radical home adjustments. Moreover, most of the time such hoists are simply an obstacle. The Wup is an effective and easy-to-use device that meets the needs of the client, the caregiver and the healthcare resources provider.





## Prototype ready for market introduction

top left Design study for different home situations bottom left User research with the hoist right Stability testing far right Analysing several work scenarios



#### INNOVATION

The hoist is perfectly suited for homecare, since it does not require any adjustments in the home. It is easy to transport, works intuitively and can easily be stored under a high-low bed. The transfer between the bed and wheelchair takes place faster, with less effort by the caregiver, and greater comfort for the client.





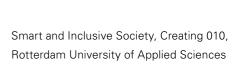
#### **METHOD**

Saxion University of Applied Sciences is developing the Wup in collaboration with industry, informal caregivers, clients, professional healthcare providers, occupational therapists and other stakeholders. In the process, a variety of methods are being applied, including observation, scenario-based product development, desk research, interviews, user research, rapid prototyping and iterative design.

www.techforfuture.nl







# DESIGNING PRIVACY: INTEGRATING MULTIPLE PERSPECTIVES ON PRIVACY





#### **Project Partners**

Maaike Harbers, Mortaza Bargh, Arne
Padmos, Michael Anhalt, Stan Scheerder,
Florian Cramer, Sunil Choenni and Anne
Nigten of the Smart & Inclusive Society
research group of the Creating 010 Research
Center at Rotterdam University of Applied
Sciences. Case studies were provided by
Linda Wauben and Lia Sterkenburg of the
Healthcare Innovation with Technology
research group of the Innovations in Care
Research Center, by Maaike Lycklama à
Nijeholt of the Finance & Business Innovation
research group of the Entrepreneurship &

Business Innovation Research Center and by Luc Petersen (senior legal expert, concern staff), all at Rotterdam University of Applied Sciences

#### **Funding**

This research project is part of the Applab010 project at Rotterdam University of Applied Sciences.



Technological developments are making it possible to gather, store, analyse and share more and more (personal) data. Yet those same transactions also increase the risk of violations of privacy. There are many different definitions of privacy, and privacy can be seen from a variety of different perspectives. As we see it, privacy certainly deserves to be considered a 'wicked problem' (Rittel & Webber, 1973).

Nevertheless, if the issue of privacy is ever actually taken into account in contemporary IT design practice, limited aspects of it will be considered. This leads to solutions in which privacy perspectives are over-represented, while others are under-represented. The result is an imbalance of privacy considerations. Can we develop a design approach for IT that acknowledges multiple perspectives of privacy?

#### **METHOD**

- After having studied the relevant literature, two domain experts came up with two design cases from health and finance.
- During design workshops, privacy experts from different backgrounds presented various perspectives on privacy.
- End users communicated their own vision and personal needs
- Designers were responsible for integrating the various different perspectives into the design approach.

#### INNOVATION

This research project presents a new approach that puts the principle of privacy by (re)design (Cavoukian & Popa, 2011) into practice. A variety of privacy perspectives, including the technical 'threat modelling' approach (Shostack, 2012), have been mapped out on the basis of the data journey. Wherever possible and relevant, the various perspectives have been combined.

## Privacy by (re)design



**DATA JOURNEY** 

**Data Collection** 

**Data Processing** 

**Data Usage** 

**Data Sharing** 

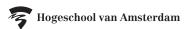
**Data Archiving** 

(closing)





## HYBRID PUBLISHING TOOLKIT FOR THE ARTS





























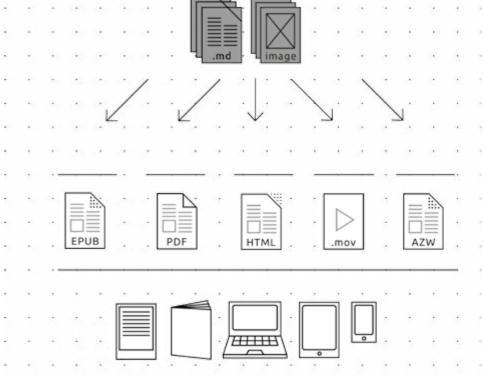




Mr. Sauli

## THREE LEVELS OF **ELECTRONIC PUBLISHING** Traditional Workflow Traditional Workflow unique/single::::: publication · /workflow . . . . FIXED 2 Hybrid Workflow Hybrid Workflow CUSTOMIZED

## Publishing 2.0



#### RESEARCH QUESTION

Does electronic publishing technology represent progress when it comes to publications about art and design? Or do we actually need to use hybrid methods in printed and electronic applications, so that the content can be published in different media? And how would that change the design process and the technical and editorial work processes?

These research questions were put forth by the Dutch art and design publishers Valiz, BIS Publishers and nai010 publishers. Media designers from PUNTPIXEL, Restruct, Medamo and Essence, researchers from the Institute of Network Cultures at Amsterdam University of Applied Sciences and from Creating 010 at Rotterdam University of Applied Sciences have developed new, inexpensive work processes for these publishing companies.

#### INNOVATION

Existing solutions for multimedia publications are too expensive and too complex for small to mediumsized publishing companies. We have developed a new approach that uses blogs and open-source tools to publish books using simple formats and free software. The manual and self-developed software enables everyone to publish e-books and prints on their own and in a sustainable way.

#### **METHOD**

In four pilot projects, researchers, designers and publishers jointly redesigned electronic publications, gearing the character and the design of the publication to fully suit e-reading. For each project, problems, solutions and new working methods were recorded in a logbook. These have been bundled together in an Open Access Manual.