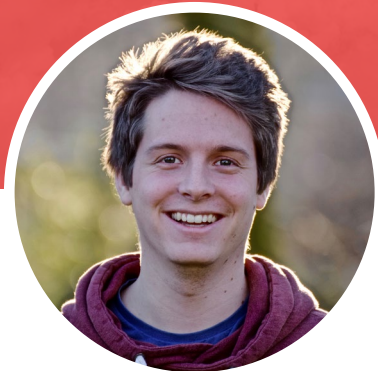


# JONAS CALLEWAERT

INDUSTRIAL DESIGN PORTFOLIO



## CONTACT

jonas@callewaert.net  
[www.jonascallewaert.be](http://www.jonascallewaert.be)



1

**ABOUT  
ME**

# ABOUT MYSELF

## NAME

Jonas Callewaert

## STUDY

Industrial Engenieer  
Industrial Design  
UGent (Kortrijk)

Postgraduate  
Digital Marketing &  
Communication  
EHSAL Brussels

## DATE OF BIRTH

1 April 1993

## CONTACT

jonas@callewaert.be  
www.jonascallewaert.be  
+32 479 02 11 04



“”

Hello, I'm Jonas, a young industrial designer. Thank you for showing interest in my work! With this portfolio I want to give you a sneak preview of the projects I've done so far.

# MY SKILLS

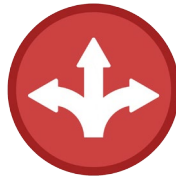
"An industrial designer is not someone who's only good at drawing, or someone who specialized in manufacturing,...

A good industrial designer for me is someone who realizes that designing a product not only revolves around creating a physical tangible object, but that this is only part of a complete designable structure.

Thanks to my training industrial design which I have continued with a post-graduate digital marketing I could immerse myself in every stage of the product development: idea generation, iterative prototyping, production and finally marketing. That gives me the opportunity to see the bigger picture."



**IDEA GEN.**



**MANAGING**



**ENGINEERING**



**PROTOTYPING**



**SPEECHING**



**VISUALISATION**



# TIMELINE

## GENERAL STUDIES

### DIGITAL MARKETING & COMMUNICATION

Postgraduate EHSAL Brussel

2015 - Today

### MASTER INDUSTRIAL DESIGN

UGent Campus Kortrijk

2011 - 2015

### SCIENCE AND MATH

olvh Waregem

2004 - 2011

## OTHER EDUCATION

### THEATER

Art school Waregem

2000 - 2013

### VISUAL ARTS

Art school Waregem

2000 - 2011

### ANIMATOR QUALIFICATION

Agency social-cultural work

2010



# SOFTWARE

Developing and rethinking products is one part of the job, presenting these projects to others and convincing them of the idea is just as important. A good presentation is the key to good communication, it's a combination of a well told story and clear visuals.

With 13 years experience in theater I developed some good communication skills. And even more important: I enjoy doing it!

The second part is the visual support. To create this I learned my way around with several computer programs. A brief overview of these programs can be found in the following list:

## ADOBE CREATIVE

ILLUSTRATOR /  
INDESIGN / PHOTOSHOP



## OPERATING SYSTEMS

APPLE /  
WINDOWS



## CAD

KEYSHOT / 3DS MAX /  
SIEMENS NX (UGS)



## OFFICE

MICROSOFT EXCEL /  
POWERPOINT / WORD

# EXPERIENCE

## EXPERIENCES & ACHIEVEMENTS

### GOOGLE DIGITAL MASTERS ACADEMY

Google adwords & Analytics  
2015

### MASTER THESIS (BARCO)

Project: 'Same Page'  
2015

### WINNER START-ACADEMY

Small business project: Wili by WoodYou? (Picture)  
2015

### VOLUNTARY INTERNSHIP

R&D Barco Kuurne  
2014

### SELECTED FOR 'DURF ONDERNEMEN' CONTEST

Project: 'Profit Jump'  
2014

### SEVERAL STUDENT JOBS

Production, administration, catering and digital marketing:  
Nollens NV, Allibert, LVB.net, Waregem Koerse, Week v.h.  
ontwerpen, Profialis, Knohopack, Recutex, Standaard  
Boekhandel, Deknudt Frames  
2009 - 2015



**WINNER START-ACADEMY 2015**



2

**REALISED  
PROJECTS**



# SAME PAGE

## MASTERTHESIS COCREATION BARCO

### TAGS

Master thesis | Idea generation  
MVP | Programming

### CONCEPT

Same Page is a product that consists of eight real-writing digital pens for the meetingroom. Using these pens allows meeting participants to share their thoughts visually on screen. It makes it possible to share annotations, sketches and notes live or deferred.

### PARTNERS



USE CONTEXT 'SAME PAGE'



# DESIGN CONTEXT

Meetings are a very important part of our society. Good communication between different persons creates a crossfertilization that leads to new insights and decisions. An average employee spends 15% of his time in a meeting.

While the number of meetings continues to increase, the efficiency of it declines. There is need for tools in this market that can increase the meeting satisfaction in order to achieve more efficient meetings (and vice-versa).



**DIGITAL SAME PAGE PEN**





# CONCEPT

Same Page is a product that consists of three different components: several digital pens, a few special designed notebooks and a docking station. All these parts are working perfectly together in order to enable meeting participants to share their thoughts in a visual way.

The digital pens are equipped with an optical sensor that tracks a unique microdot pattern on the pages of the notebooks. These real writing pens also have one button to switch between the live mode and the deferred mode: when the button is active and the light burns, everything the participant writes, appears real-time on the screen. When this button is turned off, people can first make a sketch and decide later to send it to the screen.





# WILI

# WOODYOU?

**1ST PLACE  
START-ACADEMY**

## TAGS

Idea generation | Prototyping  
Businessplan

## CONCEPT

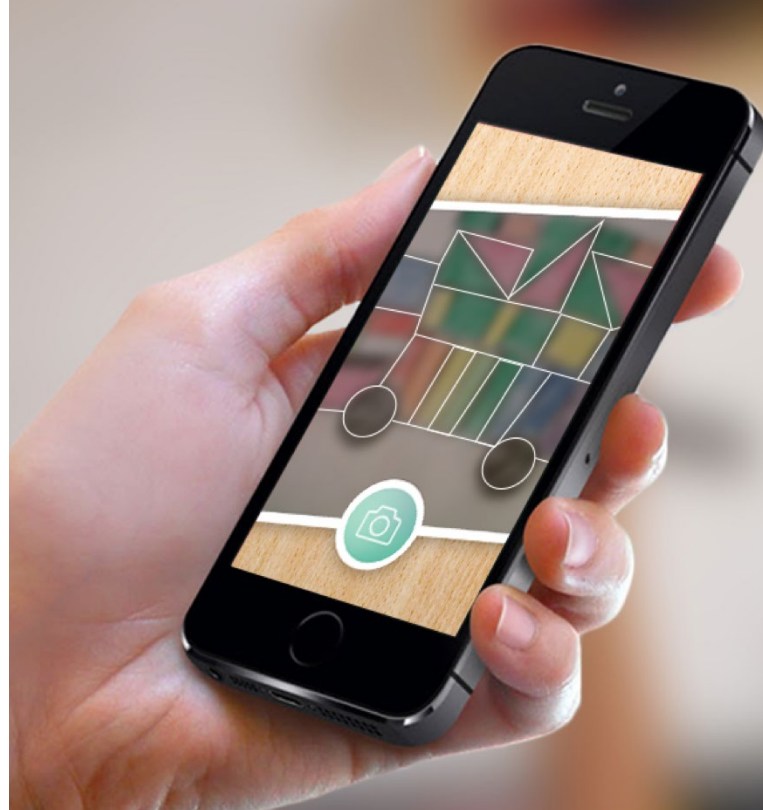
Wili is the result of a small business project. It's a wooden car that children can design themselves by combining some stickers. In combination with an app, their design can be forwarded to our company (WoodYou?) where we transform it into a real life wooden toy.

## PARTNERS



**CHILD PLAYING WITH WILI'S**





## STORYBOARD



# LIFT BIKE

## BASE FOR FURTHER RESEARCH MASTERTHESIS

### TAGS

Idea generation | Prototyping  
User-centered design

### CONCEPT

The foldable bike is without any doubt a great invention. Even though, most users are not that enthusiastic about their bike: it's too heavy, too dirty, impractical, ... The Lift bike is built on these problems in order to make the best foldable bike yet! The bike can be opened and closed in only 3 intuitive operations.

### PARTNERS



**LIFT-BIKE PROTOTYPE**



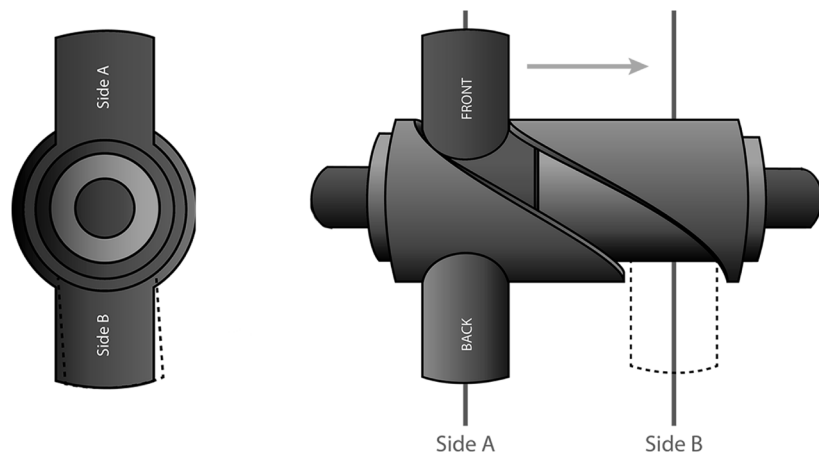
# DESIGN VISION

Designing this bike involved a lot of decisions: seating, handle bars, wheel size, driving position, drivetrain system, ... An extensive paper has been written to describe all these investigations. However, the part that makes this bike different from other on the market is the unique central folding system:

When engineers have to design a folding bike they once all have to deal with the same problem: 'The wheels have to be on one line while biking, and next to each other when folded. Most

bike fabricants use standard hinge systems to literally fold the bike together, but this asks a lot of effort from the user. Many of these are also difficult to use and have a lot of extra 'clicking' and 'clipping' systems to secure the hinge.

The central joint is based on the movement of a screw: translating an rotational force into a axial force. This gives the user three main advantages: using less force, more intuitive handling and no extra securing needed.



**CONTEXT OF USAGE**









# PROFIT JUMP

## PARTICIPANT 'PROFIT' FINAL EXPOSITION

### TAGS

Idea generation | Programming  
Arduino

### CONCEPT

Movement-based games are becoming increasingly popular (ex. Microsoft Kinect, Nintendo Wii). The Profit Jump brings this trend to public spaces and therefore available for everybody. It's an installation that encourages people of all ages to get in shape in a fun way.

### PARTNERS



**FINAL WORKING PROTOTYPE**



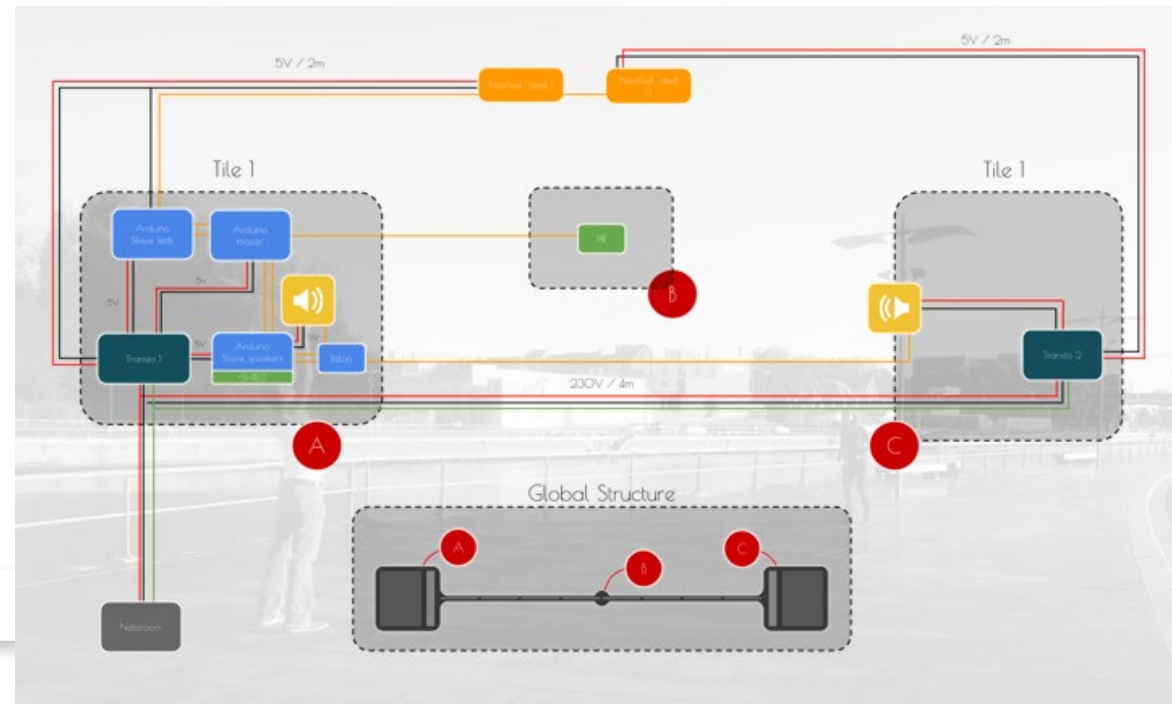
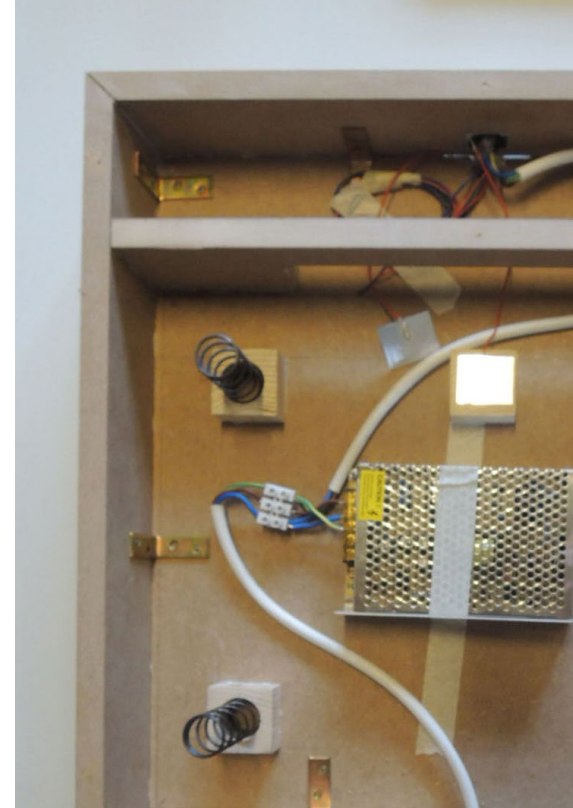
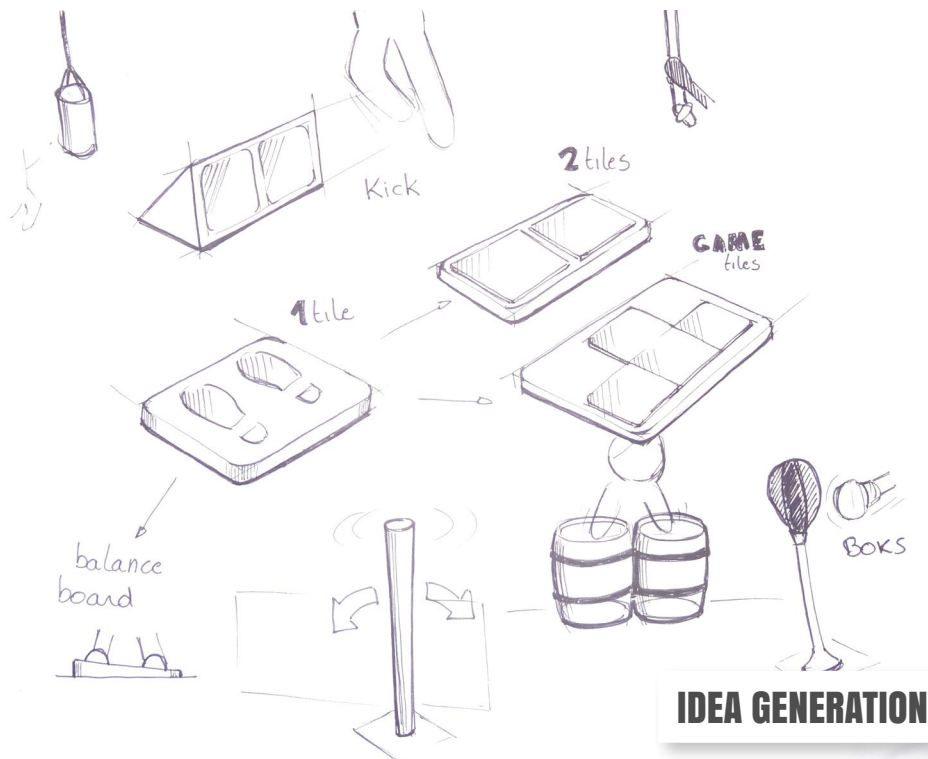
# DEVELOPMENT

The initial question came from a research program: Profit. Their mission is stimulating people to get active in public spaces.

We developed a simple competitive installation where

different games with light and sound can be played on by jumping on a tile.

The final prototype is a mobile installation which is completely foldable for easier transport.





# FINAL PRODUCT

As shown on the image, two players face each other while standing on a pressure-sensitive tile. These tiles are connected with a led strip that displays the game. By jumping on the tiles

the two players can play various games and it is even possible to add more games. Speakers are built-into the tiles which provide a good communication between the players and the game.



**FINAL FUNCTIONAL PROTOTYPE**



# THE NEXT LEVEL

## TAGS

Idea generation | Structural  
calculations | Prototyping

## CONCEPT

The Next Level is an urban festival tent that lets people get above the bustle and the crowd. The flexible character makes this structure highly suitable for extreme weather conditions. This last part was demonstrated based on structural calculations.

## PARTNERS



FINAL PROTOTYPE NEXT LEVEL



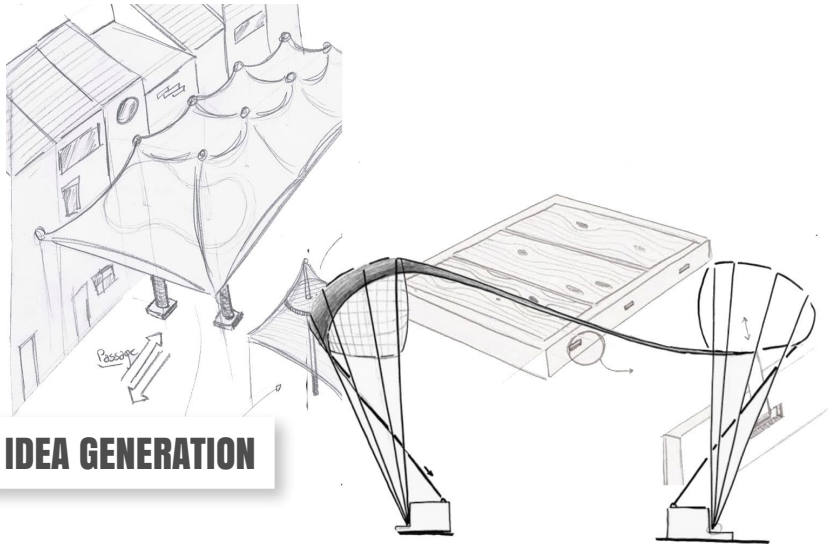
# DESIGN VISION

Town festivals , fairs , festivals , neighborhood parties , ... great places to meet people, but often almost impossible to hold a conversation. Oppressive atmosphere of packed people , continuous passage and a cacophony of dozens of people talking lies here at the base.

The Next Level is trying to respond to this without taking away the positive elements of these events : give people the chance to rise above the crowd, but don't lose the touch with the event. Combining the benefits

of a quiet area with the advantages of an outdoor event . Our vision can easily be compared with a sort of cocoon where you can flee.

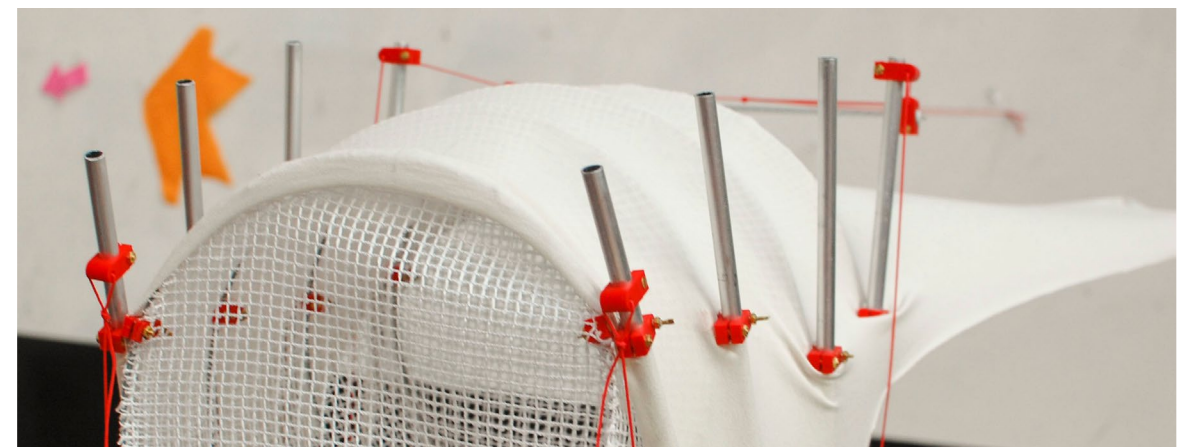
Keeping to this philosophy, a number of important decisions were made: nets an important part of the design , due to the ideal combination of strength and visual openness. We literally lift people above the crowd, so the noise drops significantly and the passage of people is no longer a problem .



**IDEA GENERATION**



**PRESENTATION AT BOLWERK**





# EGG HOLDER

## TAGS

Idea generation | Lasercutting  
Prototyping

## CONCEPT

This unique egg-holder is the result of research into new applications of lasercutting. This example is produced with just one production method (lasercutting) and just one sheet of material. The specific form of the double-spiral allows the normal rigid material to become flexible.

## PARTNERS



**LASERCUTTED EGG-HOLDER**



# BRANDING DIEREN- ARTS

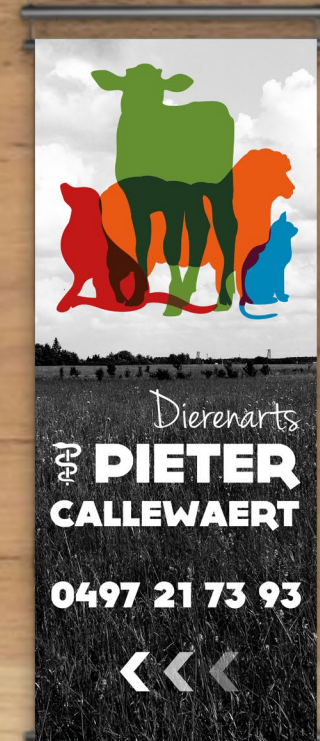
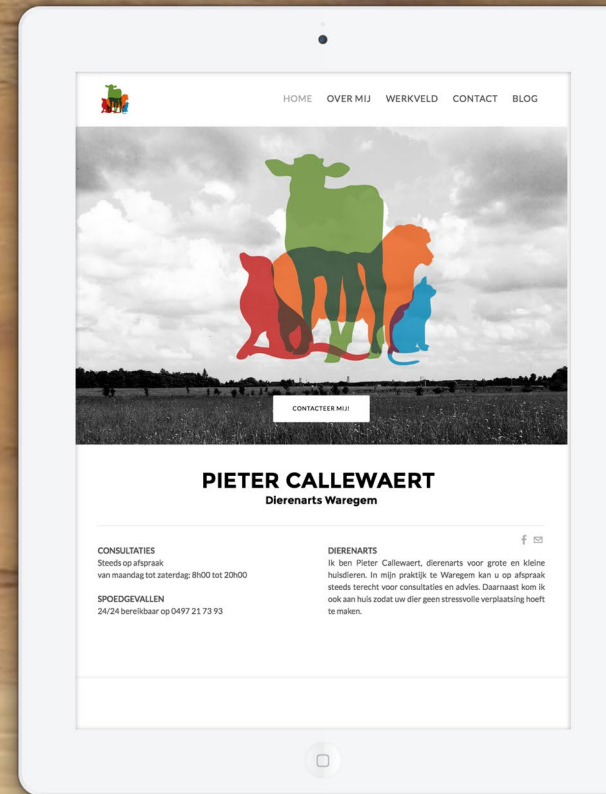
## TAGS

Hobby project | Logo design  
Digital marketing

## CONCEPT

Design of a complete brand-identity of my brothers veterinary practice.

Beside the visual part, a complete digital marketing plan is set up focussing on SEO, SEA and Social media.



PROMOTIONAL CONTENT



# TURNING AID

## TAGS

Idea generation | Cocreation  
Prototyping | DIY manual

## CONCEPT

The turning aid is a simple DIY solution to help people with mobility problems to turn themselves in their bed. A turningsheet is connected to the mainframe of the bed, by lifting the electric bed up, the sheet is pulled around the person resulting in a comfortable turn.

## PARTNERS



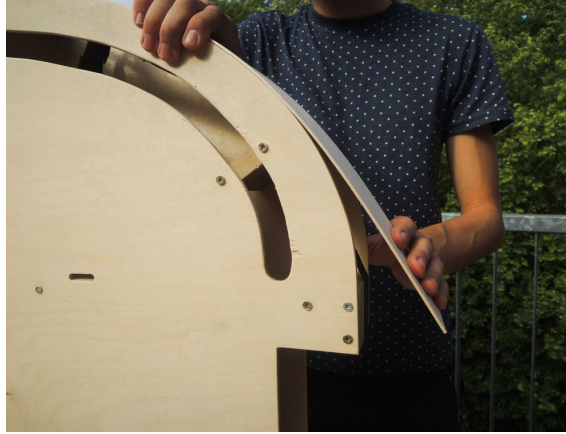
TURNING AID DIY PROTOTYPE



# COCREATION

Sylvie is paralyzed from her waste to her feet. With the help of her guide dog 'Kroepoek' she is able to get in her bed without the help of any nurse. Even though, once in that position she is unable to turn and she is forced to stay in that same position all night.

Thanks to this DIY solution the nurses don't have to come to sylvie at night to get her in an other position. This makes her again a lot more independent.



**TEAM WITH CLIENT SYLVIE**

# FIRE HELMET

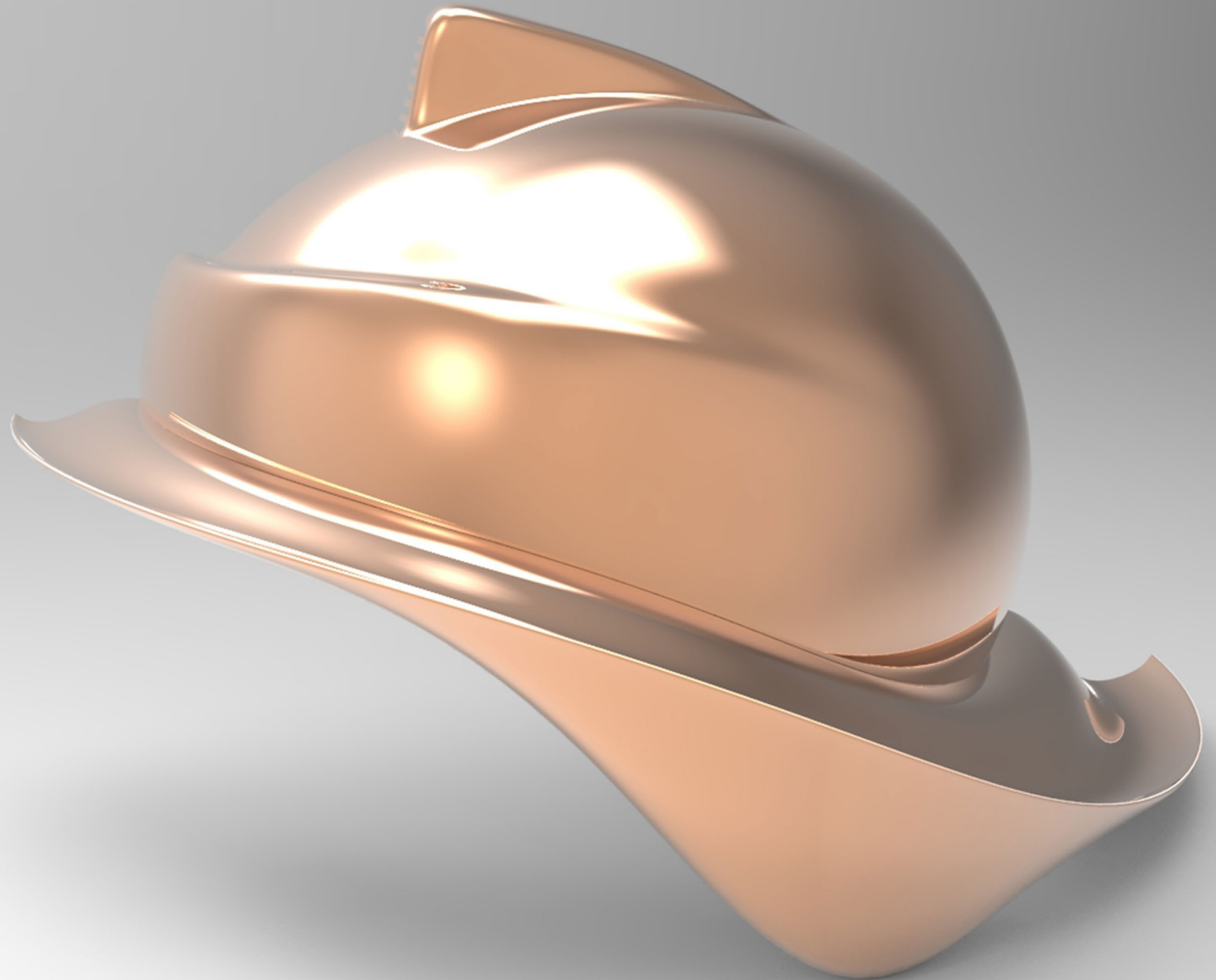
## TAGS

Computer Aided Design  
Sheet modeling | Rendering

## CONCEPT

Creating a model of a fire helmet using sheet modeling. "Show with curvations and little details that you understand the basics of sheet modeling".

Used Software: Siemens NX  
(UGS)



**RENDERING CAD MODEL**



# FA-KRUIS

## PUPITER

### TAGS

Idea generation | Prototyping

### CONCEPT

Design of a Pupiter concept for a big band. The modular and fully customizable system makes installation extremely suitable for different settings and formats. Red electrical wires are not hidden on purpose so that they become an integral part of the brand identity of the entire setup.



ONE MODULE WITH POSSIBLE SETUP



# BREIWOLK .BE

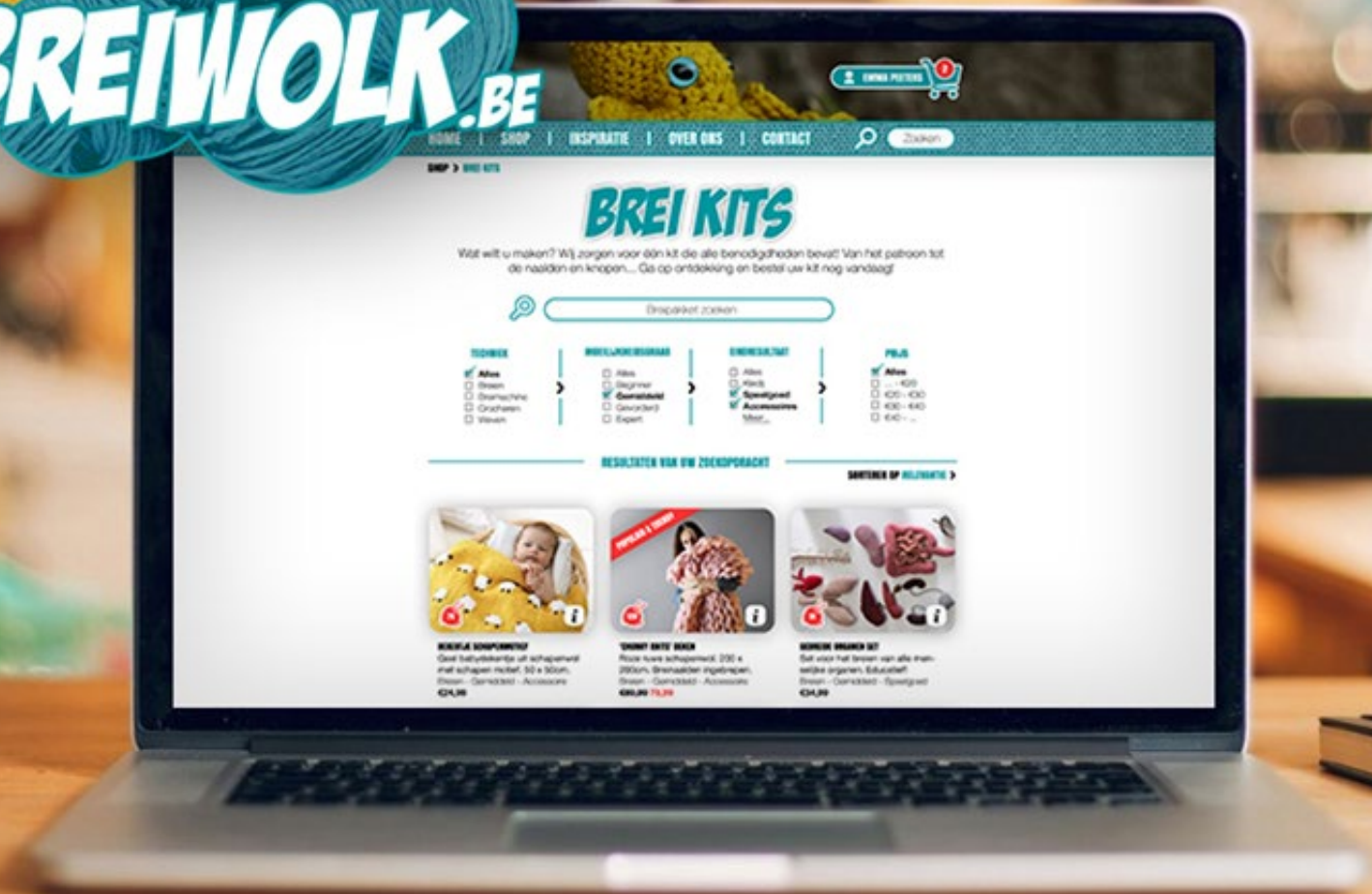
## TAGS

Webdesign | Wireframe  
Digital marketing

## CONCEPT

Design of a wireframe for a fictional shop of knitting yarn. Practical implementation including breadcrumb navigation, advanced search options, site map, customer journeys, SEO copywriting, ...

## PARTNERS



WIREFRAME WEBSITE 'BREIWOLK.BE'



# FIVER URBAN FARMING

## TAGS

Managing | Researching  
Prototyping

## CONCEPT

In the region of Lille they are working on a large urban farming project. To involve as many people in the project 'Fiver' was developed to allow even school children to participate. After cultivating plants in the classes, the fruit and vegetable plants can be planted in the toy-like planters on the site.

## PARTNERS

D<sup>+</sup>  
C /



**'FIVER': URBAN FARMING PLANTERS FOR KIDS**



# SEED HOUSE

## TAGS

Project management | Laser-cutting | Prototyping

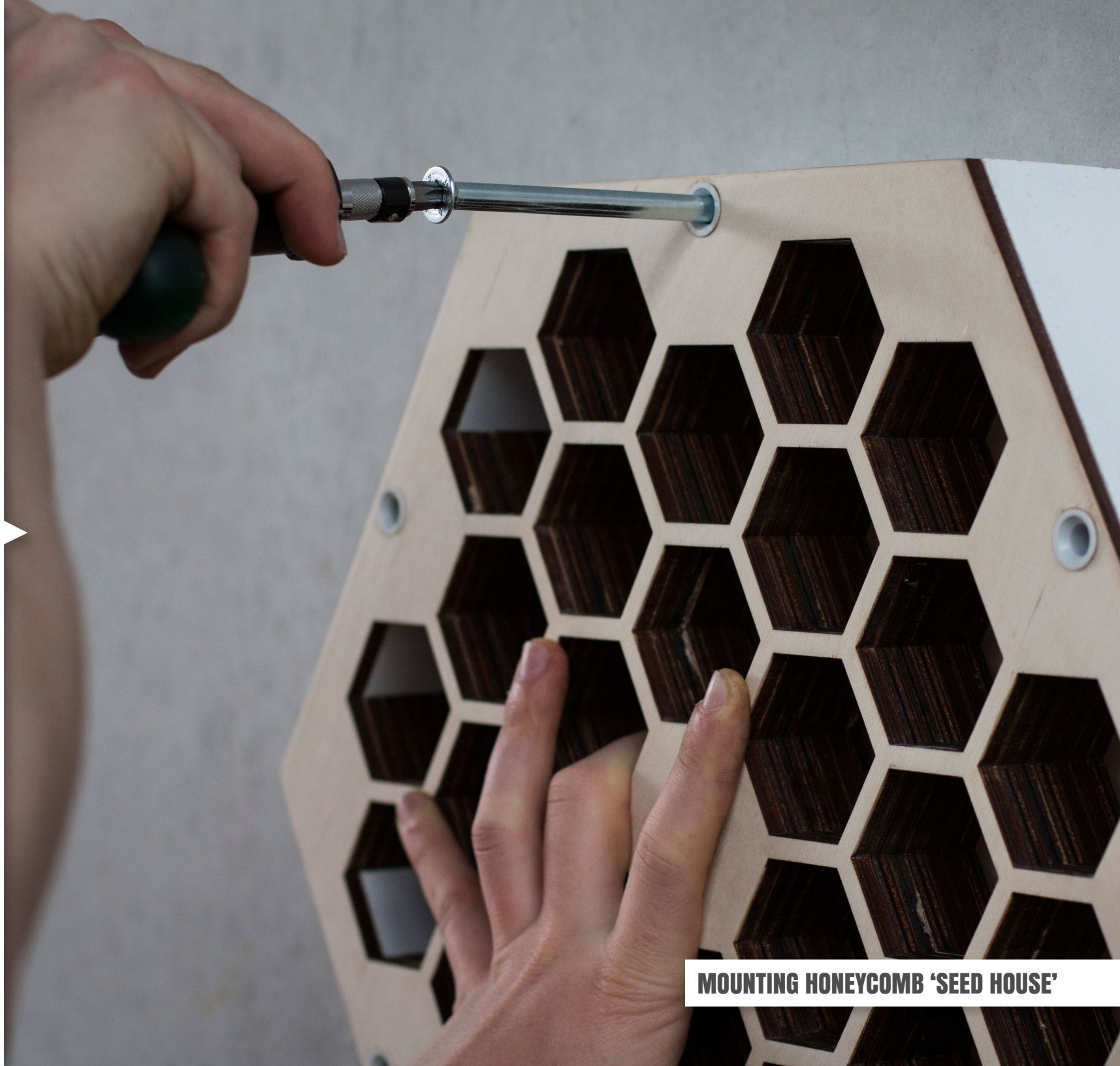
## CONCEPT

The social housing estate “De Venne” in Kortrijk is strongly committed to urban gardening. Residents are growing their own vegetables, fruits and herbs on their balconies and in the neighboring allotment gardens. Thanks to the ‘Seed House’ they now can’t only share their harvest, but also their seeds.

## PARTNERS



ocmw kortrijk



**MOUNTING HONEYCOMB ‘SEED HOUSE’**

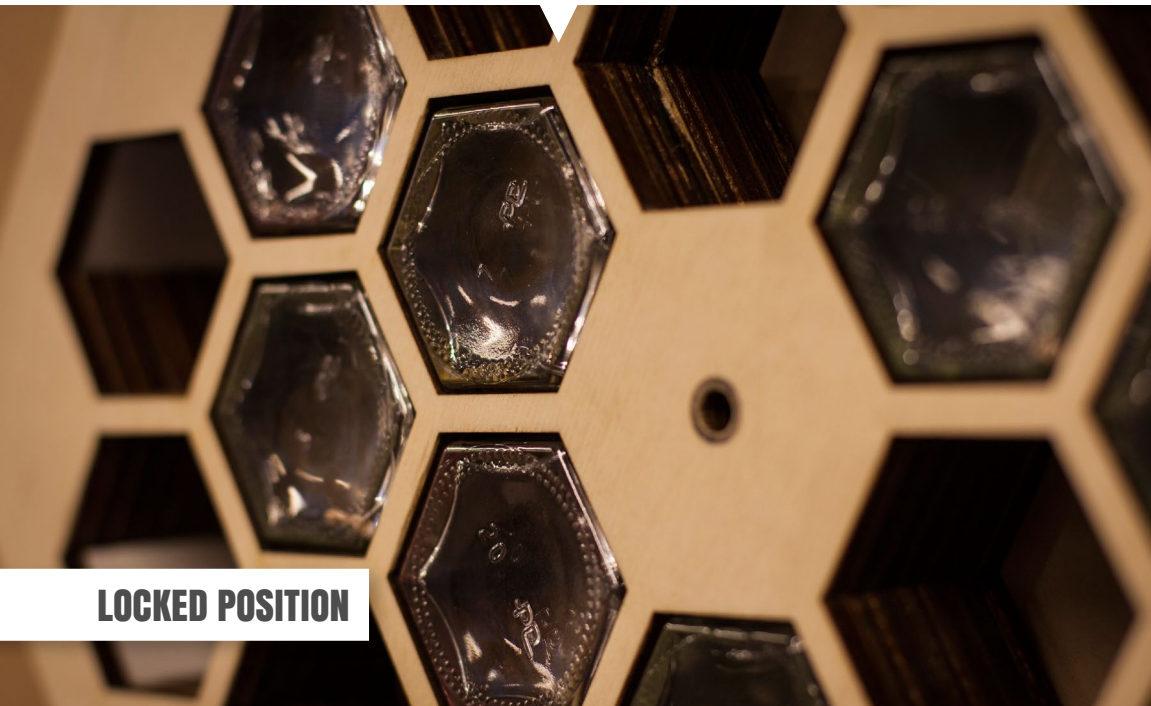
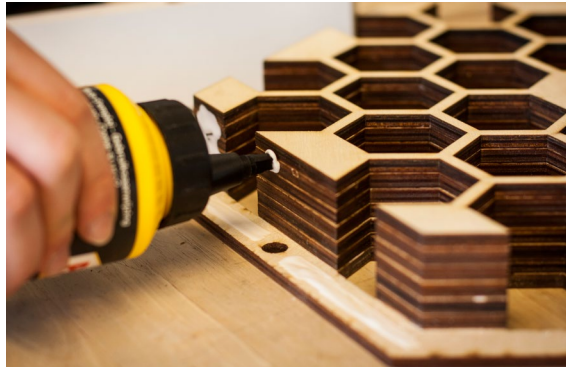
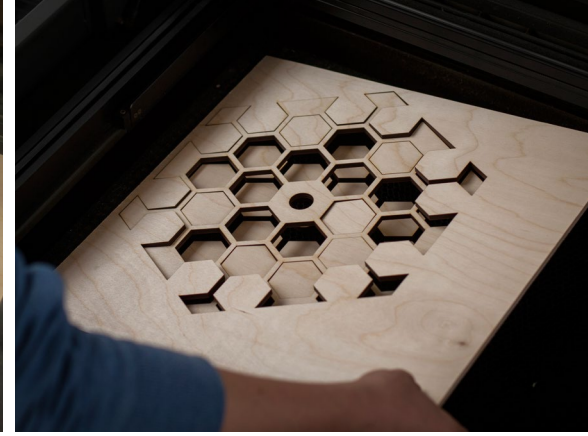
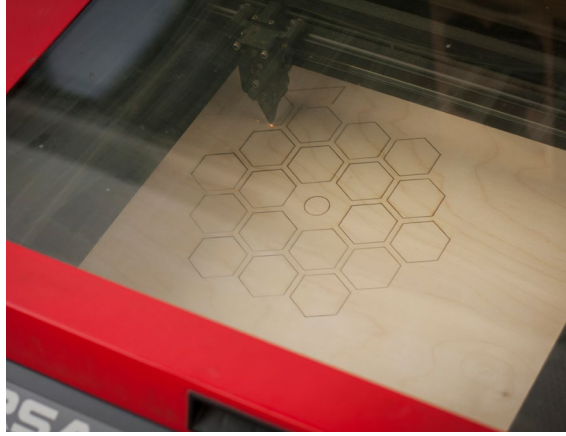


# ONE-WAY SHARING

Little jars filled with seeds are placed in the hexagonal compartments of the honeycomb structure. Magnets on the back are pulling the jars gently against the back of the structure. In this way the jars are fully locked once they have been putted in to place.

To remove the jars a simple bolt-key is screwed into the middle of the honeycomb structure. In this way, the rear panel forwards and the jars appear above the edge of the structure.

Sharing seeds is one way of using this system, but we can imagine lots of other implementations...



**LOCKED POSITION**



**OPENED POSITION**

# SOFT BATH

## TAGS

Idea generation | Testing  
Proof of concept

## CONCEPT

Every object we have to sit on or lie in has been made as soft as possible (car seats, sofas, our bed, ...). But what about our bath? Using a combination of a soft foam with a waterproof skin, the softbath can be reality giving us lots of advantages: comfort, better insulation and reducing risks in potential accidents.

## PARTNERS



# SoftBath

Een bad nemen is voor veel mensen hét symbool voor ultieme rust. Iets wat in onze haastige levens een erg kostbaar goed is. Producenten van baden doen er dan ook alles aan om die badervaring zo optimaal mogelijk te maken. Bubbelbaden zijn niet langer een uitzondering, maar ook sfeervolle onderwaterverlichting en dergelijke steken de kop op.

SoftBath speelt in op deze trend en gaat zelfs nog verder, gebruik makend van de drie 'keyfeatures': anti-slip; schuim en inserts. Een zachte schuimbekleding creëert een aangenaam matras-gevoel onder water. Zaken als lucht- en waterjets worden volledig geïntegreerd en sluiten naadloos aan op de anti-slip huid van het oppervlak.

Het SoftBath is dé nieuwe standaard voor de veeleisende badgebruiker.

## ANTI-SLIP



## SCHUIM



## INSERTS



## SITUATIE



### ENERGIE EFFICIËNT

Baden worden steeds meer dan enkel hygiëne, ze zijn vandaag hét symbool van ultieme relaxatie. Hoe aangener baden worden, hoe langer mensen in bad blijven en hoe langer het water dus warm moet blijven. Heel wat warmte gaat vandaag verloren via het wateroppervlak, maar ook langs de niet geïsoleerde badkuipen.



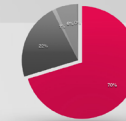
### LUXE

Slechts een eeuw geleden was een bad nog een eenvoudige houten/metalen kuip gevuld met manueel opgewarmd water. Vandaag is dankzij de voorziening van stromend verwarmd water en het gebruik van acryl dit gelukkig niet langer het geval. Baden worden steeds aangener, groter en complexer. Noot eerder was de vraag naar luxe in bad zo groot: bubbelbaden, ligbaden, jacuzzi's, ... Reden genoeg dus om nieuwe technologieën in deze markt te introduceren om de wensen van de consument in te vullen.



### ONGEVALLEN

Uit onafhankelijk onderzoek van 'the Centre for Disease Control and Prevention' blijkt dat meerendeel van de binnenshuis ongevallen in de badkamer gebeuren. Hiervan spelen 70% van de ongevallen zich af in het bad of in de douche (Grafiek). Reduceren van dit risico dringt zich op.



Grafiek: specifieke plaats van het ongeval in de badkamer

### 1 Isolatie

### 2 Matras gevoel

### 3 Nieuwe mogelijkheden

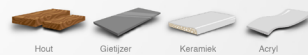
### 4 Preventie ongevallen

### 5 Gevolgen ongeval reduceren

## RESPONS

### NIEUWE MOGELIJKHEDEN

De combinatie van een PU-rubber met een PU-schuim is erg nieuw voor de badindustrie. Het spreekt dan ook voor zich dat deze nieuwe techniek heel wat nieuwe mogelijkheden met zich meedraagt. Een gelijkaardige evolutie zag men reeds bij voorgaande materiaal-wijzigingen (zie afbeeldingen).

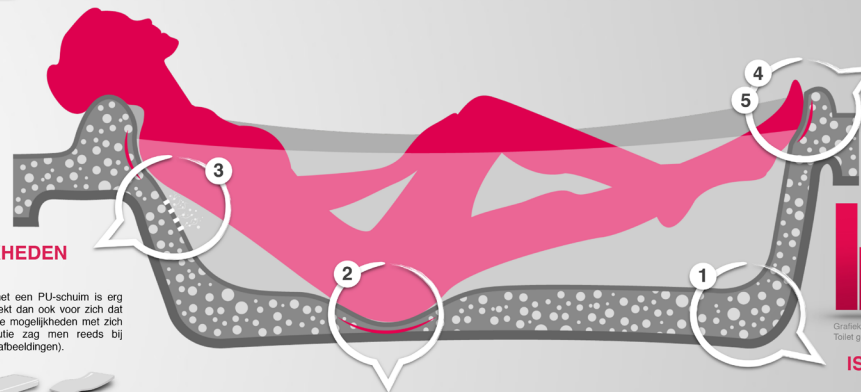


De lage productietemperatuur van Colo-Fast resulteert in een grote vrijheid wat inserts betreft, denk hierbij aan massage-koppen, onderwaterverlichting, ...

De manier waarop de inserts worden omgeven door Colo-Fast is erg uniek en creëert een veel betrouwbare verbinding dan lijn.



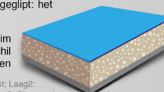
Jet omgeven door Colo-Fast en PU-schuim



### MATRAS-GEVOEL

Alle producten waar de mens direct mee in contact komt worden steeds met een zo groot mogelijk zorg ontworpen zodat ze zo comfortabel mogelijk aanvoelen: matrassen, bureaustoelen, sofa's, autozetels, ... Een product lijkt echter door de mazen van het net te zijn geglijpt: het bad.

Gebruikmakend van ideeën uit de bedding-industrie wordt een PU-schuim samengesteld die de ideale drukverdeling levert, dit echter met het verschil dat het SoftBath voorzien is van een duurzame Colo-Fast huid die water en schuim gescheiden houden.



Laag1: ColoFast; Laag2: PU-schuim; Laag3: Glasvezel

### PREVENTIE ONGEVALLEN + GEVOLGEN REDUCEREN

Uit de reeds eerder vermelde studie van het 'CDCP' blijkt dat meer dan 16% van de ongevallen het gevolg is van uitglijden, ongeveer 10% gebeurt bij het in of uit stappen van het bad (zie grafiek).

Vandaag probeert men uitglijden te vermijden door heel wat producten naast het bad zelf aan te bieden: anti-slip spray's; anti-slip stickers; badmatjes; anti-slip strips; ... SoftBath erkent dit probleem, en pakt het aan voordat het bad de consument bereikt. De anti-slip textuur van de specifiek ontwikkelde Colo-Fast huid zorgt voor een stabiel gevoel bij het in- en uitstappen van het bad.

Daarnaast reduceren we ook de gevolgen van de onvermijdelijke ongevallen: de zachte structuur van het bad neemt een groot deel van de impact van een mogelijke valpartij op, hierdoor kan men de gevolgen aanzienlijk reduceren.

Grafiek: Handeling bij het gebeurde ongeval  
Toilet gebruik; Uit of in bad stappen; Flauwvallen; Andere: Passage; Struikelen; Renssen of spelen

### ISOLATIE

Het polyurethaan-schuim waarmee het bad omgeven is heeft ook een tweede functie: isolatie. Door toepassing van deze techniek kan men de temperatuur die door de consument als aangenaam wordt aangevoeld tot 65% langer bewaren.

Op de in- en afvoer kanalen na zitten de water- en lucht-kanalen volledig verwerkt in het PU-schuim waardoor ook hier minimale verliezen optreden.



Toet: Temperatuur t.t.v. de tijd bij PU-schuim

## PRESENTATION INFOGRAPHIC





**3**

**CLOSURE**



"I hope to have attracted  
your attention with this  
portfolio. Do not hesitate  
to contact me for further  
information!"



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**+32 479 02 11 04**



**SINT-PIETERSNIEUWSTRAAT GENT**



**WWW.JONASCALLEWAERT.BE**



**PORTFOLIO**  
Voorjaar 2016