# Wouter Van Geesink

Portfolio | Industrial Design



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# Me & Industrial Design

As a designer, I have become proficient in applying specific methodologies and techniques for appropriate concept development and value creation throughtout the design process. It ranges from more traditional ideation techniques (e.g. brainstorming) to explorative processes (e.g. engagement catalysers). I have developed an appreciation and preference for methodologies such as ideation-through-making, reflective explorations, and contextual mapping.

By leading from user-centered approaches, I try to find contextual values in form of rich narratives and embody them into novel design explorations. I make often use of modern technology as means for exploration early in the design process, adding complexity along the development of the design. Specialized in mechanical and electrical engineering, creating interactive systems is innate part of my design competency.

Lastly, my preferred method of finding value is by using empathic design strategies combined with hands-on sense-making (in the context). However, I always go back to scientific knowledge to support these findings to bolster the design decisions in grounded theory. This combination of designerly sense-making and scientific background allows me to frame the challenge in form of imagery and adapted schematic frameworks.

See and read more at: www.woutervangeesink.com/growth

"I view the user as a treasure trove of rich information and the key to novel concept design and value creation."





Vimeo. https://vimeo.com/woutervangeesink

Website www.woutervangeesink.com

## Education

2009 - 2015	Bachelor of Science, Industrial Design, Technical University of Eindhoven
2015 - 2017	Master of Science, Industrial Design, Technical University of Eindhoven
Work	
03/2017 - 05/2017	EuFlex BV., tutor in a bachelor-course industrial design, Eindhoven
	Supervising and guiding design process of 25 bachelor students; Assessing,
	grading, and giving constructive feedback.
07/2016 - 09/2016	Actief Zorg, Home help, Eindhoven
	Home cleaning at homes of elderly and disabled persons; Social contact;
03/2014 - 08/2014	Atelier Vrijdag & De Ontdekfabriek, Concept Designer, Eindhoven
02/2015 - 07/2015	Styling and content of client presentations; Responsible for full development
	of 2 workshops for children; Concept & model development of installations
	for 'De Ontdekfabriek'; Collaboration in event organization;
02/2012 - 06/2012	Studio AnnaMariaCornelia, Design Intern, Antwerpen
	Idea generation and concept development; Digital visualizing and hands-on
	modelling; Business analysis;
08/2008 - 05/2009	Mise & Place Eindhoven, Eindhoven

Divers catering jobs (events, weddings, restaurants); CHR-training;



## Participated with the following TU/e Skillslab masterclasses ...

- .. Masterclass Develop your Network
- .. Masterclass Academic Writing
- .. Masterclass Negotiating skills

## My achievements ...

- .. Dutch Design Week, Zilver G'oud, 2018, KONO
- .. Academic Paper, HAI, Handige Beestjes (Pending acceptance)
- .. Dutch design week, Grootsgrijs, 2015, Handige Beestjes
- .. Dutch design week, Design cares, 2011, Luux collection
- .. Award winner, Strijp-S, Simply the cleanest, 2009, P.I.E.T.

## References can be supplied (on request) from ...

- .. prof.dr.ir. C.C.M. (Caroline) Hummels, Graduation Mentor.
- .. prof.dr.ir. A.C. (Aarnout) Brombacher, Dean Industrial Design,

  Employer student assistant job.
- .. dr.ir. E.I. (Emilia) Barakova, Master Project Coach.
- .. H. (Hugo) Vrijdag, Owner De Ontdekfabriek / Atelier Vrijdag, Employer design intern and concept designer.
- \*Extensive **documentation reports** are available for each project and specialization on request.

### I have **excellent** ...

..teamwork & communication skills

..reflection skills

## I have **good** ...

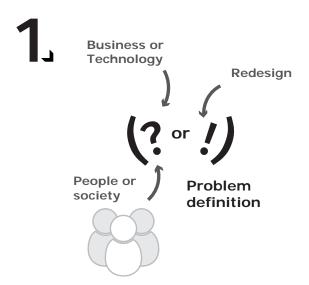
- .. presentation skills
- .. self-directed learning skills

## My software proficiencies ...

	Adobe Suite	3d Modeling	Programming
Expert	Ps Photoshop		
Exp	Ai Illustrator Id Indesign		
Advanced	Pr Premiere Pro		Processing
Intermediate	FI Flash  Ae After Effects	Solidworks Sketch-up	
Basic	Dw Dreamweaver	Blender	Java HTML HTML

<sup>\*</sup> Especially in the digital work environment, I am notably proficient and a self-directive worker.

# My Design Process



#### **Problem definition**

The first step in the design process is defining the design problems or design opportunities clearly. Importantly, raising questions to find out why the problem exist and why it is important to design for a solution.

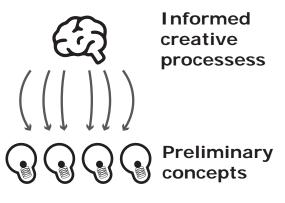
2,



## **Desk Research & in field investigation**

I combine field investigation and desk research to get multi-perspective insights to gain understanding of the design problem. This supports me with developing suitable design strategies and meaningful concepts that originate from a need from the field and/or user.

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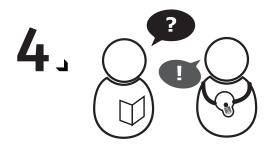


## Informed creative processes

Specific creative practices are chosen that are adapted to the requirements of the project. This ranges from more traditional idea-generating techniques to creating physical explorations.

A selection of good ideas are put together as preliminary concepts with low-fi models, visual presentations, and a rich narrative.

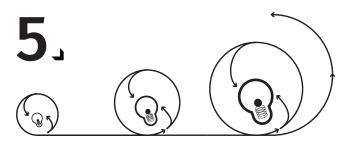




Concept evaluation with experts and stakeholders.

## **Concept evaluations**

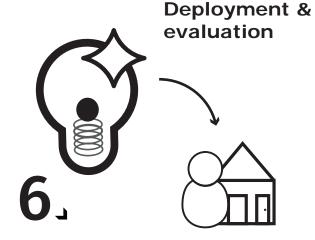
The preliminary concepts are evaluated (together) with SME's, users, and stakeholders to identify key features and value. I prefer to do this early in the process to ensures the core value/problem is appropriately addressed in the concepts.



## Iterative research & design process

## Iterative research & design process

In the iterative development process, I tend to integrate technology in early models as means of sense making. Rapid prototyping skills allows the concept to be 'experienceable' to assess the validity of the concept through multiple models of varying fidelity. Aesthetics, materiality, technolgy are improved with each new iteration.



## **Deployment & evaluation**

The finalized design is deployed and evaluated by conducting usability tests to formulate recommendations and improvement strategies. A complete documentation report provides an overview of the design process.

## **KONO**

Empathic design processes, aesthetics and materials, in context exploration, human values

01/09/2016 - 26/06/2017

Master Graduation Project

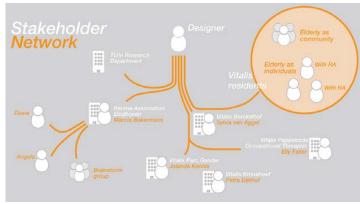
Exhibition at Zilver G'Oud; Dutch Design Week 2017



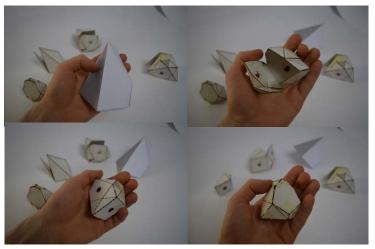
"Active and Healthy Ageing" is a trending topic with our global society facing a big shift in age composition. The aim is to create innovations that contribute to a broader concept of well-being in the ageing process. The graduation project KONO focused on elderly with Rheumatoid Arthritis (RA) due to its heavy impact ones quality of daily life. KONO embodies the concept of comfort holistically through complementary features such as thermal therapy, atmospheric lighting, and materiality. KONO provides distraction and comfort at times the user experiences discomfort at any time in the day.

In my graduation project, I challenged myself with an intensive exploration into the subject and context through interviews, empathic design methods, and engaging elderly inside the retirement home. From inclusive design principles, I aimed to design a product that uses therapeutic and playful incentives to establish a meaningful role in the lifeworld of the elderly.





An overview of the stakeholders that I involved in my design project such as health experts, users, retirement project managers, and caretakers.



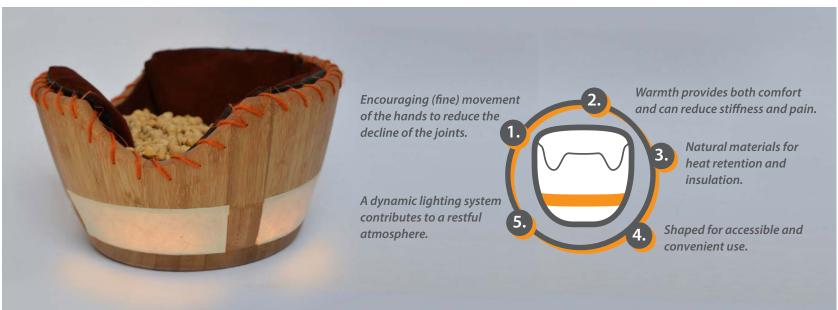


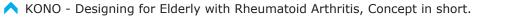






↑ Low-fi explorations / prototypes employed and tested in the field during concept development.







Interactions with elderly to gain insights, feedback and user understanding during development.

# Handige beestjes

Social and empathic design, user & technology, context-mapping, stakeholder management, academic writing, agency analysis.

01/09/2015 - 15/01/2016

Design Project

Exhibited at GrootsGrijs; Dutch Design Week 2016

Pending paper for HAI Conference

With the product line Handige Beestjes, we¹ aimed to embody the traits and characteristics of domestic pets into smart objects to promote social inclusion amongst elderly in retirement homes. The designed concepts brought together the main values of Animal Assisted Therapy (AAT) and Robot Assisted Therapy (RAT) to prevent or alleviate the feeling of emotional loneliness, resembling generic products where their animalistic traits emerge through their interactions. An empathic design approach has been used to extract the key values and user needs, and Actor-Network Theory has been used to iteratively analyze the products and their interactions in the context of use throughout the different prototypes. This has led to the development of a paper, submitted to HAI 2017 Conference.

W. van Geesink<sup>1</sup>, V.P. Rispoli<sup>1</sup>, E.I. Barakova<sup>2</sup>, M.Traenkle<sup>2</sup>. (2017) *Handige Beestjes:*applying the ANT framework to empathic design processes to design for social inclusion in retirement homes. HAI 2017. Technical University of Eindhoven.



AMY is a special pillow that provides comfort through vibrations and warmth in an elderlies's personal space.



NORA is a special lamp that provides beautiful colored light and the feeling of a presence through its behavior, expressed through light and vibrations(+ sounds).

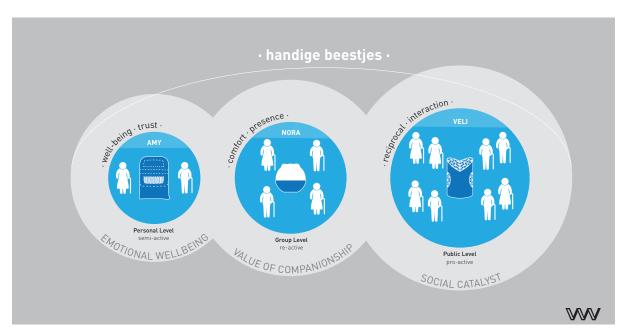




**VELI** intends to establish a reciprocal relation with multiple users in public spaces through its (pro)-active behavior.



Overview of prototype iterations of AMY (Above) and NORA (below) throughout the project.



An framework of the productline, outlining each concept's specific key values and specific traits and characteristics of domestic pets. Each product's increasing agency aims to promote a seamless integration of smart products into 'smart retirement homes'.



Regular testing and evaluating our concepts through the prototypes, at different iteration stages, with elderly inside the retirement home Vitalis Berckelhof.

# **Expressive Fetal Monitor**

Design-research project, physical data-visualization; color experience and perception; design for pregnancy;

01/02/2016 - 10/05/2016

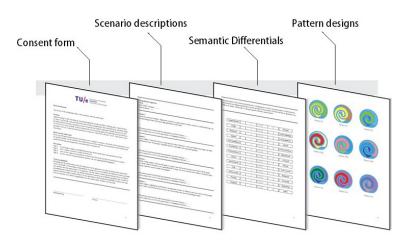
Design-Research Project

Sleepy Mommy is my explorative design-research project on expressive data-visualization of sleep quality and fetal activity of pregnant women for the home environment. During pregnancy many women experience alterations of their sleep quality with 'worrying about the baby' as contributing factor. The interaction and usability of the customary medical fetal monitors are very medical and direct.

My research investigates whether the perception of expressive color patterns as a novel way of informing the mother, can have be enriching to the pregnancy experience.



↑ The design probe created for colored patterns as expressive data-visualizations with user in the background.



↑ Overview of the evaluation materials given to the participants.

# **City Vitality**

Engagement catalysers, social design.

01/09/2014 - 13/01/2015 Bachelor Graduation Project

City vitality is about making concrete neighbourhoods more 'vital' by identifying and connecting needs of different social groups together – and designing from a systems design perspective in this context. Goedwerk is a concept aimed at unemployed people who perform voluntary work but struggle with their situation. A large part of social connection and daily routine come naturally with employment. The lack of employment can skew a person's lifestyle out of balance. Goedwerk aims to provide more balance to a unemployed person's life by physicalizing the appreciation of voluntary work and translate this into a peaceful experience at home. This experience is a physicalization of the affirmation that one's actions has value for others.



♠ Employing engagement catalysers (physical explorations) to explore design opportunities in the context, directly from the target group.



Image of final prototype, Goedwerk.

## **Luux Collection**

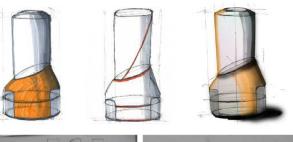
User-centered design, multi-disciplinary team, stakeholder management.

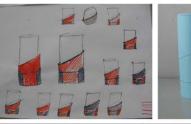
01/09/2011 - 10/01/2012

Design Project

Exhibited at *Design Cares*; Dutch Design Week 2012

The Luux collection is developed for the company client 'DuuX', with the challenge to develop a product line of electronic baby products specifically targeted to the parents that embody Duux's core values: experience of reliability, ease of use, and strong first impressions. The result is the Ambient Red focusing on an ambient way of communicating the well-being of the baby with the parents. Timeless Yellow focuses on teaching the concept of time through playful tangible interaction between the parents and the child. A probe design; Future White enables the parents to share their experience around their child with close friends and family in a personal and safe way.















(Part of) The modeling and making process of the concept Timeless Yellow.



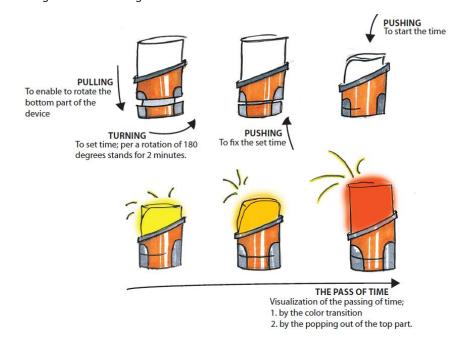
↑ The three working prototypes presented at a faculty exhibition.



♠ Early `proof-of-concept' model of Ambient Red.



★ Testing and evaluating Timeless Yellow with users in context.



∧ Simple interaction scenario of Timeless Yellow.

# Design Aesthetics & Culture

Socio-cultural values and subtleties, interaction design, aesthetic sensitivity.

Specialization Courses *Poetry in Design*, 2016

Poetry in Design challenged to use a poem as inspiration for a product redesign. The values, qualities, and cultural subtleties within the poem were interpreted through reflection-on-action processes. The poem L'infinito by Giacomo Leopardi was studied, recited, and analyzed from various perspectives which finally translated into SoundStone; a device that encourages the user to take a moment to center oneself during the hectic of everyday life, combining italian characteristics to a dutch lifestye.

Poetry in Design demanded sensitivity towards subtleties and integrating cultural aspects into a design process. The ambiguity present in poetry lead to dynamic and enriching conceptualization processes whilst framed by the poem's content.



Concept video, context of use of SoundStone.



SoundStone, the part where the user can hear her/his heart beat during use.

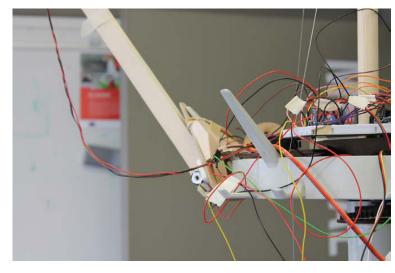
# Design & Technology

Designing human-computer interaction, interactive datavisualizations, story-telling, and electrical engineering.

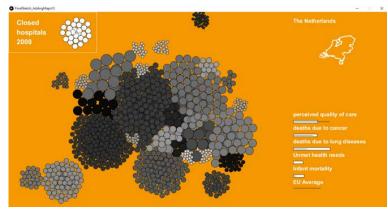
Specialization Courses
Anything goes in Biotopia, Designing an Intelligent Body, 2015
Designing Information Products, 2017

With Anything in Biotopia the task was to design an intelligent artifact, 'biotope', that was able interact with its environment. Biotopes interact through their body with a modeled intent, using external factors to compose internal processes. The elective emphasized the creation of artificial intelligence within a given body through coding, sensors, and actuators. The designed biotope was a coatrack with a 'mom' character. The biotope happily takes your coat entering home, but will express annoyance when you leave it lying around!

The aim of Designing Information Products is to design interactive data visualizations and explore their role on society and utility to different stakeholders. Secondly, to design a system for a smart home system that integrates novel data-visualizations (digital or physical) to play the major role in communicating with users for information and control. The final designs were, respectively, an interactive visualization comparing the healthcare quality to the amount of hospitals closed in Europe. And a data-communication system that tracks the user's wasteful behavior which is translated to their shopping experience.



▲ A modified coatrack with sensors and actuators to design intent and intelligence.



Screenshot of a developed interactive data visualization of closed hospitals in Europe.

# Design Processes & Methods

Tangible and rich interaction design, iterative design processes, growing systems.

Specialization Courses

Designing for Internet of Things, a Growing Systems Approach, 2016 Reflective Explorations in Interaction Design, 2015

The challenge of Designing for Internet of Things was to design a rich interactive media controller for IoT systems in the home environment. From Ideation with cardboard models evolved to proof-of-concept prototypes through an intense progressive-iterative design process. This process was accompanied by academic literature studies to gain understanding and directly apply the knowledge into the design decision-making. Our team's final design is a media remote with the capabilities of seamlessly couple and decouple two media functionalities with each other. I focused on the mechanical and product interaction of the prototype and concept. For example, a smart lighting systems would complement the colors of the videos played from smart television.

The iterative design process of designing a remote control for a growing, IoT system.

#### First iteration

New exploration to push video towards a connected display.



#### Second iteration

Expanding on first iteration mechanically and potential controls



#### Third iteration

Developing mechanics to support extended wings for bigger surface. Mechanics for retracting wings.

Integrating electronics.









Fourth iteration
Integrating electronic,
mechanics and
physical-visual aspects
into one design.



Fifth iteration
New design that allows individual wing control.
Coupling potential with middle circle and simultaneous engagement.
Cheap material model.



Final iteration
Solved issues existing
in fifth iteration. Full
interaction capabilities.
Use of transparent
perspex for visual and
mechanical purposes.



# Design Processes & Methods

Transformative and interaction qualities, materiality and aesthetics.

Specialization Courses

Designing for Internet of Things, a Growing Systems Approach, 2016

Reflective Explorations in Interaction Design, 2015

In Reflective Explorations in Interaction Design, theories such as Transformative Qualities and Design Fiction were applied to short design challenges. I learned to integrate aesthetic driven inquiry of experience design, focusing on interaction qualities and materiality. Tasty Elements (TE), a toolkit which enriches the making of your own tasty marinade by focusing on the three fundamental elements of a marinade: Acids, Oils, and Tastes. In Tasty Elements, the role and character of each element in the marinade is specifically embodied in the experience of the interaction between the tools, the food, and the user.



Finalized concept, a toolkit that guides and enriches the process of making your own marinade through its specialized tools, enticing visceral interactions betweeen the user and produce.



^ 'Caseum; create your own exotic cheese', concept developed with 'design speculation strategies'.



↑ Ideation through brainstorming followed by immediate hands-on exploration for defined interaction qualities.



Creating & analyzing interaction qualities.

# Atelier Vrijdag / Ontdekfabriek

03/2014 - 08/2014 Intern designer 02/2015 - 07/2015 Concept & workshop designer



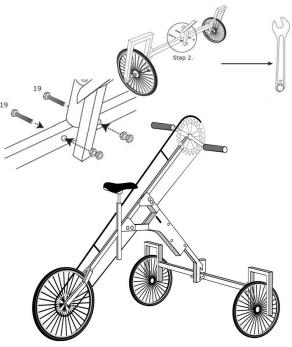
Stop-motion workshop "Advertisement Video"

Atelier Vrijdag is a creative studio and De
Ontdekfabriek offers workshops and interactive
experience for children and parents, through
rich narratives focused on technology.

My responsibilities varied from complete workshop development to small in between graphical jobs. Also, I never shy away to complete hands-on tasks. Mostly my tasks originated directly from client request or new projects to be integrated into the field (De Ontdekfabriek).

I had a great experience working there, learning more about the 'corporate' dynamic of designing and what role I can play in that environment. ✓ I made models, concept presentations and concept booklets for project meetings that involved several client parties amongst which municipality Eindhoven, KWS, Kanters B.V. and Korein Kinderplein.





I wrote and designed a child-friendly step plan, with supporting images, for assembling and disassembling a special bicycle. I tested this step plan in the field with a group of children and improved aspects accordingly to finish.



I had full responsibility to develop a stop-motion workshop for children. It started with an investigation into the most appropriate software and hardware, taking budget into account. Then designing the structure of workshop balancing fun, education and difficulty. I developed visual guides, promotion material and embedded them into an central aesthetic style. The workshop was then and still being offered by The Ontdekfabriek.



The Tilt-sensor was a full development project where children build a working tiltsensor from a small assembly package I put together. I had to take into account cost, difficulty, materials, and educative value. Starting with sketches and hand crafted models, the project finished with a complete DIY-package including my designed cardboard pattern, step-plan and build parts. The product received sponsership by Neways.

# Studio AnnaMariaCornelia

02/2012 - 06/2012 Design Intern

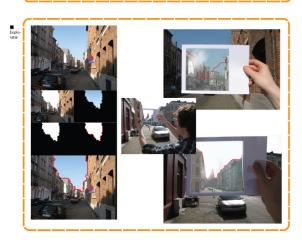
Studio AnnaMariaCornelia (AMC) is a concept design studio located in Antwerp, Belgium where I lived for the duration of the internship. New (work)environments, cultures, and people created a valuable learning experience. Experiencing the business dynamics and rules that apply in the creative line of work provided understanding of what is expected from a professional attitude and competency.

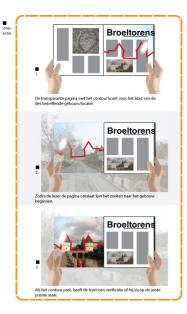
The work I delivered during this internship was a broad range, e.g. creative explorations, creating hands-on models, graphic design and business analysis. The owner prioritized and handed-out the assignments for which I then had responsibility of delivering quality and timely results. The owner in turn provided feedback and constructive criticism.

The client BUDA is a project city of Kortrijk which aims to create a new creative environment since 2008. Studio AnnaMariaCornelia was involved with BUDA as an inspirator, providing concept material and creative ideas for several projects. Our team designed pop-out movie tickets, concepts for 'brown bags' for a local foodmarket, and a creative touring booklet. Moodboards, sketches, and models were in itself a product for inspiration and concepts for BUDA.

## Skyline

Voor dit idee werd er gedacht vanuit het gebruik van de publicatie. Doordat de informatie richt op de activiteiten en bedrijven op idee betreel bedreit van de bezoeker te informeren en te laten exploreren (op het eiland). Een skyline is uniek door verschlieden betroer zoals looste, tijd en standpur, wat en en gelegenheit bied om on siet te informeren. Door middel van het integreen van een transparante pagina waarop een countour staat van een site specific skyline staat, kan de bezoeker op het EUD-kelland de voereenkomende skyline zoeken.





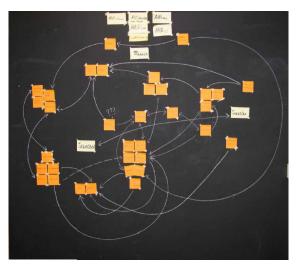




**1KG Concepts** 







In the end of the internship, I was put in charge of a (small) business analysis of the Studio AMC. By using frameworks such as Business Model Canvas, PEST analysis, to communicate the value proposition of the studio helped owner gained more insight in her business.

✓ In cooperation with TIO3, Studio AnnaMariaCornelia curated and designed a textile & technology exhibition. My job design and contribute the overall aethetics of the exhibition and promotion material.







Thank you for reading my portfolio. I look forward to the discussions we will have about design. You can find more and me via the following links: woutervangeesink@hotmail.com
www.woutervangeesink.com
www.vimeo.com/woutervangeesink
nl.linkedin.com/in/woutervangeesink