

APPENDICES

Master thesis

Design for
BEHAVIOUR CHANGE OF CONSUMERS
around
FURNITURE REPAIR AND UPGRADING

Laura Hurenkamp

Design for Interaction,
Delft university of technology



APPENDICES

- Project brief
- A Generative sessions materials
- B Brainstorm sessions plan
- C User test details
- D Profiles Motivation
- E Overview user journeys, result from generative sessions
- F Expert interviews, statements about consumer behaviour
- G COM-B with all drivers and barriers
- H Initiatives overview
- I Indirect stakeholders
- J +/- 50 ideas
- K C-Box
- L 11 ideas and their Harris profiles
- M First prototypes recipe cards
- N Final designs DIY cards
- O Final desing exhibition
- P Overview of products in store shelf

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

! USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy". Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !



family name Hurenkamp
 initials _____ given name Laura
 student number _____
 street & no. _____
 zipcode & city _____
 country _____
 phone _____
 email _____

Your master programme (only select the options that apply to you):

IDE master(s): IPD Dfl SPD

2nd non-IDE master: _____

individual programme: _____ (give date of approval)

honours programme: Honours Programme Master

specialisation / annotation: Medisign

Tech. in Sustainable Design

Entrepreneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair Ruth Mugge dept. / section: DOS / MCR
 ** mentor Sonja van Dam dept. / section: SDE / CPD
 2nd mentor Daniëlle Broeze
 organisation: Ministerie van Infrastructuur en Waterstaat
 city: Den Haag country: The Netherlands

comments
(optional)
 :
 :

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..



Second mentor only applies in case the assignment is hosted by an external organisation.



Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Ruth Mugge date - - signature _____

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: _____ EC

YES all 1st year master courses passed

Of which, taking the conditional requirements into account, can be part of the exam programme _____ EC

NO missing 1st year master courses are:

List of electives obtained before the third semester without approval of the BoE

name _____ date - - signature _____

FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: APPROVED NOT APPROVED

Procedure: APPROVED NOT APPROVED

comments

name _____ date - - signature _____

Design for sustainable consumer behaviour in furniture repair project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date _____ end date _____

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

This graduation project is focussed on furniture repair and will take place in collaboration with the Ministry of Infrastructure and Water Management (I&W), and Het Groene Brein.

The current situation is well known: Environmental problems and resource scarcity arise due to our growing world population, wealth and needs. Research by CE Delft (Bruinsma, 2021) shows that the average Dutchman makes by far the biggest impact on the environment by having stuff. A product category with a large environmental impact is furniture, the subject of my graduation (CE Delft, 2020).

The Dutch furniture sector emits 1.76 Mton CO₂-eq every year, a relatively large CO₂-footprint (Tauw, 2022). Furthermore, large amounts of furniture are being discarded, consumers and businesses in the EU states throw away 10 million tonnes of furniture per year (Forrest et al., 2017). Some of the discarded products are reused but the majority ends up in incinerators (Tauw, 2022). The production and incineration of the materials consumes energy and produces CO₂. Often, the discarded products are not yet at the end of their life. Replacement behaviour of consumers has been accelerated by technical development and fashion trends (Van Den Berge et al., 2021).

We need to use materials smarter and more efficiently. Dutch politics is active on this issue. In 2016, the government launched the programme: Nederland Circulair in 2050, which established that the Netherlands will have a fully circular economy by 2050 (Rijksoverheid, 2016). Ministry of I&W is responsible for the subject of circularity.

A circular economy can reduce a lot of environmental impact. The CO₂ emissions from the furniture sector could be reduced by almost one-third (Rijksoverheid, 2023). Sustainable design and recycling contribute, but the most CO₂ savings can be achieved by extending the lifespan of existing products and materials (Tauw, 2022). Repair is an important factor for lifespan extension. Repair helps to sustain materials and products, which leads to fewer usable products that are thrown away (Ackermann et al., 2021). Also, the government recommends that 100% of the repairable furniture will have to be repaired or refurbished in 2050 to reach the circularity goal (Rijksoverheid, 2022).

All stakeholders in the furniture industry will have to realise big changes in order to scale up repair. Firstly, it is required that consumers change their behaviour. In the end, consumers determine whether action is taken or not to repair their products (Ackermann et al., 2018). Consumers already recognise the need to take more care of their products, repair being part of this (Ackermann et al., 2017). However, they often fail to include these activities in their daily lives or hesitate to perform them (Ackermann et al., 2021). Research of Ackermann, Mugge and Schoormans (2017) states that the consumers lack triggers to perform product care. Triggers are stimuli that provoke a behaviour by enhancing people's motivation, ability or work as a signal (for example: the appearance of a product or social triggers). Besides these triggers, several studies have identified motivational factors and factors influencing the general ability to perform product care (Ackermann et al., 2017, 2021a, 2021b). These findings can help designers to reach behaviour change.

Besides consumers, the challenge is faced by business. Recently, Het Groene Brein took initiative to set up the Reuse Alliance, a coalition of companies in the furniture industry that work together to extend furniture lifetime. Companies can support consumers' sustainable behaviour by making reuse and repair possible and accessible with for example: services, spreading knowledge, new business models, educating repairers and more (The Reuse Alliance, 2023).

[space available for images / figures on next page](#)

introduction (continued): space for images



image / figure 1: 'Grofvuil' furniture found in Amsterdam (Suyderhoud, 2022)

TO PLACE YOUR IMAGE IN THIS AREA:

- **SAVE THIS DOCUMENT TO YOUR COMPUTER AND OPEN IT IN ADOBE READER**
- **CLICK AREA TO PLACE IMAGE / FIGURE**

PLEASE NOTE:

- **IMAGE WILL SCALE TO FIT AUTOMATICALLY**
- **NATIVE IMAGE RATIO IS 16:10**
- **IF YOU EXPERIENCE PROBLEMS IN UPLOADING, CONVERT IMAGE TO PDF AND TRY AGAIN**

image / figure 2: _____

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

Current climate problems and scarcity of materials call for a transition to circular economy. This project focusses on the furniture industry in which great impact can be made by saving materials, energy and emissions. Extending the lifespan of existing furniture can achieve most impact (Tauw, 2022).

To achieve the goal of a 100% circular economy by 2050, the Dutch government advises to repair or refurbish 100% of the furniture items that are repairable (Rijksoverheid, 2022). It should be further analysed if repair and refurbishment contribute to a longer product lifetime in all cases. Factors like the demand for repaired and refurbished products influences the impact that can be made. Alternative strategies like upgrading or repurposing of furniture might be more effective in some cases. Despite the uncertain mix of strategies, scaling up repair will be necessary and requires changes and efforts from all stakeholders in the system: consumers, companies and the government.

It is crucial that consumers take steps to repair their furniture (or have it repaired). Currently, consumers are still experiencing barriers as many repairable furniture items are being disposed. Examples of barriers found in literature are high repair prices, high effort, insecurity, unavailable tools and trend sensitiveness (Tauw, 2022; Forrest, 2017; Ackermann et al., 2018). Consumers need support to perform repair behaviour. Businesses and the government can use design to realise new business models and services to create user friendly repair opportunities and help overcome barriers. Repairers, manufacturers, retailers and other furniture parties can all play a role in the new circular system.

In my project, I will focus on the barriers and needs of consumers around furniture repair and combine these insights with knowledge and possibilities from the industry and government. The goal of the project is to come up with a design intervention that changes consumer behaviour around furniture repair to prolong product lifetime.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

In this graduation project, I will create a design intervention that changes consumer behaviour around furniture repair to prolong product lifespan. The intervention contributes to increasing consumers' willingness to repair furniture and helps consumers to turn their willingness into actions.

The ultimate goal of my design is to change consumer behaviour. When a piece of furniture is damaged, consumers will not throw it away but take steps to repair it themselves, and where not possible, have others repair it.

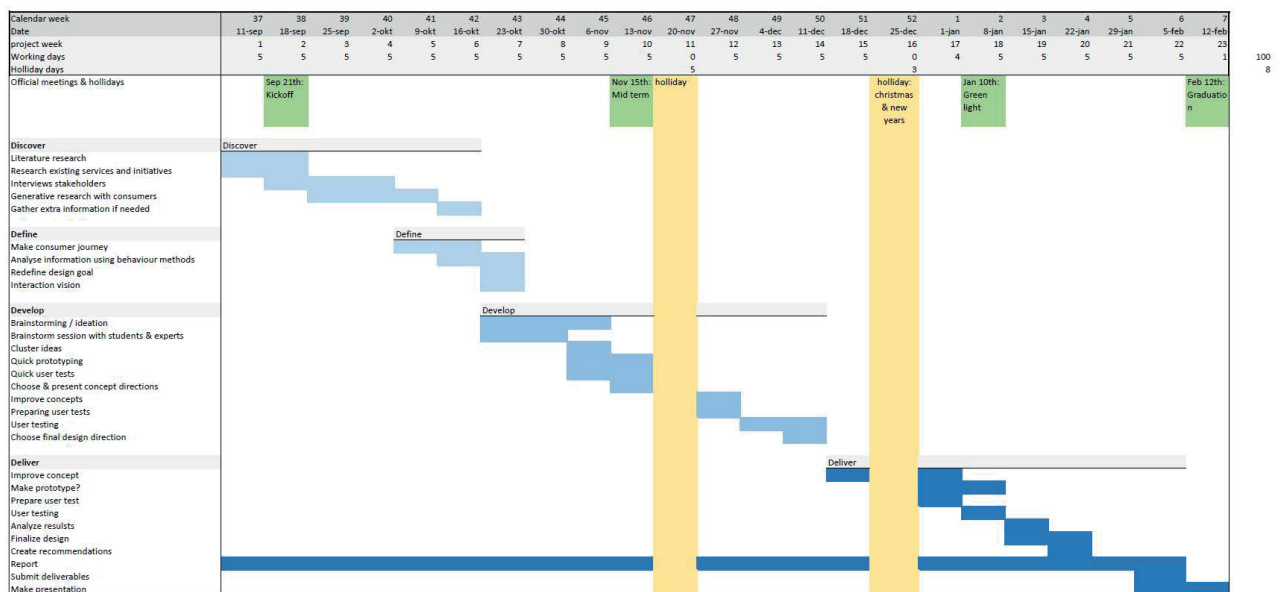
There already is literature on design strategies to stimulate product care, repair is a part of this (Ackermann et al., 2021). I will use this knowledge and apply it to the product category of furniture. With my research activities, I will find out which strategy will be effective for furniture repair. The solution direction thus depends on the research outcomes and therefore the options are still broad. My design could for example address: information provision, self-confidence, availability of tools, awareness, etc.

Despite the still unknown solution direction, my expectations are to design a service or campaign. It is important that my design connects to real-world practice. In this way, my design can bring value to parties in the furniture sector that are currently engaged in the circular transition. I do not focus on big manufacturers like Ikea, but I focus on parties that can stimulate and enable consumers that already own a product to do repair activities. A service could be designed for an online repair platform, 2nd hand trade businesses such as Marktplaats or the thrift store. In the case of a campaign, I will look for a connection with a party that is working on campaigns, such as Milieu Centraal. Het Groene Brein would like to bring me in contact with these parties.

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date _____ end date _____



My planning is divided into 4 phases, based on the double diamond.

In the discovery phase I will dive deeper into the broad context of furniture repair. By desk research and interviews with stakeholders, I will learn about the current repair system: the stakeholders, the repair options, what reparations involve, the role of DIY reparation, and more. Also, I am curious to research where most environmental impact can be reduced, maybe by focussing on a specific furniture type or target group. Lastly, it is important for me to research consumers' behaviour around furniture repair, and especially, what lies behind this behaviour. I will use literature and generative research.

In the define phase, I will analyse all findings. I will create a customer journey and identify barriers that hold consumers from repair. Also, I will find and review promising opportunities. This phase results in a redefined design goal.

I will start generating ideas in the development phase. These ideas will be developed into concepts which will be improved with the outcomes of user tests. This phase will end by choosing one design direction.

In the last phase, the deliver phase, I will detail the final concept, make a prototype and organise a user test. With the outcomes of this test, I will improve the design and write recommendations. Furthermore, I will finalise the report.

I planned to take one week off in November, one week during Christmas, and New Year's Day. In total I will use the 8 days off (besides the national holidays) as described in my contract with the Ministry of I&W.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, Stick to no more than five ambitions.

My motivation for this project comes from my personal interest in sustainability. I am very glad I chose IDE as a study, because design can trigger and facilitate sustainable behaviour in other people. Hereby, designers can contribute to sustainability challenges. I am excited that I my graduation topic is connected to sustainability by aiming for a circular furniture industry. Furniture repair brings great value in terms of material, energy and emission savings. I am happy to work on this challenge by doing research and design activities which I enjoy doing a lot!

Secondly, I am excited to gain knowledge about human behaviour in general and design for behaviour change. During my internship in the previous semester, and during some IDE courses, I was introduced to literature and models about human behaviour and strategies for behaviour change by design. This made me eager to try and apply the theory and knowledge on a project myself. In this graduation project, I would like to learn more about the current behaviour of consumers around furniture repair and how it can be influenced by design.

Furthermore, I am interested to gain insight in the Ministry of I&W and in the companies that I plan to contact during the project. I will try to find a job after my graduation and am curious to explore the possible work options for designers. Therefore, I would like to experience how it is to work for the government or furniture industry as a designer and see if it fits me.

I enjoy the focus on furniture as a product category because furniture design, craftsmanship and tangible materials such as wood and textiles have always captured my interest.

Lastly, this project gives me the opportunity to manage a large project myself. This brings many challenges, such as professional and effective communication with all stakeholders, time management, aligning feedback and requirements, asking for the right support, making decisions and much more. These are very valuable skills for me to practice.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

A GENERATIVE SESSIONS MATERIALS

Sensitize booklet

The sensitize booklet is presented below. The questions are in Dutch as the participants were all Dutch-speaking. Besides, a very minimal visual style was chosen, to invite the participants to make it their own.

<p>1. Algemene informatie</p> <ul style="list-style-type: none">• Leeftijd:• Wat is het hoogste opleidingsniveau dat je hebt gemaakt? (geen, basisschool, middelbaar onderwijs, MBO, HBO, WO (bachelor / master)• In welke plaats woon je? En in welke buurt?• Met wie woon je (als je met anderen woont) en hoe omschrijf je jullie relatie?• Hoe lang woon je hier al?• Hoe ziet je huis er uit? Kun je een kleine tekening maken of het omschrijven? (Je kunt denken aan: is het een rijtjeshuis, appartement, vrijstaand, is er een tuin, balkon, garage, hoeveel kamers, verdiepingen etc...)	<p>2. Meubels in jouw huis</p> <p>Kun je 2 meubels uit jouw huis kiezen, die jouw favoriet zijn? Ga verder naar de volgende pagina's om over deze 2 te vertellen</p>
--	---

<p>1. Algemene informatie</p> <ul style="list-style-type: none">• Leeftijd:• Wat is het hoogste opleidingsniveau dat je hebt gemaakt? (geen, basisschool, middelbaar onderwijs, MBO, HBO, WO (bachelor / master)• In welke plaats woon je? En in welke buurt?• Met wie woon je (als je met anderen woont) en hoe omschrijf je jullie relatie?• Hoe lang woon je hier al?• Hoe ziet je huis er uit? Kun je een kleine tekening maken of het omschrijven? (Je kunt denken aan: is het een rijtjeshuis, appartement, vrijstaand, is er een tuin, balkon, garage, hoeveel kamers, verdiepingen etc...)	<p>2. Meubels in jouw huis</p> <p>Kun je 2 meubels uit jouw huis kiezen, die jouw favoriet zijn? Ga verder naar de volgende pagina's om over deze 2 te vertellen</p>
--	---

Favoriete meubel 1

maak hier een schets van je meubel, het hoeft niet mooi te zijn!

- Hoe kom je aan dit meubel?

.....
.....

- Hoe lang heb je het al? Hoeveel geld kostte het?

.....

- Wat vind je van dit meubel? Kun je je mening en gevoel erover omschrijven? *Als je wil, kun je hier de woorden en plaatjes gebruiken die je hebt meegekregen*

- Kun je een foto van het meubel sturen naar Laura?
- Waar gebruik je dit meubel voor?

.....
.....

- Wie gebruikt dit meubel?

.....
.....

Favoriete meubel 2

maak hier een schets van je meubel, het hoeft niet mooi te zijn!

- Hoe kom je aan dit meubel?

.....
.....

- Hoe lang heb je het al? Hoeveel geld kostte het?

.....

- Wat vind je van dit meubel? Kun je je mening en gevoel erover omschrijven? *Als je wil, kun je hier de woorden en plaatjes gebruiken die je hebt meegekregen*

- Kun je een foto van het meubel sturen naar Laura?
- Waar gebruik je dit meubel voor?

.....
.....

- Wie gebruikt dit meubel?

.....
.....

3. Minder favoriete meubels

Kies 2 meubels uit jouw huis waar je minder fan van bent.

Minder favoriet meubel 1

maak hier een schets van je meubel, het hoeft niet mooi te zijn!

- Hoe kom je aan dit meubel?

.....
.....

- Hoe lang heb je het al? Hoeveel geld kostte het?

.....

- Wat vind je van dit meubel? Kun je je mening en gevoel erover omschrijven? *Als je wil, kun je hier de woorden en plaatjes gebruiken die je hebt meegekregen*

- Kun je een foto van het meubel sturen naar Laura?
- Waar gebruik je dit meubel voor?

.....
.....

- Wie gebruikt dit meubel?

.....
.....

Minder favoriet meubel 2

maak hier een schets van je meubel, het hoeft niet mooi te zijn!

- Hoe kom je aan dit meubel?

.....
.....

- Hoe lang heb je het al? Hoeveel geld kostte het?

.....

- Wat vind je van dit meubel? Kun je je mening en gevoel erover omschrijven? *Als je wil, kun je hier de woorden en plaatjes gebruiken die je hebt meegekregen*

- Kun je een foto van het meubel sturen naar Laura?
- Waar gebruik je dit meubel voor?

.....
.....

- Wie gebruikt dit meubel?

.....
.....

4. Meubel dat je niet meer hebt

- Is er een meubel dat je niet meer hebt (bijv. laatst hebt weggegooid, verkocht of weggegeven)?

maak hier een schets van je meubel, het hoeft niet mooi te zijn!

- Kun je een foto van het meubel sturen naar Laura (als je die hebt)?
- Hoe ben je het meubel kwijtgeraakt? (Hoe heb je het verkocht, weggegeven, weggegooid etc.?)

.....

.....

.....

- Wat is de reden dat je het niet meer hebt?

.....

.....

- Waar gebruikte je dit meubel voor?

.....

.....

- Wat vind/ vond je van dit meubel? Kun je je mening en gevoel erover omschrijven?

.....

.....

.....

.....

.....

5. Meubels opknappen / repareren

Heb je ooit een meubel gerepareerd of geupgrade (of dit geprobeerd)?
(upgraden is het uitbereiden van het uiterlijk of de functie van je meubel (bijv. een nieuwe verf, of extra plank etc.))

- Kun je vertellen of tekenen welk meubel het was en wat je ermee hebt gedaan?

.....

.....

.....

.....

.....

- Wat vond je van deze ervaring?

.....

.....

.....

6. Thema's

1. Hoe belangrijk zijn de volgende waarden voor jou:

(zet een kruisje)

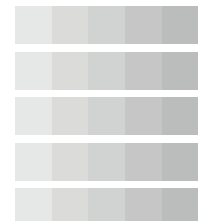
- **Traditie**
(respect voor traditie, beleefdheid, je schikken naar de levensomstandigheden, nadruk op het geestelijke, en niet op materiële zaken, bescheidenheid)
- **Zelf beschikking**
(creativiteit, vrijheid in denken en doen, nieuwsgierigheid, onafhankelijkheid, selecteren van eigen doelen)
- **Prestatie**
(succes, competentie, ambitie, invloed hebben op mensen en gebeurtenissen)



2. Hoe belangrijk vind je:

- **Rust en regelmaat in het leven**
- **Een afwisselend leven vol uitdaging**
- **Luxe**
- **Maatschappelijk betrokken zijn**
- **Bewust bezig zijn met mijn ecologische voetafdruk**

niet belangrijk heel belangrijk



3. Waar let jij op bij het maken van keuzes in je leven?

(bijv. als je op vakantie gaat of bepaalde spullen nodig hebt)

	niet belangrijk	heel belangrijk
plezier	<input type="checkbox"/>	<input type="checkbox"/>
gemak	<input type="checkbox"/>	<input type="checkbox"/>
duurzaamheid	<input type="checkbox"/>	<input type="checkbox"/>

4. Geef je voorkeur aan:

Ik let op wat mensen om mij heen doen en dit beïnvloed mijn keuzes	<input type="checkbox"/>	Ik trek het liefst helemaal mijn eigen plan.
--	--------------------------	--

Ik leef graag in het hier en nu.	<input type="checkbox"/>	Ik leef gericht op de toekomst.
----------------------------------	--------------------------	---------------------------------

Ik ben geïnteresseerd in duurzame (technologische) innovaties (bijv. een tesla, sneakers van recycled plastic uit de oceaan)

helemaal niet	heel erg
<input type="checkbox"/>	<input type="checkbox"/>

5. Welke aanpak(ken) voor verduurzaming heeft jouw voorkeur:

- Ik heb hier geen mening over
- Nieuwe technologie & bedrijven gericht op duurzaamheid
- Duidelijke plannen vanuit overheid en instituten
- Samenwerking tussen burgers, bedrijven en overheid
- Ieder draagt individueel z'n steentje bij
- Mijn eigen initiatieven of plannen met bekenden / familie
- Anders

7. Voor de sessie

Als voorbereiding voor de sessie: kies 2 van jouw meubelstukken uit:

1. Een meubel dat je hebt gerepareerd of geupgrade of dit hebt geprobeerd. Het kan door jezelf zijn of door een ander / professional.

Als je dit niet hebt, kun je een meubel kiezen waarbij je er misschien voor open zou staan om dit te doen.

2. Een meubel dat je niet zou (laten) repareren of upgraden.

Stuur van beide een foto naar Laura.

Bedankt dat je meedoet aan het onderzoek van mijn afstudeer project!!

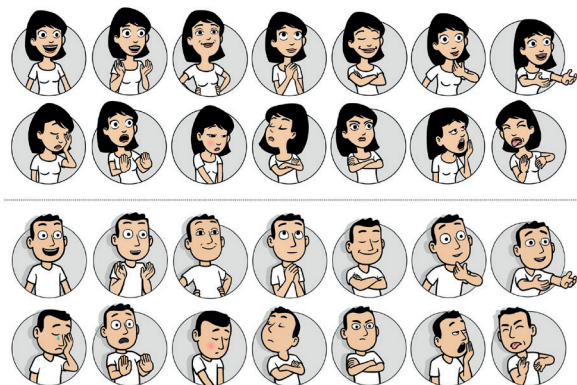
Het zou me erg helpen als je dit boekje invult en mee neemt naar de sessie. Voor vragen kun je altijd bij mij terecht!

Groetjes Laura

Tot op de sessie! en nogmaals bedankt!!!

Emotion trigger set

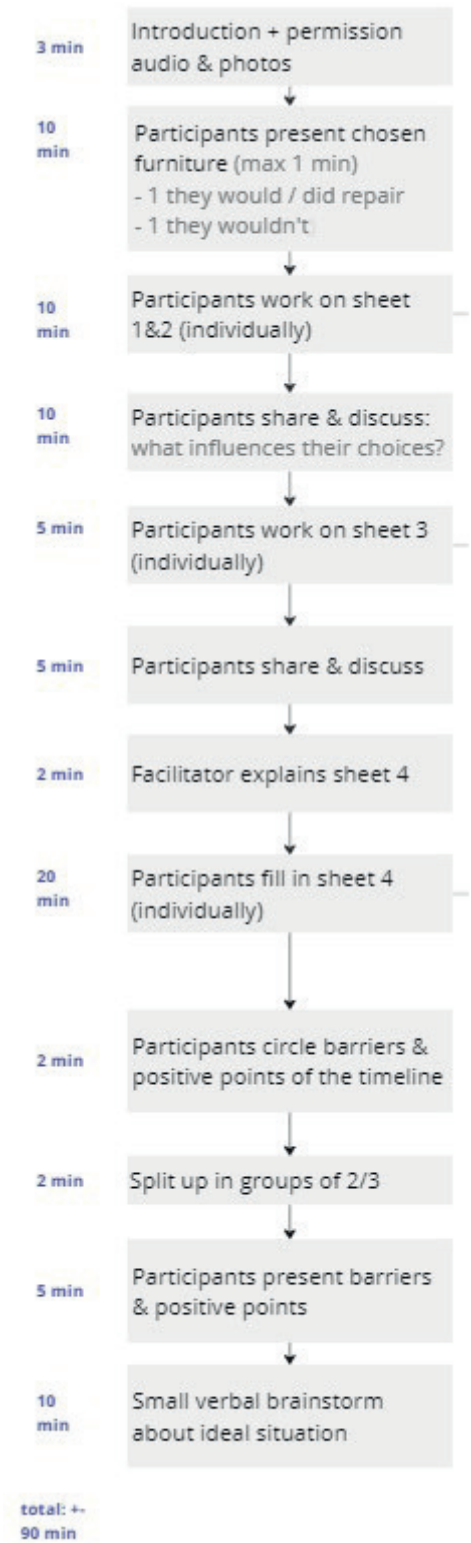
Anger	Distrust	Amusement	Positive surprise
Annoyance	Insecurity	Sensory Pleasure	Awe
Contempt	Confusion	Relief	Hope
Boredom	Resentment	Euphoria	
Disappointment	Frustration	Lust	
Rejection	Disgust	Tenderness	
Envy	Sadness	Gratitude	
Regret	Loneliness	Admiration	
Fear	Longing	Pride	
Anxiety	Guilt	Fascination	
Nervousness	Embarrassment	Inspiration	
Desperation	Worry	Excitement	
Indignation	Doubt	Schadenfreude	
Dissatisfaction	Distress	Serenity	
Hate	Shok	Satisfaction	
Reluctance		Happy-for	
Pity		Affection	
Humiliation		Elevation	
Jealousy		Worship	
Shame		Moved	
Startle		Determination	



Notes

- It was led to the participants' discretion whether they made use of the pre-structured worksheets and trigger sets or preferred working on the blank reverse side of the sheets.
- The facilitator's main task was introducing the activities and keeping track of time. Additionally, the facilitator did encourage some participants to speak up, asked for further clarification in the conversations and cut off divergent conversations which stray too far from the topic of interest.

Session plan & planning



Worksheets

<p>Wat gebeurt er met dit meubel?</p> <p>Wat doe je ermee & waarom?</p>	<p>Hoe maak jij de keuze om deze meubels wel of niet te repareren of upgraden?</p> <p>Probeer je gedachtes en alles wat meespeelt in de keuze op te schrijven.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 100px;"> <div style="text-align: center;"> <p>Dit repareer of upgrade ik niet</p> <p>NIET</p> <div style="border: 1px solid black; width: 80px; height: 60px; margin: 0 auto;"></div> </div> <div style="text-align: center;"> <p>Dit repareer of upgrade ik</p> <p>WEL</p> <div style="border: 1px solid black; width: 80px; height: 60px; margin: 0 auto;"></div> </div> </div>
--	--

2

1

Het reparatie of upgrade proces

Probeer zo veel mogelijk stappen van jouw reparatie / upgrade ervaring te vertellen aan de hand van de post-its.

3

Participants

	Pilot	Session 1	Session 2	Interview session
Total participants	2	6	8	2
Gender	2x female	3x female 3x male	4x female 2x male	1x female 1x male
Age groups	2x 18-35	6x 18-35	2x 18-35 2x 35-55 2x 55-80	2x 80+
Education level	2x high	6x high	5x high 1x middle	2x middle

B BRAINSTORM SESSIONS PLAN

Goal:

As many ideas as possible for the design direction.

Preparation

All participants received a written introduction including design goal and target group, 2 days in advance of brainstorm session.

Participants

Session 1:

- 1 facilitator: Laura Hurenkamp
- 6 IDE master students

Session 2:

- 1 facilitator: Laura Hurenkamp
- 3 people BIT team of Ministry of I&W of which 2 specifically working circularity in furniture sector.
- 1 behavioural expert from ... department of Ministry of I&W.
- 1 fellow intern, behavioural economics, also working on graduation project around DIY furniture repair.
- 1 expert from Jafix, online repair manual service

Setup

- Session 1: Online, Miro
- Session 2: Physical meeting, using big sheets of paper and post-its to write ideas on

Program

Time total: 1 hour

Introduction:

- Rules of brainstorming
- Goal of the day
- Explain design goal & target group

Purge on empty (digital) sheet

Second wave of ideas using the questions:

How to ...

- .. support people to make a plan?
 - .. increase people's knowledge & skills?
 - .. support people to have positive expectations about the DIY process & results?
 - .. support people's confidence?
- .. support / promote people to work together?
 - .. ask for help?
 - .. know how / where to ask for help?
 - .. offer help?
- .. reach the target group?
 - .. get into contact?
- .. provide the target group's preferences (e.g., social status)?

Review ideas with the group

Hits & Dots – all participants choose individually most promising ideas.

C USER TEST DETAILS

User test - 2 concepts

interview questions

The guiding questions for the semi-structured interviews in the user tests were:

- What do you think of the concept?
- Would you use the concept?
- Would this encourage you to repair/upgrade furniture more often, why would it, or why not?
- Further remarks/tips?

User test - final design proposal Opknappers

Setup

The setup was positioned at the entrance of the store and included:

- A standing table on which the prototypes were placed.
- Prints of the 6 designed DIY cards.
- A prototype of the Opknappers store shelf, which included a cabinet with several products and category titles and letter codes attached to it.
- A3 prints of visuals of the Opknappers store shelf and exposition.
- A Figma prototype app on a phone.
- An exposition piece (half-upgraded piece of furniture) to attract attention and clarify the study topic.
- Cookies to give to participants.



Interview guide

Visitors of the store were approached and asked if they would like to assist with a graduation project. Following, a conversation of approximately 5 minutes took place with individuals or sometimes with two people at the same time. The design elements were explained in two parts: the Opknappers app and the combination of exposition, DIY cards, and store shelf. It was varied which of the two was presented firstly in the tests. The following questions were used to ask the opinions of the participants:

- What do you think about the design, and why?
- Do you find it helpful, and why?
- Would this actually lead to your performing more repair/upgrading, and why?

D PROFILES MOTIVATION

Duty-bound (plichtsgetrouwen)

- 13% of Dutch people
- Traditional, quiet and regular life, value family and often faith, resistance to change, socially engaged, good citizenship, not so status sensitive.
- Sustainability: live sustainably, focused on economical and neat way of living

Structure seekers

- 32% of Dutch population
- Enjoyment, entertainment, regular and easy living, focused on the here and now, little interest in politics, risk-averse, status-sensitive, value material wealth, luxury. Little ambition and responsibility.
- Sustainability: less motivated for sustainable choices

Status-conscious

- 22% of Dutch people
- Ambitious in career and social status, optimistic view of future, interest in technological developments, open to innovation, interest in luxury.
- Sustainability: aware of environmental issues but not concerned

Responsible

- 22% of Dutch people
- Critical, socially and politically oriented, want to add something, discover, unleash, enjoy, stand up for environment and social success.
- Sustainability: intrinsically motivated to live sustainably, seek balance between comfort/ enjoyment and sustainability (sometimes still take the airplane for holidays)

Developers (ontplooiers)

- 10% of Dutch people
- Personal freedom, creative, forward-looking, looking for adventure and personal growth, do not follow the masses, detached from status, broad interests, pick-the-day mentality
- See the importance of sustainability, do not always act accordingly.

E OVERVIEW USER JOURNEYS GENERATIVE SESSIONS

phase	Identify the issue	Wait/ postponing time	Plan making process			Get material tools
			Look for/ find inspiration	Call for help	Make a plan	
Participants	C,F,G,H,J,K,L, M,N,P	C,D,G,K	C,F,K,M,P	A,- B,D,G,H,I,J,L ,N,O	all	15x
Specific activities	Take a good look at damage C,H,N Problem is clear G,J,K,L,M,P	Do nothing C,D,K Temporary solution G	See how roommate behaves with sofa C Pinterest F,H Due to materials at home M Make holliday plans K See what fits other furniture M,P	Call parent A,H,I,N Call partner G Call retailer L Visit retailer J,O Discuss with roommate D Ask family live B Ask colleagues O	With help A,B,D,G,H,I,N,O By yourself C,F,J,K,L,M,P Logistic plan A,B,G Ask permission partner M	Purchase onl Helping perso them A,I,N Buy at physic B,J,P,D Get & borrow Already have Buy at other s Buy on hollid
Help from				Retailer J,O,L Partner G Parent(s) A,N,H,I,B Roommate D Colleague O		Neighbour B Parent(s) B,I, Sister B Partner P Roommate H
Barriers & drivers	Appears to be hard to repair N Feeling bored F	No idea how to solve C Not making time for repair D Made no plan yet G Not feeling like it G Using damaged product is becoming frustrating G	Enjoy pinteres H Found idea on how to solve issue C In need of new type furniture, old one can be transformed P Having materials at home that would be perfect M Holliday is trigger to buy materials as souvenir K	Knowing family member has skills A,B,H,I,N Repair was needed before, know where to find professional J Being loyal and trust one repair company L Having experts in social network O	Make the plan together A,B,D,G,H,N Get advice from others O Having more furniture pieces that need (the same) treatment G,K,M Set a date / time together with helping person G,I Parents have knowledge and experience A,B,H,I,N see repair/ upgrading as a relaxed evening activity K,M Have knowledge/skills yourself K Small budget H Repair will take few hours, hard to make the time I	Easily borrow tools (family) G,B,A,I,H Having experience with specific material, know what you need P Car is needed, feel burnened to ask someone H Already having materials or tools F,M
Emotions	Sadness Dissappointment	Unsatisfied Frustrated Annoyance Disgust	Fascination Desire		Determination Hope	Inspired Positive surprise Proud

Persons/	Prepair repair/ upgrading	Repair / upgrade	Round off		Evaluate result
			Clean up	Transport furniture	
	B,F,G,H,I,J	all	F,H	B,F,I	A,- B,C,D,F,H,J, K,M,P
Line A Person takes with DIY shop from others G,H at home F,J,M shop A,H,I,L,O day K	Move furniture with help B,P Make space (with help) B,G,H Gather materials F,J Make upgrade space ready F,P Check how tools work	Paint wooden furniture A,B,O,P,F Shop extra materials A,M,N Re-upholster M,K Reinforce / repair / make structure H, N,D,G, H Hide damage C Shorten blinds I Accept imperfections Make 2nd plan Improve / touch ups	Clean up F,H Bring garbage materials to right place H	Transport furniture to own house by van B Furniture back into room F,I	Use furniture A,J,K,P Look at result Share result with others K,M
A,N,G D	Neighbour B Parent(s) B,I Sister B Partner P Roommate H,D	Partner B,M,F,G Parent(s) A,N Roommate H,D		Father B	
Finding cheap materials D Receiving information about materials in shop L Having no tools at home G Hard to make time for buying materials H Finding beautiful materials in store B,I,P Materials are nowhere to be found J	No suited place for repair/upgrade activity in the house H Moving furniture is hard B	Do it together A,B,D,F,G,H,M Having experience with material and work K Feeling insecure about own skills N First plan doesn't work out A,J,K,N Not satisfied with result M,A,B,K,O Upholstery is attached with staples, impossible to get out K Find materials needed for plan 2 A,M Seeing that 2nd plan works out C,A Have a nice workspace F,K,M Tools don't work G Enjoy doing H,K,F,M,O See repair/ upgrade as relaxing activity K,M Enthusiasm from other people F,K Reaching unexpected nice results O,P Being happy with results during process F Accept imperfections Having a new plan A,J,K,M,G,N	Don't enjoy cleaning F	Family owns a van B Damage by transport	Share result with others K,M
Fear	Insecure Nervousness	Insecure Fear Frustrated Annoyance Unsatisfied Doubt Anger Tired	Hope Joy Positive surprise Euphoria Desire	Aversion	Positive surprise Joy Proud Satisfaction Relief

F EXPERT INTERVIEWS, STATEMENTS ABOUT CONSUMER BEHAVIOUR


Below are paraphrased and translated statements from the expert interviews, connected to some of the barriers and drivers:

 Emotional attachment

"We receive almost only reupholstery jobs for expensive designer, or emotional valuable furniture."(Meublowski)

 Social norm

"It's between the ears what people do and don't repair, with a car and bike it's the most normal thing, with furniture it's not."(Sieds)

 Required knowledge and skills

"People often think they can't do it but have never tried." (Ambacht Centre Apeldoorn)

 Confidence/self-efficacy

"People lack skills." (Amita)

 Environmental concern

"Most people are motivated by a sense of it being a shame to dispose, or saving money, but not to save the earth." (Sieds)

 Accessibility tools & supplies

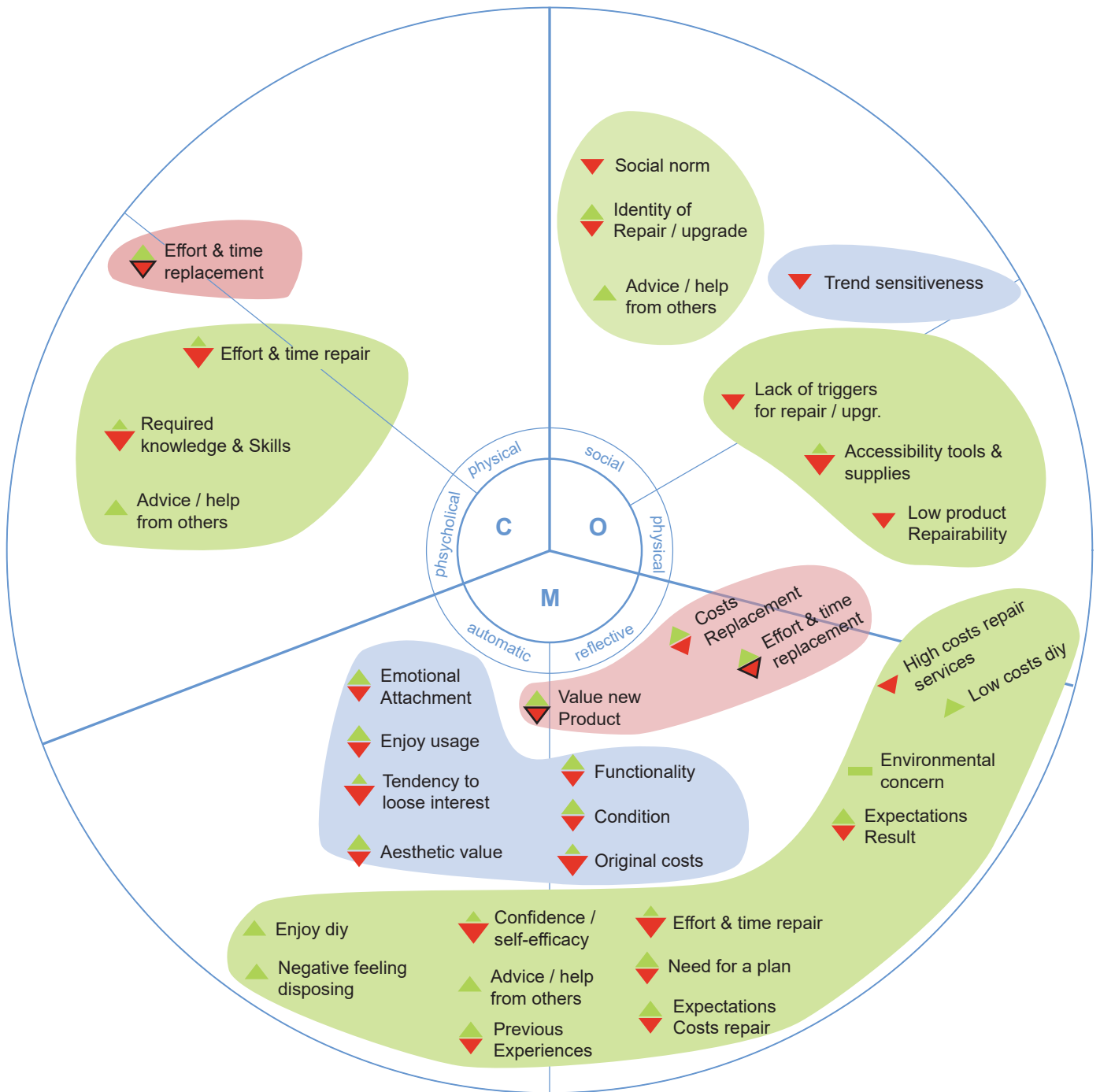
"People sometimes don't have a workplace that is suited to get dirty."(Ambacht Centre Zwolle)

 Low product repairability

"People don't take the time for it."(Amita)

 Effort & time

G COM-B WITH ALL DRIVERS AND BARRIERS



- Mental book value current product
- Attitude towards repair / upgrading
- Attitude towards new product

H INITIATIVES OVERVIEW

Lifespan extension of furniture is starting to become an increasingly hot topic. Currently, more and more companies are working on repair and reuse. Initiatives and active companies have been identified, an overview of all these initiatives is presented below.

Name stakeholder	Description initiative
Marktplaats & Race against Waste	Education on primary schools about sustainability
Sire	Campaign: Waardeer het, Repareer het 2019
Marktplaats	Campaign: commercials about value 2nd hand furniture
Milieu Centraal	International repair day – toolkits for repair cafes with communication materials
Ikea	Campaign about DIY repair is coming up
The Reuse Alliance	Collaboration of companies in the furniture industry, work together towards circular furniture sector.
The Substitute	Platform and community around sustainable interior and renovation.
Werkspot.nl & zoofy.nl	Find a 'klusjesman / vrouw'
Manon Ruijgrok	Upholstery
Meublowski	Upholstery & offering workshops
Matteo Visser	Antique restorer (furniture)
Leolux	Repair products from their brand in and out of warranty
Label van den Berg	Repair products from their brand
POS	Repair company
Vitra Circle	Repair, refurbish and resell showroom and stock furniture pieces
Intergamma	Focusses more on clients with less experience in DIY https://www.rtlnieuws.nl/editien/artikel/5409186/waarom-jongeren-minder-goed-klussen-gamma-praxis
Timmerman Koos – YouTube	Tutorial videos
Other content creators on social media	Tutorials and inspiration content
Jafix	Online repair tutorial platform
VT Wonen	Webpage with DIY interior projects
Several municipalities	Free cargo bikes and trailers available for citizens to bring bulky waste / second-hand items to the disposal site
Circular Ambacht Centra	Some of these are working on furniture repair / upgrading
IKEA	Pilot on doubling offer of second-hand furniture in their shops
Marktplaats	New label on website for second hand products: 'not functioning'

Waste disposal sites	Some select the discarded usable furniture pieces and bring these to thrift shops.
Waste disposal sites	Some pilots around reselling disposed furniture pieces at the site
Ikea	Developing solutions to make spare parts available globally
Marktplaats	Project Street Rescue: collaboration with municipalities to prevent good functioning furniture being disposed and ending up on the streets.
Branchevereniging Kringloop Nederland	Research and pilots around a Upcycle collection, circular warehouse
WaardeRing	Pilot sustainable store for interior
Bankhoezendiscounter	Selling covers for standard sofa sizes
Boost paint	Special collection of furniture paint
Marktplaats	Research regarding if Marktplaats can offer transport service for big items sold on their platform
Vitra	Pilot with DIY videos
Onze	Design and workplace making interior items from waste materials
Euromesmarko	Circular furniture design
Cooloo	Making sustainable coatings for furniture and circular furniture design
Ikea & Space 10	Modular thinking for furniture design https://www.dezeen.com/2022/05/27/oio-ikea-ai-space10-furniture-evolve-adapt/
The upcycle	Designstudio, making design from waste material
The upcycle & Woonzorg Nederland	The upcycle has made new furniture from materials sourced from furniture from renovated houses from Woonzorg Nederland
Studio Hamerhaai	Designstudio, interior products form waste materials
Bloey	Designstudio, interior products form waste materials & social goal
Tolhuijs	Designstudio, interior products form waste materials & social goal
Gispen & TNO	Circular design framework

INDIRECT STAKEHOLDERS

Dutch Government (responsible ministry: Ministry of I&W) is working on:

- Providing financial resources (such as development and scaling-up incentives for recycling and reuse programs)
- Supporting/establishing pilot businessmodels
- Planning for a UPV for furniture
- Developing design requirements for Eco-design
- Creating a repair guide
- Grants for circular Ambacht Centres (Rijksoverheid, 2023)

European commission

Is working on a proposal focused on eco-design. This involves developing a wide range of targeted product requirements to address the product aspects that influence environmental impact such as product durability, reusability, upgradability, reparability, the impact of materials used, and more. (European-Commission, 2022).

Right to repair movement

A coalition of European organisations pushing for system change around repair. fighting for legal actions by the government in several countries to ease repair for consumers. By product design for repair, making spare parts available as well as information provision, affordability and transparency of repair (Right to repair, 2023).

Various research projects

Multiple studies are being conducted on the circular furniture industry, such as research project "Urban Upcycling" by the HvA (Hogeschool van Amsterdam).

Het Groene Brein

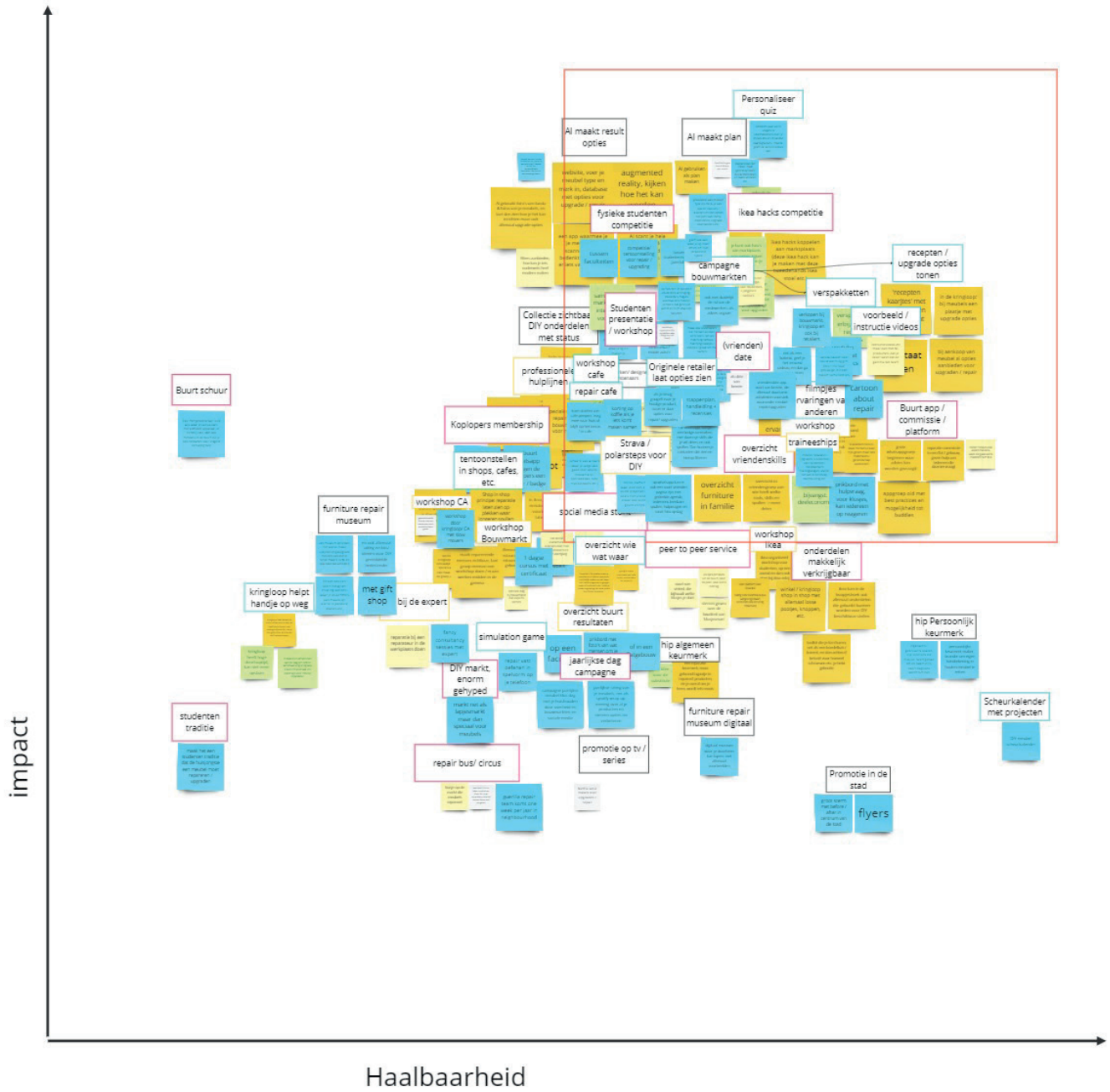
A nonprofit organisation that encourages companies in the furniture industry to collaborate on circular pilots and plans within the consortium: the Reuse Alliance.

Educational institutes

To scale up repair/upgrading, it is necessary to educate more repair technicians.

J +/- 50 IDEAS

1. Traveling repair crew and bus
2. DIY market, hype on social media
3. Make it a student tradition, part of yearly program / in student houses
4. Peer to peer service
5. National, yearly repair/upgrade day
6. Make repair / upgrading a date activity (romantic or with friends)
7. Membership / ambassador status for fanatic repair/upgraders -> getting discount on materials when helping others and spreading the word
8. Social media stunt
9. Neighbourhood DIY space
10. Overview of knowledge and supplies of friends
11. Neighbourhood app or committee or platform
12. Special shop for tools / corner in existing shops / renting a toolkit
13. Conversation starter about repair / upgrading to start new plans
14. Ikea hacks competition
15. Student competition, between faculties, student houses or associations
16. Exposition of all DIY results from people in neighbourhood (photo wall / pin board)
17. Workshop for company / traineeship as teambuilding
18. Workshops at Ikea with Ikea diner
19. Workshop at Circular Ambacht Centres where you try techniques on not selling items from thrift stores
20. Workshop at hardware stores (Gamma / Praxis), visible for all visitors of the store
21. Strava/ polar steps platform to share DIY progresses with friends
22. (video) call / chat with experts
23. Work on your own DIY project in the work place of experts, get advice but DIY
24. Tear-off calendar with DIY furniture repair/upgrade tips and projects
25. Simulation game, upgrade furniture on your phone and learn the steps
26. Instruction videos (with music in which the lyrics are step-by-step plans)(cartoon)
27. Verspaketten
28. Workshops especially for students, organised at associations / sport centres.
29. Recipes with upgrade options and plans
30. Workshop in a café: upgrade the interior of the café
31. Exhibitions of upgraded pieces in shops, cafés etc
32. Videos with experiences of others
33. Retailers showing repair / upgrading options for their brand's products online.
34. Thrift stores doing the first steps: removing old upholstery and selling new for example
35. Overview of all locations and stakeholders that you could possibly need. Google maps overview for example with all repair shops, Ambacht Centres and shops where to buy paint, fabric etc.
36. AI making a step-by-step plan
37. AI showing possibilities of results
38. A quiz, asking a consumer about their style, and DIY preferences and then suggests DIY projects
39. Campaign at hardware stores, employees providing advice
40. Flyers / big screen in city centres to attract attention
41. Promotion on tv / in Netflix series
42. Museum devoted to furniture repair / upgrading
43. Digital museum devoted to furniture repair / upgrading
44. Luxurious / stylish collection with DIY materials
45. A special 'quality mark' for upgraded / repaired furniture. So people can recognize upgraded furniture when sitting in a restaurant or elsewhere.
46. Personal mark to put on the furniture you have upgraded / repaired, burning your signature into the back of a closet for example, creating a list of names who owned and altered the product.
47. Apply the design via student housing institutes or 'vereniging eigen huis' to get into contact with people that just moved.
48. Place DIY advertisement on the funda website to target moving people.



L 11 IDEAS AND THEIR HARRIS PROFILES

Explanation ideas

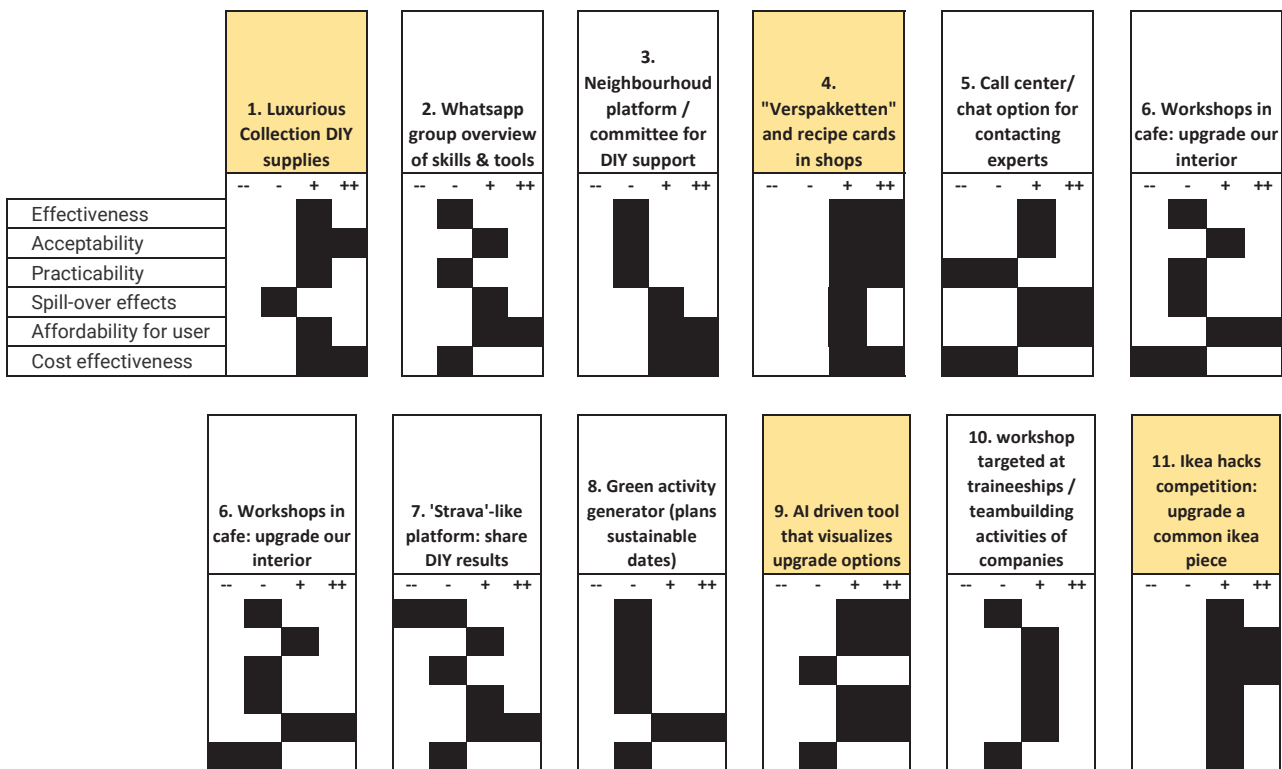
1. A luxurious collection of DIY parts and materials:
In collaboration with trendy products, designed by famous artists or luxury interior/design brands. High-quality, luxurious DIY materials such as gold legs, gold filler, beautiful paint, adhesive surfaces with beautiful print/texture, handles. Sustainable, unique, customizable.
Sell in, for example, stores like Bijenkorf.
2. WhatsApp group Overview of skills & tools
Extension on WhatsApp group which provides an overview of all group members' their:
 - a. Skills
 - b. Tools you want to share
 - c. Shared agenda
 - d. Help requests/dilemmas
3. Neighbourhood / apartment complex WhatsApp group for DIY tasks (a kind of committee can be set up with experts).
4. 'Verspakketten' and recipe cards in shops
Recipe cards for various common defects/repairs (e.g., new colour, scratches, textile damage, stains, etc.). The cards display large photos of DIY results and provide a brief step-by-step plan, required materials, reviews, and links to videos/more information. Each recipe card corresponds to a 'verspakket' containing all the necessary supplies. These packages can be offered by hardware stores, but also by thrift stores or Ikea, (specifically targeting popular Ikea products/ or frequent defects).
5. Call centre
Call/chat options to quickly get tips from experts during repair/upgrade activities. AI can also assist here.
6. Workshops in café:
The café invites visitors to make small upgrades to the interior during their visit to the café. This way, visitors contribute to the appearance and come more often to show each other what they have made. Also, the café serves as a kind of exhibition of possibilities and a fun social setting for DIY repair / upgrading.
7. Strava-like platform: share DIY results
Special platform to share your progress in DIY projects with your own social circle.
8. Green activity generator
Similar to Breeze (dating app), everyone fills in their availability, the app determines what you will do, this app can only suggest green activities. Such as repair/upgrading.
9. An AI-driven digital tool that generates a plan and examples of outcomes:
With your phone, you can take a photo of your furniture or film live. Or you can upload a photo from, for example, a Marktplaats item. With the AI, you can generate a kind of filter over the image, for example, give it a new colour, add extra functionalities, add extra aesthetic parts, anything that is possible. The tool also immediately shows which steps, costs, and time are required for this DIY.

10. Workshops at traineeships/team-building days at work:
 Repair/upgrading of furniture becomes part of, for example, training days of traineeships, or teambuilding days of company teams. In the workshop, a link can be made to leadership training, or out-of-the-box thinking training.

11. Ikea campaign: Ikea repair/upgrade hacks competition:
 Ikea can start a competition in which people are asked to upgrade a common (and often discarded) Ikea furniture (in teams) and share the results. Ikea can organise:

- a. An exhibition in the store.
- b. A nice prize (furniture that lasts long, or cleaning service for the entire household?)

Harris profiles



M FIRST PROTOTYPES RECIPE CARDS

GAMMA
meubelpakket

Professioneel gelakt houten meubel

Krassen,
verkleuring,
vlekken,
ouderwetse
kleur / lak op je
houten meubel?



Benodigde tijd
2-5 uur



Moeilijkheid
Gemiddeld



Kosten
30-50



Bezoek onze
website voor meer
informatie, tips &
trics

Onze medewerkers
denken graag mee!



introductie

Stappen



1. Maak het meubel schoon



2. Verwijder hardware of plak af



3. Schuren



4. Beschadigingen opvullen

5. Maak het oppervlakte stofvrij



6. Grondlaag

7. Lakken in kleur



8. Tape verwijderen

9. Plaats terug / vervang hardware

10. Drogen & genieten



Zoek een budy!
Samen klussen
is leuker en
makkelijker!

Bekijk video's op onze website



Houten meubels krijgen ook een mooi resultaat van olie, beits of krijtverf, bekijk onze andere kaarten

Benodigheden ✂

Ontdek welk ondergrond
jouw meubel heeft om te
kiezen voor de juiste:

In de winkel

- Ontvettend middel _____ C
- Primer verf _____ G
- Houtlak _____ L

- Schuurpapier _____ S
(150 & 220 grit)
- Terpetine _____ C
- Schilderstape _____ H
- Kleine kwasten (minimaal 2) _____ H
- Schuimroller (minimaal 2) _____ H

Optioneel

- Schuurpapier voor je _____ S
schuurmachine (150 & 220 grit)
- Nieuwe hardware _____ J
- Schoonmaakmiddel / verf _____ C
om hardware te upgraden
- Airbrush

Handig

- Schuurmachine
- Stofzuiger
- iets om je vloer te beschermen
- Schroevendraaier om hardware te verwijderen
- Doeken



"Ik heb deze techniek voor mijn houten stoel gebruikt, hij ziet er weer heel goed uit!"
"Het schuren was lastig door de vorm van mijn tafel, maar uiteindelijk hecht te verf heel goed!"
"Ik kon geen kast vinden in de kleur die past bij mijn inrichting, nu heb ik een uniek meubel!"

GAMMA
meubelpakket

Roestvrij maken metalen meubel

Verkleuring,
vlekken van
roest of iets
anders op jouw
metalen
meubels?



Benodigde tijd
30 min



Moeilijkheid
Makkelijk



Kosten
3



Bezoek onze
website voor meer
informatie, tips &
trics

Onze medewerkers
denken graag mee!



Het oppervlakkige roest wat je vaker tegenkomt op het chroom van chromen buizen is eenvoudig te verwijderen.

Heb je leren bekleding die wat aandacht nodig heeft? Kijk eens naar de handleiding om leer op te knappen!

Stappen (staalwol)



1. Wrijf het staalwol met de hand stevig over het chroom.

Poets net zolang tot het roest verdwenen is het chroom weer glimt alsof het nieuw is! Vergeet niet goed in de hoekjes en naadjes te poetsen voor het mooiste resultaat.



2. Veeg met een schone, pluïsvrije doek de restjes staalwol en eventuele vetvlekken weg.

Resultaat; een prachtig glimmend chromen buizenframe.

Benodigheden ✂

- | | In de winkel |
|-------------------------|--------------|
| • Fijne staalwol _____ | Q |
| • Pluïsvrije doek _____ | K |
| of | |
| • Aluminiumfolie _____ | Q |
| • Bankje water | |
| • Pluïsvrije doek _____ | K |

Stappen (aluminium folie)



1. Wrijf een nat, dubbelgevouwen aluminium folie stevig over het chroom.

Poets net zolang tot het roest verdwenen is. Vervang je folie af en toe, een nieuw stukje werkt effectiever.

2. Veeg schoon met de pluïsvrije doek.

Bekijk video's op onze website



Zoek een buddy!
Samen klussen is leuker en makkelijker!



"Super makkelijk"

"Je moet wel goed opletten dat je de roest niet in je bekleding smeert, dan krijg je vlekken"

"Ik wist niet dat dit zo goed werkte"

N FINAL DESIGNS DIY CARDS

6 card designs

GAMMA
— DIY —
OPKNAPPERS

Verse lak op je meubel

Kleur & bescherming voor alle houten meubels

Meubels

Hout

binnen & buiten

Krassen, verkleuring,
vlekken, ouderwets?



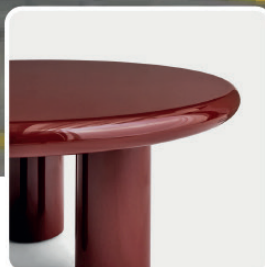
2-4 uur opknappen
12 uur drogen tussendoor



Uitdaging
Gemiddeld



± 18 euro per m²



Met lak bescherm en kleur je je hout. Er is dekkende, of (semi-)transparante lak, hoogglans, satijn of mat. Daarnaast is er binnen of buiten lak.

Stappen



Wist je dat... mensen met z'n tweeën eerder aan een reparatie beginnen?



1 ONTVETTEN
Maak het hout schoon met ontvetter. Maak lades of hardware los.



2 GATEN VULLEN
Vul eventuele gaten / diepe krassen op met houtvuller en laat drogen.



3 SCHUREN
Schuur de oppervlaktes, eerst met 150, daarna 220. Stof goed af.



4 AFPLAKKEN
Gebruik tape op de niet te verven plekken.



5 VLOER AFDEKKEN
Bescherm uw omgeving tegen verf.



6 GRONDVERF
Roer en breng dun aan met de kwast/roller. Laat drogen en schuur licht.



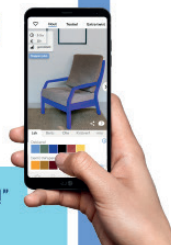
7 LAKKEN
Roer en breng dun aan, laat drogen. Schuur en breng een extra laag aan als nodig.



8 AFRONDEN
Plaats eventuele hardware terug, sluit de verf potten goed af.



Hoe zou dit staan op jouw meubel? Probeer de **opknappers app**



"Ik heb deze techniek voor mijn houten stoel gebruikt, die ziet er weer goed uit!"
"Ik kon geen kast vinden in de kleur die ik wilde, nu heb ik een uniek meubel!"

Benodigdheden



Ontvetter
middel



Doekje of
spons



Schilders
tape



Schuurpapier
120 & 220



2x
Kwasten
voor lak



2x
Schuim roller
& bakje



Grondverf
Meer opties in
verf afdeling



Hout lak
Meer opties in
verf afdeling



Terpentine

Handig



Vloer folie



Schuur machine
Schuur afdeling



Platte
schroevendraaier
& hamer
tools afdeling



Plamuurmes



Aluminium
folie



Verf doekje

GAMMA

DIY
OPKNAPPERS

Houten meubel beitsen

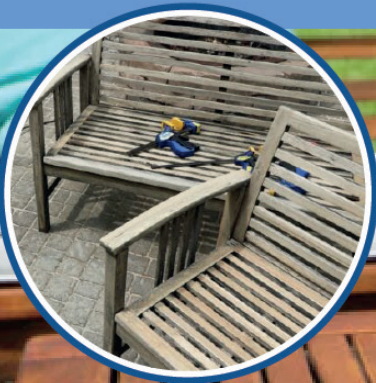
Langdurige kleur & bescherming

Meubels

Hout

binnen & buiten

Tuinstoelen verkleurd
of beschadigd?



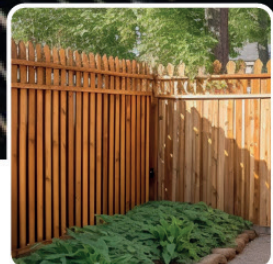
2-4 uur opknappen
5 uur drogen tussendoor



Uitdaging
Gemiddeld



± 15 euro per m²



GAMMA

DIY
OPKNAPPERS

Textiel bekleding verven

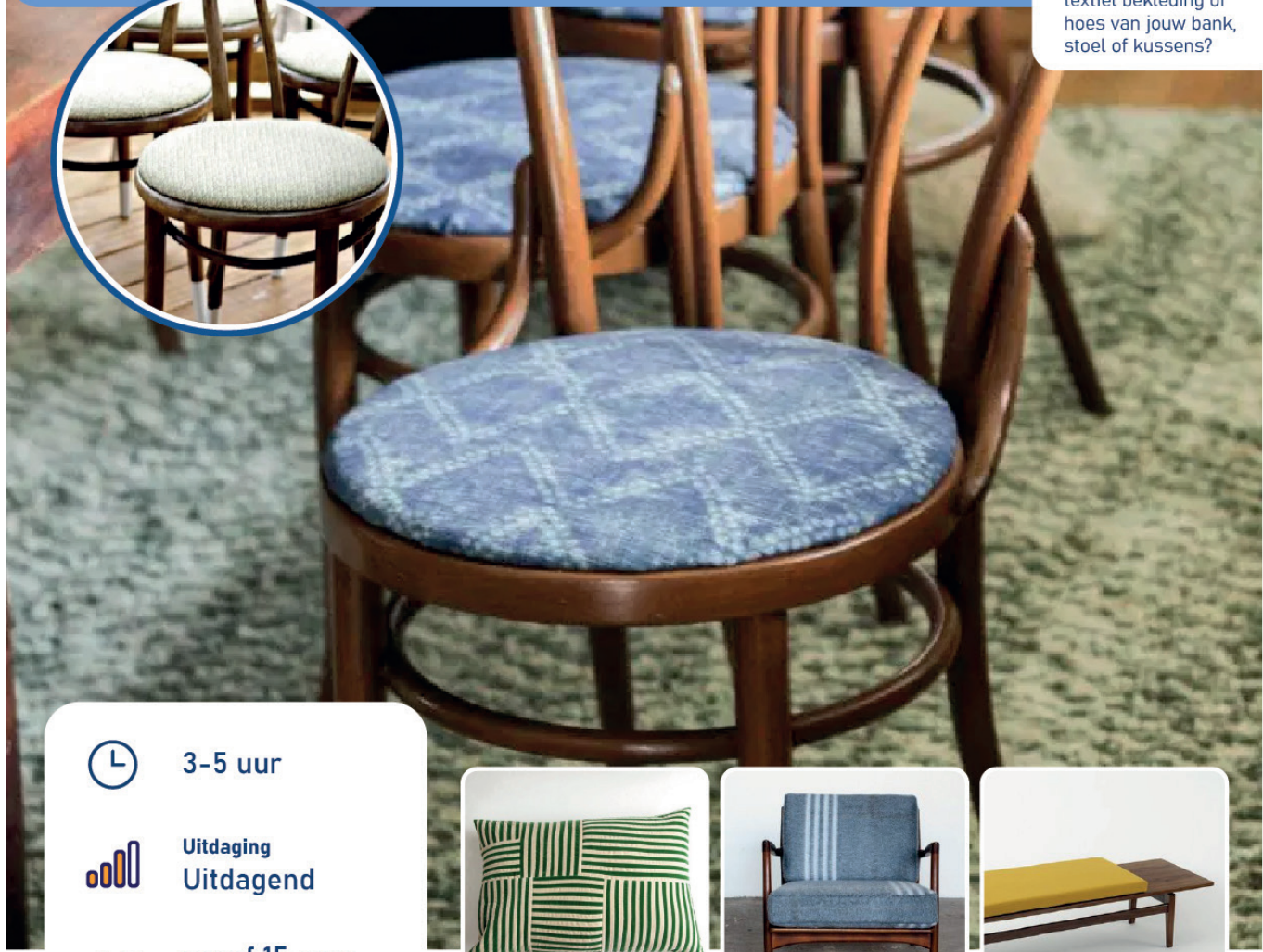
Transformeer los te maken bekleding met textielverf

Meubels

Bekleding

binnen

Uitgekeken op de textiel bekleding of hoes van jouw bank, stoel of kussens?



3-5 uur



Uitdaging
Uitdagend



vanaf 15 euro
per m²



GAMMA

DIY
OPKNAPPERS

Vlekken verwijderen

Hardnekkige vlekken in de bekleding van je meubel

Meubels

Bekleding

binnen

Ongeluk gehad met een kopje koffie, of iets anders? Dat kun je zo oplossen!



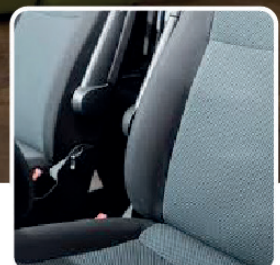
30 min



Uitdaging
Eenvoudig



± 10 euro



Vlekken meubel bekleding zijn veelvoorkomend. Probeer eerst de milde aanpak. Als dit niet werkt, kan HG vlekken spray een uitkomst bieden. Deze is geschikt voor vrijwel alle soorten textiel en vlekken.

Vlek in bekleding van leer? Volg dan de stappen van de kaart: leer reiniging & onderhoud

Stappen

Milde aanpak



1 GROF VUIL VERWIJDEREN

Haal grove stukken vuil weg met behulp van een lepel of achterkant van een mes, gebruik geen scherp voorwerp of je nagels.



2 SHAMPOO SOPJE

Probeer de vlek schoon te maken met een sopje van lauw water (c.a. 30°C) en een ph-neutrale shampoo of wasverzachter.

Zeer hardnekkige vlek



1 BESPROEI DE VLEK

Besproei de vlekken volledig met HG vlekverwijderaar.

Vermijd contact met de ogen



2 VUIL OPVEGEN

Laat de vlekverwijderaar enkele minuten intrekken. Neem het losgekomen vuil op.



3 NAT AFNEMEN

Neem het gehele oppervlakte nat af.



4 AFRONDEN

Laat drogen, je kunt het nog borstelen en stofzuigen.

Hoe zou dit staan op jouw meubel? Probeer de opknappers app



Benodigheden



ph-neutrale shampoo of wasverzachter te koop bij drogist



Doekje



Borstel



HG vlekverwijderaar extra sterk 500 ml



Emmer



Handdoek of keukenpapier



"Verwijdert alles, zeer goed spul"

"Fijn spul, inspraken en het spul doet de rest navegen met water en vlekkenreiniger"

GAMMA

DIY
OPKNAPPERS

Oppervlaktes betegelen

Een volledig nieuwe en unieke uitstraling met tegels

Meubels

Extra twist

binnen & buiten

Breng je favoriete tegels aan op de oppervlaktes van je kast, tafel, bloempot, alles is mogelijk!



2-4 uur opknappen
12 uur drogen tussendoor



Uitdaging
Gemiddeld



vanaf 30 euro
per m²



Een vlak oppervlakte werkt het makkelijkst, maar geronde vormen zijn zeker mogelijk. Hier werken we voor het gemak met tegelmatten. Je kunt ook losse tegels, stukjes tegels, steentjes of bijv. knickers gebruiken!

Betegelde plakfolie werkt nog makkelijker en sneller! Bekijk hiervoor de kaart: plakfolie aanbrengen

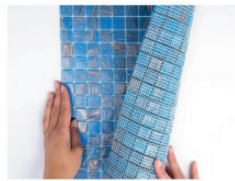
Stappen



Wist je dat... een upgrade ook een leuke sociale activiteit kan zijn?



1 SCHOONMAKEN
Maak alle oppervlaktes schoon met schoonmaakmiddel.



2 TEGELS OP MAAT
Knip en pas de matten zoals gewenst.



3 LIJM AANBRENGEN
Smeer steeds een oppervlakte ter grootte van 1 mat in met een ±3mm laag tegellijm.



4 BETEGELEN
Plak de tegelmatten 1 voor 1 netjes op het oppervlakte. Druk goed aan en laat drogen.



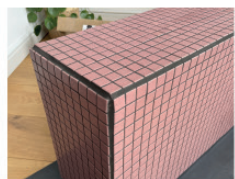
5 TEGELS VERVEN
Optie: Als je de tegels wil verven, is dit het moment. Bekijk de kaart **tegels verven**.



6 VOEGSEL MENGEN
Meng de voegmortel volgens de verhouding op de verpakking. Laat het even staan en roer goed.



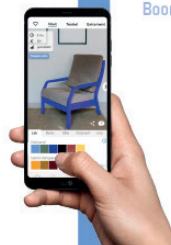
7 VOEGEN
Dit is een rommelige stap. Smeer het voegsel met je handen, werk snel, het voegsel droogt.



8 SCHOONMAKEN
Gebruik een spons en water om de tegels schoon te vegen. Laat 10 min drogen en herhaal.



Hoe zou dit staan op jouw meubel? Probeer de **opknappers app**



Bezoek de Gamma website voor meer informatie

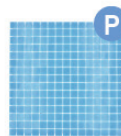
Benodigheden



Tegellijm



Lijmkam of plamuurmes



Tegelmatten



Meetlint



Schaar



Emmer



Voegmortel



Spons

Handig



Mixer boor opzetstuk
Boor afdeling



Voegkruisjes
Bij gebruik losse tegels



Schoonmaak handschoenen



"Ik vond het zo leuk om te doen, ik zit er zelfs stiekem aan te denken om in de tuin iets te gaan tegelen."

GAMMA

DIY
OPKNAPPERS

Deurtjes met dimensie

Uniek effect door houten latten, lijsten of reliefplaat

Meubels

Extra twist

binnen & buiten

Saaie kastdeuren, lades of ander oppervlakte? Op zoek naar stijlvolle en unieke twist?



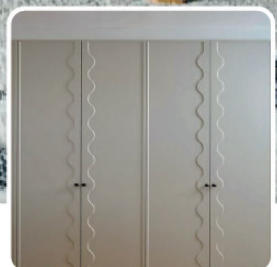
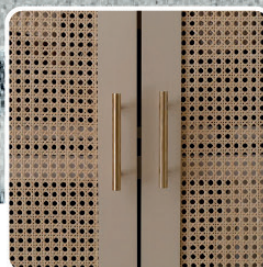
5-10 uur



Uitdaging
Gemiddeld



vanaf 40 per m²



Suggested topics of first collection

Hout

Staining, for outdoor and indoor use
Lacquer, for outdoor and indoor use
Chalk paint, for indoor use
Painting veneer
Repairing damaged veneer
Concealing scratches
Adding edge banding
Removing stains
Applying oil
Gluing joints
Screw joints/hinges
Adding/replacing shelves

Textiel

Removing stains
Reupholstering simple stool
Securing loose stitching
Deep cleaning
Leather maintenance
Dyeing textiles + patterns
Dyeing leather
Making cushions
Shortening curtains

Extra twist

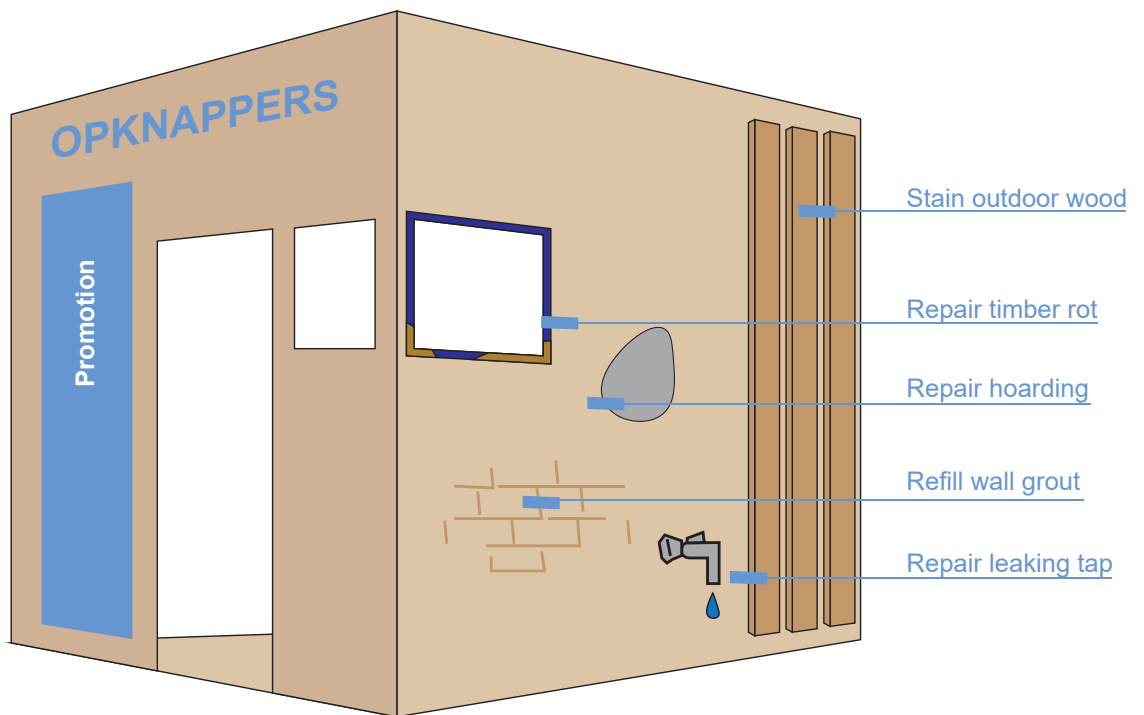
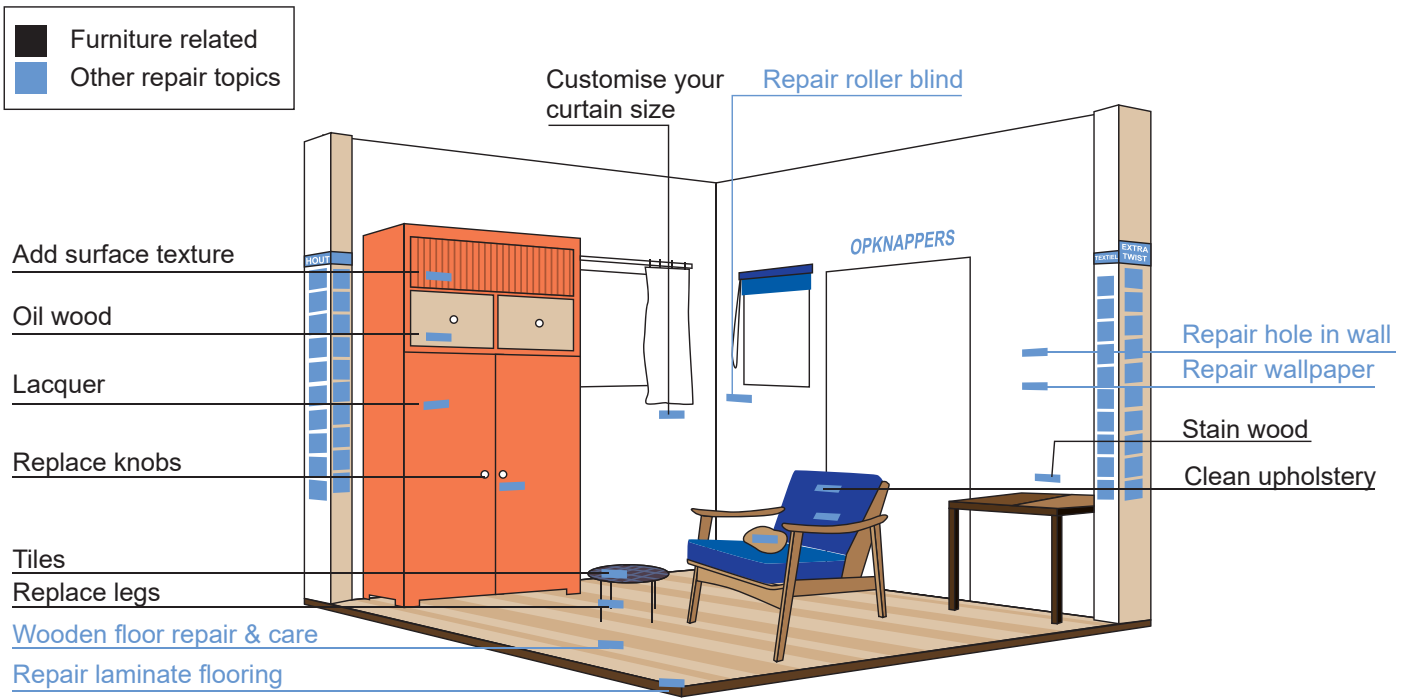
New legs
New knobs/handles
Tiling
Felt pads under legs
Adhesive foil
Adhesive tiles
Adding relief to cabinet doors
New glass panel/mirror

FINAL DESIGN EXHIBITION

Picture of interactive display



Topics in the exhibition



Examples of past exhibitions



https://www.gamma.nl/bouwmarkten?&msclkid=2f81aaf981fd1302b193cf64db56c670&utm_source=bing&utm_medium=cpc&utm_campaign=1.%20SB%20-%20Overig&utm_term=gamma%20winkel&utm_content=gamma%20-%20winkel&gclid=2f81aaf981fd1302b193cf64db56c670&gclid=3p.ds

<https://m.facebook.com/GAMMAAlkmaar/>

P OVERVIEW PRODUCTS IN STORE SHELF

Wood

1. Wood filler
2. Putty knife
3. Wood markers
4. Clamp
5. Wood glue
6. Dowels
7. Corner brackets/other shelf supports
8. Turpentine
9. Paint remover
10. Degreaser
11. Floor cover
12. Brushes
13. Rollers/trays
14. Coarse and fine sandpaper
15. Coarse and fine sanding block
16. Sample of paint
17. Sample of stain
18. Sample of oil
19. Primer
20. Sample of chalk paint

Textile

1. Chalk paint
2. Textile paint
3. Leather wax
4. Leather filler
5. Leather paint
6. Leather brush
7. Stain remover
8. Cleaning / refreshing agent for upholstery
9. Staple gun
10. Staples / nails
11. Staple remover
12. (Samples of fabric)

Extra twist

1. Adhesive film
2. Felt pads
3. Glue
4. Wooden sticks/panels
5. Glass and mirror panels
6. Legs
7. Rattan
8. Screw connections
9. Tiles
10. Tile cutter
11. Grout
12. Tile adhesive
13. Adhesive tiles
14. Knobs/handles

General

1. Sponges
2. Cloths
3. Cleaning brush
4. Stanley knife
5. Gloves
6. Dust mask
7. Measuring tape
8. Aluminum foil
9. Tape

