

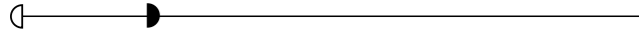
# Reduce, Reuse, Refurnish

Students moving in and out of student dorms have a recurring need for buying and selling furniture, but have few options to interact with each other. We created a platform to buy and sell second-hand furniture exclusive to Chalmers students facilitating trust and sustainable exchange,

**Jan 2023**

Course Project, Group

3 months



- User research
- Graphic Design
- Sustainability

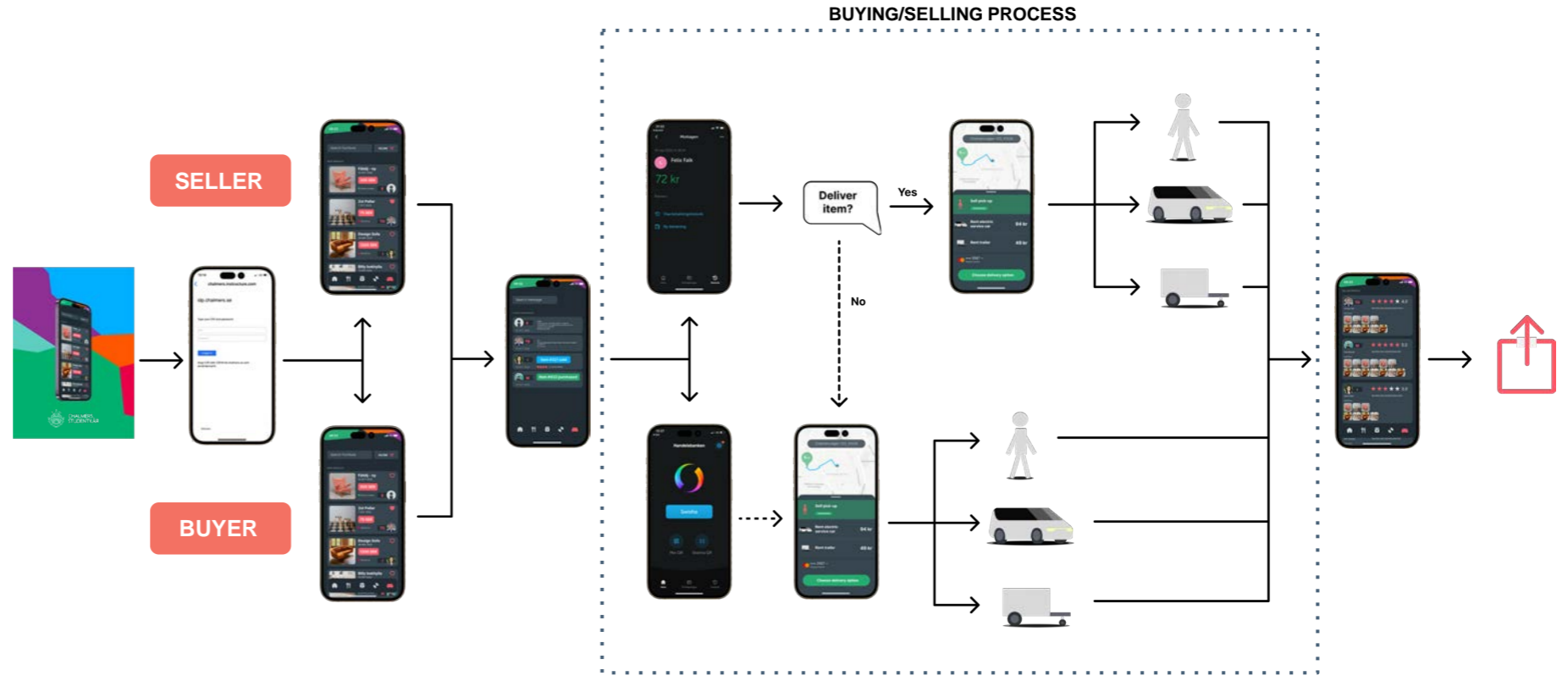
- Market Research
- Positioning
- User Surveys



CHALMERS  
STUDENTKÅR

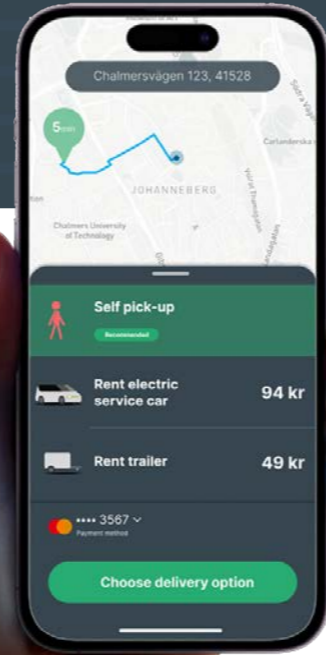
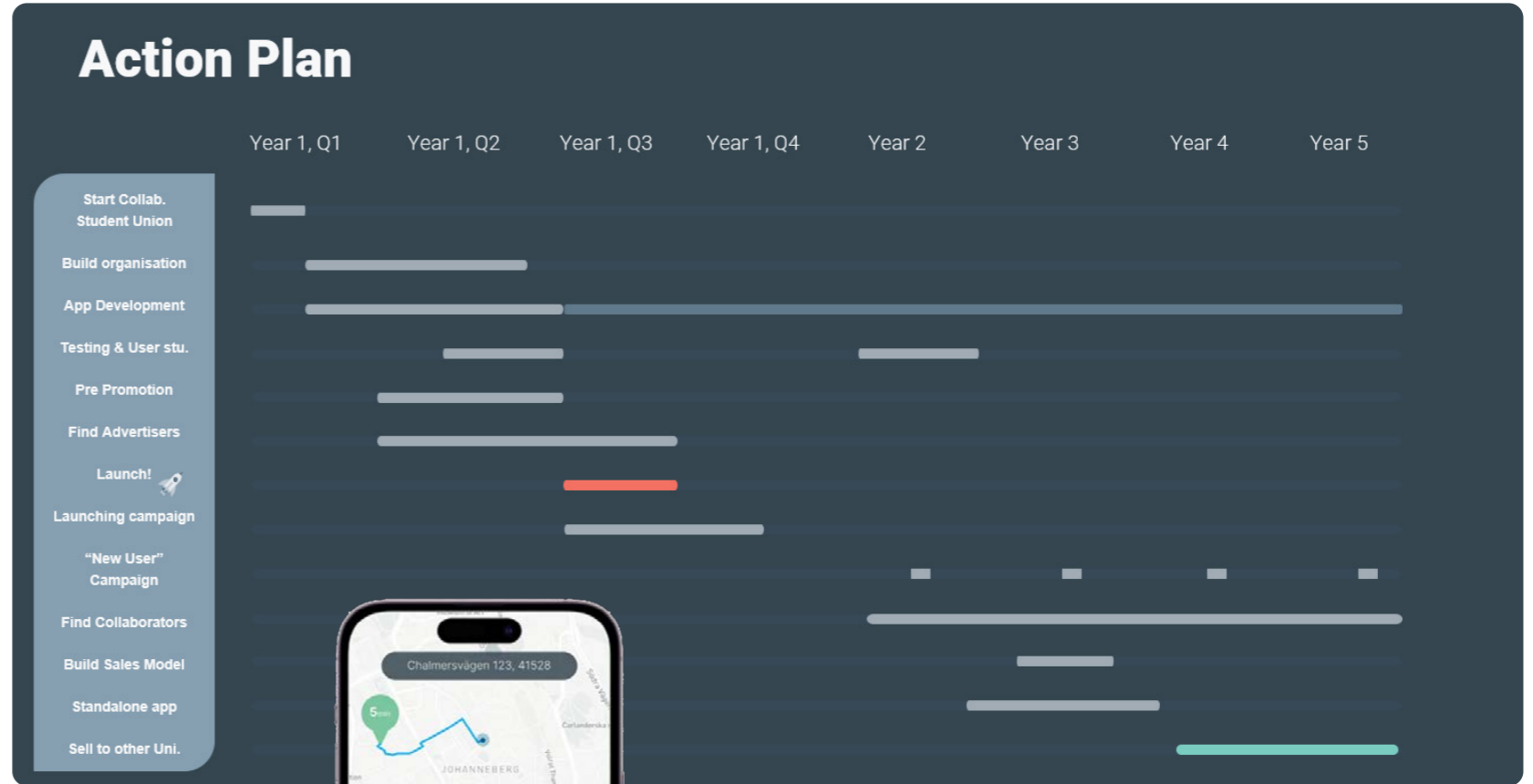
# Purchasing second-hand items

After logging in with their Chalmers ID, buyers and sellers connect via the app to enter a sale, paying online via Swish. This ensures trust and accountability between both. The app, in collaboration with transport services working with Chalmers, will provide pickup and delivery options too.



# Launch Proposal

Initial focus before launching the platform needs to be put on app development and user testing. Promotion will be timed with new student arrivals and collaborations with other brands or platforms are encouraged. A potential business model lies in providing the platform to other universities.



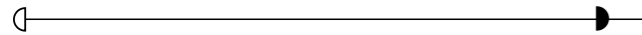
# Chalmers Dance Society

An example of my voluntary work as a graphic designer and event manager for the Chalmers Dance Society.

January - July 2023

Voluntary Society Work

7 months



● Graphic Design

● Adobe Indesign  
● Adobe Photoshop  
● Meta Business Site



@chalmersdance



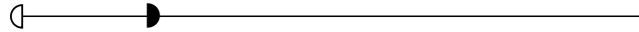
# Future Frictions Brochure

This brochure was done as part of contract work as a graphic designer for the University of Twente,

## March - May 2022

Contract Work

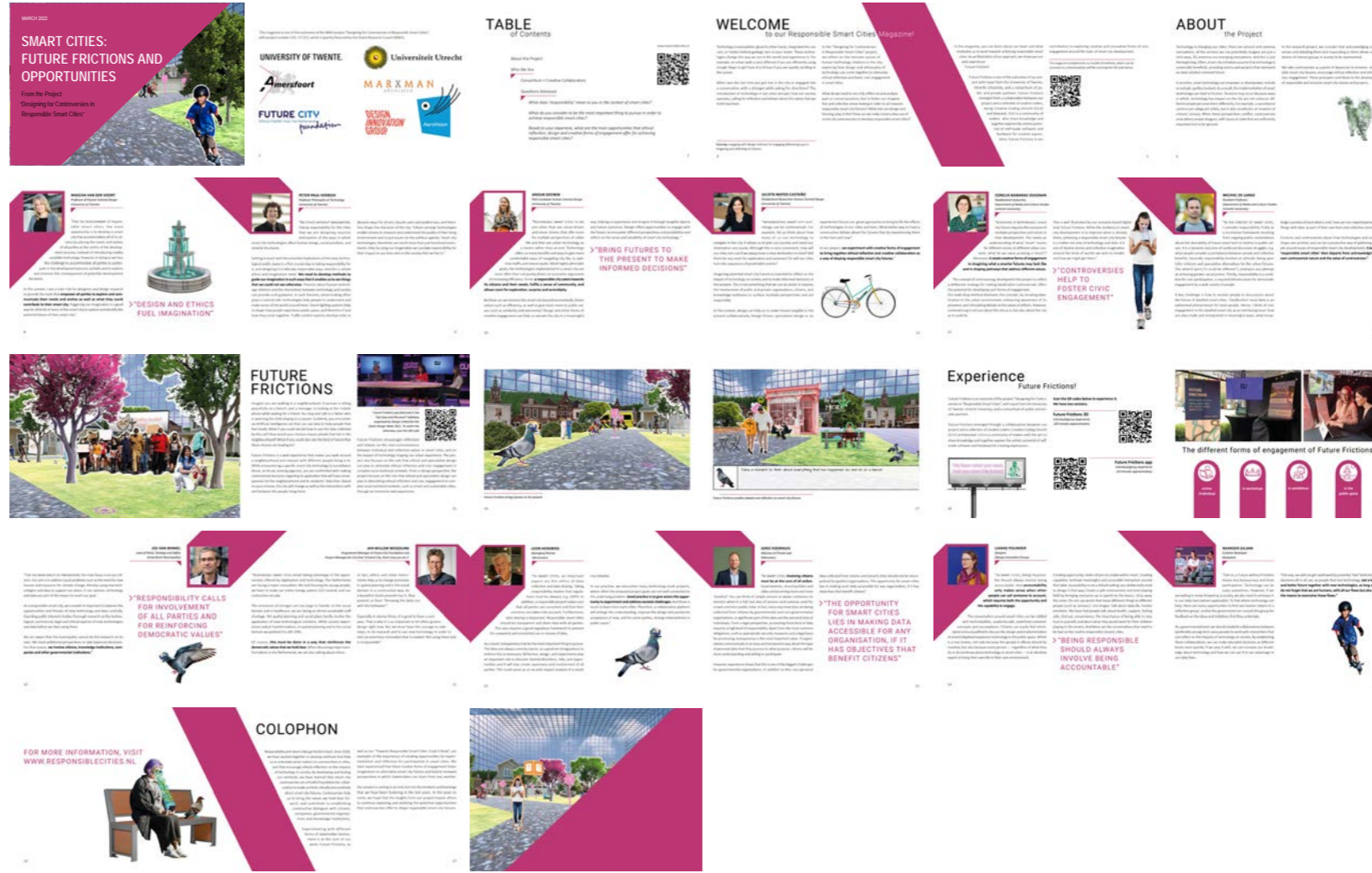
3 months



● Graphic Design

● Adobe Indesign





# The Layout

The layout design follows the university's previous designs while showcasing a digital environment exploring future tensions in human-technology interactions. The brochure tells the scenario's story and highlights contributing researchers.

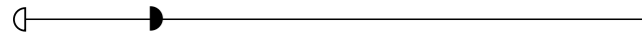
# Behavioural Design promoting Gender Equality

In this project on driving sustainable behaviour change, a non-gendered toy subscription service and a guide system for toy stores were developed. Both are based on a non-gendered toy classification system to target bias and raising children in a less gendered manner and nudge parents to choose toys without gender.

May 2023

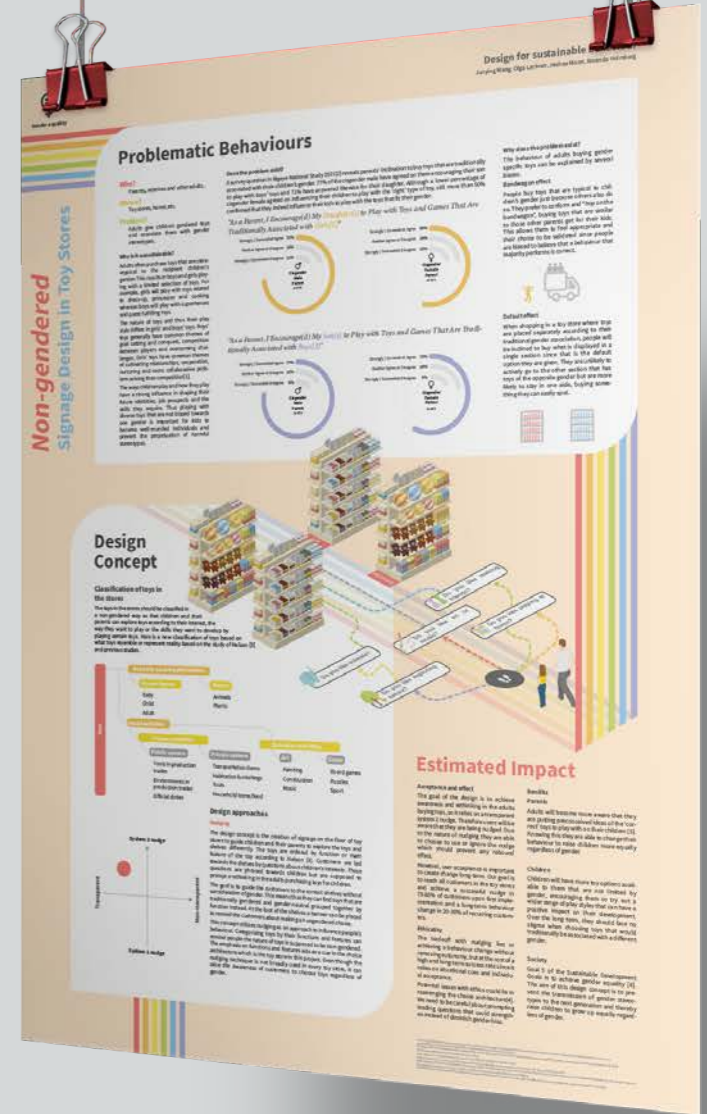
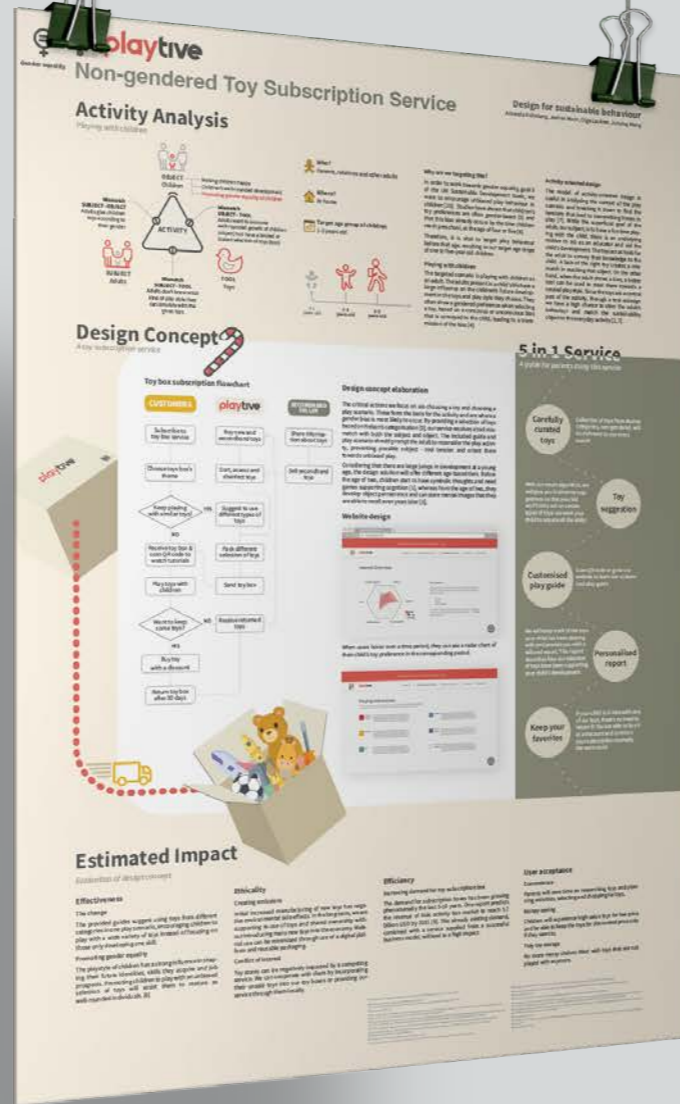
Course Project, Group

1 month



- User research
- Form & Styling
- Engineering
- Manufacturing
- Sustainability

- Design Research
- Service Design
- User research



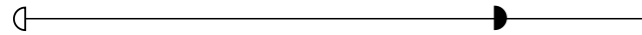
## The future of hydration: a sparkling experience

Design of a new opening mechanism for the ultimate drinking experience on the go and a branding pitch for the whole product. This bottle cap releases coloured liquid when opened with a simple twist to show that drinking sparkling water can be a fun experience, visualising all the health benefits of staying hydrated.

### Dec 2023

Course project, *Group*

4 months



- User research
- Form & Styling
- Engineering
- Manufacturing
- Sustainability

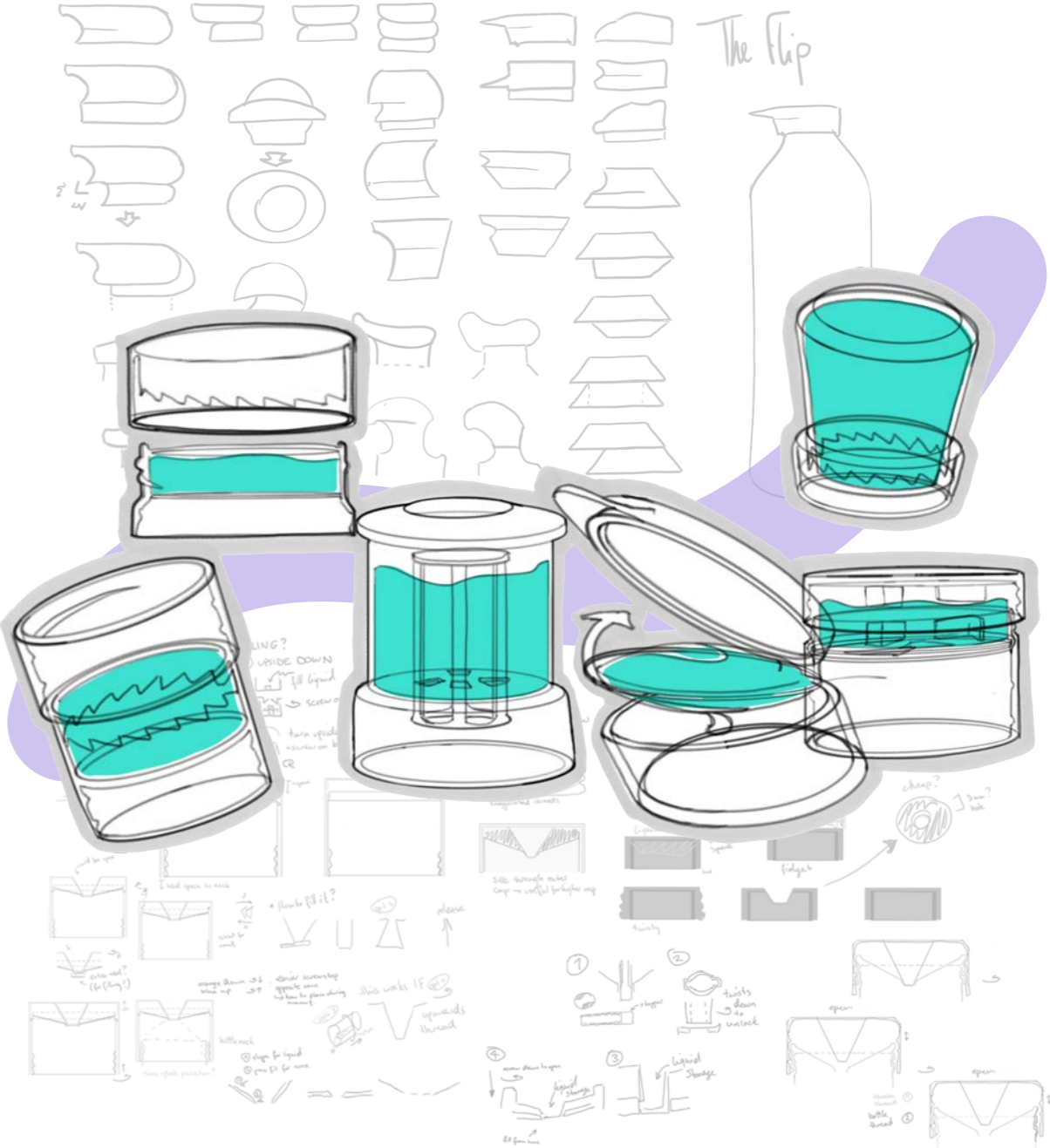
- Sketching
- Rapid Prototyping
- 3D printing
- Solidworks
- Fusion 360

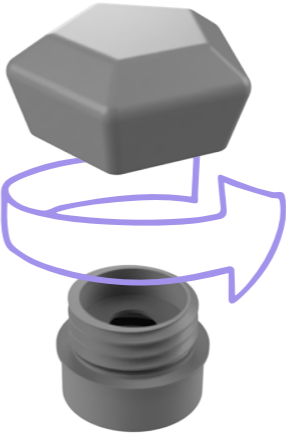




# Ideation

The bottle cap has to contain liquid that is released on opening the bottle. Many storage and opening ideas were explored, leading to multiple opening and storage mechanisms that were prototyped.





# Usability Concepts

The shape development of the bottle centered on how users open bottles. These concepts are opened by flipping open a cap, twisting it open or pulling up the cap, pictured left to right. The suggested bottle shapes emphasise the opening concepts.



'The Flip'



'The Twist'



'The Pull'

## Mechanism design

After choosing the Twist use concept based on the focus group feedback and a presentation to the company, a working mechanism was developed. The design went through five iterations that were tested and refined, each with their unique features and problems. In the end the carbonation release concept was chosen as a final design to be presented to manufacturers.

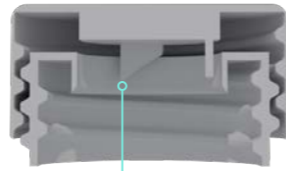
Inverted cone



*stopper released on twist*

uses a lot of material  
usability issues

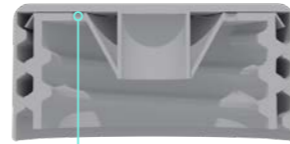
Filmbreaker



*tears seal on twist to release*

requires extra material  
& manufacturing step

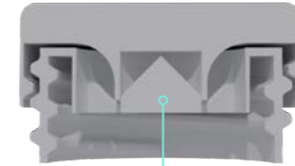
Carbonation release



*evens out pressure*

leaking problems  
optimised material use

Conical release



*stopper on bottom cap*

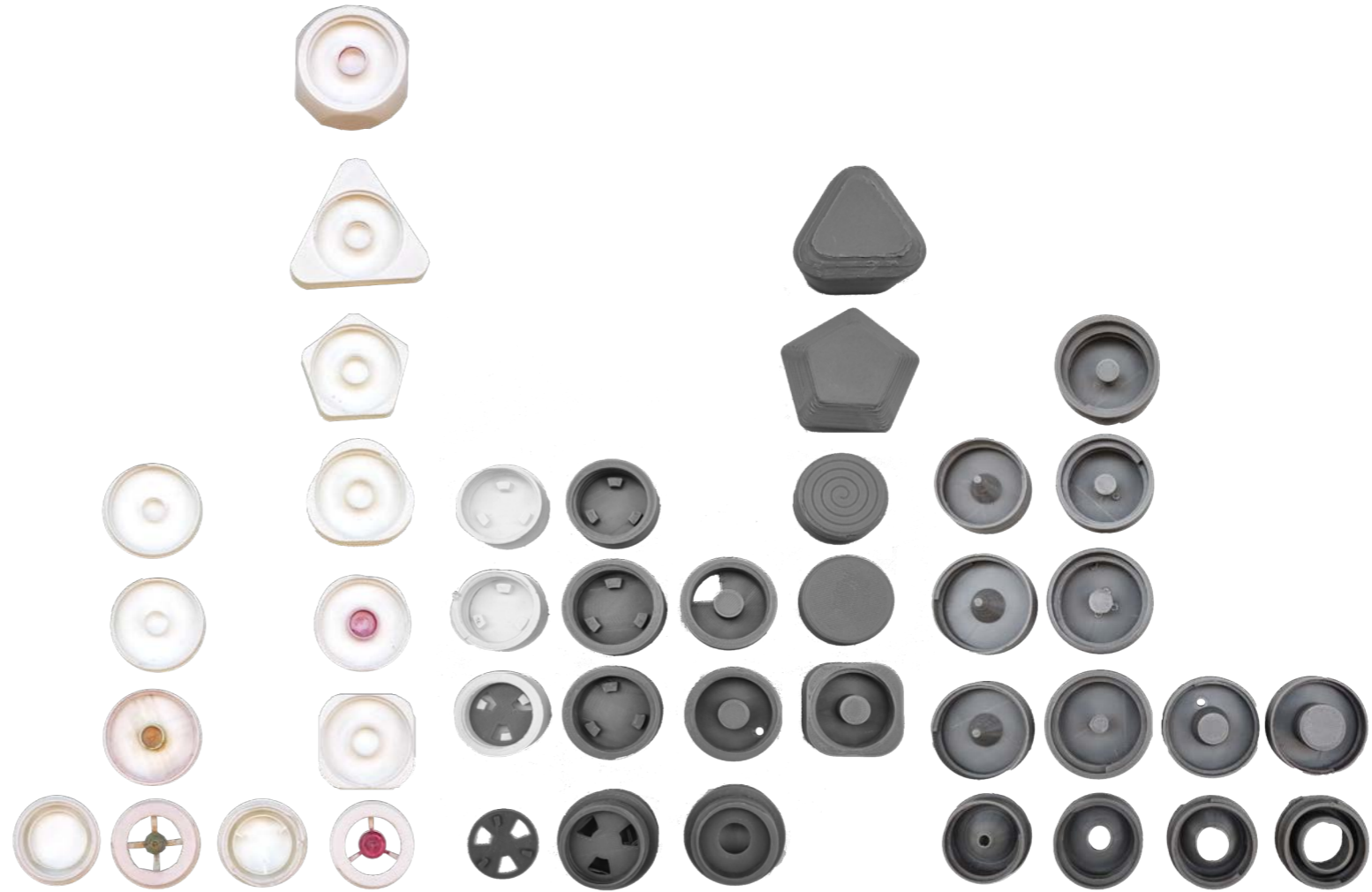
problem with liquid  
tension  
needs upside-down  
filling

Pressure squeeze



*pushes out liquid on release*

uses more material  
best for usability  
& prevents leakage



## Prototyping

Prototyping was an integral part of the whole process, starting with low fidelity modifications of existing caps, going to 3D printing and testing relevant aspects of the function of liquid release, including colour density, distribution, colour concentration, type of colouring and behaviour with sparkling water.

In a focus group, different usability concepts were tested which were also evaluated by the company. Users preferred natural colours, a non-round and slightly textured cap for improved grip and a simple design for a serious product. From there the mechanism was further developed.



NATURLIGT  
MINERALVATTEN



KOLSYRAT  
med smak av

**BLÅBÄR**

## Branding

Keywords in the sales pitch of this water are:

- natural, healthy mineral water
- local, Swedish
- for active people
- surprising, but not a gimmick

The branding leans simple and elegant to fit in with mineral water while using the coloured accents to indicate the flavour and colour change and be clear that some effect that will show. The logo itself stays close to Sweden with nature motifs and the naming "Å" being immediately associated with nordic countries, while also shounding surprised and in awe.



Cap  
*coloured and branded*

Sunrise above a mountain  
*seen as nordic letter*

River  
*flowing water*

Blueberry flavour  
*indicating the colouring*

Å  
*seen as nordic letter,  
sounds surprised and  
excited*

*Working prototype*

## Contact

- +46 793 375 012
- lacknerolga@gmail.com
- Olga Lackner, LinkedIn
- olgalackner.com
- Gothenburg, Sweden



## Olga Lackner

I am a design and engineering student always looking for a new challenge and passionate about sustainability in product development, new technologies and ethical, holistic, human-centred design. My strengths lie in translating others needs into solutions and iterative, creative work.