

Michael Thundow  
Product Designer | **Portfolio**



**2024**

[www.thundow.design](http://www.thundow.design)

# Hello!

I'm Mike, a 27 year-old product designer based in Worcester, UK.

Welcome to the portfolio! I've aimed to collate some of my work into this booklet, so if you ever want more details on a project, feel free to head over to [www.thundow.design](http://www.thundow.design) for more supporting material, as-well as a dozen other projects too!

My career aspirations have always simply been to add to the 'currency of design culture'; to take as varied a set of experiences, and convert them into as varied a work as possible.

Sadly, I've been told that 'design-currency' can't pay off the student-loan, so if you're looking to hire, feel free to drop me a line at [hello@thundow.design](mailto:hello@thundow.design). I look forward to hearing from you!



[hello@thundow.design](mailto:hello@thundow.design)  
[www.thundow.design](http://www.thundow.design)

2019 | B.A Product Design (Hons)  
University of Bournemouth (2:1)



(2020 - Current) | Product Designer at  
**Mookie Toys**



(2016 - 2017) | Product Design Intern at  
**Crosswater Ltd.**



(2017) - Product Designer at  
**Morewater**



**t@mb@beans**  
inclusive social-toys

crosswater<sup>x</sup>



**Active-Tots™**

trackpadVR

NINTENDO  
SWITCH FS

**MOREWATER**  
Modular POU Water-Purifier



**veaya**  
Hybrid VR



## Little scramblers.



The TP ActiveTots Range was my first true project at Mookie/TP Toys.

The Active-Tots Range are a set of indoor wooden climbing products. They were designed around the concept of independent "Montessori" learning, and based on the works of Hungarian Paediatrician Emmi Pikler. The aim was to allow children to have fun learning coordination skills on a product-set that could "grow" with the child's confidence.

I was Lead-Designer for the range, and was charged with every element of the design process from conceptualising, testing, liaising with factories, coordinating our logistics team, even down to the design of the instruction-manuals. It was an engaging, comprehensive introduction to the industry.



Project Name:  
**ActiveTots | Indoor Wooden Climbing Range**

Client:  
**Mookie/TP Toys**

Year:  
**2021-22**

## The Core Set



The core part of the range is comprised of a 3-product **megaset**. These products are a Climbing Triangle, a Climbing Cube, and a connecting Bridge that also doubled-up as a slide for either.

Whilst superficially simple, a lot of work went into creating products that were practical in the home and safe to use. As climbing products of this nature are typically used outdoors, the indoor environment presents unique challenges; everything from playspace, the ability to store, safety considerations, and suiting an indoor aesthetic, all had to be accounted for. A minimalist, more Scandinavian wooden theme helped suit a variety of interiors, and the small flourishes of colour through the rubber feet and triangular handles allowed for a distinctly "TP" feel to still come through despite the simplistic silhouettes.



## Standalone Products

The rest of the range comprised of standalone products. This included a wooden folding swingset/climbing-frame, a wooden balance-board, and a wooden folding slide.

A theme that ran through all of these designs was a sense of practicality. Fundamentally the ability to fold the products up and have them tuck neatly away under a bed, cupboard, or similar, was a key element of the designs that was constantly evaluated throughout development.

Space is a premium in many houses, and the ability for these toys to be able to assume as minimal a footprint as possible was vital.

The Indoor Folding Climbing Frame & Swing perhaps presented the most challenges throughout development. A shorter, freestanding swing designed to fit an indoor environment meant the product itself was very light. Good for storage, but without the support of the sort of ground-pegs used on outdoor swingsets, it would mean the product was more likely to topple under load.

The solution was to utilise the walls of the interior itself, by mounting a bracket onto the wall that the swingset could slide onto, the swing would be essentially locked in place simply by sliding the mounting brackets together. This gave a great balance of support and practicality, whilst having only a minimal visual impact on the wall in-which the bracket was mounted.







When creating the brand-identity for the range, we were keenly aware of just how saturated this market is, and how the current market tended to favour more muted tones, palletes, and iconography in their ranges.

We felt that by adding both a more vibrant colour separation and characters that symbolised the type of play the children would be engaged with, we were able to create something both distinctive, and more in keeping with our own mainline TP range; whilst still being able to fit within an interior setting.

The brighter coral-reds were often used to signify touchpoints and draw the eye, whereas the teal was commonly used in conjunction with the wooden-frame elements, in order to provide a common product theme whilst leaving room to experiment given the varied nature of the products.



Owing to the usual industry seasonal-pressures, the project had a sharp-turnaround and the graphics-team were instrumental in pulling together the incredible brand guidelines and concepts that ended up in the final products.

Between the iconography, the colours, brand strategy, photography, packaging and much much more, the team were able to deliver something that truly stands out on the market; in so doing providing the perfect entry-point for potential TP customers, whilst leaving enough space to allow the child to naturally progress into ActiveTots and eventually mainline TP products seamlessly.

There's plenty more to come from this brand, but I am pleased with how it has debuted.





## King of the Mixers.

During the lockdown of 2020 I had the opportunity to work on a number of branding projects for startups as a freelance brand-specialist. One such startup was Komixer, a zero-calorie kombucha-mixer brand aiming to fill the market space as a more casual kombucha drink compared to the often clinical nature of other kombucha brands.

I was brought on to create the brand; which included everything from the logo, to the can design, box design, colours, brand-identity and other elements.

Project Name:  
**Komixer | Zero Calorie Kombucha Mixer**

Client:  
**Freelance**

Year:  
**2019-2020**

The product launched in two flavours: Hibiscus and Ginger-Lime.

I wanted to make sure each flavour had a distinct theme, without appearing to be different products. The use of a foil layer to highlight certain parts of the can really helped in this regard, allowing me to use basic shapes to represent differences in flavour without solely resorting to colour.

The bright band of colour at the top made the flavour obvious to those unfamiliar with the product, whilst also being able to stand out from various eye-views when placed on different store shelves. As this was attempting to penetrate a market, I wanted first impressions to be BOLD.





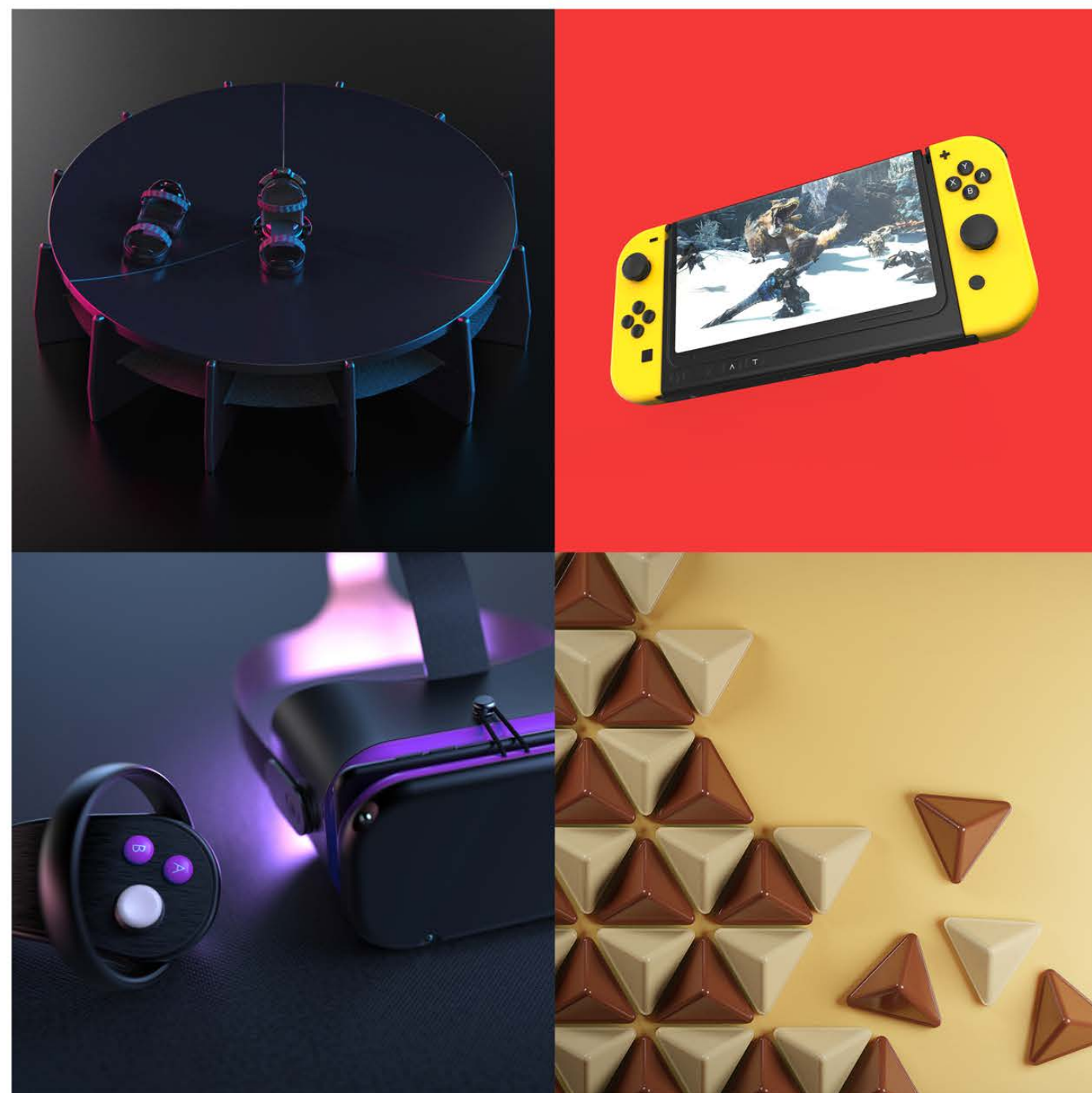
I initially suggested a dozen or so themes based on the first brief sent to me. Monochrome with bright colours based on the flavour was key, and a modern, casual theme was asked for.

Various names were also suggested, eventually the client themselves put forward a name and slogan, which I ran with and attempted to build a brand around.

The launch was challenging owing to the product releasing during the worst points of the global pandemic, and issues with manufacture-delays. eventually folding towards the end of 2021. But the product and brand design was recieved extremely well, and elements of the design were taken forward into future endeavours.







*now presenting...*

# Concepts!\*

(\*from quarantine.)

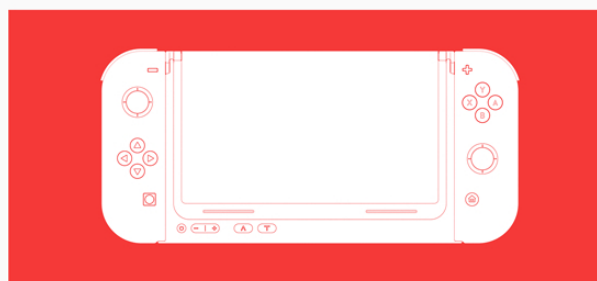


A short series of slightly more unusual projects I've been wanting to do, and have a little more time to actually try out!

# NINTENDO SWITCH FS



michael thundow  
www.thundow.design



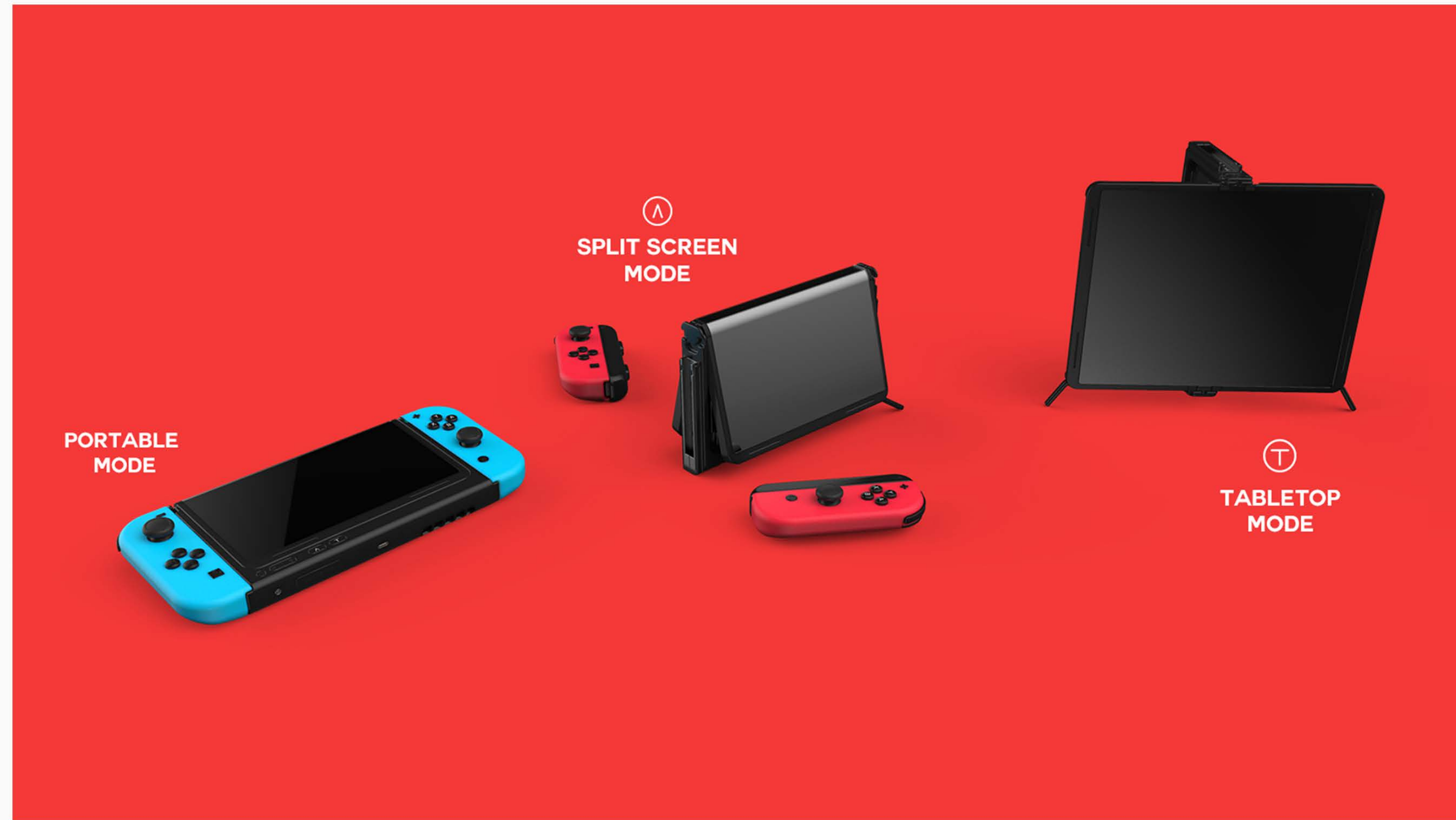
## nintendo switch 'folding-screen': retro legacy, modern inspiration, **future tech**.

The Nintendo Switch FS is a passion-project that embraces everything I love about the way Nintendo designs hardware. This was a 'prospective design', meaning this was a project that could use emerging technologies (in this case, flexible OLED displays), and treat them as if they were more commercially viable for a consumer product in the future (around the year 2025, for this product).

Project Name:  
**Nintendo Switch FS**

Client:  
**Personal (Isolation Series)**

Year:  
**2020**



The 'folding-screen' technology is baked into the function of the SwitchFS. By nature, the original Switch's main feature was it's ability to transform into different play-experiences, and the new technology was designed to further this concept by enhancing/expanding both the ability to play with friends, and the scope that portable-play offers.


## PORTABLE MODE

- 260mm Length (w/ joycons)
- 120mm Height
- 24mm Depth
- ~ 1.2lbs (w/ joycons)



A continuous top-edge for better immersion, or for non-intrusive touchscreen menu elements that keep out of the way.



  
SPLIT SCREEN  
MODE

The mode most closely resembling the original 2017 Switch, the 'portable' mode on the SwitchFS uses the top face of the product essentially as a customisable touch-screen menu, allowing much of the HUD elements to be removed from the screen, allowing for a more immersive experience.

The product is however significantly thicker and heavier as a compromise, in order to fit the new mechanisms to allow the unfolding of the screen.

Pressing the 'split-screen' button on the SwitchFS partially opens up the screen and allows for two kickstands to be pulled out from the screen's underside. This allows for a split-screen experience on a single console, giving a more manageable experience for both parties, where normally they'd be sharing one, incredibly small screen.

**T**  
**TABLETOP  
 MODE**

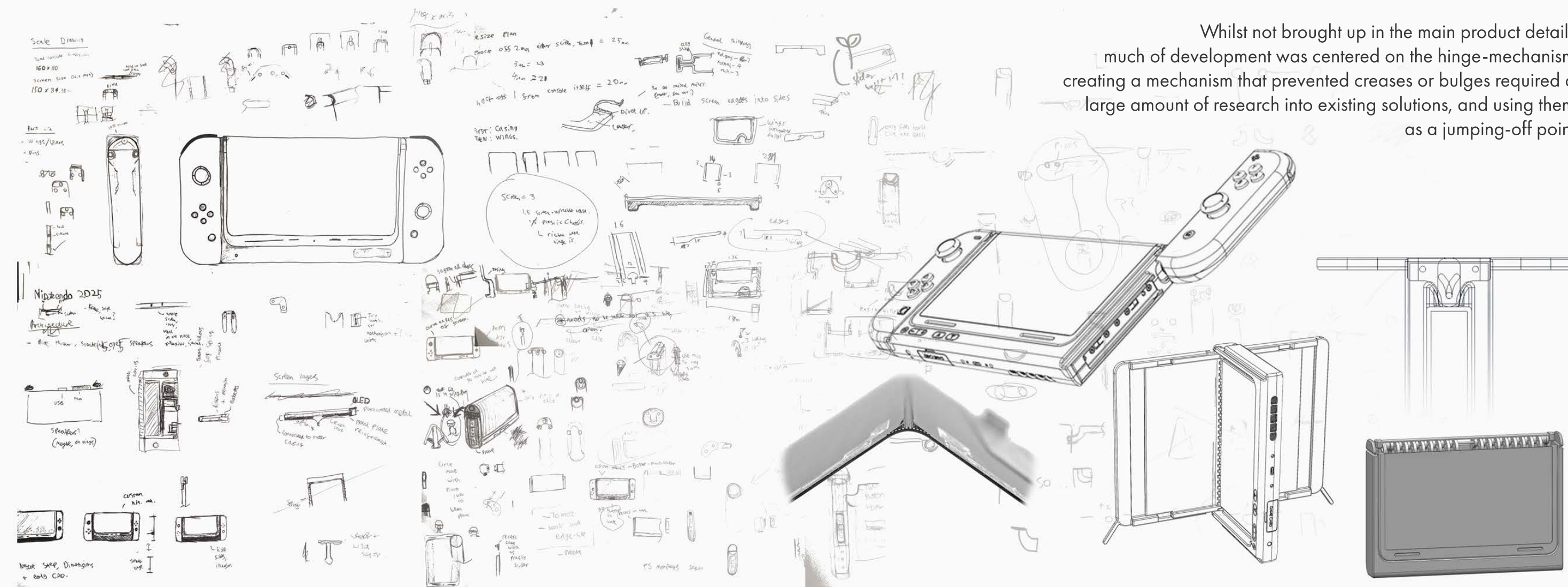


Native 4:3 aspect ratio for NES, SNES, N64, and GameCube titles.



Orientation allows for charging whilst playing.

The 'tabletop mode' opens up the SwitchFS fully, allowing it to be placed onto its side, effectively acting as one full-screen experience. Due to the nature of the screen-dimensions, this would be a 4:3 aspect ratio typical of older monitors, which works well for a native 4:3 experience with Nintendo's older titles, something the company have a strong tendency to bring to new platforms.



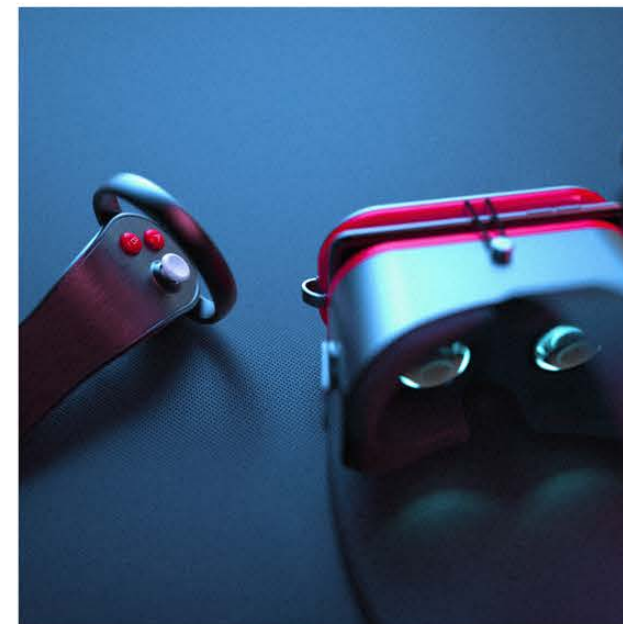
Whilst not brought up in the main product details, much of development was centered on the hinge-mechanism: creating a mechanism that prevented creases or bulges required a large amount of research into existing solutions, and using them as a jumping-off point.





## higher fidelity, lower-cost virtual-reality; the best of both VR-worlds.

Veaya is a prospective portable 'hybrid-VR' concept that aims to visualise how future low-end VR systems might leverage the fidelity of standalone VR systems such as the Oculus Quest, and merge it with the affordability and upgradability of mobile-VR systems like the Google Daydream View, aspiring to achieve a level of quality in a low-end VR system comparable to products hundreds of dollars more expensive than itself.



Project Name:  
**Veaya | Hybrid Mobile-VR System.**

Client:  
**Personal (Isolation Series)**

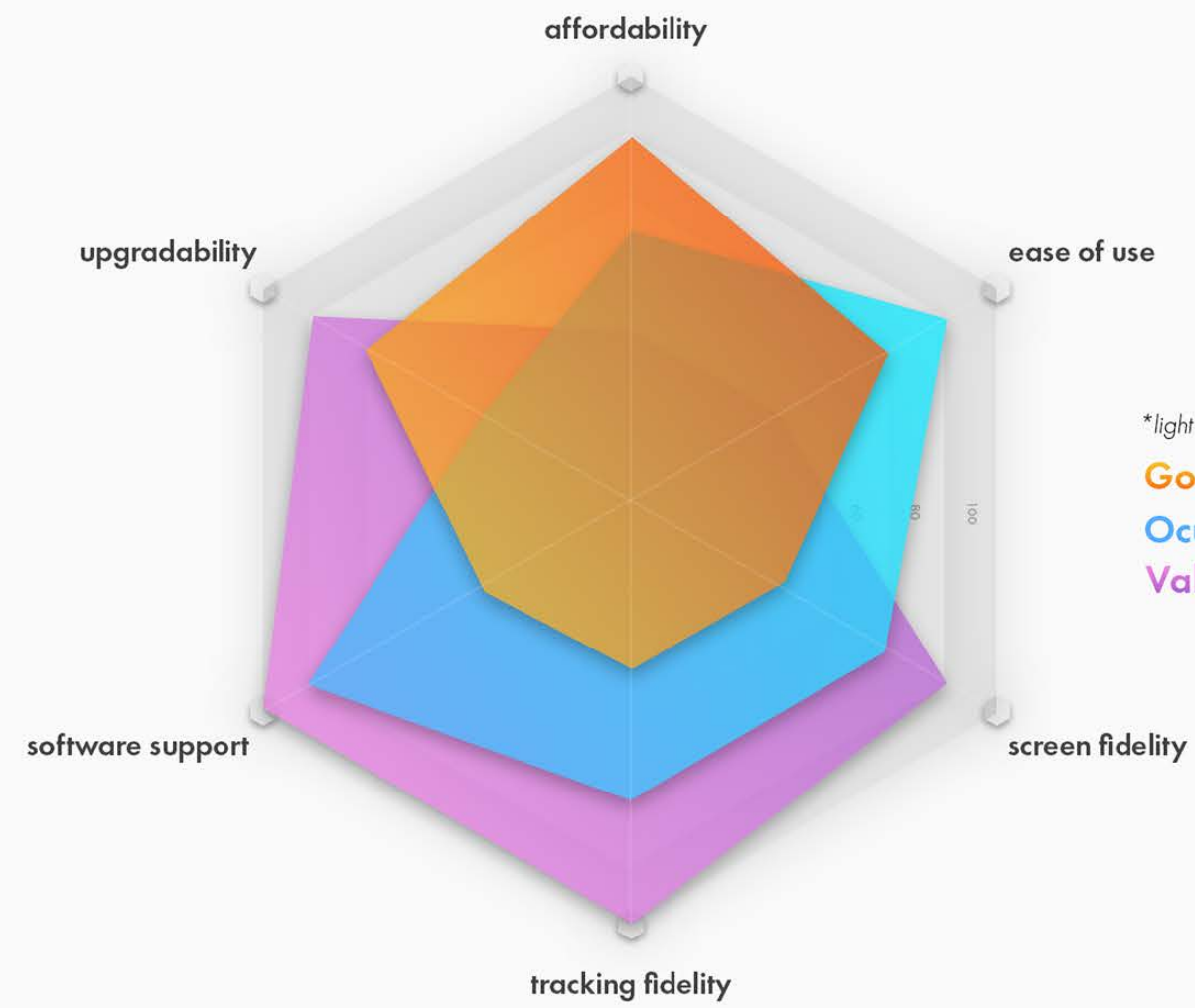
Year:  
**2020**

Whilst the VR market continues to grow, the mobile-VR market is stunted by inflexibility: it's price-advantages over higher-end VR made void by it's many caveates, limitations, and setup-barriers that the user needs to overcome. Veaya aims to incooperate a small amount of extra cost in order to impart a large amount of extra user-benefit.

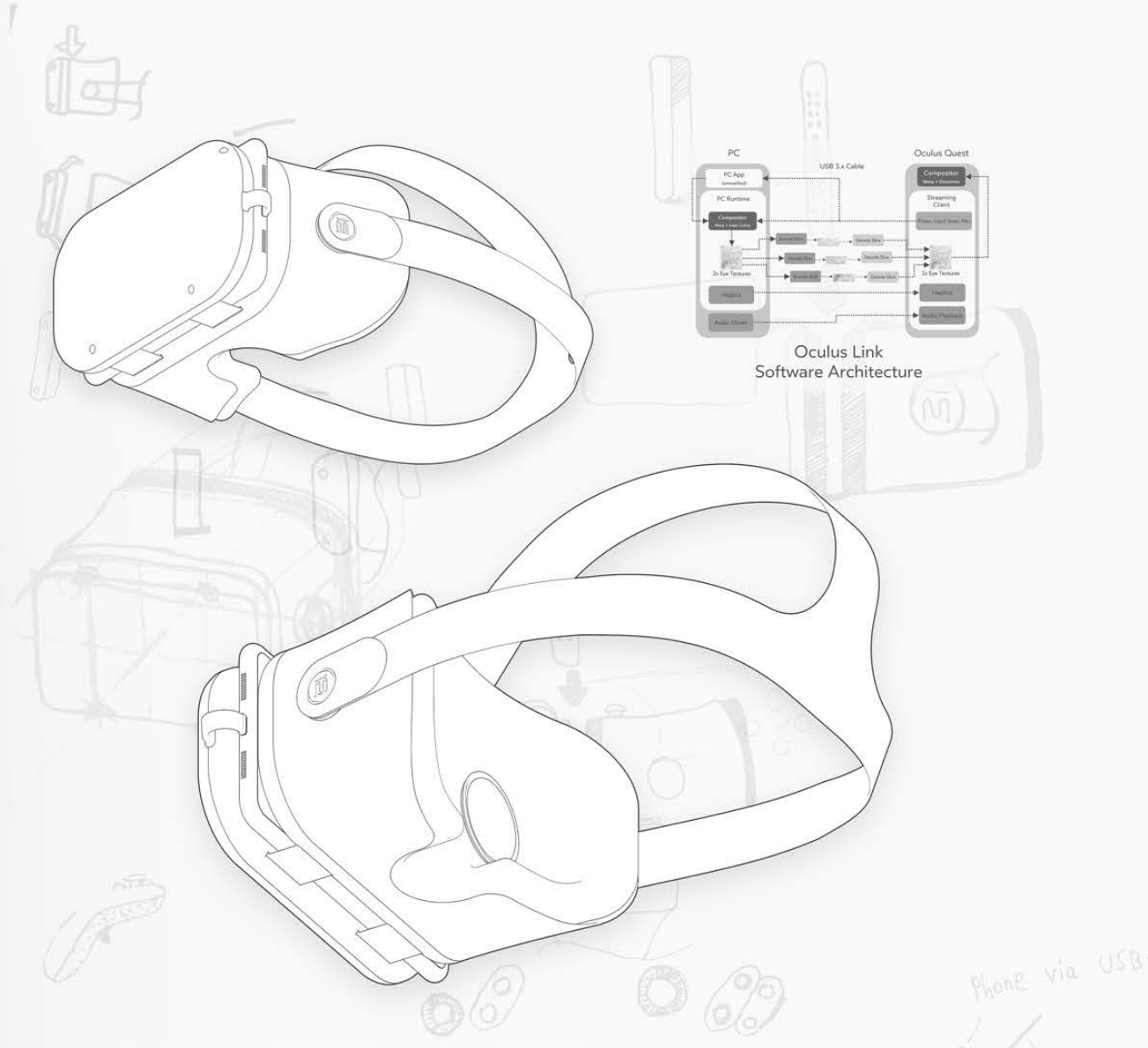
In this design-concept, whilst a modern smartphone would provide the bulk of the portable-VR experience through it's mobile-processor and screen, Veaya supplements this with 6-DOF 'inside-out' telemetry-data for itself and the controllers, as-well as a fast-charge power bank to prevent users having to decide between portable-VR, and being able to use their phone.

The mobile performance and screen-resolution/refresh-rate will naturally upgrade with each user's phone cycle, further providing long-term price benefits. Similar to the Oculus Link, when connected to a PC, the phone simply becomes a display, allowing for direct streaming of high-performance VR.

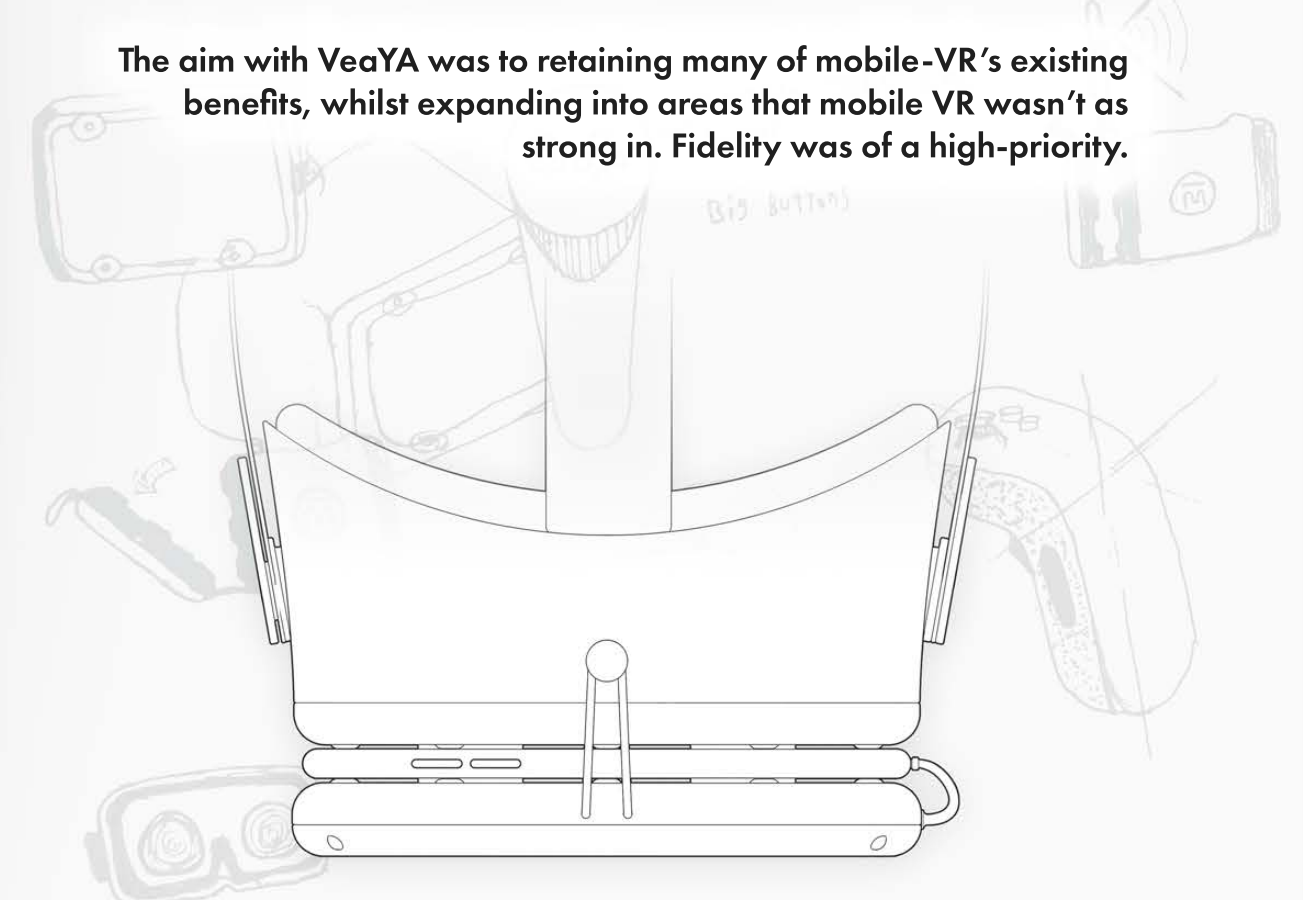




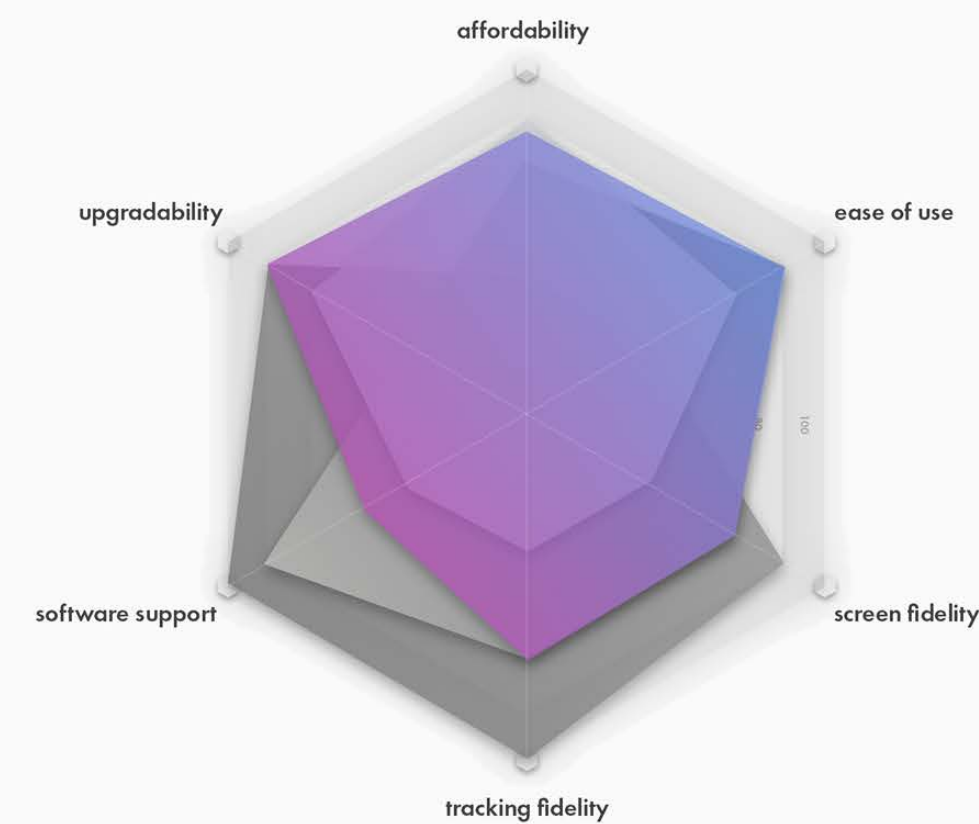
\*light analysis based off online questionnaire  
**Google Daydream View**  
**Oculus Quest**  
**Valve Index**



The aim with Veaya was to retaining many of mobile-VR's existing benefits, whilst expanding into areas that mobile VR wasn't as strong in. Fidelity was of a high-priority.



**Veaya**  
 (aspirations/estimations)



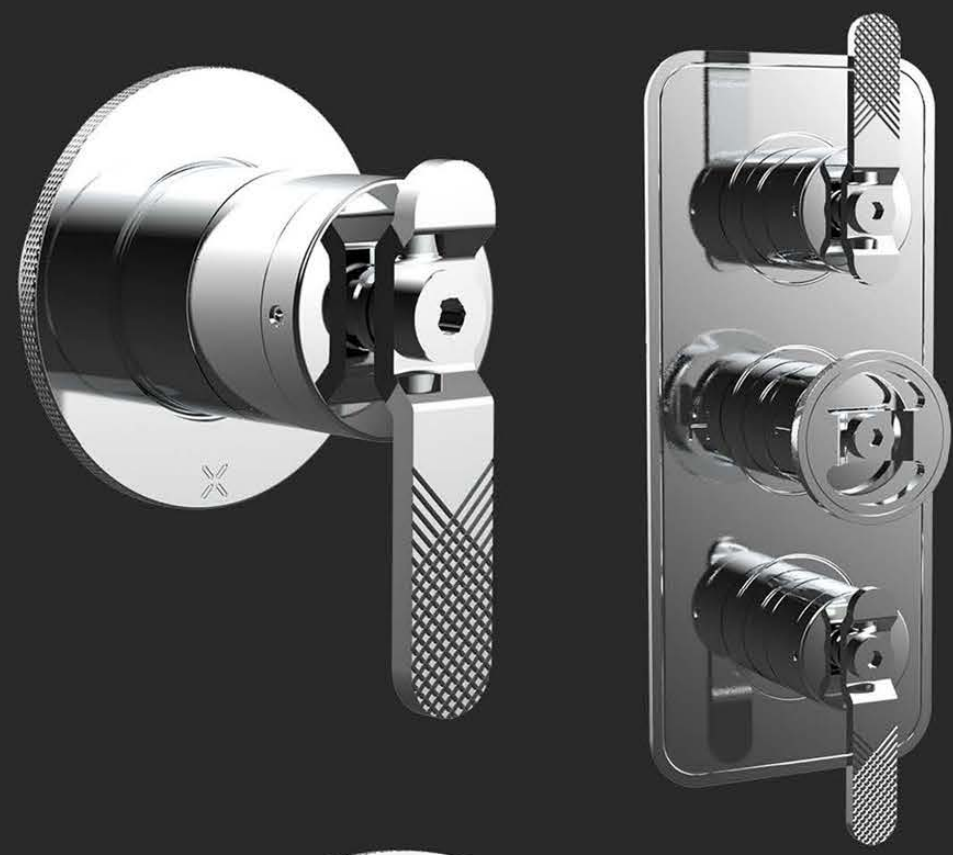
Aesthetically, those familiar with the Oculus Rift & Google Daydream View designs will see many similarities. The aim was to create a product that acted as a bridge between the two; I included a few more 'Arcade-by-way-of-SNES' elements, in order to give a more professional-playful appeal.

crosswater™

Placement Year 2017-18

I had the opportunity to spend a sensational year at Crosswater Ltd. as a 'Design & Innovation Intern'; learning a lot, and meeting some great people along the way!

I was offered the chance to both help out development of new and existing ranges, as well as come up with a few of my own ranges!





## Play together. Regardless of ability.

Tomobean are collectible, tradable, low-cost competitive social dice-toys for 6-8 year olds, that are designed to allow even those with limited fine-motor control to operate them (including acquired or congenital limb loss up to, and including, the elbow), allowing a typically underserved demographic to engage in social play with other children using tools that they previously had limited access to.

This is achieved without giving the impression that the toy is even designed for this market, preventing the alienation of able-bodied children from participating, and encouraging cross-ability social-interaction.

Project Name:  
**Tomobean | Inclusive Social Toys**

Client:  
**Bournemouth University**

Year:  
**2019**

Tomobean the Game, is a fairly simple dice game utilising collectible figurines called 'Tomo'; loosely inspired by other collectible childrens toys such as Pokemon or Bakugan, each die contains different dice-face values and 'abilities' used in the gameplay itself.

The aim was to create a toy line that was inclusive regardless of limb-ability, gender, or skill-level (hence why the dice-element was used, in-order to create a random element that can give a new player a helping hand).

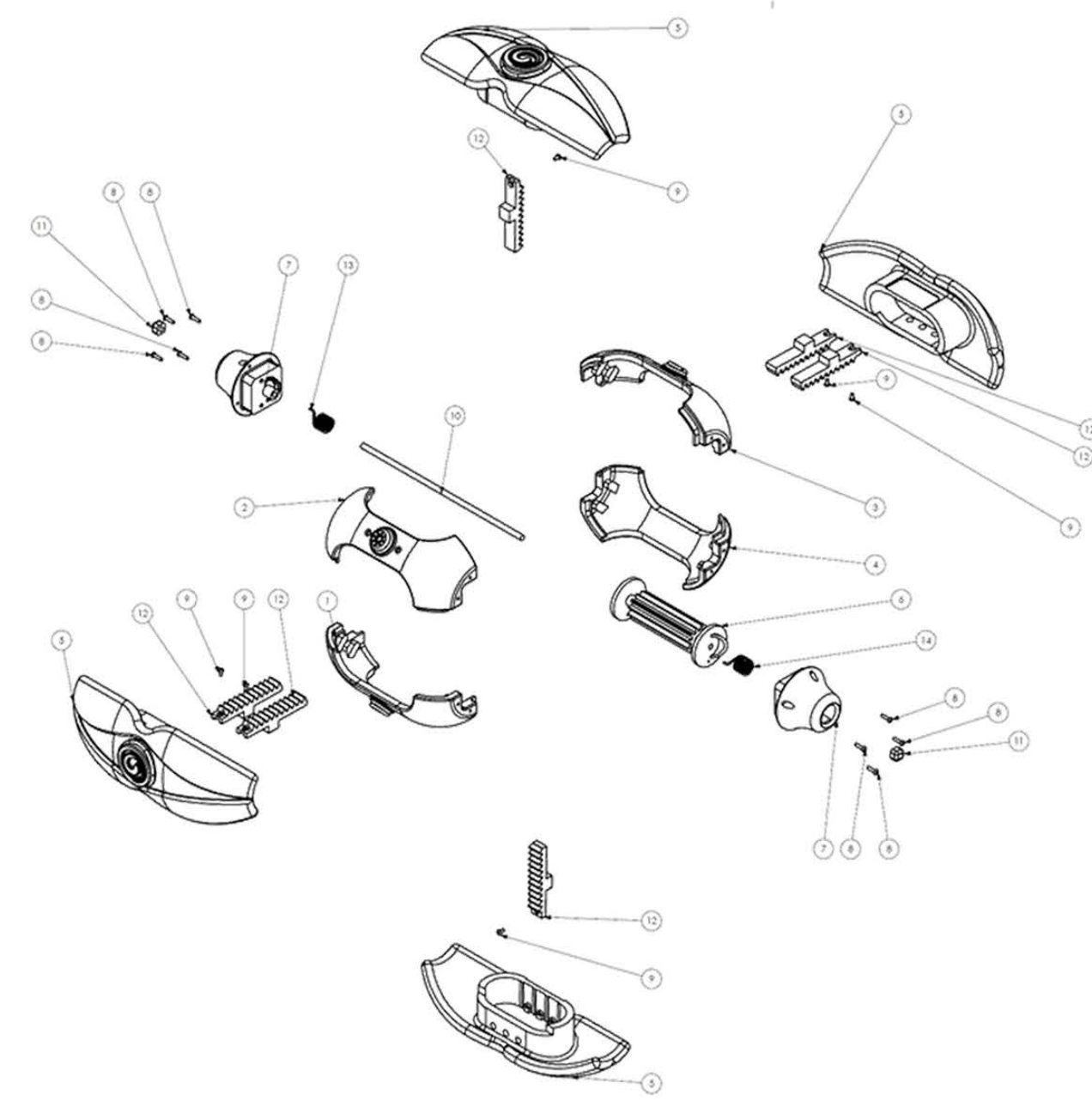
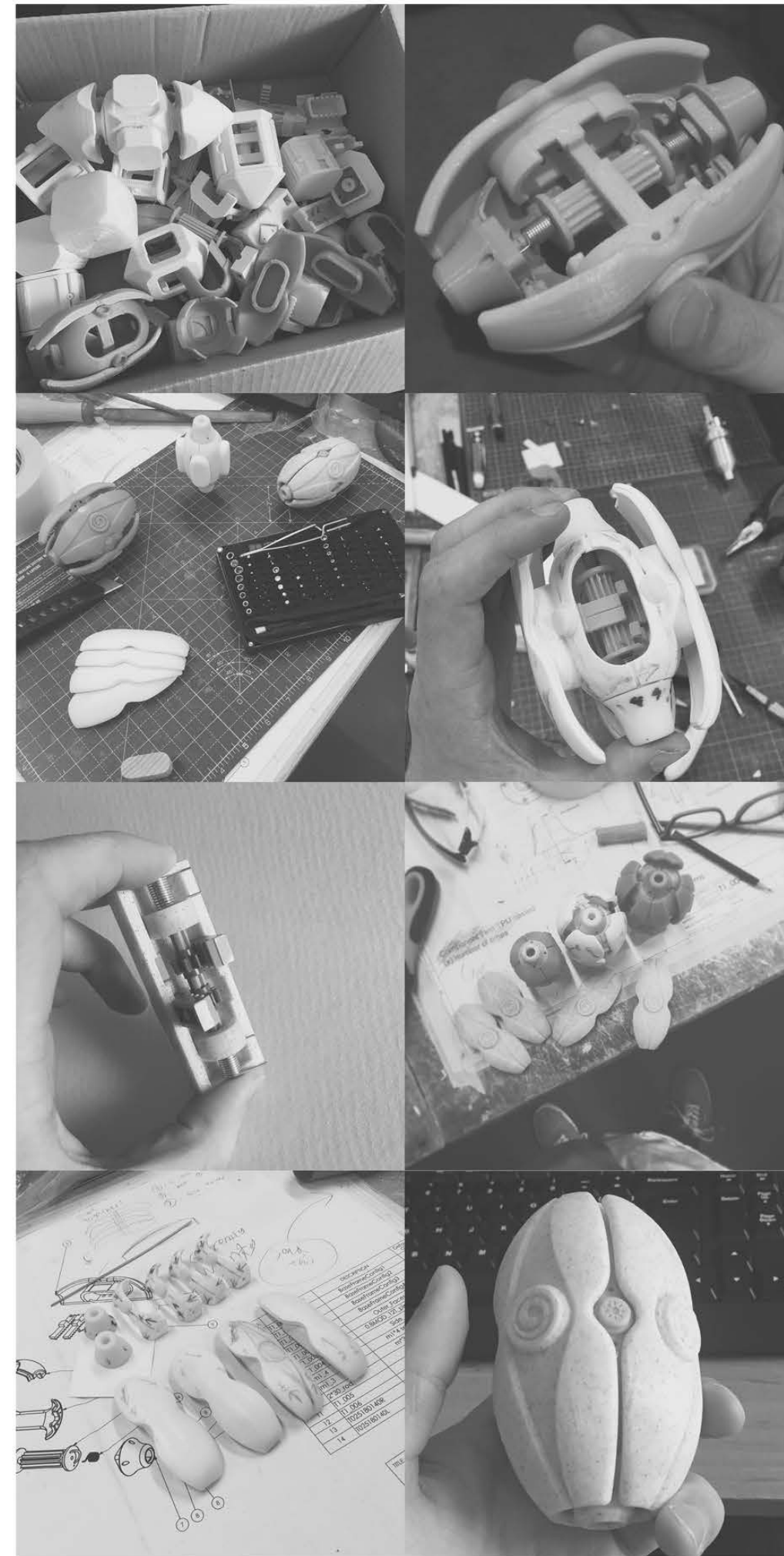
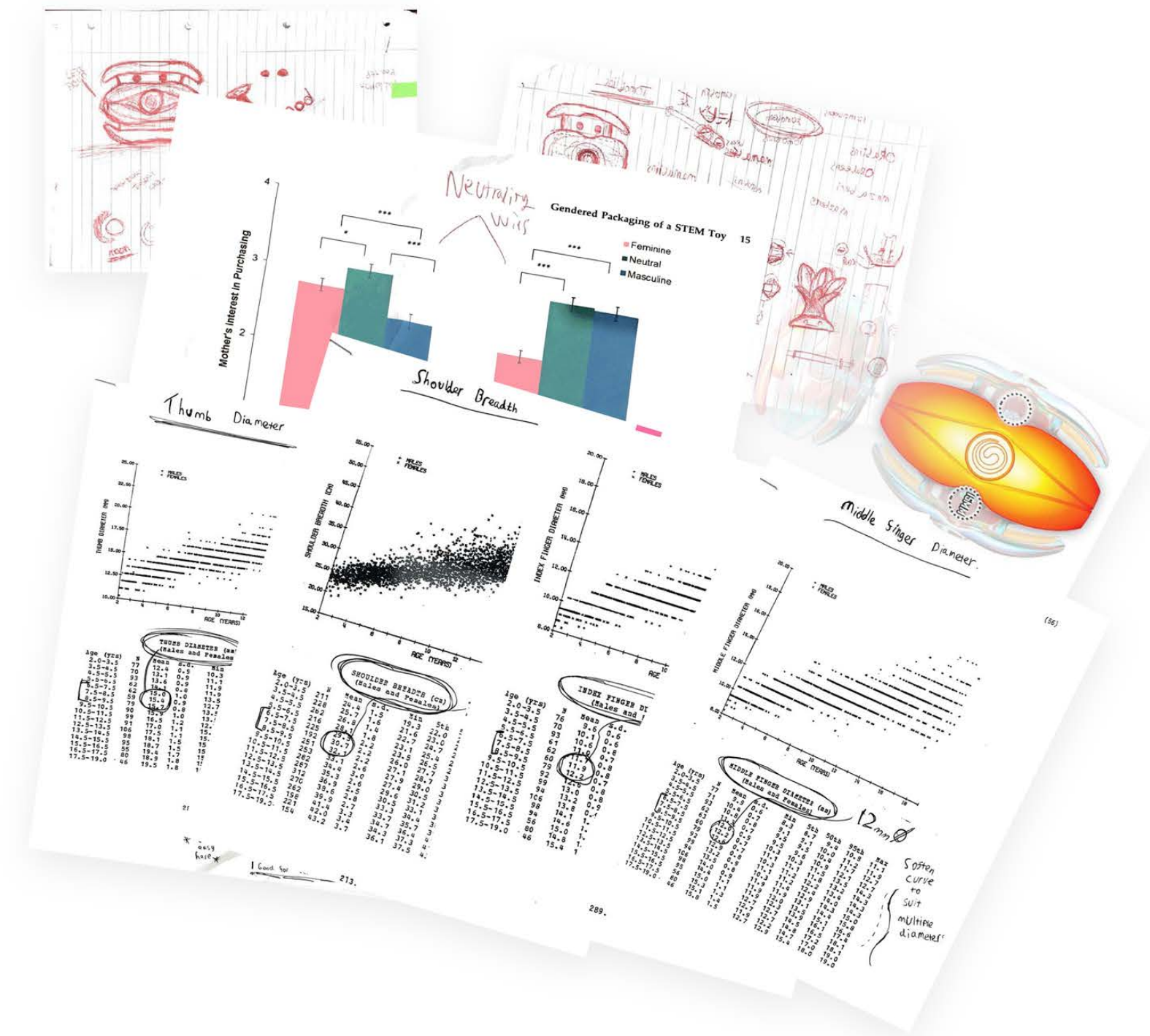




As an inclusive project designed for users who were both young, and disabled; this project relied incredibly heavily on user-research for everything from anthropometrics, to popular children character design tropes, to the overabundance of gendered-colour theory in mainstream toy manufacture.

This gave way to some specific features on the Tomobeans, including elements such as the small divets on the faces to be better picked up with one hand, or being generally larger than handheld toys to be better picked up by elbow-stumps.

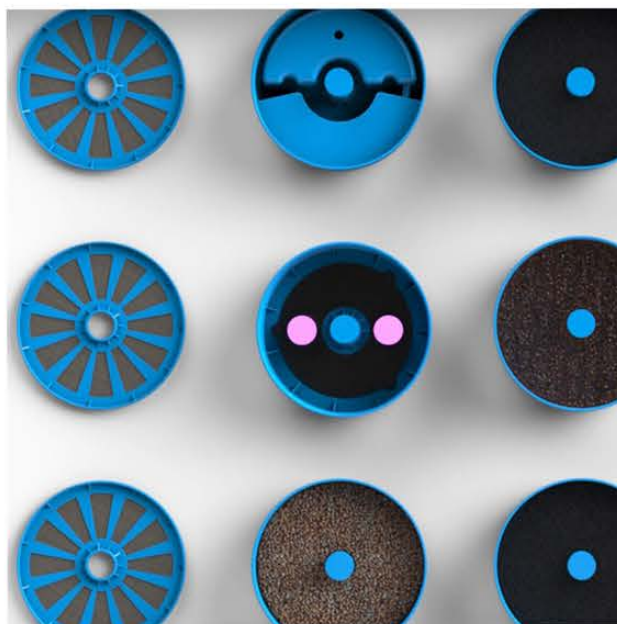
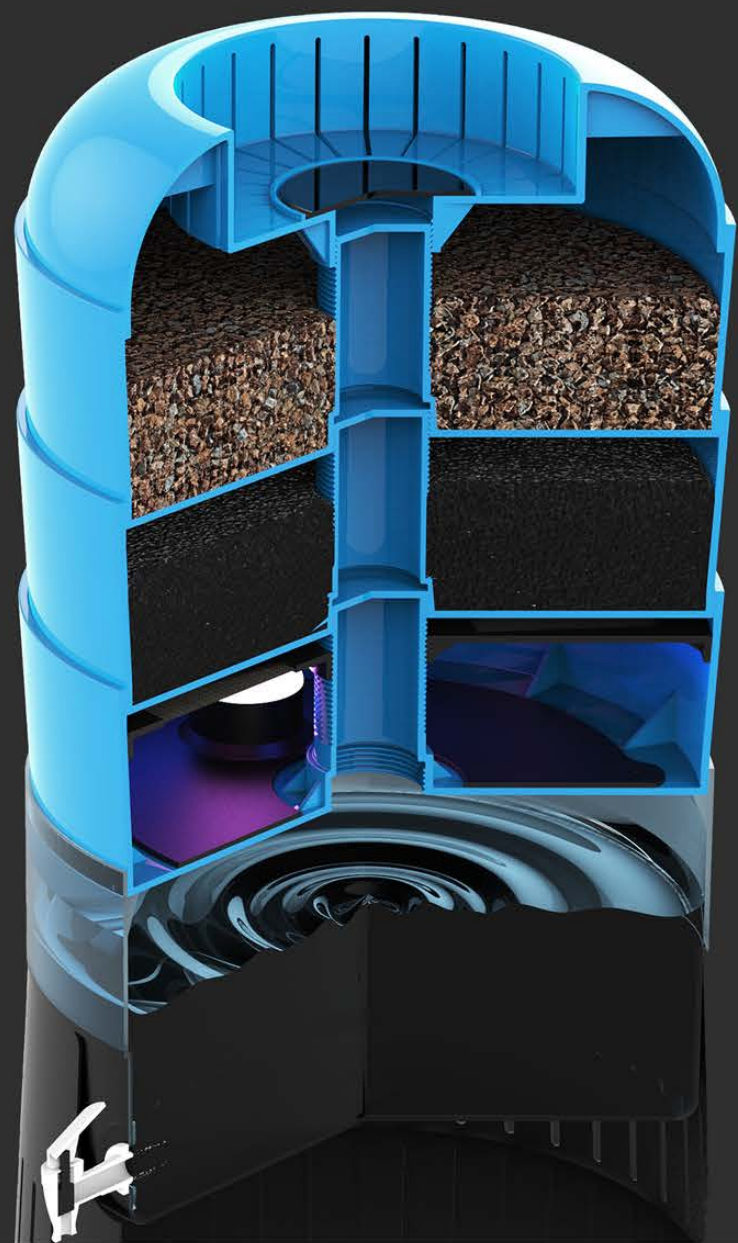
Given how much of the design would rely on it's mechanical nature, much of the development focused on many, MANY (mostly failed) prototypes.



Retrospectively, I'd have changed many things about the design. Mechanically whilst functional, there were far too many moving parts that would likely be broken fairly quickly by the typical playground environment the product finds itself in. There were also issues with communicating the 'game' aspect to children, something I've been able to research through board-game design theory in my spare time, I'd like to return to the idea in future to rethink the concept!

But I knew the project would be a rather ambitious, and I really enjoyed the simply joy of trying to solve a very real problem, and serve an underserved market.

 multi-award  
winning



## Emergency filtration. Anywhere. Always.

MOREWATER was a 6-person group project that set out to create a mid/long-term, modular, family-capacity water-filter that can be customised, assembled and dispatched rapidly for any environment, pollutants, or special cases, as-well as be adapted with new emerging technology; all for incredibly low-cost.

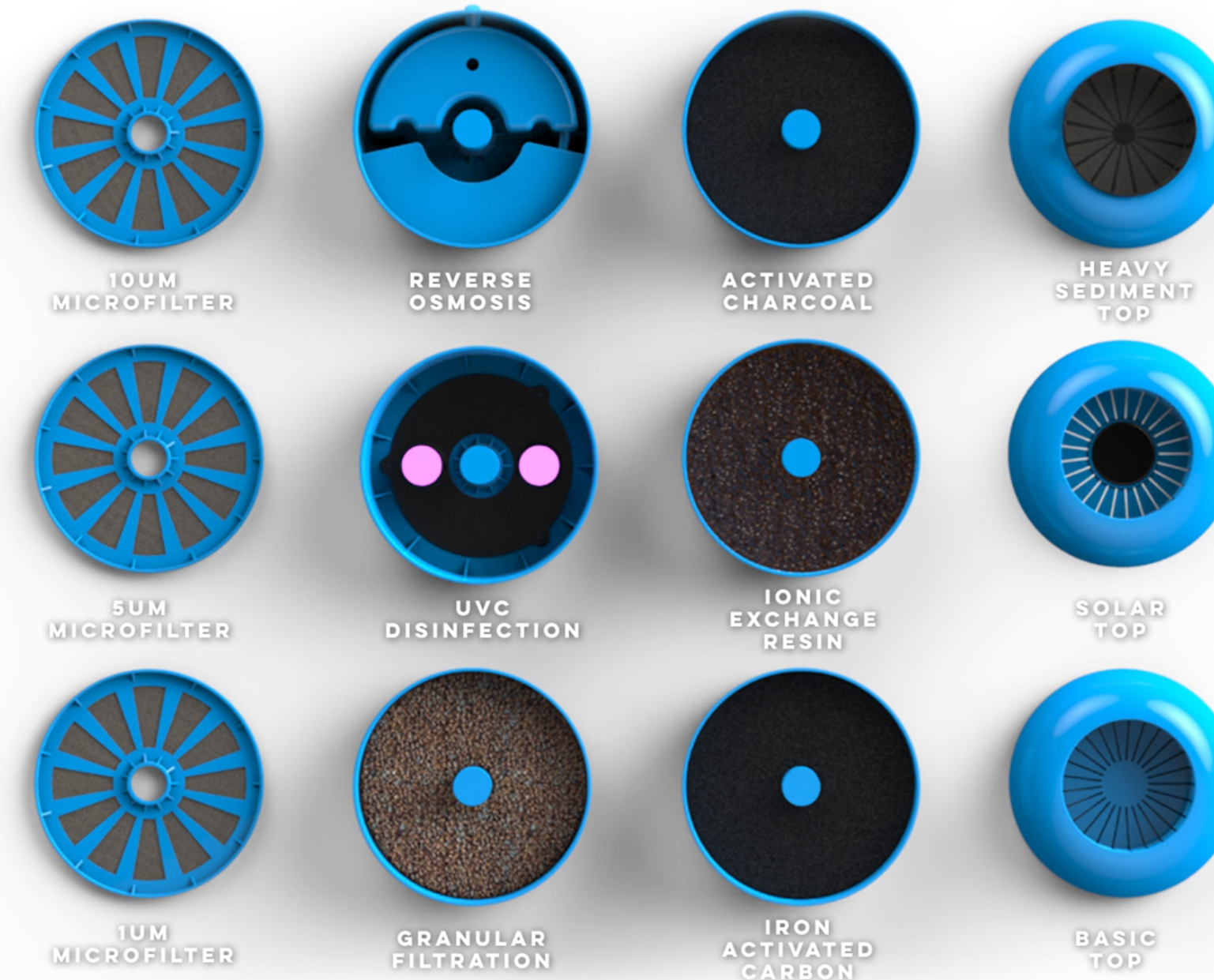
Project Name:  
**MOREWATER | Emergency Water Filter**

Client:  
**MOREWATER TEAM**

Year:  
**2017-18**

MOREWATER was designed as a 'medium-term' filtering solution designed to supply an average developing-nation family enough usable water per day for up to 10 years, in response to a crisis.

**As every water-crisis has different circumstances surrounding them and different filtration needs, the filters could be tailor-made with basic 'no-tools' top-down assembly and shipped quickly to those who need it.**





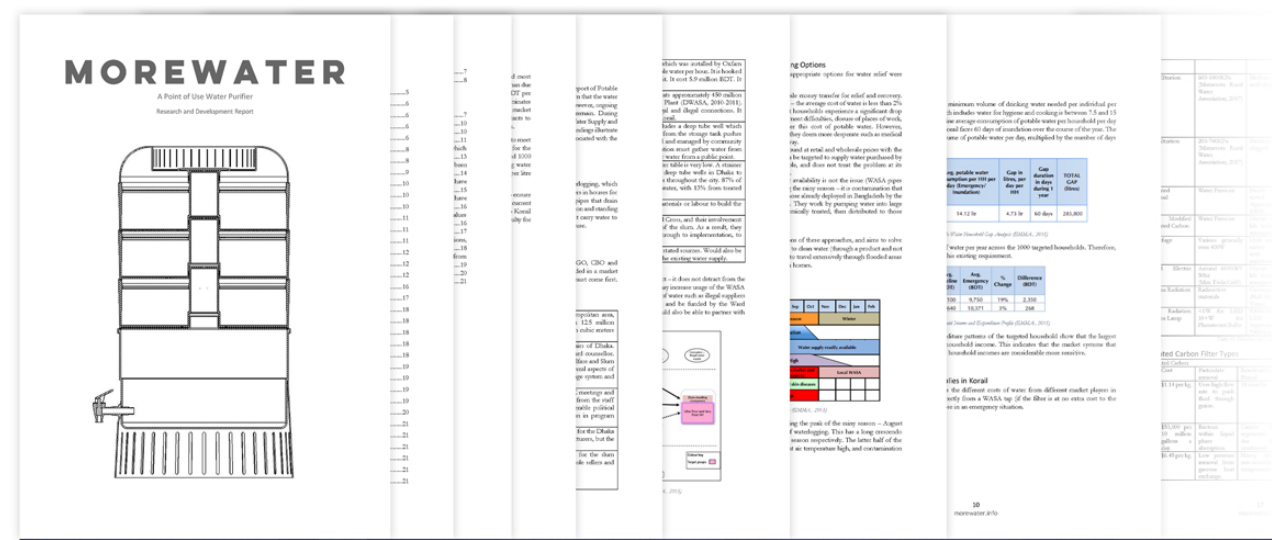
Winner in the  
Royal Academy of  
Engineering National  
Engineering Competition  
2017.



GGCS 2017 International Business Competition in  
Washington DC  
(2nd w/ \$15,000 Prize Fund)



Finalist in the Morgan  
Innovation & Technology  
Prize 2018



Dozens of pages of research, interviews with NPO's, entrepreneurs, polymer-engineers, and many others; many pitches, presentations, and events; and a travel to Washington DC later, we had successfully competed in the Global Grand Challenges Business Competition 2017, against the top entries from the UK, the US, and China, securing a \$15,000 investment.



## MOREWATER KORAIL

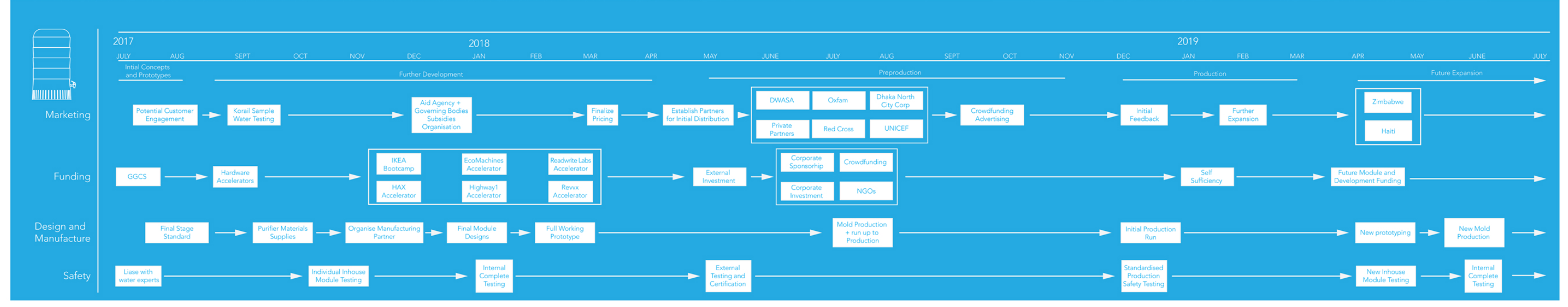
- Removes **As** (Arsenic)
- Removes 99.9% **Viruses**
- Removes 99.9999% **Bacteria**
- Removes 99.999995% **Protozoa**

**Stage 1 Granular Filtration**  
Removes some sediment and large contaminants.

**Stage 2 Iron Impregnated Activated Carbon**  
Removes some sediment and large contaminants.

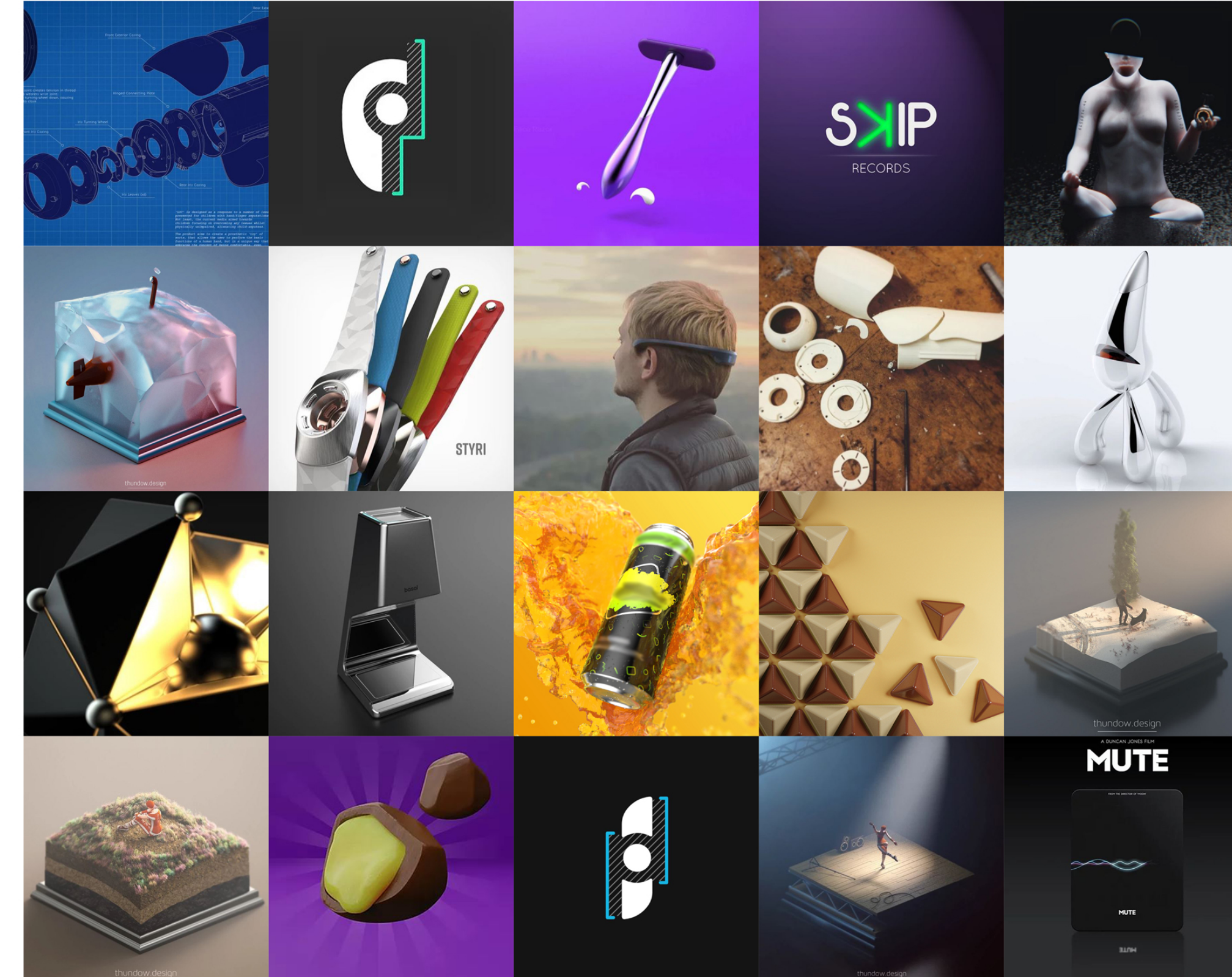
**Stage 3 Low Pressure Stainless Steel Microfilter**  
Stainless steel 1um filter which removes silt, clays, Giardia lamblia and cryptosporidium cysts, algae, and some bacterial species.

**Stage 4 UVC Sterilization**  
Deactivates viruses and remaining small bacteria. Powered by the solar panel on the top of the devices



# BUT WAIT, THERE'S MORE!

*(too much, frankly; but you can find it all on my portfolio site!)*



[www.thundow.design](http://www.thundow.design)

