



Design Proposal Part 1

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## INTRODUCTION



# COMPANY

Strix, are a world leader in safety conscious and sustainable design.
Although they are formally known for their innovative range of kettles, they also collaborate with Tommee Tippee to develop a range of reliable baby feeder and steralisation devices.

They pride themselves on their unrivalled quality and their products are used roughly 1 billion times a day globally.





# BRIEF

"Design and develop an electrical product to assist with the steralization of baby bottles, dummies and soothers with a focus on convenience, sustainability, mobility and safety"



Values

## Shaping a safer future with pio

I have chosen a set of brand values to define the bebe sub brand which reflect the ethos of Strix

Sustainable

Reliable

Convenient

Quality

Innovative

# Target Market <u>CUSTOMER PROFILING</u>

I see a gap in the market to target the slightly more health conscious and affluent parent who takes a more holistic approach to their baby's health and environment.

Target age group will be 30-40s who have defined their own personal style which translates into the type of product that they choose for their children.

They are a maturer parent with an active lifestyle who have learnt to simplify things and prefer quality and convenience over cheaper products.

They are prepared to pay a little more for products that meet their high expectations for the environment and their children's health.

# Sub-Branding \*\* Recket



### <u>LOGOS</u>































# Sub-Branding

#### <u>LOGO</u>



I have chosen a stylised cloud motif for this sub-brand to represent the idea of 24 hour care and support for your infant whatever the time of day.

To strengthen the visual recognition, I have kept a uniform colour scheme across all layouts and images.

I have chosen a pallette of 5 unisex colours which could then be used to categorised other products under the sub-brand at a later date as shown here:





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## $\underline{DEVELOPMENT}$

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# Sub-Branding Dio

#### <u>PRODUCT</u>



















pia pia pia pia



# Pio [più] VERB To Cleanse

I identified words that could be related to the product such as clean, purify, sterile etc, and researched these words in other languages, finally settling on the word Pio in Latin.

I have taken some poetic license in the translation of this word because Pio stood out as being phoetically pleasing and soothing in tone.

I also wanted a name that is both short and memorable that lends itself to a number of typographical varations making it easy to adapt into art work, media and the product itself

# Branding

#### BRANDING BOARDS

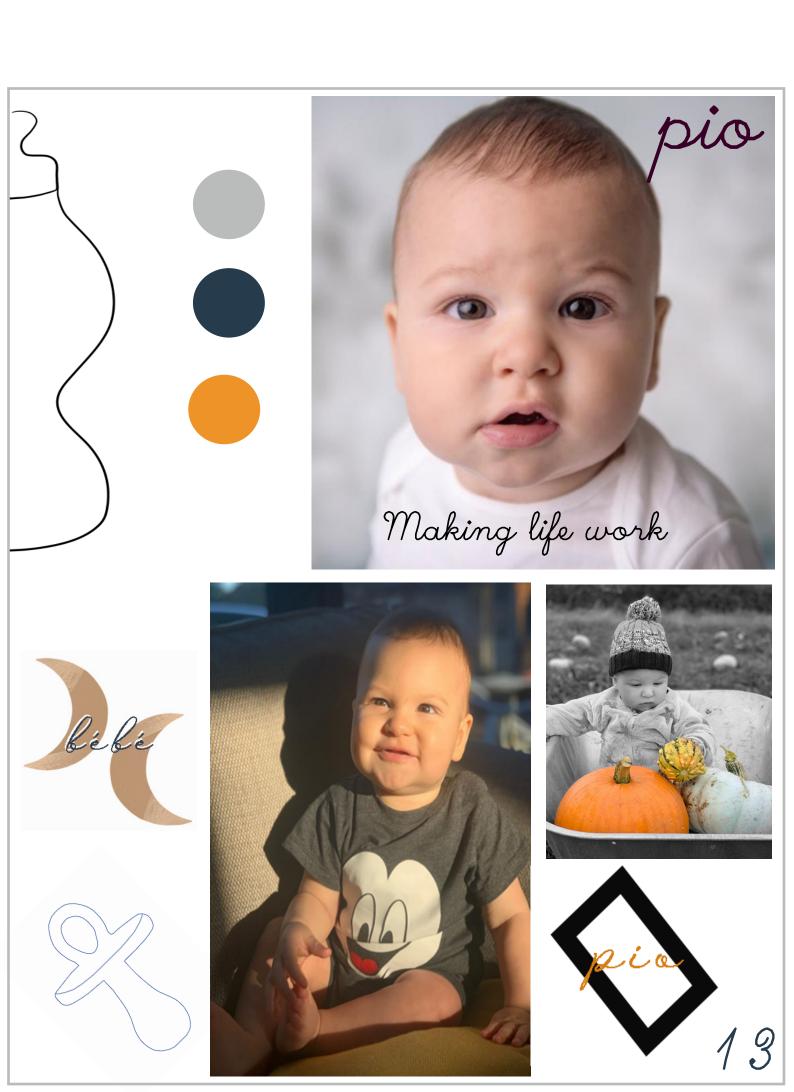


Keeping with the suggested pallete, it would be easy to incorporate the branding colours into range of images that promote the product and reinforce the visual connection for the consumer.

The selected images contrast the clean safe environment of home against children exploring their outdoor environment

These images could easily be dropped into social media as part of the branding campaign









I researched both the hygiene and baby care market to understand current trends, consumer desires and future growth predictions.

The baby care market is projected to be worth roughly £88.72 billion worldwide in 2026. This is a substantial increase from its current valuation of \$67.35 billion in 2020 and is expected to keep growing at a CAGR of 5.2%, during the forecast period of 2019 - 2024.

As a market, it is incredibly diverse and is categorised by; toys to aid cognitive development, feeding accessories, wipes, disposable diapers, body care products and soothers.

Calls for development and growth in this market have stemmed from increasing concerns over posed health risks to young children as, in recent years it has been revealed that there has been an increase in the incidence of skin diseases as well as a noticeable lack of safety standards and awareness from industry. The Covid pandemic has also been another key driver for reform in this market due to consumers becoming more hygiene conscious. This will lead to a demand for sanitary goods as consumers are focused on the well-being of their families



What is said to further drive consumer appeal and spending during this predicted market forecast is the production of more innovative products that have minimum environmental and health impacts as well as improving availability to rural communities.

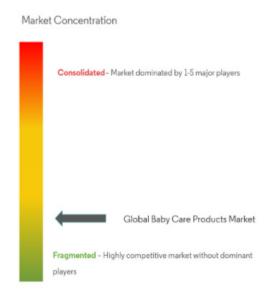
A particular segment of the baby care market which is predicted to experience substantial growth are baby bottles. The baby bottle market was valued at \$2.6 billion in 2018 and is expected to grow at a CAGR of 4.7% from 2019 to 2025. The catalyst behind this growth has been due to an increase in professional mothers who struggle to find a balance between managing a full time job with family life hence the need for convenience and reliability.



The global baby care products market is highly dominated by North America and Europe with Asia-Pacific being one of the fastest-growing markets for baby care products, due to the rise in the birth rate.

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The top 5 major competitors in the baby care market are; Unilever, Procter & Gamble Co, Kimberly Clark Corp, Johnson and Johnson and Nestle SA and due to their market power and influence they are able to drive market competition and interest amongst smaller competitors and consumers. Despite the top 5 established companies currently leading the baby care market, the market itself is not saturated with competition so there is plenty of opportunity for a new sub-brand to grow and thrive.



In light of Covid-19, the demand for improved personal and social hygiene measures has exponentially increased and thus, has highlighted the potential for profit and growth in the health sector that popularises sanitation devices.

The pandemic has fundamentally altered the structure and lifestyle of society, the new normal now encourages frequent disinfection, sanitisation and sterilisation as health professionals warn that the virus easily contaminates surfaces and belongings thus increasing the risk of spread.

Reports have shown that the global personal hygiene market has grown at a CAGR of around 7% during 2014-2019 with an estimated market value of \$140.5 billion. This is predicted to grow a further CAGR of 4.5% during a forecast of 2020-2026.

Estimated driving factors that are likely to influence consumer spending are; the ability for a product to be reused or disposed of, how convenient they are to access and use, how affordable they are in the short and long term and how natural and organic the materials and substances used are.

In particular, the most commonly used materials in the manufacture of personal care hygiene products are polypropene, propylene glycol, peptides and silicone. As businesses are crumbling under the financial strain of each lockdown, job opportunities are being lost en mass which is seriously affecting consumer ability and desire to spend.

Although it has been recognised that consumers are willing to pay more for highly priced care goods, as incomes become restricted, consumers are now having to make more value judgements that prioritise the health and well-being of their family over purchasing Veblen goods even if they are within their budget.

In all, both the hygiene and baby care markets have high predicted growth potential over the next few years in part due to the challenges and opportunities Covid-19 has provided. Producing a new baby product that combines convenience as well as sanitation is the way forward to breaking into an untapped and profitable gap in the market.



# MARKET LEADERS 2020

#### Non-Transportable Steralisers

#### the Baby Brezza One Step Steriliser Dryer



The Baby Brezza generates steam to kill 99.9% of germs in bottles, breast pump parts, pacifiers, and other baby accessories in just eight minutes. It also has a drier setting with the option of 30, 45, or 60-minute drying cycle.

US Market only. Priced \$99.99

#### Pros

- Claims to kill 99.9% of germs
- Automatic steam, dry and switch off functions all completed in one step
- Keeps baby products clean for 24 hours
- Has the capacity for 6 bottles + accessories

#### Cons

- Expensive
- Has a long run cycle
- Large footprint

The Wabi has three different functions; it steralises within 8 minutes, dries bottles without leaving condensation, descales to get rid of calcium deposits from hard water and has a cycle time of 30 to 60 minutes.

It has a smart sensors that knows to shut the unit off automatically once it has completed its sterilisation cycle and has a clock to track how much longer it has left to complete its cycle.

It keeps bottles clean for up to 24 hours with a sealed lid and is perfect for overnight use

US market only. Priced \$119.00

#### Pros

- Claims to kill 99.9% of germs
- Automatic switch off after completed cycle
- Capacity for 8 bottles and extra accessories
- Sanitises, dries and descales

#### Wabi Baby Steriliser



#### Cons

- Expensive
- Has a long run cycle
- Large footprint

#### **Dr Browns Delux Steriliser**



This is one of the largest electric sterilisers on the market, it holds up to six bottles on an upper tray and has a removable lower tray to hold accessories such as; nipples, breast pump parts, pacifiers, and toys.

It completes a cycle in 12 minutes and kills 99.9% of germs. After the finished cycle, it will automatically shut off. A measuring cup and tongs are also included to ensure you won't get burned from any dissipating steam while the device and bottles are cooling down.

The design is simple but sophiticated and is very simple to use and helps prevent illness and infection from surface transmissions.

Steam is electronically generated in set cycles to kill the bacteria.

Currently on the market, reduced for £22.39

#### Pros

- Can accommodate several bottles and small accessories at once.
- Has a simple design with controls that are very easy to use.
- Removable accessory tray for easy positioning
- Claims to kill 99.9% bacteria in 12 minutes
- Automatic shut-off
- Affordable



#### Cons

- It doesn't warm the bottles
- Steam sterilisation only works for certain types of items
- Slower than other sterilisers
- Long cool down and cycle time
- Can generate steam so hot it can burn badly



# MARKET LEADERS 2020

#### <u>Transportable Steralisers</u>

Currently on the market for £34.99

#### **Philips Avent Steriliser**



The Philips Avent microwave steam steriliser is a budget-friendly, water tight, fast and BPA free product.

The steriliser works quickly and effectively to kill harmful bacteria and viruses that are commonly found on surfaces and claims to kill 99.9% of bacteria in under 2 minutes.

It can hold up to 4 different sized bottles, breast pump parts and feeding attachments as well as being compatible with most bottles and brands.

It fan fit into most standard microwaves and will keep everything clean for 24 hours if the lid is kept sealed. The handles are designed to stay cool, so parents are able to safely remove the steraliser from the microwave without receiving any burns.

#### Pros

- Holds different shaped and sized bottles, breast pumps, and accessories
- Stays clean for up to 24 hours with closed lid
- Lightweight and inexpensive
- Cooling handles to avoid burns

#### Cons

- Cannot hold more than 4 bottles at once
- May be too large for small microwaves
- Relient on a microwave for it to work which user may not have access to

Milton Mini Portable Soother Steriliser

The Milton Mini Portable Soother Steriliser is BPA-free, small and watertight. It can be slipped into a small bag or attached to a pushchair using the built-in strap. Sterilising tablets are used with the product which will kill bacteria and viruses within 15 minutes and keeps soothers sterile for 24 hours. It also has an innovative sponge to help remove dirt from the soother and retain the sterilising fluid

Currently on the market for £6.99

#### Pros

- Sterilises dummies when out and about in only 15 mins
- 100% Watertight
- BPA free
- Soothers stay sterile in the solution for upto 24 hours
- Attaches to pushchair or small bag
- Soothers can be added and removed at any time as the solution only needs changing every 24 hours

#### Cons

Limited to dummies



#### Cotton & Pink



This portable UV steriliser disinfects efficiently, quickly and safely using ultraviolet radiation and ozone, which can kill the colibacillus, staphylococcus aureus, salmonella, shigella, influenza virus, hepatitis B virus, rotavirus and so on.

The product is suitable for baby feeding bottles with wide bottleneck or standard bottleneck (glass feeding bottles, plastic feeding bottles PC, PP,PES,PPSU, and silica gel feeding bottles).

It steralises in 6 minutes and once finished, it will shut down automatically. It uses rechargeable batteries, and has a battery life of 120 minutes (20 uses) but can also be charged via USB.

Small size, convenient for travel, with cloth bag packing, Can sterilise 1 entire breastkit at a time

Philippine market only. Priced £60.00

#### Pros

- Portable
- Can accomodate different bottle types
- Sterilises quickly and safely
- Choice of charging options
- Convenient travel size

#### Cons

- Expensive
- Batteries would have to be changed often and ongoing expense
- Long charging time
- Not compact

Medela steam bags are an affordable, on-the-go solution for sterilising bottles, pump parts and accessories. They come in a pack of either 12 or 15 can be compactly stored in a changing bag.

Instructions and use are very simple, the bag is popped into the microwave for two and a half minutes.

US market only. \$12.00

#### Pros

- Kill 99.9% bacteria in under 3 minutes
- Each bag can be reused up to 20 times
- Inexpensive
- Space Efficient

- Small capacity
- Relient on microwave access

#### Medela Steam Bags



# Summary

#### of findings

My market research confirmed that the majority of available products on the market lean towards non-portable devices, indicating there is still a gap in the market to be addressed.

Of these all are electrically powered and the main method of sterilisation is steam. Although these units offer a number of benefits including greater capacity for a variety of items and additional functions like descaling and drying, the process take much longer, in some cases up to 60 minutes.

This means a longer wait before equipment can be used and in the case where the equipment is not dried, then time allowed for equipment to cool down. In any case although steam is very effective, even in a controlled environment there is always the risk of possible injury if not handled correctly.

Overall these units are better suited to overnight preparation.

Of the portable products offered the technology is quite dated ranging from the use of sterilising tablets to being reliant on another device such as a microwave. Such products demonstrate a clear disadvantage when they are used anywhere outside the home. Access to an ancillary device if needed may be limited, particularly at this time when Covid -19 has led to many restrictions in facilities offered to the public.

Given these constraints and given the majority of these products do not address the potential market for a fully comprehensive 'all in one' solution there is an opportunity to combine desirable functionality while addressing consumer concern for the environment and drive for sustainable products.

Instead the safest and most effective alternative is to use UV light to eliminate reliance on supplementary goods and devices.

The closest competitor product offered by Cotton & Pink also uses UV but its dated square design is contrary to the shape of most baby bottles and doesn't look a natural 'fit'. In addition, the square rigid structure is an inefficient use of space and materials and inherently less strong than a cylindrical design and potentially costlier to manufacture.

With this in mind I want to design a portable product that is compact, affordable and stylish.





# Joe & Elijah Pugh



Elijah is nearly one years old.

His mother, Zoe, has found that she is using baby bottles far more frequently now.

Now Elijah is older, he is spending more time outside of the house and Zoe finds she needs to bring many more items with her when she is out in order to cover every eventuality.

Elijah is starting to explore his own capabilities using the objects around him. This often includes his bottle which he drops or throws.



Scenarios

Scenario 1, illustrated above, is to demonstrate a situation I witness otten when I am out

A mother over burdened by baby care products, feels overwhelmed and stressed. The baby picks up on this and proceeds to be upset as well or simply cries because the mother's attention is elsewhere. Once you add the burden of shopping to this mix, it is easy to hit overload.

The mothers in the right frame are calm and happy just like their babies, they aren't overwhelmed by having more than they can easily manage out with them.



Scenario 2, illustrated above, is to demonstrate a Covid conscious scenario

Babies when they reach a certain age, tend to throw their belongs or trail their hands over every surface coming into contact with germs.

A bottle that comes into contact with a contaminated surface may pass on harmful bacteria or viruses to a baby. Helpful passers by with the best intentions could also be a carrier of germs or bacteria and could indirectly pass this onto a baby by returning their bottle. This creates the potential for germs to be passed on and cause illness unless equipment is cleaned, hence the requirement for a portable sanitiser.

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### DESIGN SPECIFICATION 1

#### 1. TARGET MARKET

- 1.1. Hygiene conscious consumers
- 1.2. 30s to 40s based on income but not limited to this age bracket
- 1.3. For consumers who have expectations of a modern, technically designed device

#### 2. PERFORMANCE

- 2.1. The product must be able to sterilise baby bottles and pacifiers
- 2.2. The product must be able to warn the user when it has finished its cleaning cycle
- 2.3. The product must be able to be controlled with a single button
- 2.4. The product could be controlled via a smart app
- 2.5. The product must be straightforward to use
- 2.6. The product should use sound or light to communicate to the user
- 2.7. The product should utilise tactile design to aid sight impaired users
- 2.8. The product and all provided chargers should be universal
- 2.9. The product must use UV light to sterilise
- 2.10. The product must not be dependent on third party devices (e.g. microwave) in order to be used
- 2.11. The product must have 2 sterlising cycles of 15 or 30 minutes
- 2.12. The product must be able to be set up and packed away quickly
- 2.13. The product should take less than a minute to set up or store the product.
- 2.14. The product should reduce the need for multiple accessories
- 2.15. The product must not damage the baby products in any way
- 2.16. The product must have a stabilised base so that it can it can remain upright whilst sterilising
- 2.17. The product must be transportable and compact

#### 3. ERGONOMICS

- 3.1. The product must be easy to unscrew to insert baby bottles and pacifiers
- 3.2. The product carry loops mustn't constrict fingers uncomfortably
- 3.3. The product must fit comfortably in the hand
- 3.4. The product ideally should be able to be managed with one hand

#### 4. AESTHETICS

- 4.1. The product must be visually pleasing and have nice feel to touch
- 4.2. The product must come in a range of unisex colours and designs

#### **5. ENVIRONMENT**

- 5.1. The product must be water resistant, if hooked to the outside of a bag or pram
- 5.2. The product should stand out against competitor products

#### **6. MANUFACTURE COST**

- 6.1. This product must be appropriate for mass production
- 6.2. The product has a simple casing design to reduce manufacturing cost to around 40% of the RRP.
- 6.3. Expensive manufacturing processes should be avoided, in order to maintain profit margins

#### 7. MATERIALS

- 7.1. The product casing must be made out of a durable and sturdy plastic like HDPE
- 7.2. The product base must be made from silicone so that it can be collapsed
- 7.3. The product be easy to easy to clean
- 7.4. The product must be stain and scratch resistant

#### 8. MAINTENANCE

8.1. Any product accessories e.g. Charger cables should have manufacturer guarantee

#### 9. PRODUCTION

9.1. The product should be commercially viable

#### 10. ELECTRONICS

10.1. The product must have multiple charging methods; USB, adapter or mains charger



## DESIGN SPECIFICATION 2

#### 1. PACKAGING

1.1. Each steriliser should be individually packaged and charging equipment provided

#### 2. PRODUCT LIFE SPAN

- 2.1. The product should last at least 2-3 years
- 2.2. Product should be able to be deconstructed easily for recycling
- 2.3. Any additional apps must be kept updated to work with newer smartphones
- 2.4. The product should be able to be used multiple times each day

#### 3. COMPETITION

3.1. The product should have a USP to differentiate it from its competitors

#### **4. LEGAL REQUIREMENTS**

- 4.1. The user can return the product for any repairs or replacements needed within 2 years
- 4.2. The product must adhere to Article 5 of the EU Product Warranty Directive (1999)
- 4.3. Difective goods can be returned or replaced within 2 years

#### **5. MARKET PRICE**

- 5.1. The product should be priced competitively relative to comprable products and the functionality offered.
- 5.2. Initial proposed price bracket between £20.00 £40.00, depending on unit size, extended functionality and manufacturing cost

#### **6. WEIGHT AND SIZE**

- 6.1. The product must be light to not cause discomfort when holding, even with the addition of baby products
- 6.2. The product must be able to accommodate different brands of baby bottle
- 6.3. The product must be large enough to contain a baby bottles with pacifiers
- 6.4. The product shouldn't take up too much space when being transported or stored

#### 7. QUALITY AND RELIABILITY

- 7.1. The product must be able to withstand general and daily wear and tear
- 7.2. The product must not cause injury to users, stakeholders or young children in any way
- 7.3. The product must be durable and long lasting
- 7.4. The UV must not diminish or damage the materials used in manufacture

#### 8. SAFETY

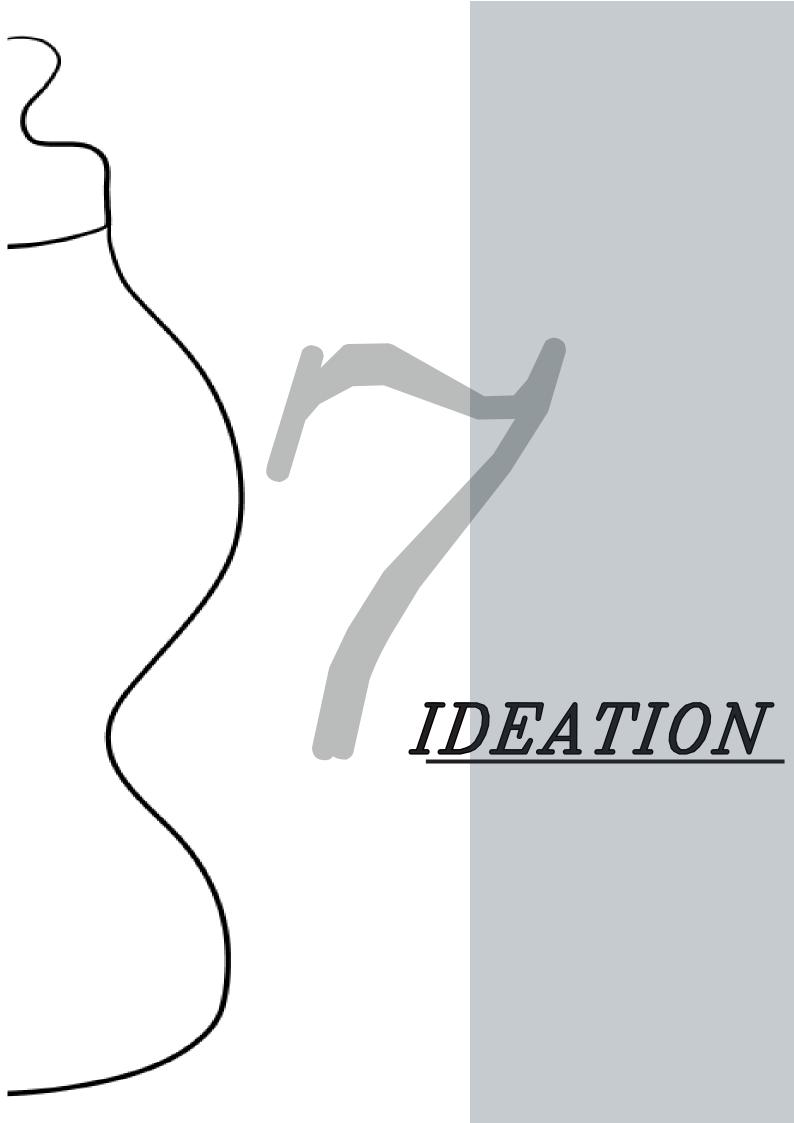
- 8.1. Any electronics must be isolated to prevent failure from interference
- 8.2. The electronics must not be exposed in any way
- 8.3. The product must not be able to be prised apart by young children

#### 9. PRODUCT DISPOSAL

- 9.1. The product must be designed with as few components as possible
- 9.2. Components and materials used must be able to be recycled for reuse

#### 10. SUSTAINABILITY

- 10.1. This product should be made out of recycled or recyclable plastics if possible
- 10.2. Replacement parts should be available to extend product life
- 10.3. The number of parts of the product must be kept to a minimum.









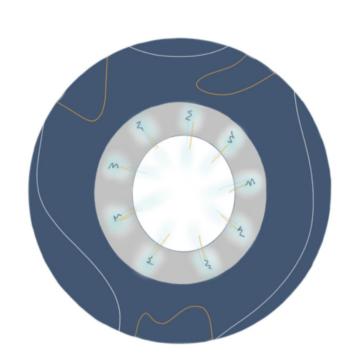
#### 1. <u>Screw on steraliser</u>

Screws directly onto male thread of baby bottle. UVs are contained in the lid and shine directly inside the bottle, killing all bacteria

#### 2. UV Dome

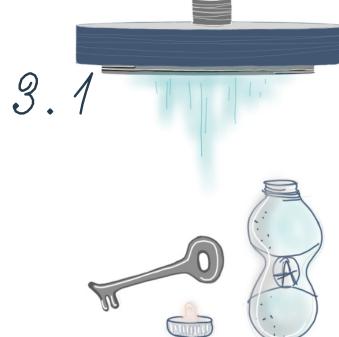
Instead of constricting capacity, this dome can be used on any surface to sanitise multiple items at once. UVs are contained in the top half of the dome





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#### 3. <u>Steraliser Bowl</u>

Moulded handle lid for easy removal. Bowl base holds items while being sanitised. UVs are located in the lid allowing it to be removed and used separately to sanitise by hand.

#### 4. Portable Hand Steraliser

Adaptation of the removable lid sanitiser in design 3.1 The moulded handle offers finger grip comfort.

#### 5. Clip Styles

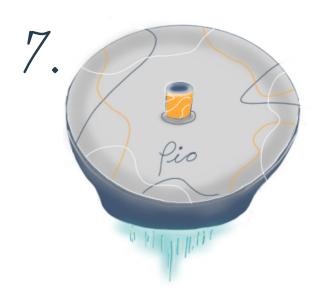
Magnetised clips for pacifiers in place while sanitising

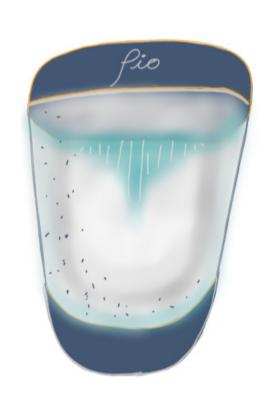
#### 6. <u>Translucent UV Box</u>

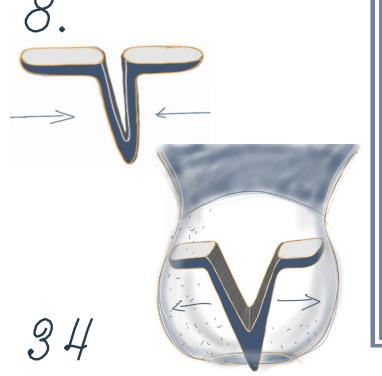
The transluscnet box allows the user to see the product in action

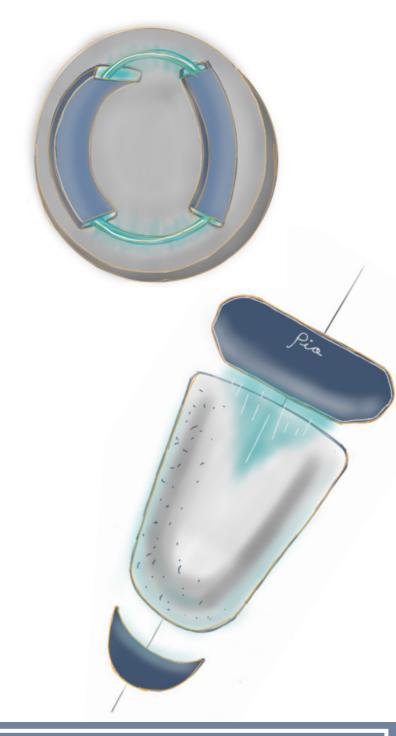












#### 7. Exploded View

Unique cup shape is a slight varariation on a standard baby bottle but allows it to also be used as a recepticle to sterilise small items, e.g. pacifers. UV placement is in the lid which push fits into the transluscent body allowing the sterilising process to be shown.

#### 8. Push Lock Mechanisms

A lock mechanism holds a baby bottle in place whilst being steralised. Pushing the clips together allows the bottle to be placed over

9.

#### 9. Push Fit Base

Moulded base with UV lights pushes into a transluscent cylindrical shield. Bottle and pacificers are held in place by mouldings

#### 10. <u>Steamer Inspired Steraliser</u>

Segmented compartments for pacifiers. Screw top with a long loop handle to attach to pram or handbag. Charge points in base

#### 11. Silicone body Steraliser

Flexible, collapsible silicone body for space efficiency. UVs are located in firm plastic screw top head along with charger ports and carry loops to allow product to be attached to pram/bag.

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# Concept Screening

Concept screening is a means of identifying strengths and weaknesses of a product's design to test the concept. Using the Cotton&Pink steriliser as a comparison, I have compared three of my top designs

|                     | Cotton & Pink | Idea 2 | Idea 7 | Idea 11 |
|---------------------|---------------|--------|--------|---------|
| Ergonomics          | 5             | 5      | 8      | 8       |
| Aesthetics          | 5             | 9      | 8      | 9       |
| Ease of Manufacture | 5             | 8      | 6      | 7       |
| Durability          | 5             | 8      | 5      | 9       |
| Portability         | 5             | 4      | 8      | 10      |
|                     |               |        |        |         |
| Total Score         | 25            | 34     | 35     | 43      |

The dome model was discounted, it was overall too large and when outdoors you couldn't rely on finding a surface to place it on.

I also discounted the cup recepticle with the distinct baby bottle shape because this might alienate consumers by requiring them to completely switch to new bottles rather than make use of products they already have but use them better.

The design I favoured overall is the collapsable silicone steriliser due to its portability and use of flexible materials.

#### MATERIALS

Body of product: Rubber Silicone

Silicone can come in wide range of colours, it is not affected by extreme temperatures, it is water resistant and has excellent UV resistance

#### **Product casing and components:** HDPE

HDPE is lightweight, durable, easily molded and 100% recyclable.



Collapsed base view

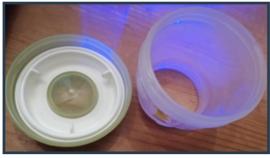


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# Development



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- A) Bottle neck dia 5cm
- C) Bottle Base dia 7cm Bottle overall height 7.5cm
- D) Overall product height 14.5cm



B) Base dia 7cm

#### Pacifer + Bottle Teat:

Teat = w1.5cm x l2.5cm x d1cm Overall Dimension = l5cm x h3.5cm x d4cm (Taking into account teat)

#### **Observations**

- Small, stubby shape
- Breaks down into three essential parts to make sterilisation easier
- Has slightly weighted base
- Capacity 130ml

Virtual Modelling





This is a basic CAD render to gain perspective of how I would adapt this product to the sizing of exisiting baby bottles and pacifiers

# Development



#### <u>LED</u> PLACEMENT

There are 2 rings of LEDs. The inner ring steralises the inside of a baby bottle, whilst the outer ring steralises the outside of the bottle



Developing a range of styles such as a purple bear in order to have a variety of branding styles and to make the product aesthetically stand out





#### **CONVENIENCE**

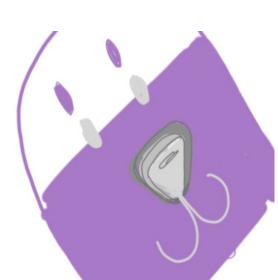
Carry loops that can either be clipped to a changing bag and pram or be carried by hand. Their design can be altered depending on the style of the body of the product. e.g. Styled to look like ears of an animal or clouds to fit the bebe branding



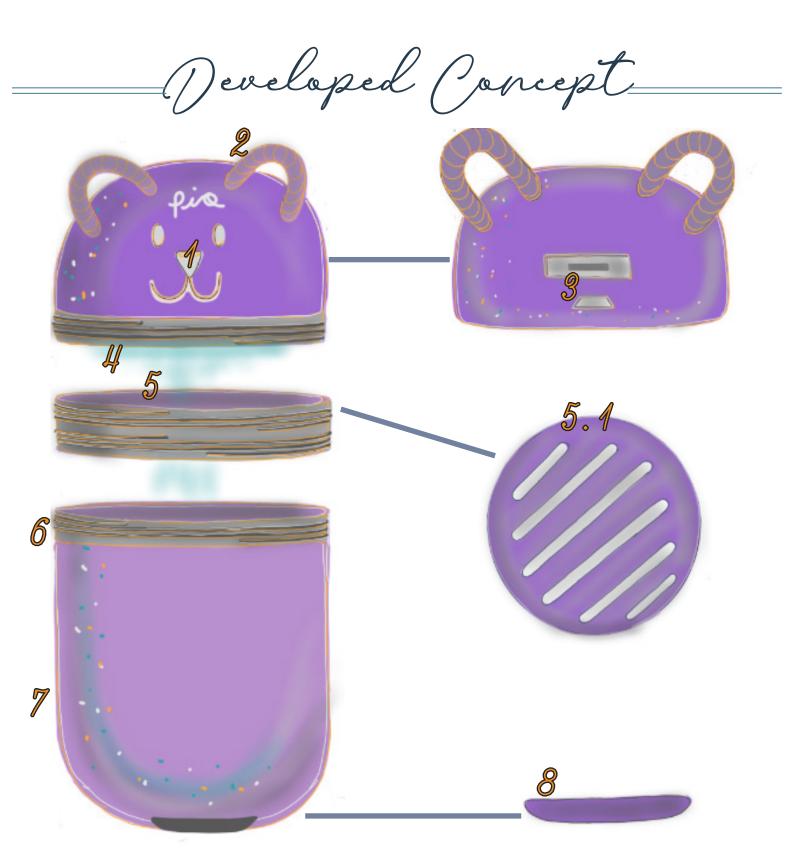
#### **COMPONENTS**

Components are designed to be unobtrusive.

In the bear design, the on/off and UV activation button is shaped like the bear's nose and the whiskers light up to indicate the product is on



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## <u>Design</u> Points

- 1. Single control button nose and LED whiskers
- 2. Ear carry loops
- 3. USB and provided charger ports
- 4. UV Lighting
- 5. Removable screw section that extends the length of the steraliser body
- **5.1.** Silicone grill compartment for pacificers
- 6. Reinforced plastic screw ring
- 7. Collapsible silicone body bottle holder
- 8. Weighted base for stability



# bébépio







The Pio is an all in one complete solution to steralising baby bottles and accessories on the go. It revolutionises the portable sterilisation product market

Its sleek understated design, offers exceptional quality and performance

#### The Key Benefits of the Pio:

- Kills 99% of surface bacteria inside and out
- Its compact and space saving
- Lightweight and durable
- Easy and convenient to use
- Can be used day or night anywhere

Making life work



# <u>bébépio</u>

#### How to use your Pio in 5 easy steps

1. Remove Pio bear head 2. Select the Pio sections for use 3. Insert accessories and bottle to be sterilised 4. Hold nose button to turn the Pio on **5**. Press nose once or twice for cycle selection Flashing whiskers indicate end of cycle.

# bébépio



#### STORYBOARD

- 1. Bottle and pacifier thrown from pram and becomes contaminated
- 2. Parent reaches for Pio that is clipped to changing bag
- 3. Pio is unscrewed and bottle and pacifers are inserted into unit
- 4. On button is held to activate. Whiskers glow when unit is on
- 5. Single press activates 15 minute cycle, double press activates 30 minute cycle
- 6. Whiskers flash when cycle is completed
- 7. Bottle and pacifer removed as now sterilised

#### <u>NEXT STEPS</u>

In IKB 2 I aim to extend the design concept to a unit that will accommodate 2 baby bottles as well as other accessories based on consumer consultation and need.





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