



James Woolsey

# Contents

---

## **Context** **2**

- Human Design
- Honeymoon Period

## **Values** **8**

- Sol Values
- Core Values
- Interactive
- Efficient
- Durable
- Product Values
- Aesthetics

## **Brand** **24**

- Sol System
- Sol
- Sol Colours
- Sol Logo
- Sol Icons

## **Product** **36**

- Food Blender
- Blender Values
- Safe
- Clean
- Assembled
- All Values
- Interactive Blender
- Efficient Blender
- Durable Blender
- Safe Blender
- Clean Blender
- Assembled Blender
- Packaged Blender

## **Future** **64**

- Sol's Future



**Context**

# Human Design

---

A design process with a strong focal point on user experience is essential for ensuring that new solutions empathise with their intended market, creating desirable user defined outcomes.

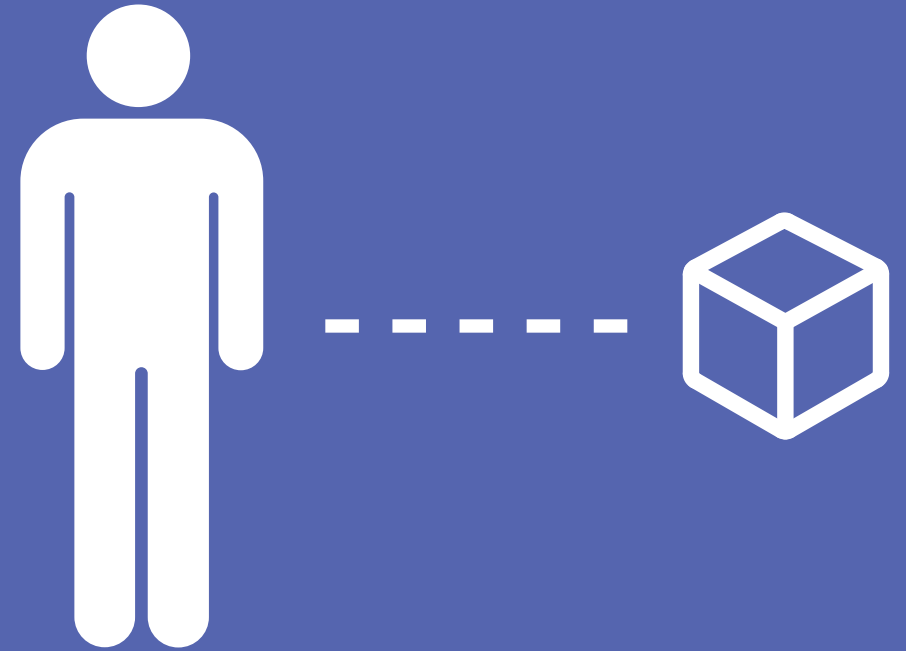
Working with and around users creates an understanding of how people interact with the world around them, allowing their desires and frustrations to become apparent. These observations become the key design considerations that drive the creation of desirable solutions.

Without a strong understanding of a user's desires and frustrations there is no validation

to suggest that a solution will have the desired impact. Solutions deprived of this human centered approach often lack the empathy that can only be created through user defined input.

By designing to meet the desires and solve the frustrations of real users, the user experience can be greatly improved, creating solutions that are widely accepted as people can invest with both their heads and hearts.

(IDEO – The Field Guide To Human Centered Design)



## Honeymoon Period

---

During a products life it will be used most regularly after it's purchased but after the first few weeks the frequency of the products use starts to decrease. The existence of this period shows a lack of consideration for the long term experience of the product.

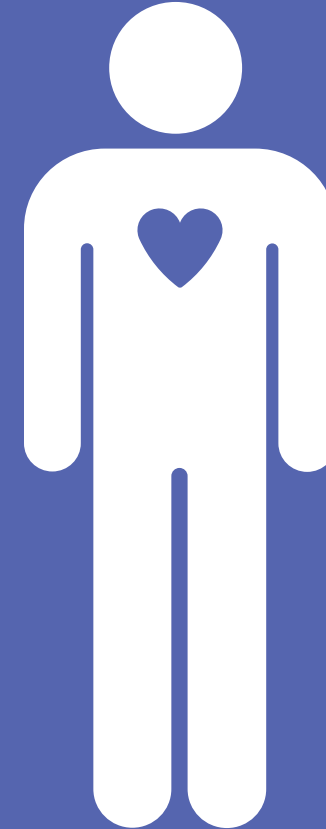
An explanation for this consumer behaviour comes from the ecstasy created from buying a new product. For the first few weeks after buying the product the user is in a state of blind euphoria that enables them to enjoy the product despite its possible flaws.

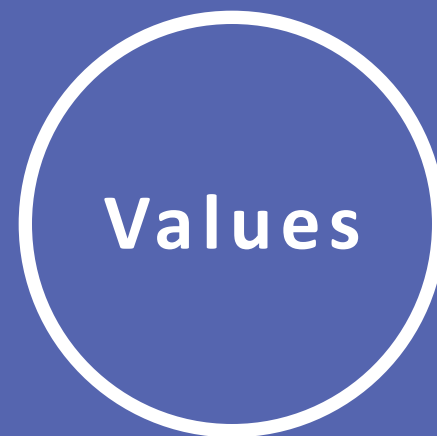
After a period of a few weeks this euphoria starts to where off allowing the user to

recognise the product more accurately seeing the flaws and frustrations within the product, making the user less inclined to regularly use the product.

With careful design and user input this honeymoon period has the potential to be extended or even gotten rid of, ensuring a lasting positive user experience.

(William Green – Pleasure With Products: Beyond Usability)





Values

## Sol Values

---

Sol is a new product brand with beliefs firmly set within human centered design. Striving to create the best product experience Sol puts the needs and desires of people first, creating the products we've always wished for.

For a product to be valued, it must be enjoyable, function correctly and last without failing or developing fault. It is these 3 elements that are at the core of all product experiences and improving each aspect is the key to improving the user, product relationship as a whole. These elements of, Interaction, Efficiency and durability are the sole of good design and should be the

starting blocks for all products.

With all products able to conform to 3 elements it is important to realise that all product are as much different as they are the same, with each product requiring its own set of additional considerations to ensure the best product experience for its unique application.

Sol considers a products interaction, efficiency and durability as its 3 core values and applies all 3 elements within its design process to ensure products are designed to meet the aspirations of their users.



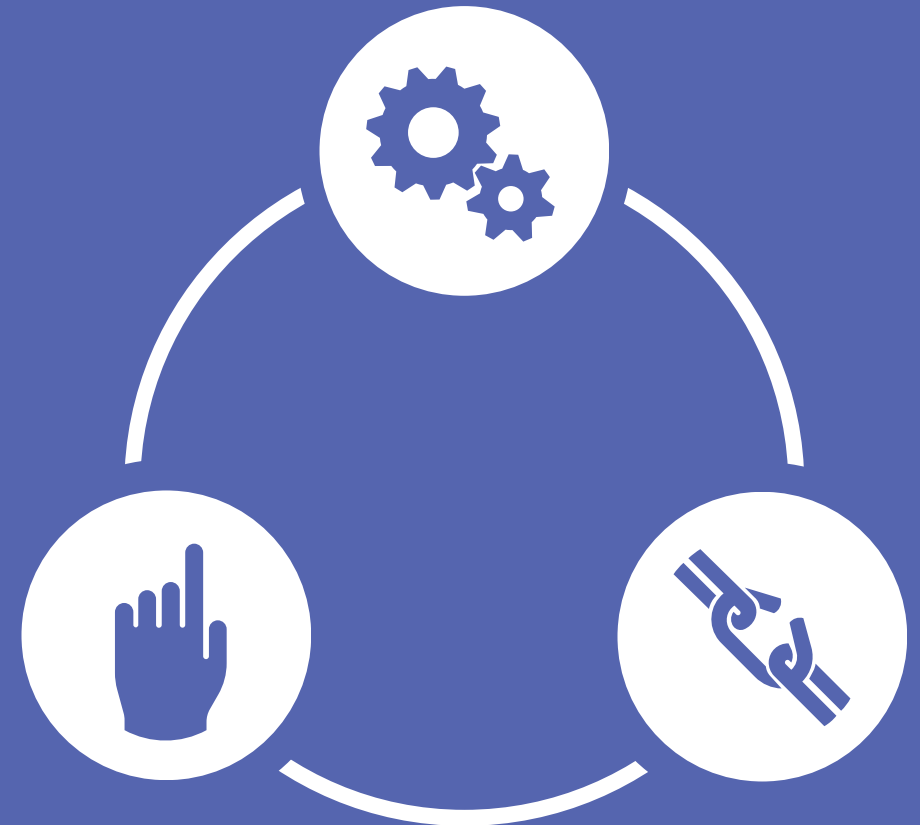
## Core Values

---

The three core values of Sol are interaction, efficiency and durability. It is these three values that Sol includes at the centre of its design process, ensuring all Sol products have a unique and recognisable theme throughout.

The values of interaction, efficiency and durability, although very broad, can be applied to any and all consumer products. It is Sol's belief that by carefully considering these three values and ensuring they empathise with users' needs and desires the users long term experience can be greatly improved.

By designing products with the values of interaction, efficiency and durability to improve the users' long term experience, Sol aims to tackle the problem of a products honeymoon period, vastly extending it, potentially indefinitely, keeping the user engaged, positive and satisfied.





## Interactive

---

The interaction between the user and product is vitally important within any product. A problem with products today is that physical interactions are not being designed with the care and consideration they need, resulting in product experiences that become dull and boring after a short period of time. Many products today have very standardised unimaginative buttons and dials that show no imagination from the designers to create an innovative and intuitive interaction based upon user's natural behaviours.

By observing and analysing user's interactions with products, natural and intuitive behaviours can become apparent.

Inspiration can then be drawn upon from these observations creating innovative, meaningful and empathetic product interactions that are a much less likely to become dull and boring, ensuring the user experience remains exciting.

To create an interactive product it is important to not only consider how the user input is applied but also the Haptic, audio and visual qualities to ensure a full sensory experience, adding extra depth to the users relationship with the product.



## Efficient

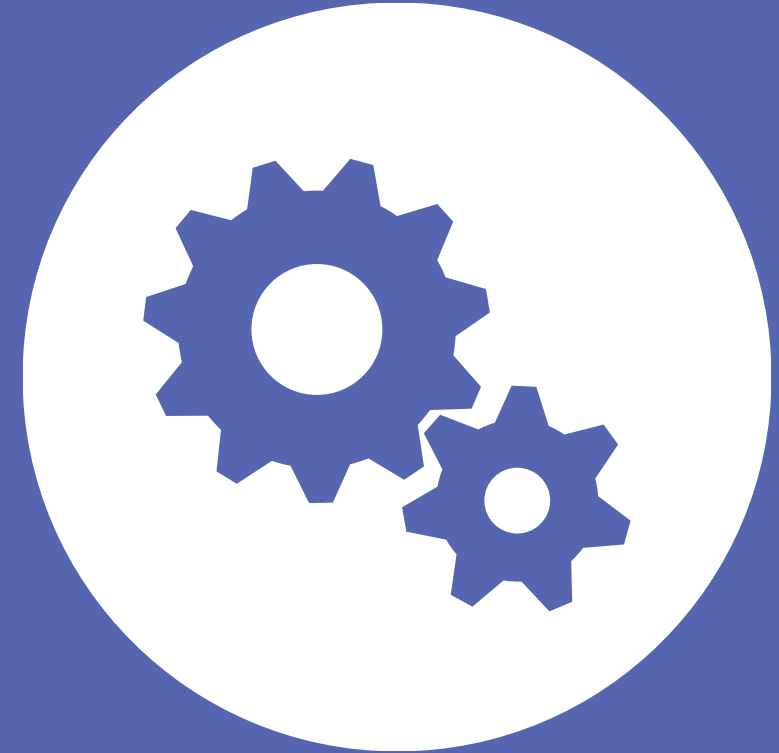
---

Efficiency is a fundamental value that Sol believes in, as without consideration of a product's functionality the product cannot fill the key desires the user has with the product. Users today can be disappointed when their expectation of a product does not match with reality. This disappointment crucially damages the relationship between the user and the product and in turn causes users to have less enjoyment when using the product. It is this issue that can contribute to the honeymoon period.

By rigorously improving the efficiency of the key functionalities of a product the expectations of the user are more likely to

be in line with the actual performance of the product, ensuring a satisfying result from the product and extending the product's honeymoon period.

To increase a product's efficiency a large amount of technical and scientific rigour needs to be invested. Although observing users is key to determining where a product's efficiency needs to be improved, designing efficient solutions requires a scientific approach of testing and trialling.



## Durable

---

Durability is an expected trait that all products are expected to conform to but many products on the market are made cheaply and quickly to capitalise on the lower end of the market. Although the price of these products can be considerably lower than the higher end products, the trade-off can be a drastic reduction in user experience as the likelihood of developing faults is much higher. These faults and potential failures knock the confidence users have with their products resulting in users being less trusting in the future.

Having a durable product can give the user confidence to use the product however they

wish, ensuring that the user doesn't feel limited in their capabilities. The feeling of a strong, solid product can also give a sense of value making the user feel the product can be relied upon, improving the user, product relationship.

Improving the durability of a product can be as simple as using higher grade materials, and analysing stress and strain points, although this can impact on the end cost of the product it is essential to ensure that the user experience continues to last without fault.



## Product Values

---

Although Sol believes that the three core values of interaction, efficiency and durability can be applied to any product, these three values cannot cover all of the consideration that are needed to create a long term user, product relationship.

To cover the extra considerations that are needed to create a lasting user experience a set of individual product values need to be discovered and analysed in order to improve these unique aspects for each products design. These extra considerations can be different for each product as every product can have different functions that are key to the products overall performance.

The core values of Sol still remain the centre point of all its products but these extra product values are also necessary to consider, allowing for all Sol products to be fundamentally the same but still have a flexibility for each product to be designed to ensure the best user experience.



# Aesthetics

---

A product's aesthetic quality, although not a core value of Sol, is something that designers naturally incorporate into whatever they are designing. Because of this, aesthetics are not something that needs to be considered consciously, but subconsciously, as it will always be incorporated as part of a designer's natural process.

Consciously thinking about the overall aesthetic qualities of a product can create a product that looks overly stylised, cheap, tacky, and unrefined. Adding too much aesthetic can also date the product, making it more likely to become aesthetically outdated, damaging the future user experience.

Allowing aesthetics to be considered subconsciously ensures that the visual appearance of a product remains clean, simple, and humble, allowing the core values of the product to shine through, communicating the product's message clearly.





**Brand**

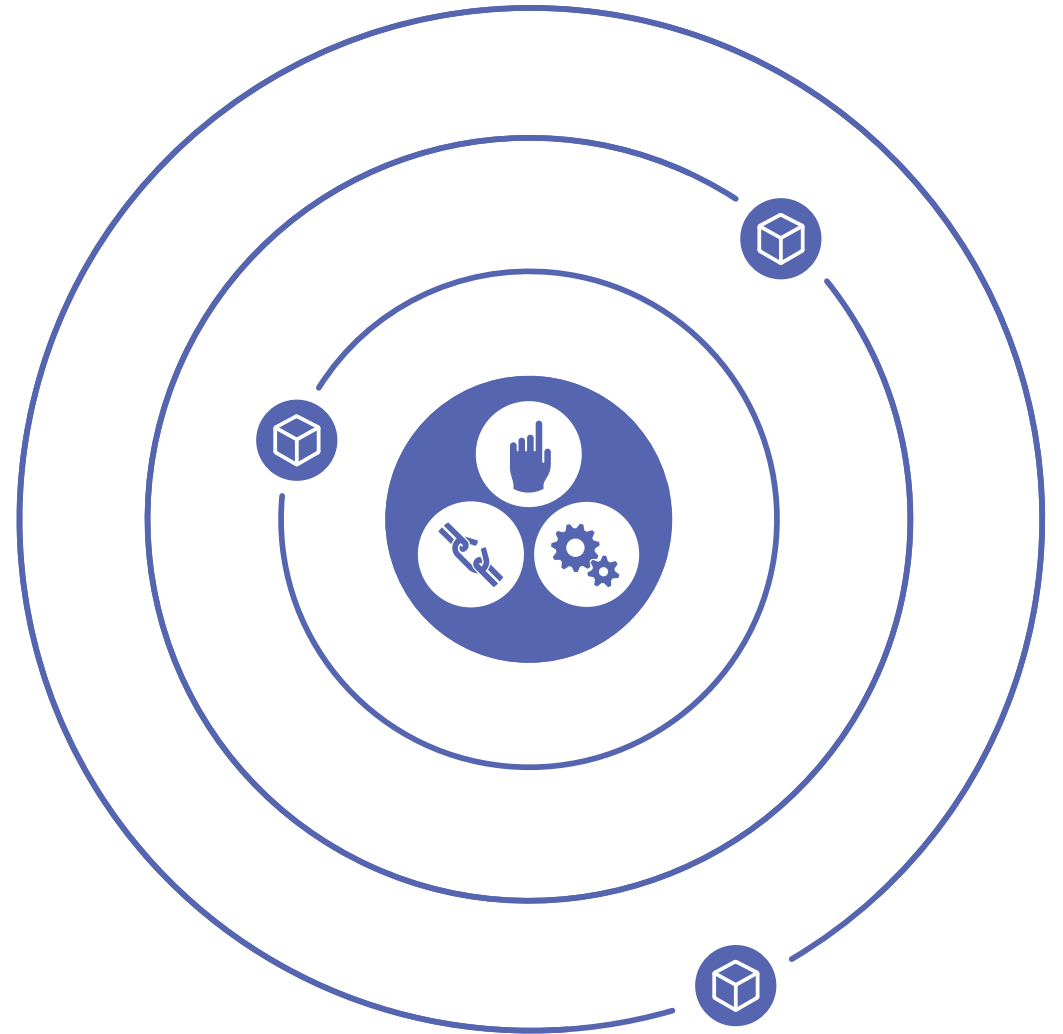
## Sol System

---

Sol believes in a strong but flexible design system that allows all of their products to retain a unique identity while still allowing all the necessary values to be considered for each product individually. This new system can be applied to any product to create a better, longer lasting relationship between the user and the product, tackling the problem of a products honeymoon period.

Sol's system takes inspiration from the structure of a solar system. At the centre of the system are Sol's three core values of interaction, efficiency and durability, these represent the star of the system. The extra product values orbit around the core acting

like the planets of a solar system. As each solar system has its unique set of planets so does each of Sol's products have their own set of product values. This creates a flexible system that can cater to the needs of a wide verity of products while keeping the core values of the Sol brand the same.



# Sol

---

The word Sol comes for the Latin name for the sun or star. This name links the brand to the core design system that it applies to their products. Sol is the embodiment of it's systems core values of interaction, efficiency and durability, in the same way as a star is at the core of its own solar system. The word Sol can also be interpreted very personally, as somethings soul is an attribute usually given to a living being, this allows users to connect with the brand emotionally improving the overall users relationship with the brand.

The simple short name of Sol gives the brand many visual and verbal advantages. Because of its simple verbal form, Sol is a

name that can be easily picked up without worrying about pronunciation, this ensures the brand is easily approachable allowing it to be quickly embraced. Visually the simple balanced form of the word Sol can be easily remembered and recognised, in turn further extending the users relationship with the brand.





# Sol Colours

---

Sol's colour scheme uses a refined range of colours to ensure clear communication of the brands identity to its users. The two blue tones and two grey tones create a uniform theme across all media. In combination the greyish blue and pure white are the brands primary colours with the sky blue and light grey as the brands secondary colours.

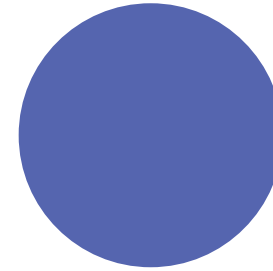
The Greyish Blue is a mixture of blue and purple creating a gender natural colour that appeals to a wide audience. Blue gives the brand the sense of dignity, efficiency and trust whereas purple adds a sense of sophistication and royalty. Overall this gives the Sol band a sense of luxury enhancing the

brand desirability and communicating the brands core values.

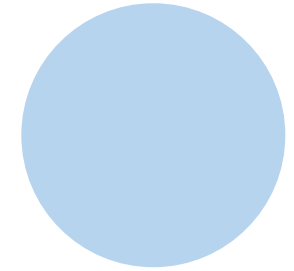
The Sky Blue uses the same hue as the greyish blue allowing the two colours to communicate together effectively. The Sky Blue conveys a sense of calm and serenity making the brand easily approachable.

Together these colours communicate Sol's brand in the absence of text and graphics ensuring the user is always able to understand the brands core values.

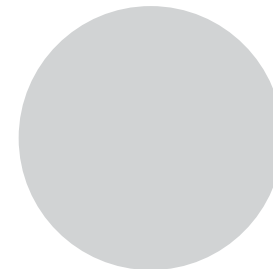
(Color Harmony, Hideaki Chijiwa)



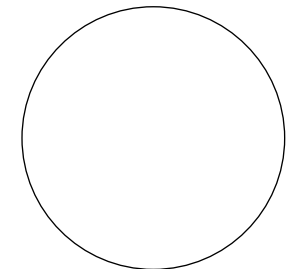
**Greyish Blue**  
CMYK: C80 M75 Y0 K0  
RGB: R65 G87 B166  
DIC: 144



**Sky Blue**  
CMYK: C30 M10 Y0 K0  
RGB: R173 G205 B236  
DIC: 21



**Light Grey**  
CMYK: C0 M0 Y0 K20  
RGB: R209 G211 B212  
PANTONE: 427 C



**Pure White**  
CMYK: C0 M0 Y0 K0  
RGB: R255 G255 B255  
PANTONE: 11-0601

## Sol Logo

---

The Sol logo is inspired by the design system that is applied to their products. With the Sol brand name at the centre of the logo, it represents the brand's core values of interaction, efficiency and durability. To give the logo a defining border, the product symbol with an orbital path surrounds the brand name, again relating the logo back to its design system as well as communicating the brand's product design roots.

The logo's typography uses Calibri regular with +100 tracking, creating a spacious, uncluttered type in a clean and simple font. The Calibri font is used throughout all of Sol's media as it is a common default in many word

processing software, this ensures that all of Sol's media retains a timeless aesthetic.

The Sol logo is only ever shown in the brand's two major colours of Greyish Blue and Pure White, with the opposing colour as its background. This ensures that these colours become a strong part of the brand's identity so when seen apart they are still associated with the brand itself.



## Sol Icons

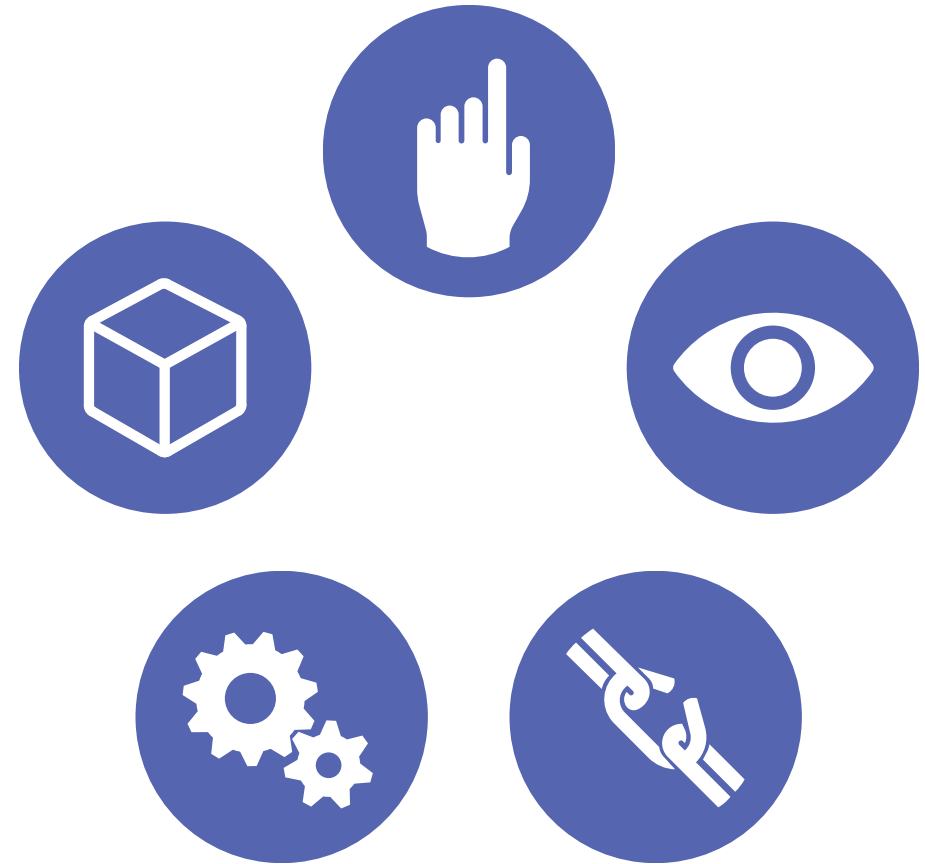
---

To communicate the values of each Sol product visually, an icon is created for each value symbolising its own individual meaning. By doing this users that wish to understand their product in more depth are able to learn about the product and design system quickly and visually creating a simple and satisfying user experience.

To ensure these Icons are in keeping with the core values of Sol, the icons themselves have been designed with consideration of their interactivity, efficiency and durability, and then tested with users to confirm their coherence. As a result these Icons are clean, elementary two tone symbols that intuitively

convey each product value without becoming confusing or outdated.

As Sol works on more products, more product values will be discovered creating additional icons to add to its own design library. Over time this library of product values will build up allowing the design system to mature and grow.





**Product**

## Food Blender

---

The household food blender is a prime example of a mainstream product that displays the problem of the honeymoon period. The food blender is a product that people use more recreationally rather than out of necessity, therefore users are more susceptible to the honeymoon period as there is no need for the user to use the product if they don't want to.

As food blenders are a common household appliance that everyone is familiar with, the food blender is a perfect starting point to showcase the Sol brand, allowing its unique system and set of values to be applied to a meaningful problem that users can relate to.

With the food blender, Sol aims to design a new blender that enhances the long term user experience, increasing the user's relationship with the blender. By applying the three core values along with the blenders own product values the product will prolong the honeymoon period, keeping the user actively using their blender for longer.



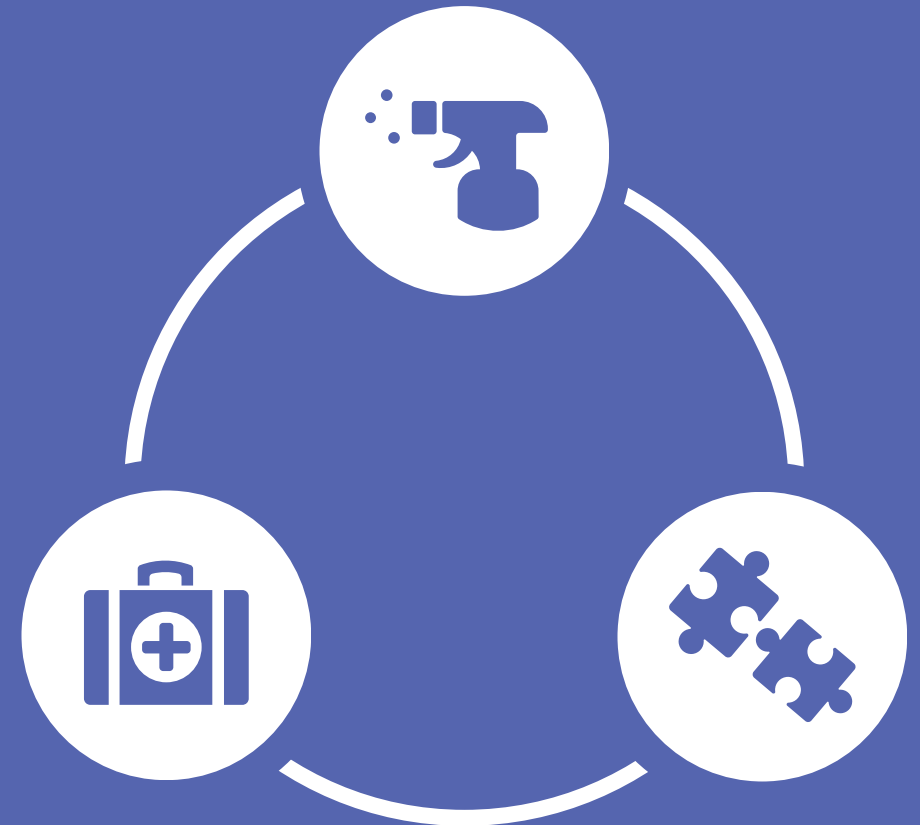
## Blender Values

---

In keeping with Sol's design system each product has its own specific product values that need to be considered in addition to the three core values of the brand. To discover these product values, a human centred design approach is applied, connecting with real users by interviewing, observing and analysing their interactions with the product. Throughout this process a number of product specific themes start to become apparent. It is these themes that users feel are the important product specific values when designing the product.

By using this human centred process it has been determined that the extra product

values that need to be considered when designing a blender are its cleaning, safety and assembly. By including these values alongside the brands core values all the crucial factors of a blender can be considered, ensuring that all the aspects of the users experience are improved, enhancing the user's relationship with the product.



## Safe

---

Although safety is not necessarily something that needs to be actively considered when designing every product, a food blender with stainless steel blades spinning at over a thousand RPM means that safety needs to be thoroughly thought about and designed into a blender.

From observing and talking to users, it is clear that users are not confident when using their blender, as when something goes wrong the user has to re-interact with the blender to turn it off, this puts their hands near the spinning blades making the user feel vulnerable. This fear detrimentally impacts the user experience, making the user less

willing to use the product in the future.

To design a blender that is safe and feels safe to use the blender must ensure the user cannot physically turn on the blender unless it is assembled safely, reducing any human error. The blender must also ensure it is simple and easy to turn off so the user feels in control at all times, eliminating the fear users have when using the product, improving the user experience.



## Clean

---

Being cleanable is specific value commonly required in kitchen appliances because of their close proximity to foods and liquids requiring them to be cleaned regularly. Blenders are a particular example as their function of liquidising food means after every use it needs to be washed.

From observing, talking and experiencing the washing up process of a blender, it was found that the cleaning process is the least enjoyable part of the blending experience because cleaning is seen as a chore. This negative cleaning process is encountered at the end of the entire blending experience resulting in the overall experience being left

sour thus causing the users to be less inclined to use the product in the future.

To minimise this negative effect cleaning has on the overall blending experience the blender needs to be designed so the cleaning experience is as quick and simple as possible. Doing this ensures that the user spends as little time as possible cleaning, allowing the user to retain a more positive experience increasing the users relationship with the product.





## Assembled

---

Unlike other products a blender's assembly needs to be consciously considered as the user is constantly removing the lid, jug and blade holder for the blender to be used and cleaned. With many different parts the assembling process is a crucial part of the blenders overall experience.

Through testing and trailing users found that the assembly process can be difficult and fiddly. Some jugs were too difficult to unlock and too fiddly to lock in place as well as the number of components meaning that smaller pieces were easily forgotten causing problems. With constant user assembly needed these frustrations cause

a detrimental impact on the overall user experience, making the user less inclined to use the product in the future.

To solve this frustrating process, the user assembly needs to be simple and intuitive so that the user is not confused when using the product. The force needed to assemble the blender also needs to be sensibly considered so the assembly process is not too strenuous. Improving these factors will ensure that the blenders assembling process is a positive experience, improving the users relationship with product.



## All Values

---

By taking a human centred design process and applying it to the household food blender, three specific product values have been identified to be considered alongside Sol's core brand values, to create an improved user experience, extending the products honeymoon period.

By applying these three product values of safety, cleaning and assembly to Sol's design system an entire strategy can be created that is specific for designing a food blender. The completed system ensures that the three core values of interaction, efficiency and durability are the first considerations when designing the blender, with the other

three blender specific values ensuring every aspect of the products experience has been considered.

By personalising Sol's design system for the blender all the necessary aspects of the blenders design can be easily considered and designed into the product, creating and enhanced user experience where the user is less likely to become bored or frustrated with their product, counteracting the products honeymoon period.



## Interactive Blender

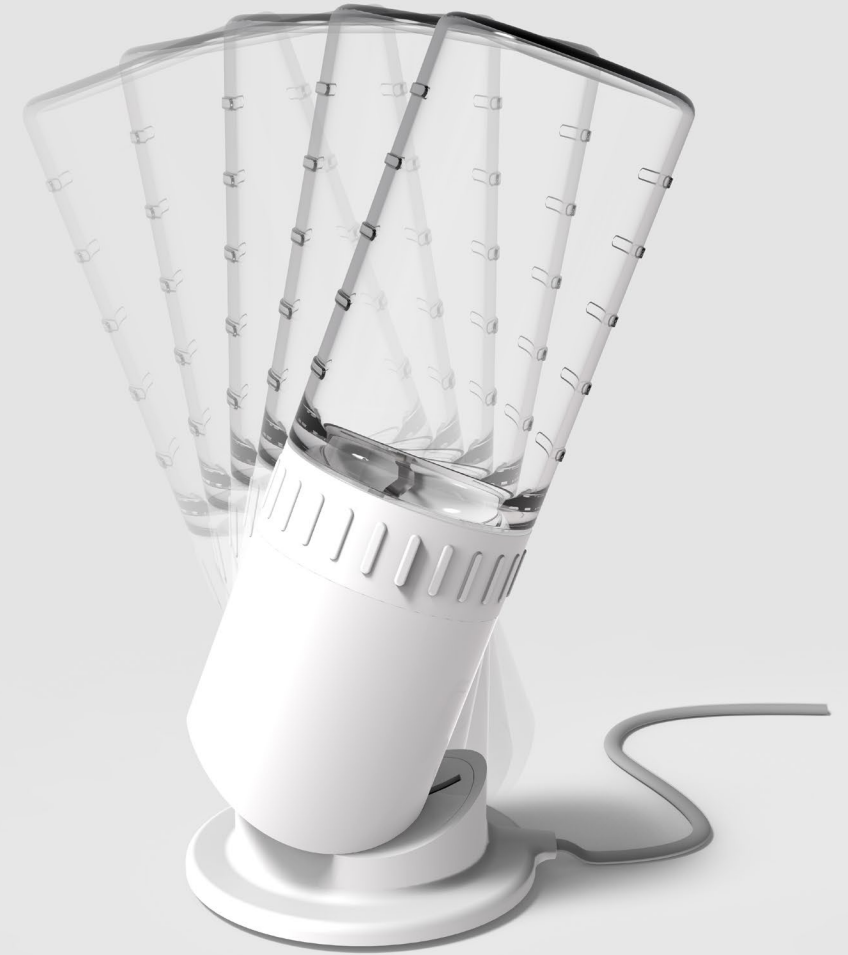
---

From observing and interviewing many experienced and non-experienced users, a common interaction where the entire blender was tilted back and forth to dislodge any bits caught on the sides was discovered. This interaction was seen as a universal interaction that was intuitive to all users. Inspired by this interaction the blender works on an axis allowing the user to tilt the blender back and forth to activate the motor. By not using over standardised dials and buttons this tilt activation creates a more engaging and meaningful interaction improving the users experience.

To physically engage with the blender it has

silicon grips on the base and around the blade connector, with ridges on the jug, these prompt the user to place their hands in the appropriate places to operate the blender. This reduces confusion building a better relationship between the user and the product.

The size of the jug has also been considered so it can be easily picked up by an average adult hand without the need of a handle. This makes the overall aesthetic of the blender much cleaner improving the blender's visual qualities.



## Efficient Blender

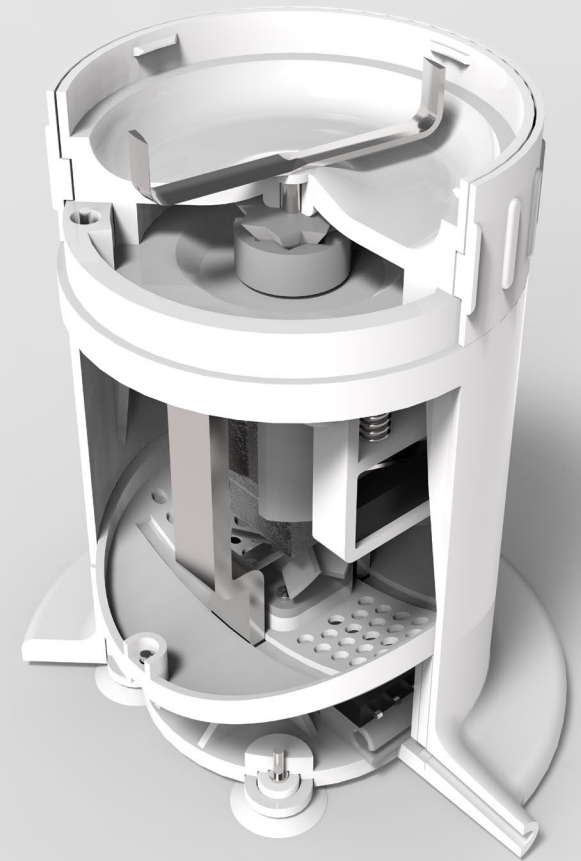
---

From observing and analysing the blending action a key flaw was spotted in the motion of the liquid. Due to the spinning motion of the blades within the blender the liquid starts to spin in the same direction creating centripetal force. This causes everything to be forced away from the blades reducing the blending efficiency. To counteract the centripetal force, the blades have been redesigned to create a pulsating motion mixing the liquid and allowing the food to be blended more evenly and quickly, resulting in a smoother consistency.

The tilting action has also be shown to improve the blending efficiency as the liquids

vortex within the jug works at an angle to the blades, rather than in parallel, this allows the blades to cut into the vortex, blending the food more effectively.

Together these two methods increase the efficiency of the blender, allowing the user to get the desired result from the product quickly and effectively, increasing the users experience and making them more inclined to use the product in the future.



## Durable Blender

---

From talking to users about their experiences it was possible to pin point common weaknesses in the blender. The most common problem was that plastic jugs were prone to shattering when dropped onto kitchen floors. Because of this lack of durability the entire product was rendered completely useless, destroying the user experience completely. To solve this problem the blender's jug is made from 4mm thick toughened glass to ensure that any accidental drops don't impact on the user's prolonged experience.

As well as improving the material for the jug, the mechanical components within the blender are made from steel so they are able

to cope with the extra stress without failing or wearing out. This ensures that the product minimises the likelihood of faults that could reduce the user's experience. Using these materials also allows the user to place more trust in the blender improving the user's relationship with the product.

Because of the high quality of the blender and the added trust, the user places more value in the blender, giving the user a greater sense of ownership so they are less likely to become bored with the product, counteracting the honeymoon period.



## Safe Blender

---

From analysing how users interact with blenders and how other products make sure people are safe when using potentially dangerous products, a number of safety features have been designed into the blender to ensure that it is as safe as possible.

To make sure that no accidental injuries occur from coming into contact with the blender blades, the blades have been sunk into the connector piece meaning that the blades themselves do not protrude out from the connector, making it difficult for the user to accidentally cut themselves.

Inspired by many gardening tools the blenders

tilt activation has a dead man's switch built into the mechanism, this means that if something goes wrong user only needs to let go of the product and it automatically turns off. The dead man's switch also means that the blender cannot be used unsupervised ensuring a problem is less likely to develop.

By designing in these additional safety features the user has more confidence to use the product allowing the user to feel comfortable and relaxed so the overall blending experience can be more enjoyable.



## Clean Blender

---

From finding out that cleaning is the most hated part of the entire blending experience the blender has been designed to ensure that the cleaning experience is easy and quick so the time spent cleaning the product is as short as possible, this allows the user to remember the positive aspects of the blending experience more than the negative.

To allow the blender to be easily cleaned all the surfaces have smooth glossy finishes, this allows food and dirt to be easily wiped off the blender without need for scrubbing. The glass jug also allows dirt to slide out more easily than plastic jugs, reducing the amount of cleaning required.

Within the blending chamber all the corners have been radiused so that no dirt can get trapped within sharp corners ensuring that all dirt can be easily washed out of the blender making the cleaning process less fiddly and time consuming.

These factors drastically reduce the frustration of cleaning the blender by reducing the required effort and time needed to clean the product, allowing the overall experience of the product to be more positive encouraging the user to use the product in the future.



## Assembled Blender

---

From observing and talking to users it was concluded that the assembly process for some blenders was too difficult. With the locking mechanism being too stiff and the number of components adding confusion, the experience of assembling the blender could be frustrating, negatively impacting on the user experience.

To ensure that the blender is quick and easy to assemble, the jug can be easily screwed into the blade connector in the same way as a jam jar. The jug and blade connector can also be easily twisted into the blender's base, clicking into place to tell the user that it's locked. The two large grooves on

the connector ensure that the piece can be quickly and easily located, allowing the assembly process to be as easy as possible.

The number of user assembled components in the blender has also been reduced from an average of five to three. By reducing the components the assembly process becomes much simpler making it easy for the user to intuitively assemble the product ensuring the user experience isn't hindered through frustration.





## Packaged Blender

---

As well as applying the three core values to the product, the packaging has also been design with these values. It is crucial packaging is considered carefully as unpacking is one of the first experiences the user encounters after purchase. The packaging acts as a first impression for the user and if this isn't correct it could damage the user relationship with the product.

To create a positive experience the blenders packaging has been layered into different sections. The outer packaging gives the user basic product information. Inside the packaging are three smaller packages containing the Base Motor, Blade Connector

and Jug, these packages each have small bits of information explaining each of the products specific values. Pulling out each package reveals the next layer of information creating an interactive and informative experience.

Creating this gradual unpacking experience allows the user to be gently informed about the product, building the users relationship with the product without it feeling forced, this ensures the products first impressions are positive, initiating a lasting product experience.





**Future**

## Sol's Future

---

With Sol's flexible design system that can be applied to almost any product, the future of Sol has many possibilities. By taking Sol's human centred design approach and applying it to other products, their own product values can be determined allowing Sol's design system to be specifically tailored to create an enhanced user experience for each product.

Because Sol's aim is to improve a products user experience through human centred design, the Sol brand is focused on designing household appliances as this is the area where the honeymoon period is most apparent. Designing household appliances

allows Sol to make meaningful improvements to the products we use on a daily basis, allowing the user to building a positive, lasting relationship with the Sol brand.

As Sol designs more household appliances, its brand identity will grow, building its reputation for designing long lasting, positive user experiences making the user more inclined to purchase other products in the future.



