

## The Sprinkle Case behind the Scenes

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### Abstract

The consumer psychological thinking when purchasing products is dependent on multiple factors that go beyond the price and the visual attraction of the product. However, in the water industry, the decision-making process is all about branding and communication.

In several western countries, the bottled water market is highly segmented according to target groups, types of water and other categories. It is common to find top notch brands selling spring water, carbonized water and even iceberg extracted water. However, in the Kingdom of Thailand, the major market share belongs to the purified drinking water industry. Consumers buy drinking water on a daily basis; this water can be delivered by a supplier or purchased directly at a convenience store or supermarket. In order to prevent market speculation with this vital good, the government regulates drinking water with a low price fixing. With this limitation, the industry capabilities of investing in marketing development and promotional campaigns come with very small budgets. With all contenders on equal footing the battle to gain national recognition is fierce. Major corporations such as Singha Corporation and Chang (Thai Beverage Plc.), which are well known for the sale of other products, play in a clear advantage. How then can a medium size company compete to win its place in the market?

The example of Sprinkle is the example of an ambitious business project that mastered to take a design thinking approach on how to enter an overcrowded market. Sprinkle's design process, value understanding, was a key element to gain success and popularity. The following paper narrates the total process, from experiences and obstacles in dealing with the business of water, to the meticulous design process which goes all the way to manufacturing. The aim is to make a contribution to Thai society where this project serves as a reference which can help guide the business, educational, and intellectual communities by providing the readers with an in-depth understanding of the design process and the value of design itself through the success of this project.

**Keywords:** *sprinkle, branding, design strategy, product design and development*

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### 1. Introduction

On daily food and beverage purchases, the consumer brain selection performs in different ways depending on the desired product type. Illustrated by The Economist (The Way the Brain Buys. Special Christmas Double Issue, 2008), it is contrasted that most beer consumers have their mind made and take less than 2 minutes to complete the purchase process. As Dr. Rajeev Sharam says "they are on autopilot". The selection of juice otherwise is a more complex decision for the consumer. A study revealed that 12% of people spent 90 seconds looking at juices, studying the labels but not selecting any. This is explained with the connection between juice and a healthy modern lifestyle. Despite the interest in acquiring nutritious products, the excess of false information and claims lead to consumer confusion who decides to walk away.

Each product we find in a convenience store or supermarket translates into a specific consumer behavior. The decision-making is influenced by several social, psychological, and visual aspects which will determine the buyer's perception of the product. The ultimate goal is to engage the consumer with our product and to create a long-lasting tie.

In the particular case of drinking water sales in the Kingdom of Thailand, as informed by The National News Bureau & Public Relations, the Department of Internal Trade has strict regulations which set bottled water price at 7 baht for 600 milliliters bottles and 14 baht for 1,500 milliliters.

With these limitations bottled water providers have a much-reduced unit sale budget margin to work with. For this reason, providers are mostly inclined to keep all bottle production, labeling and printing costs as low as possible. Minimizing the technological investment required to manufacture a bottle

will render higher incomes on water sales.

The following article describes the Sprinkle rebrand and design process case study as an example on how to create brand awareness and connection to the consumer in a government controlled market with voracious competition.



**Image 1** Bottle set visual rendering

## **2. Rebrand and Design Process**

### **2.2 Client Brief**

A clear and concise client brief is the starting point of any creative process. The client brief aims to define goals and objectives of the project. It is the first documented client/designer rapport which establishes the foundations of the project.

For the Sprinkle case, the message was clear. Sprinkle aimed to gain awareness in the drinking bottle market. The company was already well known for delivering 5-gallon drinking water containers to Bangkok's households and offices. However, Sprinkle was unknown for the regular supermarket and convenience store consumer.

Entering this crowded market segment was without doubt a completely new challenge that had to be tackled with the right approach in order to guarantee success.

Sprinkle's background and name recognition in the water supply played to their advantage, but a strong brand and design strategy was required to position the company amongst the top bottled water sellers.

### **2.2 Benchmarking**

Thorough research was conducted to define the Thai market's competition spectrum and to identify key advantage selling points. The insight gathered from the research manifested a general norm in the industry. All providers outsource or manufacture the water bottles with little regard of aesthetic looks. The bottle was mostly seen as a purely functional object that had to be able to stand compression and flexion stresses when held, drunk or transported.

A few international bottle design references by Ross Lovegrove (Ty Nant Water Bottle. Bethania, Wales 2000 - 2002 ) and Philippe Starck (Saint Georges Water Bottle. Paris, France 1998) were set out as

good examples on how to create brand awareness by creating the necessary ‘wow’ factor which was inexistent in the daily Thai water consumer experience.

The only competitor who had taken a firm position and had a key marketing advantage over the rest was Namthip water (Coca-Cola’s Eco-Crush bottle uses 35% less plastic, 2013). Namthip Company, which is owned by Coca-Cola Thailand, had clearly positioned itself as the sustainable water brand in Thailand by reducing 35% the polyethylene terephthalate (PET) used to produce the bottle. The material reduction that was originally developed by Coke’s global packaging research and development (R &D) center gives a thinner bottle wall allowing it to be ‘Eco-Crushed’. This innovative technology clearly helped Namthip to gain national brand recognition and consumer attachment thanks to the brand alignment with environmentally sensitive values.

Other game players such as Singha Corporation and Chang (Thai Beverage Plc.) would merely use their renowned popularity and large marketing budgets from the beer market to create awareness through nationwide advertising campaigns.

### 2.3 Brand Positioning and DNA

An essential stage of the brand creation process is to have a clear understanding of the brand character. For the design team, it is fundamental to know what is the client’s vision about their own brand and how are they perceived by the consumer. Ultimately the client will be asked how they wish to be seen.

This brand psychological frame was developed by a series of collaborative workshop exercises between client and designer. The activities were aimed to analyze and comprehend the client’s strengths and weaknesses, personal qualities, admiration references, dreams and feasible ideas that they wanted to achieve.

A business mapping was conducted to point to the actual brand positioning in the market and to establish a plausible future direction and strategy to be taken. Definition and forecasting of possible brand segments according to consumer audits were also planned.

The brand DNA analysis was done with a visual exercise where the client had to link key words that are defining the brand’s identity to several iconographic material. Words like “happiness” may have multiple subjective interpretations (wealth, freedom, comfort, etc.), pictures on the contrary are a very accurate representation of personal imagination and thoughts.

The gathering of images with a connection to words is a common practice in the design process. Whether by observing or referencing, the absorption of visual symbols is a tool that can help the designer have a clear vision of a brand identity and core values.



**Image 2** Brand DNA brainstorm

### 2.4 Business and Strategic Development.

As part of a brand strategy, Sprinkle was assisted with establishment of a solid business plan for the brand’s growth perspective. The strategic development plan set out an idea mapping and action timeframe of current and future operations and products which could bring value to the brand at different levels.

A comprehensive road map marketing plan outlining the major communication, distribution, and retail milestones was provided. Also a key performance control guide to refer to for brand image and quality perception assessment.

### 3. Rebranding Process and Brand Development

A key element for branding success lied on the identification of the company’s values and market positioning elaborated in the creative workshop activities described in the point 2.3. (Brand Positioning and DNA). With a crystal clear vision of Sprinkle’s DNA, the graphic design team was able to develop several representative corporate identity concepts that had a strong connection to the company’s core values.

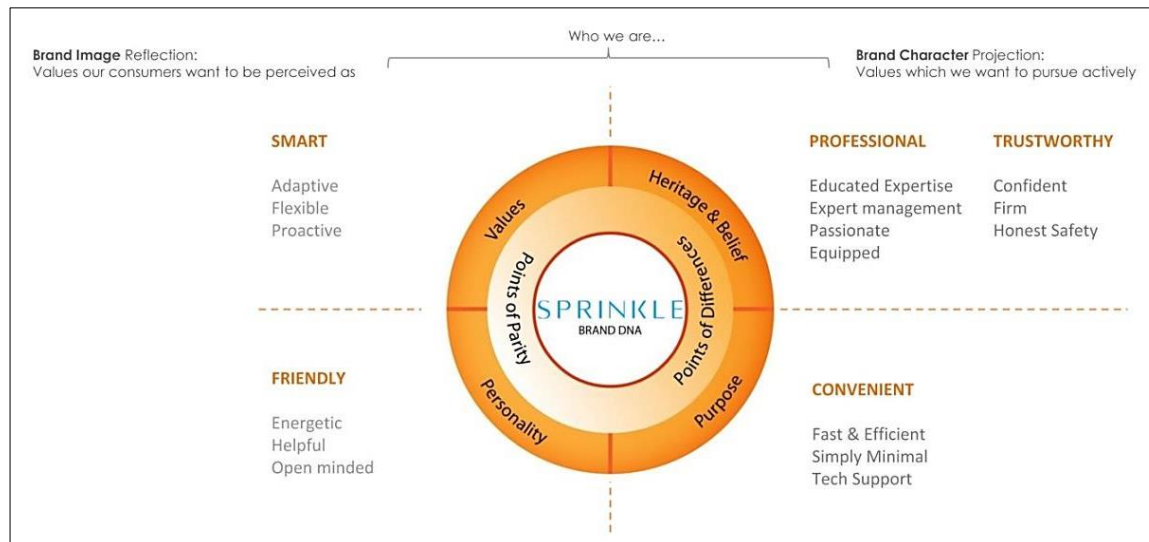


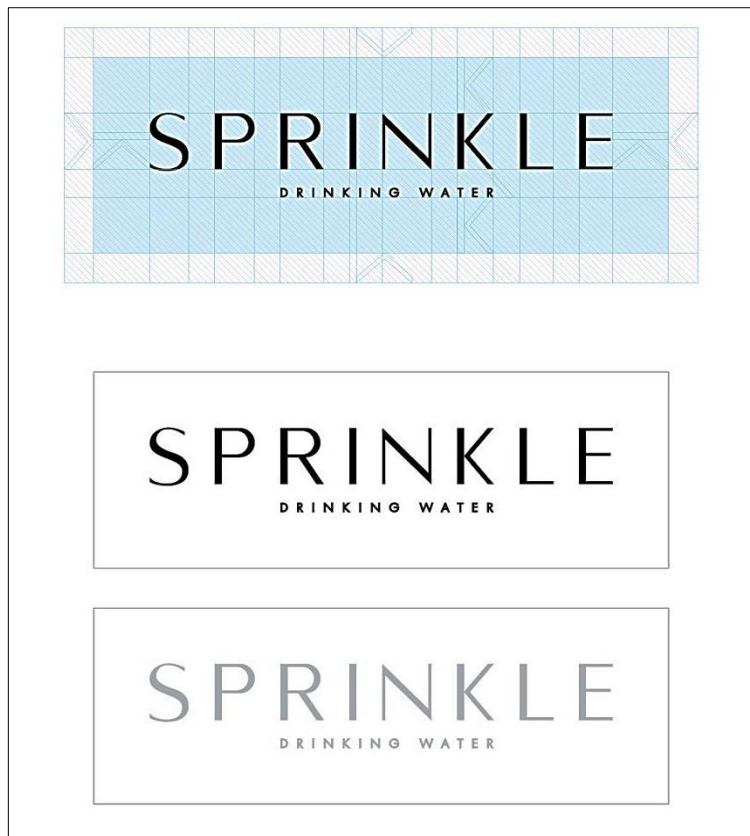
Image 3 Brand DNA key words

The typeface adopted to create the logotype had to be carefully selected to represent trustworthiness and professionalism. The high commitment of being the major drinking water supplier in Bangkok’s metropolitan area is a huge responsibility that had to be portrayed by both principles.

Since Sprinkle’s R & D capabilities are obviously not comparable to those from Coca-Cola Thailand, the intention of embarking into the bottled water business had to take an approach different than Nampthip’s sustainable innovation strategy. Sprinkle required the need to find its own way to stand out from other products in the market with a distinctive value differentiation. Our research findings highlighted that most brand identities were formed with values associated to health, cleanliness and sustainability. The identity colors and typographic styles which are selected by the competitors are obvious examples of it. The use of blue, white and green colors is common as well as fresh and young looking fonts.

In order to stay away from those redundant classic graphic congenital connections between water, health and other key words we decided to give a new approach and give the chance to a 7 baht bottle to embrace a premium look. To do so we explored several typefaces and colors that could represent the new conception. The use of dark colors (grey and black) combined with white along with the selection of a capital letter sans serif font generated the desired excellence look that could differentiate from the competition.

This unique approach had the risk of being rejected by the customer because adopting a premium look could induce the consumer brain to think the product was expensive. However, what if this expensive looking product was available at the same price of other products? As Steven D. Levitt and many other economists argue, the human being is moved by incentives, so it is logical to think that when offered multiple choices with the same cost we tend to prefer the choice that gives us the most. For the Sprinkle case study time has proven that the resulting consumer decision-making experience response of the new prime looking brand is excellent. Predictably the consumer prefers the distinctive choice that enhances his personal image and makes him feel ‘cool’.



**Image 4** Logo design

## **4. Product Design and Development**

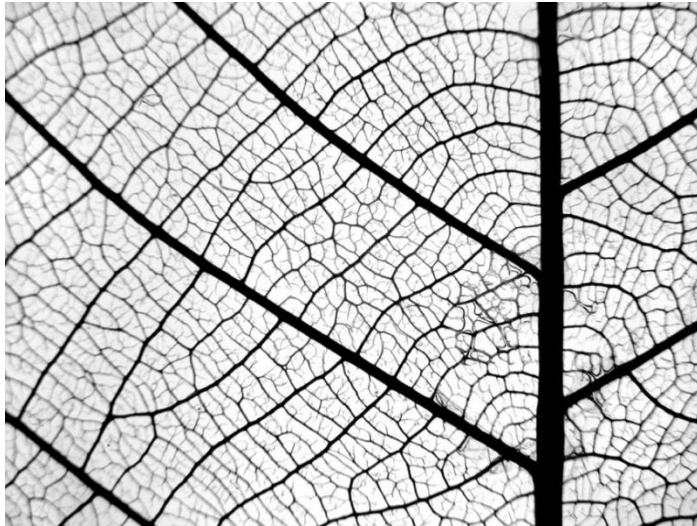
### **4.1 Observation and Inspiration**

With the ultimate goal of creating beauty to stand out from common functional water bottles in the market, an observation process took place in order to gain inspiration for the concept creation. The inspiration process is somehow personal, but a common practice based on image gathering and the visualization of objects out of context was used to generate new ideas that could break away from the mundane and the conventional.

Among all the ideas sparking from the inspirational brainstorm, the preferred original one which made up the present concept was conceived from the vision of capturing a photographic shot of a dropping crystal bottle in the exact instant of impacting with the floor. The unique essence of that moment was aimed to represent the uniqueness on the bottle’s ‘morphology’.

The direction of the styling development process took the primary idea inspiration as a reference and endeavored to emulate structural chaos and order paradigms that can be found in nature. An evolution

of this first thought was matured in order to obtain a final look that would be aesthetically representative of both antagonistic concepts. Examples of natural structural chaos and order paradigms are the veins of a leaf or the geometrical order that defines snow crystals.



**Image 5** Inspiration image



**Image 6** Bottle concept illustration by Herald Ureña

#### **4.2 Concept Refinement**

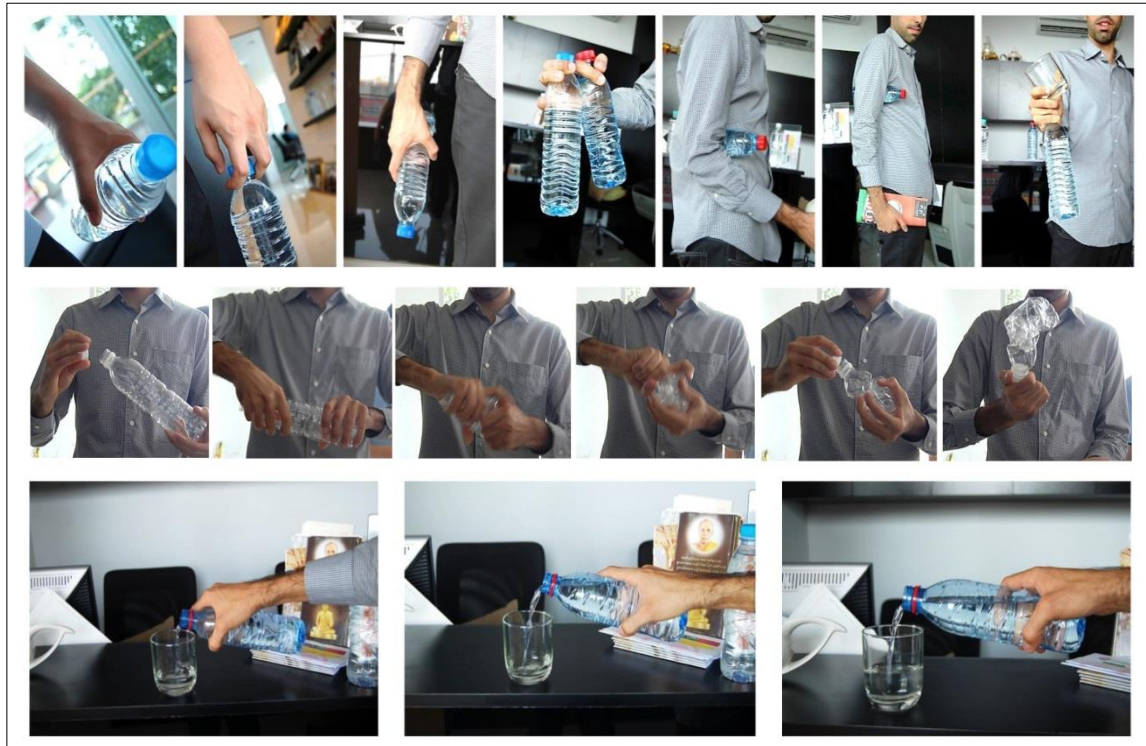
After the form, language was decided the mission was to bring it to reality. A common step in this stage is to make a series of quick mock-ups that give the designer the first perception on how the product will look like. This is an iterative “hit or miss” process that will help get close to the final form by judging the physical models that are built.



The complexity of the amorphous surfaces representing “chaos” proved to be very hard to prototype by hand. Instead, several computer-aided design (CAD) models that were based on the conceptual sketches were made. The CAD models could easily be rendered and prototyped with the latest 3D printing technologies to imitate an approximation of the real experience feeling when interacting with the bottle.

#### 4.3 User Experience and Response

In order to validate the concept design several user experience (UX) and consumer response activities were carried out. Amongst these activities we can highlight bottle role play usability and drinking experience tests, shop shelf displays research to determine the optimal position of the label, user surveys and blind test including a 100 participants to assess cognitive response.



**Image 7** User experience study

The blind test helped to illustrate how diverse target groups react when instructed to select one object among a group of different object forms. The tests showed that females were more preferential for the soft curvy organic forms while males would feel more identified with the minimalistic uncomplicated shapes. The same test also compared competitor's bottle forms concluding that Singha and Namphip have the strongest form recognition mark.

The complete insight was structured to develop diagrams and mappings connecting target empathy, brand identity recognition, form factor and usability. The data conclusions were of extraordinary value to keep the design team on focus with the brief and to assist on the verification of the concept in hand.



**Image 8** Form factor analysis

Slight modifications of the concept were made based on the researched input data. For example, subtle alterations of the overall form, which transformed the bottle's main surface from a planar look to a more sinuous curvature, had to be done to improve attractiveness to the feminine audience.

On the other hand, the consumer recognition mark was to be achieved by the amorphous faceted surface only if the facets arrangement, size, and sharpness were purposely designed in a manner that could easily be perceived by the human eye.

#### **4.4 Final Prototyping and Feasibility Study**

Parallel to the refinement process we started visiting plastic bottle manufacturers who could provide a complete fabrication solution delivering a blow molded (Thompson, R., 2007) bottle, cap and labeling. The final concept prototypes that were presented to the supplier raised manufacturing and logistic concerns to the engineering and factory management team. The absence of neither vertical nor horizontal structural ribs in our concept made it extremely susceptible to stress deformations. The design we presented had a large plain surface that could easily bend when stacking several levels of bottles for transportation.

An alternative to all structural problems was to increase the quantity of polyethylene terephthalate of the 500-milliliter bottle (PET) from 17 grams to 32 grams. A larger bottle weight would translate into a thicker bottle thickness that could be able to stand high compression stress. What would result from increasing the bottles plastic from 17 grams up to 32 grams would have a substantial impact on unit cost thus shrinking the profit margins per unit sold making the business of commercialization less interesting to our client.

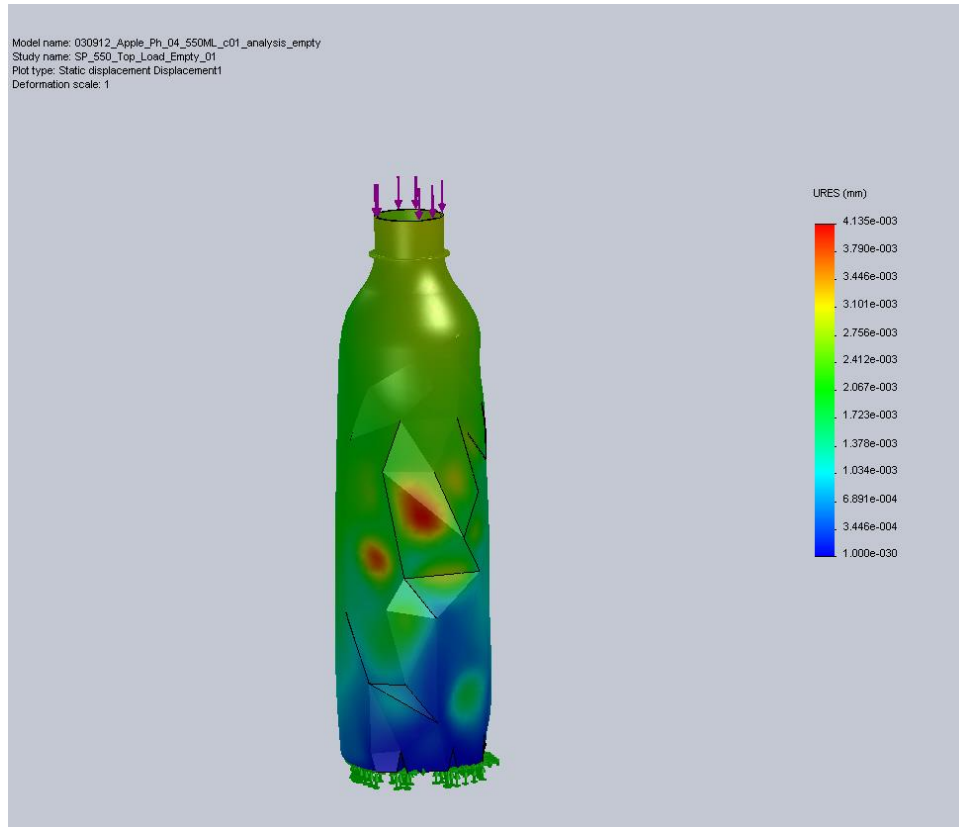
The manufacturer also raise the labeling dilemmas of using a sticker or shrink wrap technique. We were certain that covering the irregular faceted area of the surface with a plastic shrink film wrapped around would diminish the overall tactile experience. Prototype tests confirmed that not only the touch feeling had worsened but also the aesthetic appearance would be diminished.

The labeling alternative was to use a sticker on the regular surface of the product; however this solution presented problems as well. The surface radius was too curved for the labeling machine to roll properly a sticker onto the bottle's surface. In addition, it was hard to control the exact position of the sticker on the bottle in a consistent and repeatable manner.

All the technical restrictions presented a real challenge for the engineering team whose mission was to modify the existing concept once again without altering the overall look and feel of the product too much. All work done up to that point had born in mind the main focus of the brief, "creating an elegant, attractive product that could excel from the rest."



From that point on new CAD models were made. The models were studied with finite elements analysis (FEA) to estimate possible deformations and surface stresses. Mold making tools were also used to ensure product feasibility.



**Image 9** Finite elements analysis

Finally, the engineering team came up with a concept that would arrange the triangular facets to create a structure that could stand compression and flexion stress. The final look of the bottle goes beyond merely an aesthetic exercise. Instead, it emulates geometrical primary nature cases such as the spider net, the structure of a leaf or the crystallization of water to integrate technology and provide a solution for the user.

The solution provided for the sticker labeling issue was resolved in a way that increases brand awareness. The creations of a front face with a different bottle curvature allowed an optimal sticking process and emphasized the front / back form asymmetry of the bottle. The new front face definition delimited by two vertical subtle ribs would accentuate the branding area and generate a stronger form recognition mark that would make it easier for the consumer to visually identify the product.

The vertical ribs are the outcome of the intersection of the new front branding face and the bottle general form radius. The convergence of both curved surfaces produce a vertical line that delineates the labeling area and also works to absorb top load compressions.

The final proposed solution was capable of meeting both manufacturing and creative needs in an exceptional harmonious confluence between engineering and design practices. An exemplification of this success was the achievement of international recognition with the concession of prestigious design awards such as the Good Design, iF and Red Dot design award. At a national level Sprinkle has been able to gain prominence in the market and it has increased sales in both bottled products and home and office drinking water supply.

## 5. Conclusions

The Sprinkle case is representative of how influential the design process is for the consumer decision-making situation when purchasing products. The importance of creating a first love visual attraction between consumer and product is a key element shared by design thinkers and business strategists.

Regrettably, in Thailand and other parts of the world, only a few businesses have their mind set to allow design practitioners to participate in strategic and brand development processes. This situation opens the debate if the creative community is ready to tackle high-level business challenges.

Yet, the economic and intellectual growth of an entrepreneurial society that day by day is acquiring knowledge and developing itself to absorb new design thinking tendencies such as human-centered and systematic design for innovation welcomes a new future that breaks away from archaic business mindsets.

The Sprinkle project was only a small contribution to this change that will require greater efforts from both creative and business communities.



Image 10 Final product

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