

CASE STUDY

# Nu Skin LumiSpa

sagentia

## The drive of personalisation and the need for tailored experience

Key trends continue to drive research, development and marketing for organisations in the cosmetics, beauty and personal care market.



Working with Sagentia allows Nu Skin to create products that grounded by core scientific understanding and deliver repeatable and consistent results.



Across sectors—and in this interconnected world—the consumer is looking to organisations, businesses and people to meet their demands. The beauty and cosmetics industry is certainly no different and we’re seeing this translated into consumers looking for products and services that are personal to them and specific to their needs.

And as the need for a ‘tailored experience’ increases—diagnostics and customised formulations will take centre-stage.



**Nu Skin** wanted to develop a smart device—a game-changer—in the personal care landscape. It knew that in order to achieve this, whatever they developed needed to be underpinned by compelling technology, quality engineering, robust science and engaging design.

Working with Sagentia allows Nu Skin to create products that grounded by core scientific understanding and deliver repeatable and consistent results. This has been key for them in their product design and development as it meets the need for a user-centric and personalised experience that the customer loves.

## The challenge: the science of beauty

Nu Skin laboratories had been testing different manipulations of skin in order to produce tangible cosmetic benefits. With positive lab results in place they engaged with Sagentia to characterise this discovery, translate the findings into reality and develop an elegant spa-like device to provide this new manipulation to the end consumer.

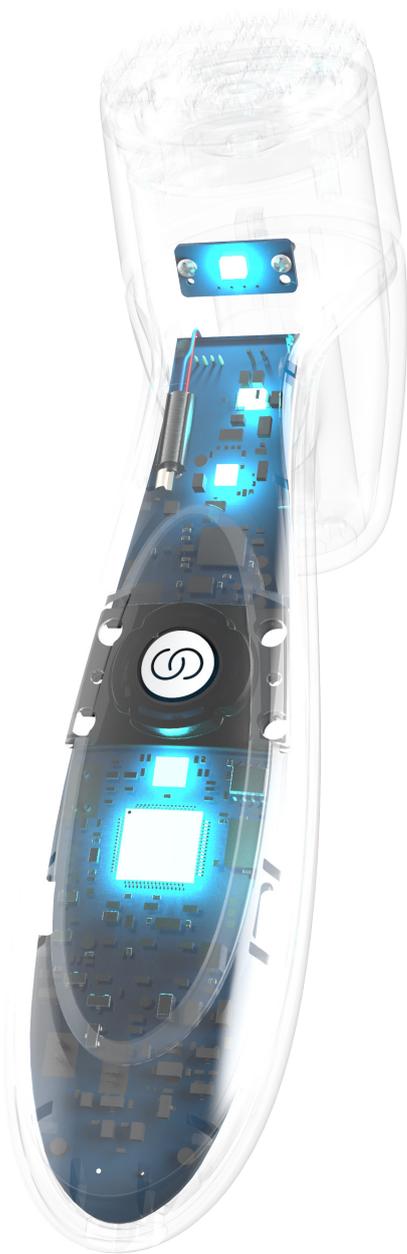
It was important to create a device which would fit seamlessly into their customers' routine, offer an enhanced cleansing experience unachievable with formulation alone, with surfaces tailored to compliment new formulations and a demonstrable benefit from the very first use.

## The development journey: complete considered design

New science was the innovation enabler, but just one element of the equation: the Sagentia cross-collaboration approach was fundamental in the development of the LumiSpa for Nu Skin.

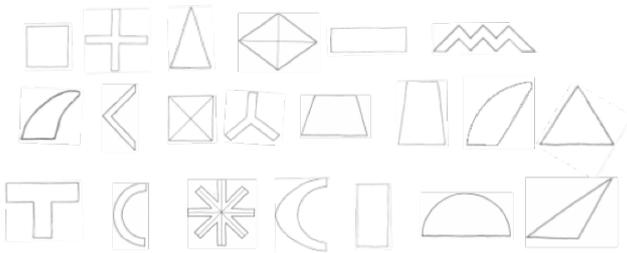
Our experience in technical development has shown us that the best solutions are created when a multi-disciplined team of scientists, engineers and designers come together from the start: from scientists considering a technical package to achieve the optimal skin manipulation through to working with focus groups driving technical, ergonomic and user-experience decisions, the project was underpinned by scientific knowledge, continuous and iterative testing.

At Sagentia we call this **complete considered design**. It comes from everyone working together and challenging each other across disciplines.



## Creating the perfect treatment and cleansing surface

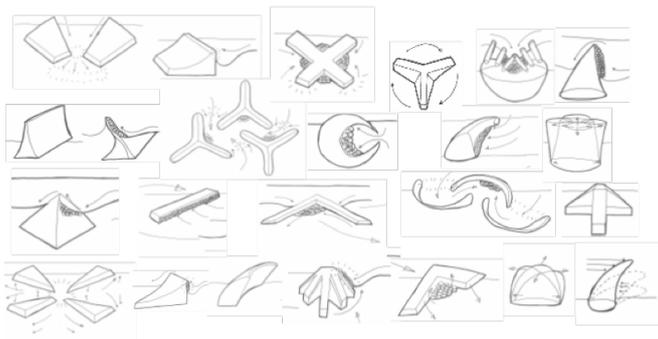
### Geometry



Our applied science experts created synthetic skin which could be used for the testing and verification of prototype designs, while our engineers designed experiments and used high-speed cameras to look at how the skin was manipulated.

With its medical-grade silicone surface, the treatment head moves at a precise frequency to promote dynamic skin renewal for smoother, softer-feeling skin after just one use and its embedded silver antimicrobial prevents bacteria build up.

### 3D Form & Movement

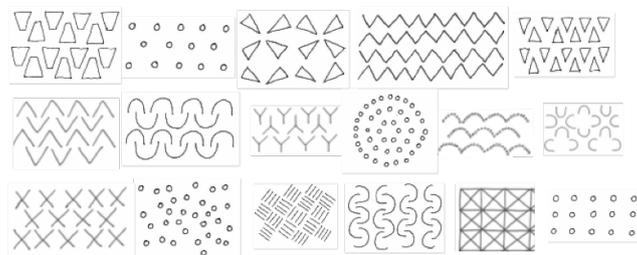


### The mechanics

Our mechanical engineers and designers worked together—testing and challenging each other—to create a device that not only looks beautiful, that customers want and find easy to use, but that is also mechanically optimised to deliver this innovative new manipulation reliably and in a way that is repeatable.

Additional mechanical device challenges included creating a premium sound signature, power management to ensure a long battery life, waterproofing to allow use in the shower, weight balance and optimisation, and a choice of treatment pad attachments.

### Pattern



The LumiSpa incorporates smart features which adjusts to the user behaviour and adapts to ensure they get the most out of the product.

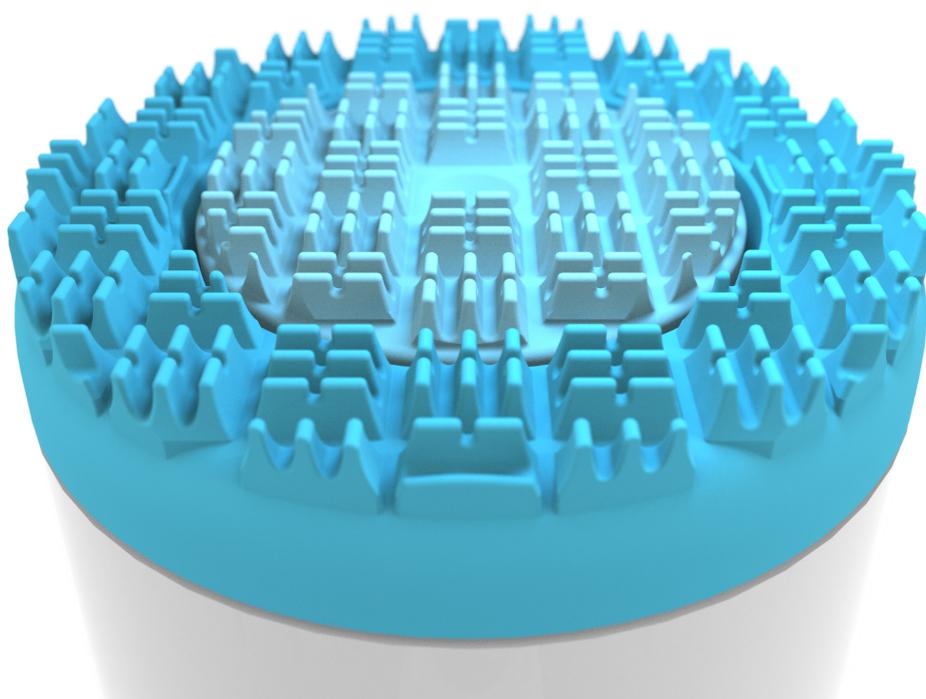
## R&D and clinical studies

Focus user groups were used throughout the design and development of the Nu Skin LumiSpa. They were used to test and choose against options for surface design and manipulation. We also asked them to consider shape, ergonomic design such as grip positions and form perception.

Sagentia and Nu Skin together worked with the focus groups to truly understand user behaviour and created a 'day in the life' of the user with the device such as where it's stored and used, therefore making the interactions with the device intuitive and maintenance easy.

Algorithms were written to learn the user behaviour to adapt and ensure they got the most out of the device as well as supporting them in learning to maximise the benefits. The LumiSpa incorporates smart features which adjusts to the user behaviour and adapts to ensure they get the most out of the product.

To this end we built in smart features and embedded sensors that alerted the user when they needed to move the device to another part of the face or that stopped if the user was pressing too hard against the skin or moving too quickly.



## Why Sagentia: the science behind the device

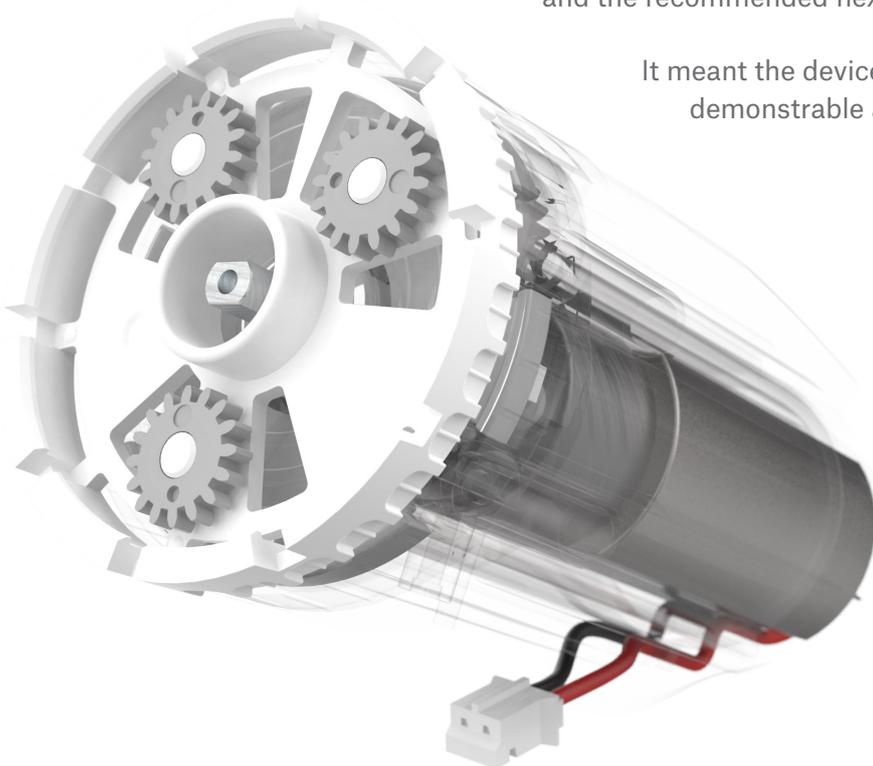
The science drives the testing we do and informs the process ensuring intelligent evaluation of results.

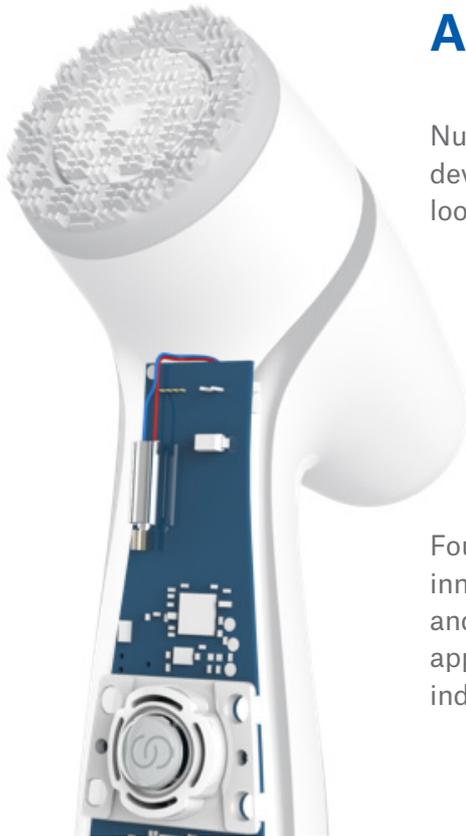
Cross-collaboration negates the challenges that often occur with product design. When a product is design-led alone, often when it comes to developing the prototype, the functionality such as electronic and mechanics don't work reliably and are not optimised for the best performance. You may have something beautiful but if it doesn't work well then it can often mean a return to the drawing board.

Nu Skin were—and continue to be—impressed with the level and depth of science behind the product development.

The science drives the testing we do and informs the process ensuring intelligent evaluation of results. This increased the efficiency of the tests completed throughout the process meaning progress was quicker and more reliable. Nu Skin could therefore be confident in the conclusions gathered and the recommended next steps.

It meant the device was unpinned with proven, demonstrable and quantifiable science.





## About Nu Skin

Nu Skin is a beauty, wellness and personal care company, developing and selling more than 200 products to help people look and feel younger.

Nu Skin offers its skin care products under the ageLOC anti-aging brand and includes daily skin care products targeting the sources and signs of aging. Its nutritional supplements, sold under the Pharmanex brand span micronutrient supplements, anti-aging nutritional solutions, and weight management products.

Founded in Utah in 1984 with a promise of “continuous scientific innovation”, Nu Skin now operates in more than 50 markets and has a revenue of \$2.25 billion. It has a multilevel marketing approach to business with a network of more than one million independent distributors and employing more than 5,000 staff.

*“Working with Sagentia means we can make significant strides forward with the development of our cosmetics devices. The collaborative approach they have—as well as with their customers—means any progress is more robust and more reliable. The teams at Sagentia have a passion for what they do and a scientific insight that has ensured we continue to be a game changer in our sector.”*

### Nu Skin LumiSpa Awards

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