

iluminage Skin Smoothing Laser

Bringing clinical beauty into the home



JANUARY 2015
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CONTINUUM

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A GROWING MARKET FOR BEAUTY

Any number of recent reports will cite a steadily growing market for beauty—especially skin care—in the United States and Europe.¹ Women are facing higher standards of beauty and are starting to focus earlier on anti-aging; between the ages 16-34, they are seeking ways to preserve their youthful appearances.² Rather than seeing dermatologists to treat wrinkles, women are purchasing home use products—and stepping up their expectations for the results.³ New technology is making it possible to bring treatments and devices that were previously only available in a dermatologist’s office into our homes. The opportunity is significant for companies targeting the at-home beauty care space.

It is estimated that the global market for skincare will be \$121 billion in 2016.⁴

BRINGING IT HOME



The challenge is beauty routines do not create lasting change with a single application. In order for any new product to be accepted and not written off as a gimmick, it needs to show results. And those results only happen if the product is embraced as a part of her routine. There is opportunity for new products to affect behavior; 33% of US women change their beauty routines once every couple of months, and 28% of European women change them once to twice per year.⁵ Given this intermittent willingness to

try new things, new beauty treatments may gain traction—but will need to overcome challenges of adherence to remain fixtures in a user’s daily life.

Products that leverage complex technology face additional challenges because of the mental shifts they demand in securing a user’s understanding of the application and confidence in its safe use.

BEAUTY IS PERSONAL

At-home beauty can be a personalized experience.

A benefit of visiting a clinician or spa is that beauty experiences can be extremely personalized. At-home beauty must provide users with just as much of an individual experience as services delivered in a clinician's office. This experience could begin with a consultative sale, as the first in-person touch point a customer has with a beauty product will be at a sales counter, likely with a hired representative who works exclusively for that company as an expert on their product line.

In the past, when technology came into the picture to augment the beauty category, it was to connect with other people sharing their experiences, or to read product reviews; nearly 70% of women in Brazil and Mexico, for example, consult beauty blogs.⁶ Technology served to connect people to others who could advise and support them.

We typically think of the Internet of Things (IoT) as a category of gadgets that can automate behavior, but the ability to connect products through technology offers us the additional opportunity to increase personalization—for example, through progress tracking and online advice—and support the correct use of complex products when the responsibility falls on an individual to use one previously administered by a professional.

REVOLUTIONIZING THE AT-HOME BEAUTY ROUTINE



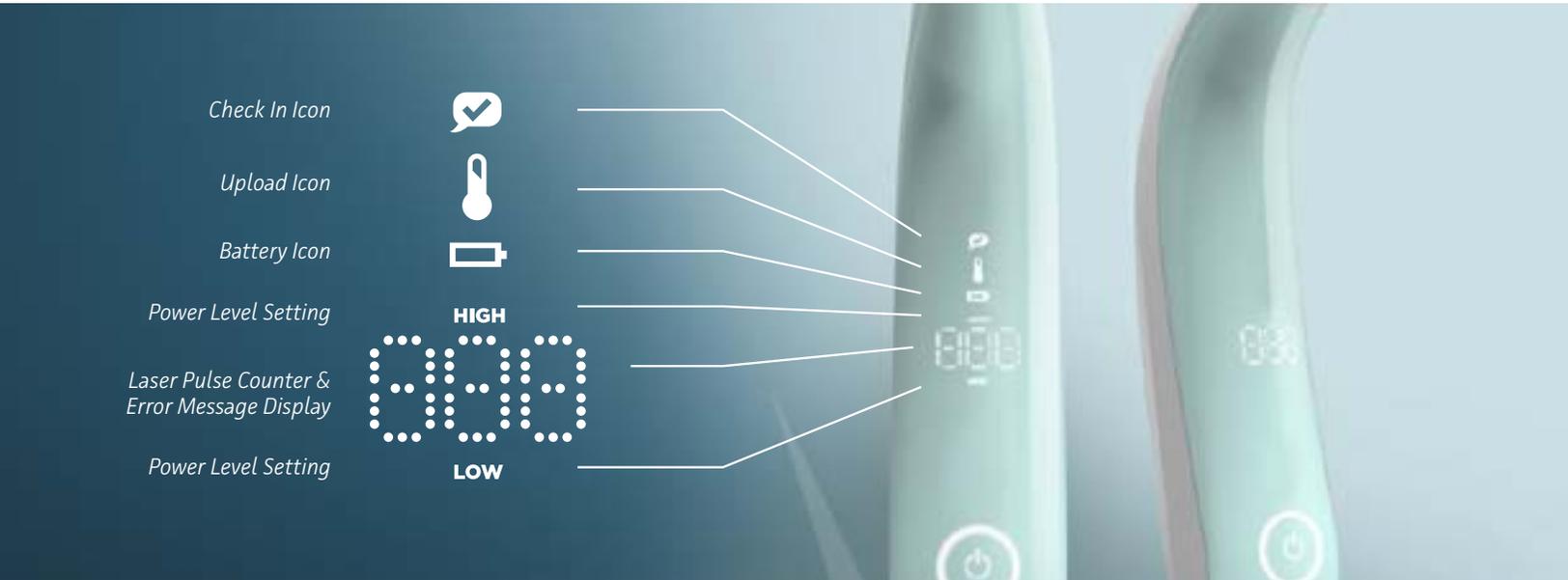
Unilever’s home beauty brand, iluminage, is a prime example of an organization that has leveraged technology to make an impact in the at-home beauty market. In partnership with iluminage, as well as Cynosure, a developer and manufacturer of a broad array of light-based aesthetic and medical treatment systems, Continuum worked to develop the Skin Smoothing Laser, the first handheld laser device designed to treat facial wrinkles that is FDA-approved for in-home use.

The laser design and the ecosystem surrounding it are the result of a collaborative effort between consumer researchers, designers, and engineers. From the physical object’s design to the thoughtful workings of the user interface, the iluminage laser was built with the intent to function simply yet effectively.

Insights from women interviewed in New York and Los Angeles helped the team design a visually appealing product that would not only reduce wrinkles but that would avoid the “bathroom drawer of death” when not in use. Keeping the laser out of a cabinet would be key to providing users with a visual reminder to keep up with their treatments, which would ideally occur multiple times a week to deliver maximum results.

In addition to demonstrating credibility and familiarity through purposeful product design, the laser would also need to function intuitively and be usable in any location to promote the continuous use required to achieve results. To be easily accessed at any location around the home, the laser would be battery powered and would charge on demand when plugged into its cradle, which was an embedded component of the object design.

Bringing Clinical Beauty Home



User interface designers put careful thought into tactile, lighting, and sound cues that would reinforce when the laser was being applied to the skin properly.

It was critical that several contact sensors would need to connect with the skin in order to communicate the laser was working as intended and placed properly on the skin.

The display would illuminate with a welcoming “Hello” message, and would deliver pulses and sound effects to indicate when the laser was being used correctly—or incorrectly.

Perceptible components of the UI represent

an underlying expertise in designing product experiences for use in heavily regulated environments.

From breadboarding to making a medical product real, clinical trials require adherence to regulatory constraints. The Continuum team built and deployed 160 clinical trial units of the laser that brought functionality and design to life according to ISO 13485 requirements.

The iluminage Skin Smoothing Laser is the first handheld laser that is FDA-approved to treat facial wrinkles in the home.



The Skin Smoothing Laser is a connected product that plugs into a laptop or desktop computer and transfers logged use data to an online portal. The device design was always influenced by a need for a USB port to enable this connectivity.



From the beginning, iluminage and Continuum were focused on designing a product that would earn adoption through some personal touches. Nodding to the expert-driven sales model seen in the cosmetics category, the Skin Smoothing Laser could be socialized through a consultative sales approach. One could imagine the delivery of a personalized “beauty prescription” to customers, as each woman’s skin is different.

The connected nature of the product is designed to allow users to track their progress individually and also seek feedback from licensed professionals to gain reinforcement around their usage techniques. When they are expected to use the laser alone in their homes, they have a network to connect to and a way to validate that

their treatments are working. With additional functionality to support photo uploads, a user would be able to track her own progress, and her “beauty coach” would be able to offer critical feedback and suggestions.

With a \$121 billion market at stake, beauty care brands interested in bringing treatments previously available purely in clinical settings are at the precipice of a significant opportunity. Organizations must consider the technology available to enable such a shift, consumers’ existing behaviors and routines, and what motivates adherence to a product that demands regular, long-term use in order to tackle the challenge of designing a relevant new entrant to this market.

Citations

- (1) <http://www.statista.com/statistics/254612/global-skin-care-market-size>
- (2) http://issuu.com/mccanntruthcentral/docs/mccann_truth_about_beauty/5
- (3) http://www.cdc.gov/nchs/data/ahcd/NAMCS_Factsheet_DERM_2009.pdf
- (4) <http://www.statista.com/statistics/254612/global-skin-care-market-size/>
- (5) <http://www.statista.com/statistics/243809/frequency-of-change-to-womens-beauty-routines-worldwide-by-country/>
- (6) <http://mashable.com/2012/02/25/pinterest-user-demographics/>



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Kristin Heist
Principal
617-928-9551
kheist@continuuminnovation.com

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