THE SKINCARE REVOLUTION

WHITE PAPER

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Skincare exposed

How Science, Transparency and a New Breed of Customer are going to revolutionise the Skincare Sector.

Somewhere in a large global city, a millennial gets reminded by her mobile skincare app that her monthly analysis is due. She uses a cotton bud to collect a skin sample from her cheek and underarm, then pops the samples in an envelope. These results will determine the formulation of her next pot of cream based on her skin's biological age, condition and type.

She then gets back to applying her cleanser and skin conditioning serum. These have been tested using impartial, scientifically validated information from biomarkers that are now industry standard and can be found on several popular 'science of wellness' forums.

What this young professional wants is naturally healthy skin that is optimised for the long term, not just skin that is fleetingly and superficially changed to hide fine lines or unsightly blemishes. She also values her brand's naturally sourced, sustainable narrative because she is keen to avoid synthetic chemicals that she worries might cause skin damage.

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Stepping onto the street, she can feel the sunshine, wind and smog hit her face, but is reassured that the skin-aware lifestyle advice provided by her app has taken all this into account while interpreting her ongoing results. She drops her swab sample in a mailbox and heads into work.

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The transparency revolution

The technology that makes this future scenario possible already exists, and it is going to have profound consequences on skincare brands and businesses around the world.

Artificial intelligence and big data have already transformed marketing and sales in the skincare sector. Now, a similar cloud computing approach powered by proprietary deep learning algorithms is enabling scientists to screen and test natural compounds much faster than traditional methods. Machine learning can identify promising ingredients hidden away in huge databases, and combine them in a way that optimises their effectiveness.

The skincare industry is about to be fundamentally disrupted by technological change.

Until recently, rigorous and impartial scientific validation of product claims was only available to large companies who could afford expensive biotechnology testing.

Now, thanks to AI, such tests are becoming cheaper and more insightful, with the results presented to skincare consumers in a language they can understand. This means that the effectiveness (or otherwise) of skincare is inevitably going to come under the spotlight.

In this approaching world of transparency, if an established brand's claims fail to meet these new testing benchmarks in terms that measure the underlying condition and health of skin, its reputation is likely to suffer. It will also have to contend with a wave of next-generation rival products that are specifically designed to excel in those tests, giving them a crucial advantage in terms of marketing, USP and customer satisfaction. These rival products are also likely to enjoy the protection of patents.

Like many sectors of the world economy, the skincare industry is about to be fundamentally disrupted by technological change.

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The challenge of **skin complexity**

While a new generation of tests will almost certainly encourage consumers to expect more from their skincare products, it's not clear how many products currently on the market can actually pass these new tests.

The fundamental barrier to the creation of effective skincare products has always been the enormous complexity of our bodies, including our skin.

A multiplicity of environmental interactions and biological relationships need to be deciphered in order to create skincare products with scientifically proven benefits that matter to the customer.

But after decades of unrewarding research and little innovation, complex network analysis combined with a novel scientific approach is beginning to emerge. Complex systems science is uniquely equipped to handle the complexities of skin and the fluctuating environment it operates in. Just as importantly, it is able to address the underlying health of skin, not just the surface appearance.

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Regulation

Paradoxically, a skincare product that demonstrably works on a scientific level is perceived by some in the industry as a regulatory risk because it sounds like biotechnology.

Fortunately, complex systems science generates its own solution to this concern because of the fresh insight it provides into how skin systems work. These insights drawn from big data allow it to optimise the skin's performance without altering its function or structure.

AI delivers next-generation benefits without using the type of interaction that gets the FDA concerned about skin products not being cosmetics.

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The patent race

There's a ticking clock in this new world of transparency. If the action of a validated compound is novel, then it can be patented.

The nature of cosmetics regulation means that modern technologies such as machine learning are able to develop, validate and bring innovative skincare products to market much faster than traditional methods, potentially within a year. With patent life lasting 20 years from the point of grant, this big data approach offers a long and valuable period of patent protection in the marketplace.

These patents will not be restricted to the product formulation. They will be based on the means by which the skincare product delivers new benefits and they will be validated by the new tests. This will raise even higher the level of protection for the patent holder.

Businesses who come late to the game will find themselves locked out.

Without access to these products or the complex network analysis technology that can make them, businesses who come late to the game will find themselves locked out of the segment unless and until they can find an entirely novel and validated approach of their own. Anyone tempted to copycat will face the risk of litigation.

So even for the largest brands, moving fast into the scientifically validated skincare space looks less like a gamble, and more like prudence.

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Disruptors

Up until recently, large marketing spends by established brands presented a formidable barrier to new entrants and would-be disruptors.

Even when the claims made by established brands verged on fanciful they went largely unchallenged, while skilful advertising, celebrity endorsement, slick packaging and canny promotion did much of the heavy lifting in terms of shifting product. When high street retailers were the primary channel to market, major brands were able to dominate shelf space and exclude the competition at point of sale.

Rigorous scientific testing was expensive, and there was little incentive for the industry to shine an impartial light on itself.

That is now changing. Challenger brands are already making incursions into the premium science-based claims segment, demonstrating that innovation is perfectly capable of finding a market without the assistance of an established brand. Large organisations do not always embrace innovative products when they are seen to threaten the market share of their leading brands.

The online world has transformed skincare marketing and sales because it influences buying decisions and also provides a direct sales channel. With the right online positioning, new brands can expand quickly and efficiently to reach a global audience, especially if they offer new benefits that consumers have always wanted alongside scientifically robust verification of their impact.

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More than ever businesses need to differentiate themselves by creating innovative products that meet a defined consumer need, or face being drowned out by the new wave of indie and selfie-based cosmetics marketing.

So what kind of customer has been identified as holding the key to global growth potential?

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The global millennial

Millennials are already a global phenomenon, and they are growing in both numbers and disposable income.

They are multi-ethnic, which means they display the full spectrum of skin types, cultural preferences, diets and exposure to different kinds of weather. They are also highly educated and tend to congregate in large global cities like Seoul, New York, Beijing and London.

Millennials are a heterogenous bunch. They see themselves as individuals and want to be treated as such. But they also share a very specific set of concerns which we all know about because they love to vent about them on social media.

As enthusiastic early-adopters, their discoveries and experiences of new health and wellness products are keenly followed around the world. In this way they tend to influence a much wider category of people over time.

Challenger skincare brands have already understood that millennials hold the keys to exponential global growth.

The millennial customer is therefore potentially an ideal ambassador for a brand - or its worst enemy. The fads that millennials espouse either gather momentum fast and enter the mainstream - or die a death.

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Science based wellness

The average millennial is concerned about their overall physical and mental wellness as well as their appearance.

They understand that the two are connected when it comes to their skin. They want a product that makes them feel good as well as look good, so whatever cream or supplement they use will need to form an integral part of their wellness regime and lifestyle.

Millennials are sophisticated consumers who want their skincare purchase to make them appear smarter and further ahead of the curve than their peer group, not just rich or exclusive. They also want something that actually works. So airy claims and celebrity endorsements aren't going to cut it on their own. The millennial is looking for impartial scientific evidence.

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Natural versus nasty

Millennials are the type of consumer who will look at the small print when an impressive-sounding claim is made with an asterisk at the end of it.

Many are science literate and they will shop around to find an active ingredient that they like, and steer away from so-called 'nasty' ingredients. Wherever possible they will choose an ethical 'natural' product with an appealing narrative over a synthetic ingredient, especially if the verified benefits are superior.

Wherever possible they will choose an ethical 'natural' product.

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Difficult customers

Faced with a sceptical customer who demands a high level of personalised care, the temptation is to ignore them.

Making millennials happy is time-consuming and expensive. It requires a modern, holistic, big data-driven approach that is laser-focused on getting validated results. It means commercialising new and innovative products at a speed that only a machine learning approach can deliver, in order to beat the competition.

But equally, ignoring the potential of skincare innovation carries the risk of long term decline and obsolescence. This is a dilemma that every skincare business is going to grapple with, if they are not already.

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How to be **that millennial brand**

Whether it's upgrading an existing brand, or creating a new one, there is an obvious case for getting your product portfolio in shape to survive and thrive in this new world of transparency and AI powered validation.

Here are three steps to consider:

1

Screen and test

Find out what really works by subjecting the active ingredients in your possession to the new generation of testing. Are your product claims validated and do they correspond with a promising market opportunity?

2

Licensing

Consider licensing an existing active ingredient that meets the market demand you have identified. This could provide validated benefits in areas where testing of your portfolio has exposed a shortfall.

3

Get products made to order

Access new AI technology that can accelerate and transform your R&D pipeline, creating products customised to your needs. Remember, any complex network analysis technology must be able to demonstrate that it can decipher skin's biological complexity if it is going to work.

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