
How L'Oréal adopted new technologies to scale personalisation, adapt to new customer demands and evolve into the top beauty tech company

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Abstract Across the globe, the COVID-19 pandemic has had a massive — and likely long-lasting — impact on commercial and consumer trends. For companies specialising in consumer packaged goods and traditionally reliant on physical stores for the majority of their sales, success is no longer about staying relevant, but rather on preparing for a world where significant portions of their business will emanate from e-commerce. With brick-and-mortar sales declining and consumers becoming more tech-savvy, this paper argues that beauty companies (both large and small) must look to advanced ways for customers to discover, consider and purchase beauty products. By way of illustration, the paper describes how L'Oréal embarked on a programme of digital transformation that would prepare it to outlast the current context and continue to advance in spite of a challenging market.

KEYWORDS: beauty tech, virtual-try-on, digital services, digital marketing, consumer behaviour, digital transformation, innovation

THE HISTORY OF BEAUTY TECH AND SERVICES AT L'ORÉAL

L'Oréal first began its digital services transformation with the launch of the augmented reality (AR) app, Makeup Genius, in June 2014.¹ Developed in-house for the L'Oréal Paris brand, Makeup Genius placed the power of makeup virtual-try-on (VTO) directly into consumers' hands. The app was a simple interface. The consumer scans their

face, chooses the products or looks to try on, and the app renders the products onto the face. These were the beginning stages of makeup VTO and, in practice, AR was yet to be seamlessly integrated into everyday lives. As an example, Snapchat launched in 2011, but the now popular Lenses feature for which the app is most known was not introduced until 2015 with the acquisition of AR and selfie animation app, Lookser.²

Makeup Genius represented the start of L'Oréal's beauty tech obsession, and just before the app launch, in March 2014, the Group hired its very first global chief digital officer (CDO) — Lubomira Rochet — who has been the Group's Executive Vice-President and Global CDO for the last seven years, and has sat on the Group's executive committee to ensure that digital transformation is discussed and strategised at the highest levels of the organisation.³

As of April 2021, the Group has appointed a new Global Chief Digital and Marketing Officer (CDMO), Asmita Dubey, to lead the next generation of digital transformation and continue L'Oréal's journey as a digital-first company, where beauty services continue to play a major role in accelerating the digital revolution.⁴

In 2018, L'Oréal further expanded its expertise in beauty tech by acquiring ModiFace — the first non-beauty brand to join the company's portfolio.⁵ ModiFace is the industry-leading artificial intelligence (AI) and AR technology specifically tailored for the beauty industry, servicing multiple product categories in order to facilitate makeup VTO, hair colouration VTO, hair diagnostics and skin diagnostics. ModiFace has since become a major force in accelerating and scaling beauty tech for L'Oréal and for the beauty market as a whole. In the company's own words, ModiFace produces 'real-time facial analysis and feature tracking for videos and photos. Highly accurate 3D facial micro-feature tracking tracks movements and expressions through 68 non-identifying parameters including lip and eye edges, iris size and location, head pose, as well as skin features including spots, texture, and wrinkles'.⁶ It is one of the most precise tracking and analysis technologies in the world — giving L'Oréal a very strong competitive advantage and building a robust foundation to achieve scale.

SCALING BEAUTY TECH AND SERVICES IN THREE PHASES

Today, the ModiFace technology is present in 80 countries across L'Oréal's owned brand websites, as well as retailer partner websites. With this scale, VTO usage has increased by five and reached 1 billion visits globally, tripling e-commerce conversion rates in 2020.⁷ In what follows, the paper describes how L'Oréal scaled beauty tech and services.

Phase one: Scaling makeup VTO pre-COVID-19

ModiFace is a key partner and strategic necessity in L'Oréal's ability to scale beauty tech and services across the company's global footprint. Approximately 30 of the 42 brands in the company's portfolio offer virtual services across owned websites and platforms, as well as through key strategic retailers.

The first stage of services roll-out focused primarily on owned brand websites as it is a controlled environment where internal teams can manage all phases of an integration from kickoff to deployment, and it is a wholly branded universe that can foster strong consumer relationships. The integration consists of a software development kit (SDK) that is built directly into the site's code, inserting the services onto any page within the site — most frequently the product detail page (PDP) as this is a primary research source during the consideration phase, where all product information is housed and where potential consumers add products to cart or click through to retailer e-commerce sites. Subsequent product catalogues and available shades are managed through the ModiFace content management system (CMS). This initial roll-out on owned brand websites benefitted the Group in three ways:

- *First-party data collection and enrichment:*
 - known first-party data can be used to generate strategic audience insights that can be analysed and integrated across the entire digital ecosystem, including

- website, CRM, media, re-targeting, search and content development, resulting in a clearer understanding of the brand's target groups; and
- enrichment of known first-party data with supplemental attributes around product and shade preferences, skin concerns or issues allows for hyper-personalisation and targeting across the entire digital ecosystem.
- *Consumer experience optimisation:*
 - owning the full consumer experience allows the brands to test and learn throughout the various touch points and interactions, giving rise to optimisation opportunities to reduce adoption friction; and
 - by way of example, the latest internal performance results on a global scale show that makeup VTO engagers try on 20–30 shades per session and spend more than seven minutes on the services, meaning the consumer can then be activated and re-targeted with those products and shades during various points along the website visit or within the brand's digital ecosystem in order to drive towards conversion.⁸
- *Omni-channel touch-point bridge:*
 - the ModiFace CMS is activated across all devices, allowing for integration on iPads for in-store experiences with trained beauty advisers; and
 - this connection between in-store try-on and purchase seamlessly bridges the consideration and conversion stages of the consumer journey.

Takeaway

Scaling on owned branded platforms or websites allows for greater flexibility, with many 'test and learn' opportunities to further enhance, enrich and optimise the total consumer experience, feeding audience insights into the brand's entire digital ecosystem and providing important operational learnings for future integrations.

Phase two: Scaling with ModiFace during COVID-19

The COVID-19 virus has altered the beauty, makeup and skincare experience as it removed one of the most crucial points along the consumer interaction with brands and products, namely the in-store experience. With various stages of lockdowns occurring globally at varying intervals, many retailers began implementing services to bridge the consumer need across the consideration phases, to facilitate and ease purchase decisions online. Beauty e-commerce has traditionally been a replenishment system, where 56 per cent of beauty buyers typically buy products they already know they want, while 28 per cent are information seekers focusing on inspiration, discovery and reviews across brands and products.⁹ With continued store closures, however, the e-commerce behaviour in 2020 consistently increased across categories from month to month. Indeed, according to a recent survey conducted in the USA, 38 per cent of respondents made a digital purchase in health and beauty in February 2020, rising to 45 per cent by December 2020.¹⁰

Phase two of the ModiFace implementation roll-out is directly connected to these shifts in the market during the COVID-19 pandemic and subsequent store closures. At the time of writing, the Group has collaborated with 27 key strategic partners across 30 countries to implement ModiFace directly onto their websites for applicable L'Oréal brands, including TMALL, Amazon, Douglas, LYKO, Matas and many others worldwide, successfully scaling the accessibility of VTO and services to consumers globally.

Case study: Matas and L'Oréal meet consumer demand in Denmark

Matas is a key strategic partner for L'Oréal as the two companies have a fruitful history together, based on decades of collaboration. Matas is Denmark's leading retailer for

health, cosmetics and personal care products, and despite lockdown, generated a revenue of over US\$606m in 2020.¹¹ Matas has fully embraced digital transformation, and the local L'Oréal teams collaborated directly with the retailer to prioritise makeup VTO implementation on the Matas website, on all makeup PDPs within the L'Oréal product range, including for such brands as Lancôme, IT Cosmetics, Yves Saint Laurent Beauté, Giorgio Armani Beauty, Maybelline, L'Oréal Paris and NYX Professional Makeup. The following outlines this strategic collaboration in more detail, highlighting the project objectives, the observed results and the subsequent key takeaways that continue to shape the ongoing partnership:

- *Objectives:*
 - prioritise the delivery of industry-leading and personalised beauty services to Matas consumers;
 - implement ModiFace makeup VTO within all applicable PDPs within the L'Oréal product ranges;
 - bring VTO and beauty services closer to the point of purchase; and
 - gain insights into shopping behaviours and usage of VTO and services during the purchase cycle, and the ensuing impact on conversion.
- *Results, 1st December, 2020 – 4th May, 2021:*
 - a total of 78,849 site visitors engaged with ModiFace;
 - of those site visitors, 85 per cent preferred engaging via Live Mode rather than Photo Mode;
 - across product categories, a total of 394,705 shade variations were tried on;
 - when comparing conversions on PDPs with Modiface versus PDPs without Modiface, the Modiface PDPs show an index uplift of 133;
 - the lips category (consisting of lip gloss, lip liner and lipstick) generated a conversion index uplift of 219 on Modiface PDPs versus non-Modiface PDPs;
 - the face category (consisting of foundation, bronzer, blush, concealer and other sub-categories) generated a conversion index uplift of 133 on Modiface PDPs versus non-Modiface PDPs; and
 - ModiFace PDPs generated an average session duration of 13 minutes and 15 seconds, while non-ModiFace PDPs generated an average of only 2 minutes and 27 seconds.
- *Key takeaways:*
 - *Engagement and conversion:*
 - there is a clear correlation between ModiFace engagement and conversion, indicating that increasing site traffic to services will have a positive impact on conversion and profitability over time;
 - there are differences in which categories and sub-categories are driving higher performance, with the lips category generating a conversion rate that is more than twice as much as non-ModiFace PDPs in the same category; and
 - the majority of engagers prefer Live Mode, which means this experience must be as optimised, seamless and frictionless as possible to ensure easy usage and thus foster conversion.
 - *Services visibility:* This is a crucial element to drive customer engagement and reach performance targets. The Matas and L'Oréal teams have developed aligned animation planning to increase awareness and visibility across several touch points and activate consistently, including the following channels:
 - on-site trade visibility via homepage placements, landing pages and brand universes;
 - influencer activations across social media and other platforms;
 - in-store visibility and seamless access to services via quick response (QR) codes or iPad integrations; and
 - retailer and brand media on owned channels and platforms.

- *Data-sharing agreements:* These are vital in order to properly understand and give visibility to performance, and should be negotiated and built into agreements so that both brand and retailer are aligned on performance expectations. Important metrics and key performance indicators (KPIs) to share, and thus better understand performance, include:
 - overall services usage and per cent of total site traffic engaging with services;
 - live mode versus photo mode usage;
 - shades and/or products tried;
 - products added to cart;
 - purchases and conversion rate;
 - traffic source;
 - average session duration and shades tried per session; and
 - if multiple brands are included, brand, category and product-level data across the above parameters will provide even more granularity and rich insights.
- *Category-level solutions:* For a company like L'Oréal with multiple brands in-house, opting for category-level solutions, rather than brand-level solutions, puts consumer centricity at the core of the service, marries well with the retailer multi-brand visibility model, reduces adoption friction and avoids fragmented consumer experiences.

The Matas and L'Oréal collaboration has truly solidified both companies as tech-savvy, industry leaders and digital first-movers. The results show that the Matas consumer is eager and excited to engage with virtual beauty services and this engagement has led to increased conversion rates across all makeup PDPs where ModiFace is implemented, further positioning Matas as the market leader and L'Oréal as a trusted partner for digital innovation.

Omni-channel considerations

As stores globally enter into varying stages of opening and closing, dependent on

government restrictions, preparations must also be made to ensure consumer safety in-store when engaging with products. Some retailers have opted to remove testers all together, while others have a considerably reduced tester assortment in-store. In either scenario, the physical handling of products is severely limited or removed all together to ensure high sanitary conditions and reduce the spread of the COVID-19 virus.

L'Oréal is combating these limitations by scaling VTO and services to in-store experiences, providing customers with quick access to VTO via QR codes that are printed on materials and visuals, giving customers opportunities to interact with products without fear of contamination. This roll-out is in progress globally, bridging seamlessly from in-store to online and quickly becoming a cornerstone of the omni-channel strategies moving forward.

When implementing QR codes that direct to services, it is important to keep the following parameters in mind:

- connect directly to the PDP or landing page where the VTO or service is implemented to avoid confusion or negatively impact bounce rates or site engagement;
- train all beauty advisers or in-store personnel to ensure customer support and adoption;
- separate data performance views by traffic source, from online site traffic versus in-store site traffic, to compare results and optimise future strategies; and
- if possible, create dynamic QR codes to reduce reprinting if site landing pages change. Consider security implications, employ strict governance and restrict access to QR code creation to limit any possible infractions.

Takeaway

The COVID-19 pandemic has shifted consumer shopping behaviours, with more and more consumers turning to e-commerce to purchase products beyond

just replenishment. Support these shifts by offering services directly on retailer sites in order to provide consumers with high-quality online experiences that support product research, engagement and conversion.

Phase 3: Scaling skin diagnostics during COVID-19

During COVID-19 lockdown periods, consumer shopping trends have shifted heavily in favour of skincare products that benefit and complement longer time periods spent at home. Most notably, the aptly called ‘cocooning’ trend has surfaced across influencers, bloggers and social media mavens as consumers are opting for new skincare products and regimens to pamper and treat themselves while in lockdown or quarantine.¹²

L’Oréal’s annual results for 2020 mirror these trends, with the skincare category growing fastest of all. The Active Cosmetics Division within L’Oréal, encompassing the skincare brands La Roche Posay, Vichy, CeraVe, Decléor and SkinCeuticals, saw tremendous growth during 2020, with 13 per cent like-for-like growth and sales exceeding €3bn.¹³

Increasing consumer demand for skincare products coupled with closed stores gives rise to ample service-oriented opportunities, focusing on overall skin diagnostics to assess various elements of the skin with hyper-precision to deliver hyper-personalised recommendations.

Via the ModiFace technology, several L’Oréal brands, including Vichy’s SkinConsult,¹⁴ dive deep to analyse skin attributes like radiance levels, pore quality and firmness in order to provide tailored product and routine recommendations. These analyses are incredibly informative for the consumer, providing much needed guidance when making a first-time skincare purchase. When combined with an e-consultation to discuss results, the consumer is also thoughtfully and carefully guided towards purchase with confidence in the products.

L’Oréal is continuing to meet this rising market demand by extending the ModiFace technology to all skincare brands across the portfolio and connecting each product to analysed skin attributes with the ability to offer tailored product recommendations. Scaling to retailers with this category-level solution is underway — with the first retailers implementing the SDKs in progress. This is consumer centricity at its apex — providing superior service, meeting demands, offering a multitude of products, while being hyper-personalised and relevant.

Takeaway

While the makeup category is being challenged by the ongoing global pandemic, the skincare category is growing. L’Oréal is fuelling this by expanding ModiFace services to include skin diagnostics, offering virtual analysis of skin quality to provide consumers with personalised and bespoke skincare regimens.

PREPARING FOR THE FUTURE TODAY

E-commerce now encompasses a record-level 26.6 per cent of L’Oréal’s total global sales, increasing 62 per cent over 2019.¹⁵ Much can be attributed to the COVID-19 impact on brick and mortar closures, but the growing trajectory of e-commerce is embedding itself deeply into consumer behaviours. L’Oréal is continuing to fuel e-commerce internally with newly formed digital roles, ambitious e-commerce targets and stronger retailer partnerships that are supported and further fuelled by this obsession with beauty tech and services. The Group has to continue accelerating and scaling services in order to bridge any consideration gaps when consumers are in the purchase cycle, particularly if in-store dynamics shift, lockdowns ease and shoppers continue to embrace online buying behaviours.

The future of beauty tech and services is starting to present itself in different ways, all

of which are encompassing AR, AI, platform integrations and direct links to e-commerce purchasing behaviours. The following outlines the current beauty tech integrations that are enhancing consumer experiences and engagement across platforms:

- *ModiFace and WeChat bring VTO to messaging:* While the western world continues to advance and accelerate VTO and services across categories, products and brands, L'Oréal Asia Pacific has integrated ModiFace VTO within the WeChat messaging application, piloting a mini-programme with Giorgio Armani Beauty that links directly to a shopping experience within that programme.¹⁶ The WeChat integration also gives customer care teams the power to utilise VTO during chat sessions, recommending shades and products during direct conversations with customers.
- *ModiFace and Amazon bring VTO to the world's biggest e-commerce company:*¹⁷ L'Oréal has further expanded the ModiFace reach by partnering with Amazon to add VTO to applicable L'Oréal PDPs in the USA, the UK, Japan and Canada.¹⁸ As the world's biggest e-commerce platform, 53 per cent of product searches begin on Amazon,¹⁹ and this integration provides a dedicated base of beauty buyers a way to try thousands of products virtually before making a purchase within the same platform.
- *ModiFace and Google bring VTO to the search results page:*²⁰ In late December 2020, L'Oréal and Google announced the ModiFace integration directly into Google Shopping formats. This brings VTO into a very important step along the consumer journey, as 23 per cent of shoppers use Google to research products before making a purchase.²¹
- *ModiFace and Facebook bring VTO to the social media experience:*²² This long-term collaboration facilitates AR experiences delivered directly via Facebook Camera

products, and launched in 2018 shortly after the ModiFace acquisition. This strong partnership has kept beauty innovation at the core of the Facebook user experience.

Takeaway

Platform integrations allow VTO and services to scale much further than just a brand or retailer's website. This scale reaches consumers when they are at critical points along the purchase cycle and begins to reduce barriers to technology adoption that will push AR and AI over a tipping point and into the mainstream.

WHAT DOES THE FUTURE LOOK LIKE?

L'Oréal has made impressive strides in driving the adoption and integration of beauty services around the world through owned and retailer platforms, as well as strategic platform integrations. The proliferation of and increased access to VTO and AI/AR services, however, provides a glimpse into a future where people's homes and lives are even more connected through technology. For example, connected mirrors and smart beauty mirrors are already in stores, making it possible for consumers around the globe to try products at the point of sale. It is surely only a matter of time before consumers will be able to access VTO and skin diagnostics through connected mirrors in their own homes. The possibilities here are extremely exciting — imagine a mirror that provides skincare recommendations based on one's skin analysis in real time, helping to combat dark circles or dull skin after a restless night. Once the skincare regimen is underway, the connected mirror will then assist with a makeup look for the day, providing VTO options and suggesting potential looks. Although such products are not yet on the market, given the rate of VTO and services adoption, the future is approaching quickly.

CONCLUSION

During an uncertain time, when the COVID-19 virus has altered consumer behaviours, closed brick-and-mortar stores and accelerated the e-commerce market, L'Oréal and its partners around the world have emerged as true innovators that support evolving consumer needs with a focus on hyper-personalised services. Tech-savvy consumers are now equipped with tools that empower them to make the right product decisions, across makeup, haircare and skincare routines. At the same time, L'Oréal brands are positioned as the trusted go-to brands that continuously meet consumer demand and provide the utmost attention to service and quality.

L'Oréal's longstanding commitment to progress in beauty services has given it a competitive advantage in 2020 and beyond, empowering the Group to face the uncertain landscape and further embed VTO and other beauty services to meet consumer needs in a highly fluid context.

There are four final takeaways and principles that should be acknowledged when inviting consumers to participate in these experiences:

- *personalisation*: ensure the experience is tailored to the individual and welcomes all skin tones, types and textures;
- *accessibility*: create awareness and visibility around the services, and scale to where consumers are shopping;
- *integration*: partner with key players in the industry, to bring new ways of engagement across a variety of platforms; and
- *test and learn*: optimise the consumer journey on an ongoing basis, focusing on results to inform data-led decisions and provide the best possible service to the consumer.

At a crucial point in history, where e-commerce sales are accelerating and shopper behaviours are changing, brands

have an opportunity to leverage new technologies to meet rising consumer demands and catapult immersive beauty experiences into the future today, building long-lasting, trustworthy and exciting new relationships with customers across the world. As an industry leader focused on consumer centricity, excellent service offerings and fearless innovation, L'Oréal will continue to drive the digital transformation forward.

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