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AI-Powered Storytelling in Experiential Marketing: A Case Study of L'Oréal's Personalized Beauty Journey with Modi-Face and Skin Consult AI

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ABSTRACT

In today's competitive landscape, where brands strive not only for visibility but also for emotional resonance, storytelling has emerged as a strategic pillar of experiential marketing. This study examines the role of artificial intelligence (AI) in advancing personalized brand storytelling and fostering emotional engagement, focusing on L'Oréal's integration of modiface and SkinConsult AI as a case study. Grounded in theories of narrative transportation and experiential branding, the research proposes a conceptual framework that connects AI technologies with individualized storytelling, emotional immersion, and consumer response. Using a qualitative, exploratory case study approach, the study analyzes secondary data drawn from L'Oréal's digital campaigns, product platforms, and consumer feedback. A thematic content analysis demonstrates that AI operates not merely as a data-processing tool but as a narrative engine that enables brands to co-create meaning with consumers. Through ModiFace and SkinConsult AI, personalized product experiences are transformed into emotionally resonant narratives, positioning users as protagonists in their own beauty journeys. Findings indicate that AI-driven storytelling enhances consumer engagement, strengthens brand trust, and fosters identity alignment, ultimately driving loyalty and word-of-mouth advocacy. Furthermore, the case illustrates how AI-enabled personalization contributes to sustainable marketing practices by minimizing product waste through virtual try-ons, broadening access to beauty experiences, and supporting profitable yet responsible growth. This research enriches marketing scholarship by reframing AI as a storytelling partner and introducing a model that integrates emotion, experience, technology, and sustainability within contemporary brand communication.

Introduction

In its digital transformation journey, L'Oréal has used the integration of augmented reality (AR) and artificial intelligence (AI) to reinvent the beauty experience; the acquisition of Midface in 2018 was a milestone that allowed makeup simulation and skin recognition technologies to be implemented on a large scale and across the group's multiple channels (L'Oréal,2018; L'Oréal, n.d.).

Tools such as Skin Consult AI, developed in collaboration with the group's brands (including Vichy), claim to be able to detect aging indicators and clinical signs of the skin with just a selfie and provide personalized recommendations; these capabilities form the basis of an "experiential beauty journey" (Vichy/ L'Oréal, n.d.; Midface,2022). Independent research has also pointed to high accuracy in algorithmic skin sign analysis, although improving performance in diverse skin color groups remains a scientific priority (Flament et al.,2022).

We define "AI-powered storytelling" as a process in which interactive (AR) and analytical (AI) technologies combine to create a personalized experiential narrative for each user, one in which the user is the "hero of the experience" and the brand acts as a guide/companion. Unlike traditional one-way advertising, such an approach provides interactive paths and data-driven decision-making,

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and can improve metrics such as user engagement, conversion rates, and customer loyalty (Beauty Matter,2024; McKinsey & Company,2025). Furthermore, AR/AI experiences can collect real-time feedback and create rapid learning loops for product and messaging optimization (Eppler,2025). The technical and ethical challenges in implementing these personalized journeys are prominent. From a technical perspective, data bias and reduced accuracy in detection for a wide variety of skin tones can undermine the validity of detection; studies have shown that although algorithms perform well in many scenarios, further validation on diverse populations is needed (Flament et al.,2022). From a legal and privacy perspective, processing facial images and storing sensitive biometric data requires compliance with data protection standards and transparency in user agreements (ModiFace,2022; L'Oréal, n.d.). Furthermore, the psychological implications including the formation of filter-based beauty standards and the risk of "filter-dysmorphic" require interdisciplinary approaches between marketing, ethics, and public health (Vogue Business,2025).

From an industry perspective, brands need to balance rapid innovation with responsibility: AI-powered solutions can accelerate and personalize customer experiences in the short term, and help improve product design and value chain efficiency in the long term; however, responsible scaling of technologies like next-generation AI in the beauty industry requires data frameworks, competent human resources, and clear policies (McKinsey & Company,2025; FIT,2025).

This combination of technologies (AR for "virtual testing" and AI for "analysis and recommendation") is an example of a new type of experiential marketing that we call "AI-powered storytelling": a process in which a brand, by analyzing visual and interactive data, creates a personalized experience narrative for each consumer a narrative that educates, builds trust, and leads the user to make more informed decisions. This approach, unlike traditional one-way advertising, places users as the main actors in the narrative, thereby increasing the emotional effectiveness and experiential marketing (Agrawalet al.,2025).

Aiming to develop a theoretical-analytical framework for understanding how AI-based storytelling works in experiential marketing, this paper will first outline the structure of the customer journey in the L'Oréal example, then analyze key AR/AI touchpoints (such as Try-Ons, skin diagnostics, and personal assistants), and finally document the marketing implications and ethical and operational risks. The methodology will use a combination of industry document analysis, clinical study review, and content analysis of digital experiences to cover both the commercial aspects and the health and social implications of these innovations (BeautyMatter,2024; Eppler,2025; Flament et al.,2022).

Literature Review

Prior studies have addressed these themes individually; however, few have integrated them into a cohesive framework that explains how technology, narrative, and experience converge to shape modern consumer behavior. By reviewing key concepts and identifying gaps in the literature, this section lays the groundwork for the proposed conceptual model.

In today's hyper-saturated markets, where consumers are overwhelmed by choices and digital noise, storytelling has become a critical differentiator in marketing strategies. Rather than promoting features or pricing, successful brands now compete through compelling narratives that evoke emotion, inspire identity alignment, and foster long-term loyalty (Fog et al.,2010; Escalas,2004).

Brand storytelling goes beyond traditional advertising. It is a strategic communication tool that helps companies humanize their value propositions and create meaning in the minds of consumers (Lundqvist et al.,2013). By constructing emotionally resonant stories, brands can anchor abstract values such as trust, innovation, or sustainability into tangible consumer experiences (Gilliam & Flaherty,2015).

Recent research shows that when consumers engage with a brand's story, they experience narrative transportation, a psychological state in which they become mentally and emotionally immersed in the narrative (Green & Brock,2000). This immersion increases message persuasiveness and strengthens the cognitive and emotional connection between the consumer and the brand (Van Laer et al.,2014).

Moreover, in the context of digital marketing, storytelling plays a pivotal role in generating user-generated content and social sharing, often leading to viral campaigns and organic reach (Singh & Sonnenburg,2012).

The shift from transactional marketing to experiential marketing reflects a fundamental transformation in how consumers interact with brands. In today's saturated and highly competitive environment, traditional marketing tactics that focus solely on product attributes and pricing are no longer sufficient. Instead, brands strive to create memorable experiences that emotionally engage consumers and foster deeper connections (Schmitt,1999; Pine & Gilmore,1998).

Experiential marketing emphasizes sensory, affective, cognitive, behavioral, and relational dimensions of the customer journey (Gentile et al.,2007). These dimensions' shape how individuals perceive value and meaning in their interactions with a brand. Emotional engagement is particularly critical when consumers feel something during their interaction, whether joy, surprise, empowerment, or

inspiration, they are more likely to form lasting attachments to the brand (Brakus et al.,2009).

Research has shown that emotionally charged experiences influence not only satisfaction and loyalty but also word-of-mouth and brand advocacy (Zarantonello & Schmitt,2010).

AI technologies such as machine learning, natural language processing (NLP), image recognition, and recommendation systems enable marketers to decode behavioral patterns, anticipate needs, and dynamically adjust content based on real-time data (Chatterjee et al.,2021).

One notable advancement is the use of AI in generative storytelling, where algorithms participate in content creation producing copy, video scripts, visual designs, and even emotional tones based on consumer profiles (Liu et al.,2023).

Research also suggests that AI-enhanced personalization increases trust, satisfaction, and brand affinity, provided that transparency and ethical use of data are maintained (Tussyadiah & Miller,2019).

Existing models of storytelling in marketing often emphasize symbolic meaning, narrative structure, or emotional appeal, yet lack integration with data-driven personalization enabled by artificial intelligence (Van Laer et al.,2014; Lundqvist et al.,2013). Similarly, while AI research in marketing frequently focuses on predictive analytics or automation, it rarely addresses narrative construction as an outcome of AI interaction (Chatterjee et al.,2021).

This fragmented approach leaves an important conceptual gap: How can AI-enabled storytelling be strategically designed to support experiential marketing and deepen consumer engagement? Moreover, there is limited empirical or theoretical work on how consumers perceive and emotionally respond to personalized narratives generated or mediated by AI.

This study addresses that gap by proposing a conceptual model that integrates these three domains AI, storytelling, and experiential marketing to explain how emotionally resonant, personalized brand narratives can be designed and delivered using intelligent systems. By grounding the model in a real-world case study (L'Oréal), the paper offers both theoretical advancement and practical insights.

Specifically, this study contributes to the literature in three distinct ways. First, while prior research has examined storytelling as a branding tool and AI as a driver of personalization, these domains have rarely been integrated into a single conceptual framework. Second, existing models (e.g., Van Laer et al.,2014; Lundqvist et al.,2013) treat personalization and narrative as separate processes; this paper advances the literature by conceptualizing AI as a narrative co-creator that fuses personalization with storytelling. Third, unlike prior studies that often emphasize consumer perception in static contexts, this model highlights the dynamic and cyclical feedback loop between consumer responses and AI refinement. Taken together, these contributions provide a novel theoretical lens for understanding how technology, narrative, and experiential marketing converge to shape sustainable consumer brand relationships

Methodology

This section outlines the research design, data collection methods, analytical procedures, and ethical considerations employed in the study. Given the study's focus on the cutting-edge intersection of artificial intelligence, storytelling, and experiential marketing, a qualitative case study approach was selected as the most suitable method. This design enables the exploration of contextual depth, emotional dynamics, and the complexity of narrative-driven consumer experiences aspects that would be difficult to capture through purely quantitative methods.

The following subsections detail the research design, data sources, coding and analysis process, trustworthiness strategies, and ethical considerations undertaken during this study.

This study adopts a qualitative, exploratory case study design to investigate how artificial intelligence enables personalized storytelling within the context of experiential marketing. Given the evolving and interdisciplinary nature of this subject spanning technology, psychology, branding, and communication a qualitative approach allows for in-depth exploration of complex interactions and contextual dynamics that are difficult to capture through quantitative measures alone.

The research focuses on a single embedded case study: the global beauty brand L'Oréal, and its use of AI-powered platforms (Midface and Skin Consult AI) to create personalized consumer experiences. The case was selected through purposeful sampling, based on its pioneering integration of storytelling and AI in digital brand communication.

This design is suitable for unpacking the "how" and "why" of a contemporary phenomenon within its real-world context (Yin,2018). It also enables the construction of a conceptual model that links AI technologies, narrative personalization, and consumer engagement drawing on both theoretical insights and practical implementation.

To explore the integration of AI and storytelling in experiential marketing, this study relied on secondary qualitative data sources. This method was chosen due to the exploratory nature of the research and the depth of publicly available material on the selected case L'Oréal's use of Midface and Skin Consult AI in digital marketing campaigns.

The dataset consisted of approximately 48 documents collected between 2018 and 2023, covering L'Oréal's acquisition of Midface and the

launch of Skin Consult AI through to their most recent campaigns. Data was collected from a variety of credible sources, including:

- ✓ Official brand communications such as L'Oréal press releases, innovation reports, and blog content.
- ✓ Industry publications and case studies from marketing and beauty-tech platforms.
- ✓ Academic articles, white papers, and conference presentations on AI-driven personalization and experiential branding.
- ✓ Social media content, consumer testimonials, and promotional videos that illustrate the brand's narrative and customer engagement strategy.

Inclusion criteria required materials to (1) directly address L'Oréal's AI-driven initiatives, (2) be publicly available and verifiable, and (3) explicitly mention consumer interaction, personalization, or sustainability. Exclusion criteria removed materials unrelated to AI or storytelling, generic industry news, or duplicates across outlets. To minimize bias, triangulation across different source types was applied. In addition, an audit trail of metadata, coding notes, and version histories was maintained to ensure transparency and replicability. Researcher reflexivity was applied through analytic memos that critically reflected on interpretive decisions.

While this study primarily relied on secondary data sources, future iterations of this research design could be enriched by incorporating primary empirical evidence. Interviews with marketing managers, beauty consultants, and end-users of platforms such as Midface and Skin Consult AI would provide deeper insights into lived experiences behind the digital narratives. Likewise, surveys or controlled experiments could validate the thematic findings at scale, offering stronger empirical grounding for the conceptual model.

The collected data was analyzed using thematic content analysis (Braun & Clarke,2006), a qualitative method well-suited for identifying, interpreting, and categorizing patterns across diverse data sources. Coding proceeded in three stages:

- ✓ **Initial coding both deductive (based on the conceptual framework:** AI technologies, personalization, emotional engagement, experiential perception, consumer response) and inductive (emerging directly from the data).

Theme development grouping codes into higher-level categories that represented recurring patterns across corporate texts, campaign content, and consumer narratives.

Refinement revisiting themes against raw data extracts to ensure consistency and theoretical alignment. To enhance reliability, an audit trail documenting coding notes, metadata, and analytic decisions was maintained. In addition, peer debriefing with two independent researchers was conducted to validate the thematic categories. Reflexive memos were written throughout the process to monitor researcher bias. A sample coding sheet has been included in the Appendix for transparency.

Table 1 illustrates selected codes, aggregated themes, and representative data extracts drawn from brand communications and user-generated content (UGC). These examples demonstrate how meaning was constructed in the analysis, linking consumer narratives to the broader conceptual model.

Table 1. Example of Coding Framework for Thematic Analysis

Initial Code	Theme	Representative Extract
Virtual try-on	Personalized Storytelling	I loved how I could try different looks instantly with Midface." (Consumer review, Instagram comment,2021)
Skin diagnosis	Experiential Perception	The AI showed me what my skin might look like in 5 years this felt like a personal journey." (User feedback on Skin Consult AI,2020)
Feeling confident	Emotional Engagement	This app made me feel more beautiful and secure about my choices." (User testimonial, campaign website,2019)
Sharing on social	Consumer Response	I posted my try-on results on Instagram, and my friends wanted to try it too." (UGC,2022)
Guided journey	Experiential Story Arc	The app felt like a guide helping me through my beauty routine step by step." (Campaign video transcript,2021)

Source: Compiled by the author from secondary data (brand communications, reports, UGC, 2018-2023).

Through this process, the study was able to map relationships between AI inputs, storytelling elements, and consumer responses offering both validation and refinement of the conceptual model introduced earlie. To ensure the trustworthiness of the findings, this study applied multiple strategies commonly recommended in qualitative research.

First, triangulation was employed by sourcing data from a wide range of materials official brand documents, academic studies, marketing analyses, and consumer-generated content. This helped validate key themes across perspectives and reduce reliance on any single source.

Second, a transparent coding process was maintained using a structured matrix that documented all codes, their definitions, and supporting quotes or data points. An audit trail of coding sheets, analytic memos, and version histories was preserved to ensure transparency and replicability, with selected excerpts from the coding framework included in Appendix A.

Third, reflexive memos were written throughout the analysis to monitor potential researcher bias and ensure interpretative neutrality. These memos captured analytical decisions, uncertainties, and evolving insights.

Lastly, peer debriefing was conducted by sharing interim findings with two independent researchers familiar with branding and AI. Their feedback helped refine thematic categories and enhanced the credibility of the interpretations.

Collectively, these steps contribute to the credibility, dependability, and confirmability of the research, aligning with the rigor standards of qualitative inquiry (Lincoln & Guba,1985)

Ethical Considerations: This study was based entirely on secondary and publicly available data, including brand-owned content, academic literature, marketing analyses, and user-generated materials on open platforms. As such, no direct interaction with human participants occurred, and no sensitive or private information was collected or analyzed.

To ensure ethical integrity, all sources used in the study were properly cited and credited in accordance with academic standards. Screenshots, quotes, and campaign materials were used solely for research purposes and fall under fair use guidelines.

Furthermore, the researcher maintained an objective stance when interpreting content, and no manipulative or promotional bias was applied in the presentation of the case study.

As the study involves analysis of corporate communication and public engagement strategies, no formal ethics approval was required. However, ethical research principles including transparency, honesty, and respect for intellectual property were upheld throughout.

Conceptual Framework: In the age of algorithmic influence, brands no longer craft stories alone ‑they co-create narratives with intelligent systems that learn, adapt, and personalize. This research proposes a conceptual framework that bridges artificial intelligence, storytelling, and experiential marketing, to explain how brands can deliver emotionally resonant, personalized experiences that move beyond transactional value.

The proposed framework is rooted in the idea that AI functions not merely as a tool, but as a narrative engine capable of shaping the what, how, and when of brand communication. As illustrated in Figure 1, the model consists of five interrelated constructs:

- ✓ **AI Technologies (e.g., machine learning, NLP, AR/VR):** These act as enablers, gathering and interpreting consumer data in real time.
- ✓ **Personalized Storytelling:** AI facilitates the creation of dynamic, context-aware narratives tailored to individual users, enhancing relevance and emotional resonance.
- ✓ **Emotional Engagement:** When consumers encounter stories that reflect their needs, identities, or aspirations, they experience heightened emotional immersion often described as narrative transportation (Green & Brock, 2000).
- ✓ **Experiential Brand Perception:** Emotional storytelling shapes how consumers perceive the brand not as a product, but as an experience. This perception becomes a memory, a feeling, and a point of identification.
- ✓ **Consumer Response:** Ultimately, these perceptions influence behavioral outcomes such as increased loyalty, brand advocacy, word-of-mouth marketing, and willingness to co-create with the brand.

This model posits that the flow from AI to consumer response is not linear but cyclical: each consumer interaction generates new data, allowing AI systems to refine future narratives, thereby creating a continuous loop of engagement and personalization. Unlike existing models that treat personalization and storytelling as separate mechanisms, this framework fuses them positioning AI as the invisible author behind the consumer's brand experience. Theoretically, the model integrates principles from experiential marketing, emotional branding, and narrative psychology, while practically offering a roadmap for brands to design smarter, more human-centered communication strategies.

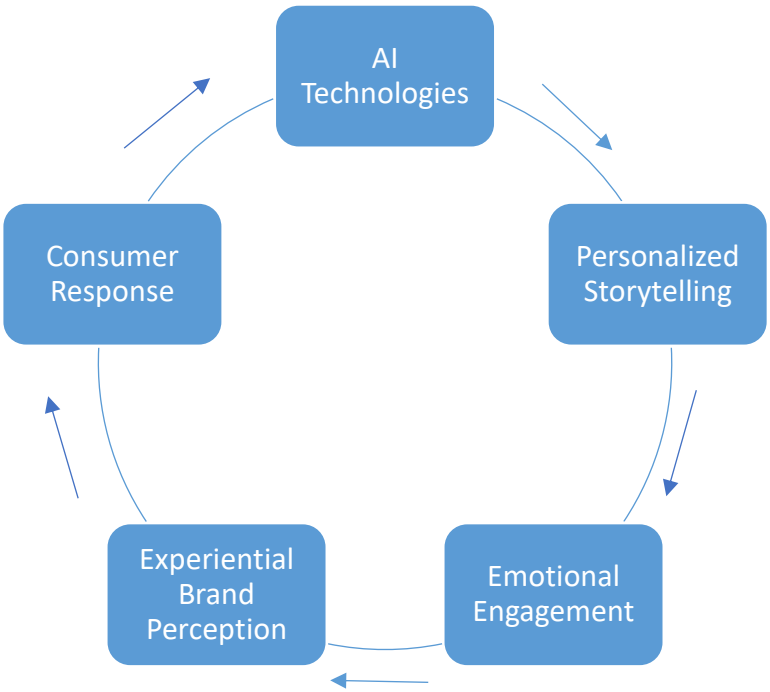

Figure 1. From Algorithms to Emotion: A Conceptual Model of AI-Powered Storytelling in Experiential Brand Marketing

Case Study: L'Oréal

Brand Overview and Context: Founded in 1909, L'Oréal has grown into the world's largest cosmetics and beauty company, with operations in over 150 countries and a portfolio of more than 35 global brands including Lancôme, Maybelline, Garnier, and Kérastase. Known not only for its product innovation but also for its forward-thinking approach to digital transformation, L'Oréal has positioned itself as a leader in beauty tech an intersection of beauty, science, and technology.

In recent years, L'Oréal has undergone a strategic shift from traditional product-centric marketing toward experience-driven, consumer-centric engagement. This shift aligns with the company's broader goal of "beauty for all", aiming to provide hyper-personalized beauty solutions based on individual needs, identities, and aspirations.

Recognizing the importance of emotional connection and storytelling in modern branding, L'Oréal has increasingly leveraged artificial intelligence (AI) to build immersive experiences across its digital touchpoints. The brand views AI not simply as a data tool, but as a creative enabler capable of transforming how consumers discover, interact with, and emotionally engage with products. This case study focuses on two of L'Oréal's most impactful AI-powered platforms Midface and Skin Consult AI to illustrate how the brand integrates cutting-edge technology with narrative marketing to co-create meaningful, emotionally resonant experiences with its consumers.

AI Tools Used: Midface and Skin Consult AI: L'Oréal's investment in artificial intelligence has been most visible through the deployment of two signature tools: Midface and Skin Consult AI. These platforms serve as the technological backbone of the brand's move toward personalized, immersive storytelling in beauty marketing.

Midface: Augmented Reality Meets Storytelling: Acquired by L'Oréal in 2018, Midface is an AI-powered augmented reality (AR) platform that allows users to virtually try on makeup, hair colors, and skincare products through real-time facial mapping and 3D rendering. It uses advanced facial recognition and deep learning algorithms trained on thousands of images to generate hyper-realistic simulations. But beyond utility, Midface is a storytelling interface: it enables each user to visualize their "transformation" journey, turning product trials into an emotional, narrative-driven experience. By allowing consumers to see themselves in multiple future scenarios, Midface brings the aspirational language of beauty into interactive form making the user both the hero and narrator of their own beauty story.

Skin Consult AI: Diagnostic Intelligence as Narrative Trigger: Developed in collaboration with dermatologists and fueled by L'Oréal's skin aging research database, Skin Consult AI uses a selfie to assess 7 key signs of skin aging (wrinkles, fine lines, firmness, tone, etc.) and delivers a personalized skincare diagnosis along with targeted product recommendations.

While seemingly clinical, the tool's impact is deeply narrative: it frames the consumer's current skin state

as a "starting chapter" and recommends a personalized beauty journey ahead. The tone is empathetic, non-judgmental, and empowering transforming what could be a medicalized process into a confidence-boosting experience.

Together, these tools do more than personalize they create micro-stories for each user, powered by AI, that bridge science, self-image, and brand emotion.

Storytelling Strategy in Practice

L'Oréal's storytelling strategy is not limited to brand slogans or visual identity it is intricately woven into the user experience, especially through AI-enabled platforms like Midface and Skin Consult AI. These tools do not simply offer utility; they invite the user into a co-created narrative, where the consumer becomes both the subject and the storyteller of their own beauty journey. Each interaction is structured like a micro-story:

- ✓ **Introduction** :The user opens the app and is welcomed with an intuitive, personalized interface. This acts as the narrative "hook."
- ✓ **Discovery**: Through virtual try-ons or diagnostic scans, the user sees themselves in new, improved or altered versions often accompanied by empowering language like "Find your perfect look" or "Reveal your skin's potential."
- ✓ **Emotional Response**: The visual transformation evokes feelings of excitement, surprise, or confidence, reinforcing brand affinity.
- ✓ **Call to Action**: Recommendations and purchase options are presented not as products, but as the "next chapter" in their beauty story.

This interactive, emotion-driven journey aligns with modern storytelling frameworks, such as The Hero's Journey, in which the consumer is cast as the protagonist who overcomes challenges (aging, skin concerns, self-doubt) with the help of a guide the brand.

L'Oréal also amplifies these narratives through social media storytelling. Many users share screenshots of their Midface results or Skin Consult reports online, adding personal context and emotion. These user stories, in turn, become part of a larger brand ecosystem of storytelling, blending corporate content with authentic consumer voices. What distinguishes L'Oréal's approach is not the presence of AI itself, but its integration into a humanized, emotionally resonant narrative one that supports identity exploration, confidence building, and co-creation with the brand.

Consumer Experience and Emotional Engagement

L'Oréal's use of AI-driven storytelling doesn't just enhance personalization it transforms how consumers feel about the brand. The consumer experience is intentionally designed to be immersive, empowering, and emotionally meaningful. It aligns closely with the "narrative transportation" theory, where individuals become mentally and emotionally absorbed in a story, increasing persuasion and connection (Green & Brock,2000). With Midface, users are not just "trying on" looks they are envisioning alternate versions of themselves. This virtual transformation often triggers excitement, confidence, and even curiosity. Many users describe the experience as "fun," "surprising," or "eye-opening," expressing a sense of ownership in the process. These emotional reactions create a deep bond between the consumer and the brand, rooted not in product specs but in how the product makes them feel.

Similarly, Skin Consult AI takes what could be a cold, clinical process and reframes it as a personal journey of self-discovery and self-care. By diagnosing skin concerns in a non-judgmental way and recommending a "future plan," it evokes feelings of relief, trust, and hope. The result is a shift from passive consumption to active participation, where users feel seen, understood, and supported by the brand.

Social media responses and user-generated content reinforce these emotional outcomes. Screenshots of virtual try-ons, user selfies, and "before-and-after" moments often include emotional language:

- ✓ "I never thought I'd look this good,"
- ✓ "This made me feel beautiful again,"
- ✓ "I trust this more than a salesperson."

These emotional expressions are not just reactions they are evidence of brand co-creation. The customer becomes part of the brand's story, and the story becomes part of the customer's identity. In doing so, L'Oréal achieves a rare marketing outcome: emotional engagement at scale, powered by data but grounded in humanity.

Alignment with Conceptual Model

The case of L'Oréal demonstrates a strong alignment with the conceptual model proposed in this study. Each element of the framework AI technologies, personalized storytelling, emotional engagement, experiential perception, and consumer response is not only present but actively interlinked through a dynamic feedback loop.

AI Technologies (Midface and Skin Consult AI) serve as the foundation, enabling real-time data capture, facial recognition, and personalized content delivery. These tools reflect the model's first layer: intelligent systems that initiate the storytelling process.

The next layer, Personalized Storytelling, emerges through interactive experiences that adapt to each user's appearance, skin profile, and emotional needs. Rather than delivering static content, L'Oréal crafts living narratives that evolve with each interaction fulfilling the model's emphasis on relevance and

personalization. These personalized narratives trigger measurable emotional engagement, particularly through moments of surprise, joy, validation, or confidence. This supports the model's psychological dimension narrative transportation where users are immersed in stories that reflect their identity and aspirations.

The impact of this emotional engagement is visible in how users perceive the brand not just as a product provider but as a partner in self-expression and self-care. This aligns with the concept of experiential brand perception, where the brand becomes a memorable and emotionally charged experience. Finally, this perception leads to clear consumer responses, including heightened trust, repeat usage, content sharing, and word-of-mouth marketing. Many consumers become brand advocates, voluntarily participating in a co-created ecosystem of storytelling completing the model's feedback loop. In short, L'Oréal operationalizes the conceptual framework not as a theory, but as a strategic practice demonstrating how AI-driven storytelling can scale emotional experiences, enhance brand meaning, and activate consumer participation in powerful new ways.

Discussion and Conclusion

This study investigated how artificial intelligence can strengthen personalized storytelling in experiential marketing and how such narratives shape consumer engagement and perceptions of the brand. A close examination of L'Oréal's AI-enabled platforms Midface and Skin Consult AI reveals a fundamental shift in marketing communication: moving away from one-way persuasion toward co-creation, and from simple product promotion toward active participation in consumer identity.

One of the central insights is that AI does not strip storytelling of its human element; instead, it enriches it. By offering real-time personalization and context-sensitive content, AI platforms become facilitators of narrative, allowing brands to mirror each consumer's individuality. This challenges the long-standing view that algorithmic marketing is cold or mechanical. On the contrary, L'Oréal's strategy illustrates how emotionally intelligent AI design can deliver highly personal and resonant brand interactions. The findings reinforce Narrative Transportation Theory (Green & Brock,2000) by showing that AI-powered digital storytelling can create levels of emotional immersion comparable to literature or cinema. Unlike static advertising, AI-driven narratives are fluid, interactive, and adaptive, deepening not only consumer attention but also emotional connection, identity alignment, and memory. Similarly, the case validates Experiential Marketing Theory (Schmitt,1999), confirming that emotions not just functional product attributes are the main drivers of behavior in digital consumption contexts. Here, consumers are not merely buying products; they are participating in narrative rituals that reinforce and reshape their sense of self. Another important contribution is the identification of a feedback cycle between consumer interactions and AI refinement. Every engagement produces data that helps AI systems improve subsequent narratives, creating a self-reinforcing loop of personalization and immersion. This expands the literature on AI in marketing, which has often emphasized technical optimization but overlooked narrative and emotional dimensions.

Beyond consumer engagement, the study highlights the role of AI-enabled storytelling in advancing sustainable marketing. Environmentally, tools like Midface reduce reliance on physical product samples, minimizing packaging and waste. Socially, they democratize access to advanced beauty consultations, making them available globally regardless of socioeconomic status. Economically, AI personalization builds loyalty, advocacy, and repeat purchases, showing that sustainability and profitability can go hand in hand. This integration of environmental, social, and economic value reframes AI storytelling as not only a communication tool but also a lever for responsible growth.

Conclusion

This research set out to examine how AI technologies can support personalized storytelling in experiential marketing, illustrated through L'Oréal's implementation of Midface and Skin Consult AI. The findings indicate that AI rather than depersonalizing brand communication can generate emotionally rich, identity-based narratives, transforming consumers from passive recipients into active co-authors of brand stories. L'Oréal's case demonstrates that personalization at scale does not have to compromise authenticity. By embedding AI-driven tools into digital touchpoints, routine product exploration can be transformed into immersive journeys, where consumers see themselves as protagonists in their beauty narratives. Emotional engagement thus emerges as a powerful driver of loyalty, advocacy, and brand memory.

The conceptual framework developed here links AI, personalization, emotional immersion, and consumer response, offering a dynamic alternative to traditional advertising models. Unlike linear persuasion, this approach is cyclical and co-creative, continuously evolving through consumer feedback and algorithmic learning.

Nevertheless, the study has limitations. It relies on a single case in the beauty sector and is based on secondary data. While analysis of campaigns, reports, and user-generated content yields meaningful insights, primary research such as interviews, surveys, or experiments—is needed to validate and extend these findings. Future work should expand across industries, markets, and cultures to test the generalizability of AI-driven

storytelling models. Finally, the implications extend to sustainability's triple bottom line. Environmentally, virtual try ons reduce material waste; socially, digital experiences democratize access to beauty expertise; and economically, AI personalization drives retention and responsible growth.

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Authors' Contributions

All authors contributed to data analysis, drafting, and revising of the paper and agreed to be responsible for all the aspects of this work.

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