

The application of artificial intelligence in the beauty industry: A technological revolution in the world of makeup and skincare

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ABSTRACT

Keywords: Beauty industry, Artificial intelligence,skincare The beauty industry has always been one of the dynamic economic and cultural sectors that quickly adapts to new trends. In the past decade, artificial intelligence (AI) has emerged as a driving force of innovation in various industries. The beauty industry is no exception and uses AI to offer personalized services, enhance customer experience, and improve production processes' efficiency. This article examines the applications of AI in the beauty industry, its impact on customers and brands, and the future this technology promises.

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Artificial Intelligence: A Game Changer in the Beauty Industry

AI has opened new ways to interact with customers. From product recommendations to skin analysis, AI offers unprecedented levels of personalization through extensive data and advanced algorithms. Leading brands like L'Oréal, Estée Lauder, and Charlotte Tilbury are utilizing AI to provide innovative and engaging experiences .

1.Skin Detection and Analysis with AI

One of the most widely used AI technologies in the beauty industry is skin analysis. Advanced facial scanning tools, using AI, can identify skin issues such as fine lines, wrinkles, dark spots, and dehydration. These systems analyze high-resolution images and compare them with large databases to provide the most accurate skincare recommendations .

Examples :

•Olay's Skin Advisor: This tool uses AI to scan users' skin and introduces suitable products with personalized suggestions .

•L'Oréal Perso: A device that uses AI to analyze skin and produce customized skincare products at home .

2. Virtual Makeup and Augmented Reality (AR)

One of the most exciting applications of AI is the virtual makeup capability brought through augmented reality (AR) technology. Customers can try on various products on their faces online or in stores without the need for physical product usage .

Benefits :

•Time and cost savings: Customers see the product on their face before purchasing .

•Hygiene and safety: Prevents direct contact with trial products .

•Personalization of the shopping experience: Suitable colors and products are automatically recommended .

Examples :

•Sephora Virtual Artist: This tool uses AI and AR to allow customers to try different makeup products virtually .

•Charlotte Tilbury Magic Mirror: A mirror that enables customers to see various makeup styles live on their faces using AI and augmented reality .

3.Personalizing Products with AI

Personalization is one of the most important new trends in the beauty industry. Brands now use AI to create custom products that precisely match customers' needs. AI can analyze suitable formulations for skin type, hair, and even customer preferences to offer a fully tailored product .

Examples :

•Proven Skincare: Uses AI to analyze customers' skin and produces custom creams .

•Function of Beauty: Uses AI to create customized shampoos based on hair type and specific customer needs .

4. Marketing and Predicting Beauty Trends

AI also plays a vital role in marketing. From analyzing social media data to predicting future trends, AI can understand customer behavior and create more effective advertising campaigns .

Applications :

•Social media analysis: Identifying emerging trends through user comments and image reviews .

•Targeted advertising: Providing personalized ads based on customers' interests and shopping behavior .

•Sales forecasting: Analyzing past data to predict future popular products .

5.Robots and Virtual Assistants

Chatbots and virtual assistants help brands provide a better shopping experience. These systems can answer customer questions, offer product recommendations, and even book appointments .

Examples :

•L'Oréal Chatbot: Helps customers find suitable products for their skin .

•Sephora's Virtual Assistant: Assists customers in selecting the best cosmetics .

The Future of AI in the Beauty Industry

AI continues to evolve, and it is expected to find more applications in this industry in the future. Some future trends include producing cosmetics using 3D printers, developing more advanced systems for detecting skin health, and even robotic makeup artists .

Conclusion

AI, as a leading technology, has transformed the beauty industry and elevated customer experiences to a new level. As this technology continues to grow and develop, beauty brands must leverage AI for further innovation and personalization to remain competitive in the market. The future of the beauty industry lies in the hands of AI, and this technology will help brands influence customers in ways that were previously unimaginable.