# H&M leads fast fashion’s digital twin revolution amid ethical concerns



Fast-fashion companies like H&M are increasingly integrating "digital twin" technology into their marketing and design strategies, harnessing the power of AI to create lifelike replicas of human models. Recently, H&M showcased its latest venture by generating digital clones of 30 real-life models, an initiative that speaks to the broader trend within the fashion industry towards the adoption of advanced technological solutions.

The essence of this digital twin technology lies in its meticulous process of full-body scanning and voice modelling. These AI-generated avatars are fashioned not just to promote products but to engage directly with consumers and model clothing virtually, indicating a paradigm shift in how fashion is marketed today. As highlighted by various industry voices, this technology could fundamentally alter the landscape of fashion marketing, raising questions about the role of real human models in an age where digital doubles are becoming more prevalent.

H&M's initiative is not isolated; similar strategies are gaining traction across the industry. For instance, European fashion retailer Zalando has successfully incorporated generative AI into its marketing campaigns, drastically reducing the time and cost associated with producing imagery for fast-changing trends. Their approach has marked a reduction in image production times from six weeks to about three days, offering significant cost savings. The growing reliance on AI suggests a broader shift where fast-fashion brands leverage this technology to enhance their marketing capabilities, while simultaneously minimising the need for traditional photo shoots.

Yet, this transformation comes with a dual-edged sword. Although digital twins might improve operational efficiency, they also stir concerns about labour fairness and the potential erasure of creative roles within the fashion ecosystem. Jul Parke, a PhD student at the University of Toronto, emphasizes that as this technology evolves, it is imperative to develop regulatory frameworks that safeguard the rights and compensations of workers in creative industries. The compensation models for models and the rights pertaining to their digital likeness will be crucial areas of focus, and some companies, including H&M, have recognised the need for transparent practices. H&M's models have reportedly retained the rights to their digital likeness, allowing them to dictate which campaigns they join—a positive step amidst ongoing concerns.

The implications of this trend are particularly significant given the environmental impact of fast fashion, which currently generates over 92 million tonnes of textile waste annually. The introduction of AI-generated models could further accelerate this trend, as brands may see a diminished incentive to invest in sustainable practices or real human talent. The cycle of overproduction and waste could be exacerbated if digital avatars replace the tactile human element of fashion marketing.

Industry experts advocate for heightened consumer awareness and behaviour to counteract these emerging challenges. One recommended approach is to embrace thrifting and the purchase of secondhand goods, which not only extend the life of garments but also help mitigate waste and reduce the demand for fast fashion. As consumers become more informed and selective about their purchases, they can collectively push back against exploitative practices in both physical and digital realms.

Ultimately, the arrival of digital twins in fashion is a poignant reminder of the delicate balance between innovation and ethics. While H&M's use of digital models aims to complement traditional models without fully replacing them, it undeniably heralds a future that challenges the conventions of the fashion industry. As this technology continues to unfold, the collective actions of consumers, alongside the establishment of robust regulatory frameworks, will play a pivotal role in shaping its trajectory.

### Reference Map

1. Core focus and details about H&M's digital twins.
2. Zalando's integration of AI in marketing.
3. H&M's collaboration and ethical considerations.
4. Concerns about the impact on models and rights.
5. H&M's approach to model rights and usage.
6. Ethical implications of AI in fashion.
7. Broader industry context and retail insights.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.thecooldown.com/green-business/digital-twin-ai-fashion-industry-hm/> - Please view link - unable to able to access data
2. <https://www.reuters.com/business/media-telecom/zalando-uses-ai-speed-up-marketing-campaigns-cut-costs-2025-05-07/> - European fashion retailer Zalando is increasingly integrating generative AI to accelerate content production for marketing campaigns, significantly reducing both time and costs. By utilizing AI to create imagery and digital twins of models, Zalando can more swiftly respond to fast-moving fashion trends popularized on social media. This technological shift has cut image production times from six to eight weeks down to three to four days, slashing associated costs by 90%. In the last quarter of the previous year, approximately 70% of Zalando's editorial images were AI-generated, showcasing trends like 'brat summer' and 'mob wife.' The AI-generated digital twins allow for consistent visual representation of models across campaigns and product pages without extensive photo shoots. This approach particularly benefits retailers with limited marketing budgets, compared to luxury brands. Despite concerns about AI replacing creative roles, Zalando’s VP Matthias Haase believes AI complements rather than replaces human creativity, encouraging photographers and creatives to adapt and collaborate with emerging tools. Zalando's move aligns with a broader industry trend, following similar AI usage by brands such as H&M.
3. <https://fashionunited.uk/news/fashion/h-m-to-create-twins-of-models-with-ai-the-possibilities-are-almost-endless/2025032880819> - H&M is integrating artificial intelligence (AI) into its marketing strategy by creating digital 'twins' of real-life models. These AI-generated clones will be used in select social media posts and campaigns, with permission from the models they duplicate. Thirty models, including Mathilda Gvarliani, have already given their consent. Jörgen Andersson, Chief Creative Officer of H&M, emphasized the company's commitment to exploring new creative ways to showcase fashion while staying true to its human-centric approach. The initiative has sparked both enthusiasm and criticism, highlighting the need for clear regulations and fair compensation in the evolving landscape of AI in the fashion industry.
4. <https://fashnfly.com/2025/03/hm-knows-its-ai-models-will-be-controversial/> - H&M is collaborating with technology partner Uncut to create digital 'twins' of real models for use in marketing campaigns and social media posts. The company views these AI-generated models as a complement to physical models, not a replacement. The initiative aims to address the growing demand for imagery in marketing campaigns, e-commerce, and social media feeds. Models will reportedly retain the rights to their digital likeness, allowing them to decide which campaigns they participate in. However, concerns have been raised about potential impacts on compensation and the future of work for models and other creative professionals.
5. <https://www.standard.co.uk/lifestyle/fashion/h-m-ai-digital-twin-model-b1219273.html> - H&M has revealed plans to use AI to create digital versions of 30 real-life models for its advertising materials. These AI-generated models will be used for marketing campaigns and social media posts, with models' consent. The company is collaborating with technology company Uncut to photograph the models from various angles and under different lighting conditions. Models will reportedly retain the rights to their digital likeness, allowing them to decide which campaigns they star in. A yet-to-be-decided compensation scheme will reportedly be structured like the current system, where models are paid for the usage rights of their images.
6. <https://timesofinnovation.com/retail-news/hm-knows-its-ai-models-will-be-controversial/> - H&M is venturing into the realm of AI-generated imagery by creating 'digital twins' of real models. This initiative is expected to stir up mixed reactions among the public, as it raises questions about the future of traditional modeling and the ethics of digital representation. While some see this as a groundbreaking innovation, others are concerned about the implications for the modeling industry and the rights of professional models. The company is collaborating with models and their agencies to ensure that their voices are heard and their interests are protected.
7. <https://feeds.bbci.co.uk/news/articles/c3vwg73xndeo> - Fashion retailer H&M is to use artificial intelligence (AI) to create digital 'twins' of 30 models. It says it will use the AI doppelgangers in some social media posts and marketing in the place of humans, if given permission by models. Despite H&M's claim it would not change its 'human-centric approach,' some fear the move could impact other models, photographers, and make-up artists. The Swedish fashion giant, which also operates Arket, Cos, Monki, & Other Stories, and Weekday, says it has more than 4,000 stores worldwide across 75 markets.