

The Future of Luxury Retail

**How emerging
technologies are
revolutionising
luxury retail**

with Matthew Drinkwater
Head of Innovation Agency,
London College of Fashion



verizon ✓
business

Technology is reshaping the world of luxury. As part of our Future of Luxury Retail series, we spoke to Matthew Drinkwater, a technology expert from the London College of Fashion. Here's his take on how the cutting edge of tech is advancing the luxury retail experience.

The world of luxury fashion is always changing. New seasons bring new styles, and fresh looks are never far away.

Matthew Drinkwater, who Wired says¹ is “bringing Hollywood-style technology to high street fashion,” knows this better than most.

Matthew is the head of the Fashion Innovation Agency at the London College of Fashion. He leads a team with an open invitation: to explore any emerging technology and its impact on the fashion and retail industries.

“There’s been an explosion of interest in what technology can do for fashion and retail,” says Matthew. “The ways in which consumers can engage with brands is changing. Technology is affecting every part of the industry. And so, it’s essential that brands begin to understand how to implement that technology and what they’re doing.”

Before his interests in technology and fashion converged, some of Matthew’s earlier work included creating the world’s first digital skirt for Nokia, developing trousers that wirelessly charge mobile devices for Microsoft, and designing a 3D-printed bionic arm for Star Wars: The Force Awakens. He says that the union between technology and chic was inevitable – in his own career and for both industries at large.

¹Burgess, M. (2017, October 24). How Hollywood technology is changing fashion retail. WIRED UK. <https://www.wired.co.uk/article/matthew-drinkwater-london-college-of-fashion>

²Beauloye, F. E. (2023, January 11). The Future of Luxury: 7 Trends to Stay Ahead in 2023. Luxe Digital. <https://luxedigital.com/business/digital-luxury-trends/luxury-future-trends/>

“I think the fashion industry has always been an early adopter of technology and I think there is a sense of innovation and experimentation in the industry.”

The blurring lines between the virtual and real worlds.

One of the more obvious ways that luxury brands have adapted to technology is by selling clothes online. Now, for the first time, these digital sales in luxury retail² are poised to overtake those made in-store.

But the distinction between in-store and online is also getting fuzzier.

According to a report from Google,³ “in a hyper-connected world, the boundary between online and offline luxury shopping experiences is becoming blurred, with consumers moving away from a linear path to purchase.” Put simply, the experience in-store is becoming more digital, and the digital experience is becoming more physical – or at least more real.



³Riili, V., & Bezze, L. (2023, January 26). 4 trends that will define the future of luxury and fashion. Think With Google. <https://www.thinkwithgoogle.com/intl/en-emea/consumer-insights/consumer-journey/trends-fashion-luxury/>

We might see something we like on Instagram. Then we'll check out that garment on the company's website – or even its in-house app. With some retailers, like Zara, we can add items to our digital shopping basket and then check them out in-store, in real life, where we know the item is in stock.

As consumers today, we want to explore every big purchase from different angles. This kind of customer journey is often called “channel agnostic.” There is an opportunity for technology to add value in this shopping context – when we're looking at products or browsing or inspiration, which can happen in both digital and physical spaces.

On the one hand, retail storefronts can become more immersive with better digital displays, and by better syncing up our preferences online with our experiences in-store (the hyper-realistic wave⁴ rendered on an LED façade of the SMTown COEX building in Seoul is one example). On the other hand, online shopping can be enhanced by creating more realistic renderings of the products we're considering.

More realistic 3D renderings sell more clothes.

With the aim of creating new ways to engage with products and the brands that make them, Matthew and his team have been experimenting with everything from photogrammetry (the process of building 3D models from 2D images) to augmented reality.

For seemingly every digital advance, luxury fashion finds a use. Blockchain, for example, the distributed ledger behind NFTs and cryptocurrency, is now used to assure customers of where products come from.

According to Vogue Business,⁵ Seattle-based Fuchsia uses a blockchain platform called Provenance to share details about the workers in Pakistan who hand-make the brand's shoes. Provenance provides similar services to knitwear designer Martine Jarlgaard, who uses smart labels to trace garment timelines back to the alpaca farm, and a vegan accessories brand called Mashu, which provides details on each bag's origins in Greece with QR tags.

So blockchain can give retailers and shoppers oversight of the supply chain and provenance, abating sustainability concerns. But there are a few other reasons why luxury retailers are looking to blockchain platforms. One is speed. Another is security. Moreover, the authenticity of the item, when backed by the tamper-proof blockchain, is unassailable.

“Adding digital to physical and physical to digital is key,” according to Vogue. The same piece reported that “two-thirds of consumers expect personalisation and real time assistance in their journey.” Technology makes it possible to scale both.

Nast, C. (2021, November 12). Personalisation, the metaverse and NFTs: The technology fuelling fashion's next phase. Vogue Business <https://www.voguebusiness.com/technology/personalisation-the-metaverse-and-nfts-the-technology-fuelling-fashion-next-phase#:~:text=Adding%20digital%20to%20physical%20and,senior%20director%20of%20product%20innovation>.



⁴Tsui, K. (2022, May 22). Giant 3D wave sweeps over Seoul's Gangnam District. cnn.com. Retrieved February 14, 2024, from <https://edition.cnn.com/style/article/3d-wave-in-seoul/>

⁵McDowell, M. (2019, May 14). 6 ways blockchain is changing luxury. Vogue Business. <https://www.voguebusiness.com/technology/6-ways-blockchain-changing-luxury>

⁶Mitzner, D. (2022b, August 17). Luxury brands discover blockchain. Forbes. <https://www.forbes.com/sites/dennismitzner/2022/08/17/luxury-brands-discover-blockchain/>

⁷Feber, D., Granskog, A., Lingqvist, O., & Nordigården, D. (2020, October 21). Sustainability in packaging: Inside the minds of US consumers. McKinsey & Company. <https://www.mckinsey.com/industries/packaging-and-paper/our-insights/sustainability-in-packaging-inside-the-minds-of-us-consumers>

⁸Hull, E., Hughes, M. CEO Climate Leadership & Sustainability Study | Accenture. (n.d.). https://www.accenture.com/us-en/insights/sustainability/ungc?c=acn_glb_unitednations%28mediarelations_12469464&n=mrl_1021

“Our skills sit in three core areas. 3D design, 3D animation, and game engines. Those are the key areas for us to begin to build new experiences.”

– Matthew Drinkwater

Why mock up a product in three digital dimensions? Matthew says that there are two main reasons. One reason is to show the product in rich detail. The second is its potential as magic mirrors – which use augmented reality (AR) to overlay clothes onto the customer’s reflection, providing a virtual try-on.

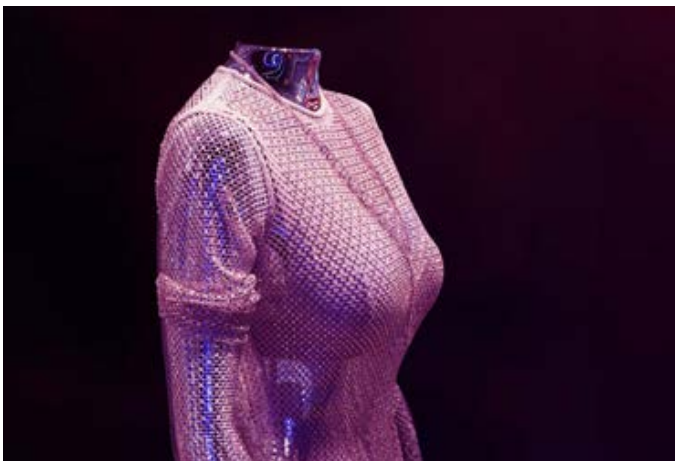
According to Matthew, both applications of 3D technology are difficult to achieve.

“One of the challenges that we experience when we’re trying to model clothes that would sit on a person in a digital experience is getting the material to move as it should do. We call that cloth simulation, rendering a garment in real time to replicate how that garment would move in the real world is hugely challenging, computationally very heavy, and the amount of data that has to be transferred, particularly for real time experiences, is very large.”

There is good reason to go to all this trouble. The 3D renderings his team makes are powerful selling tools.

“The more work that we do in augmented reality and the research that we are doing behind it would suggest the click through rates on 3D models are higher. Anywhere between 20 to 40% higher, and conversion rates are higher. And return rates are lower.”

Obviously, luxury retailers need their products to look top-quality in every setting, including virtual ones. But Matthew says that these sorts of product renderings are only the beginning.



“It’s becoming simply a must have for retailers to begin to create in 3D and give their consumers much more in-depth experiences around the content that they’re creating.”

The metaverse and virtual spaces.

The metaverse is a catch-all term for virtual spaces. While it remains in nascent form, its potential is huge. But Matthew has seen it coming for a long time.

“In 2015, we were approached by Industrial Light Magic and Lucasfilm to experiment with a new technology that they were developing called Life X.”

The technology Matthew worked on relies on photogrammetry, the science of obtaining measurements from photographs and images. These measurements can be used to create startlingly realistic 3D renderings, such as the space aliens in Hollywood blockbusters.

The same kind of 3D technology has found a home in luxury fashion.

“We were able to deploy that technology during London Fashion Week in 2018,” he says. “We were able to deliver real time visual effects onto a physical location. So visitors to the presentation at London Fashion Week were able to see 2 hours’ worth of real time visual effects coming to life around them in that physical location.”

“It was kind of wild,” he adds.

According to Matthew the ultimate potential of the metaverse, and of virtual reality in general, is storytelling, not selling.

The biggest barrier to the metaverse is that it's not simple now to lead into a virtual space. But VR headsets and augmented reality glasses are both developing rapidly and are likely to become fixtures of daily life in some form or another.

Customers want experiences – and, increasingly, products – to feel customised for them. For luxury retailers, scaling bespoke options and white-glove treatment has never before been possible. But the potential is now tantalisingly close.

This shift in consumer expectations demands new attention from retailers.

“These are things that could deliver a really magical experience,” says Matthew. “Like when I go to my local coffee shop, and they remember who I am and they remember what I like, that part makes me feel really good.”

According to Matthew, every experience in-store can feel as matched to our preferences as online shopping.

“Every store at scale will be able to do that for their consumers, returning kind of a magical experience for consumers when they step into each and every store is what is going to be possible.”

A roadmap for retailers.

There are two key things luxury retailers should start thinking about before delving into digital technology.

- **How can advantages to shopping online be brought in-store?**

There are pros and cons to shopping IRL and on the web. Increasingly, we can level this playfield with technology. AR is getting better at giving us a realistic picture of the clothes we're considering when we're browsing from home. Already, you can see this tech come to life in select stores, as magic mirrors. But we can also begin to capture data about our customers' behaviours in-store, as you would online, and keep a record of each person's preferences, the garments they've tried on, etc.

- **How can digital technology address pain points?**

When you're shopping in-store and an item is out of stock, with AR-powered magic mirrors, you can still try it on. The more accurate these renderings are, the better able they are at approximating the size of the garment on the customer's frame, and even the gentle flow or shimmer of the fabric.

Ultimately, the key to powering all these digital tools is cutting-edge connectivity. To meet the ever-increasing needs of modern shoppers, you need technology that empowers creativity and agility – and that works as a tool for meeting the needs of consumers.



Learn more about how Verizon can help you explore and adopt the technology that's reinventing retail at [verizon.com/gb/retail](https://www.verizon.com/gb/retail)

