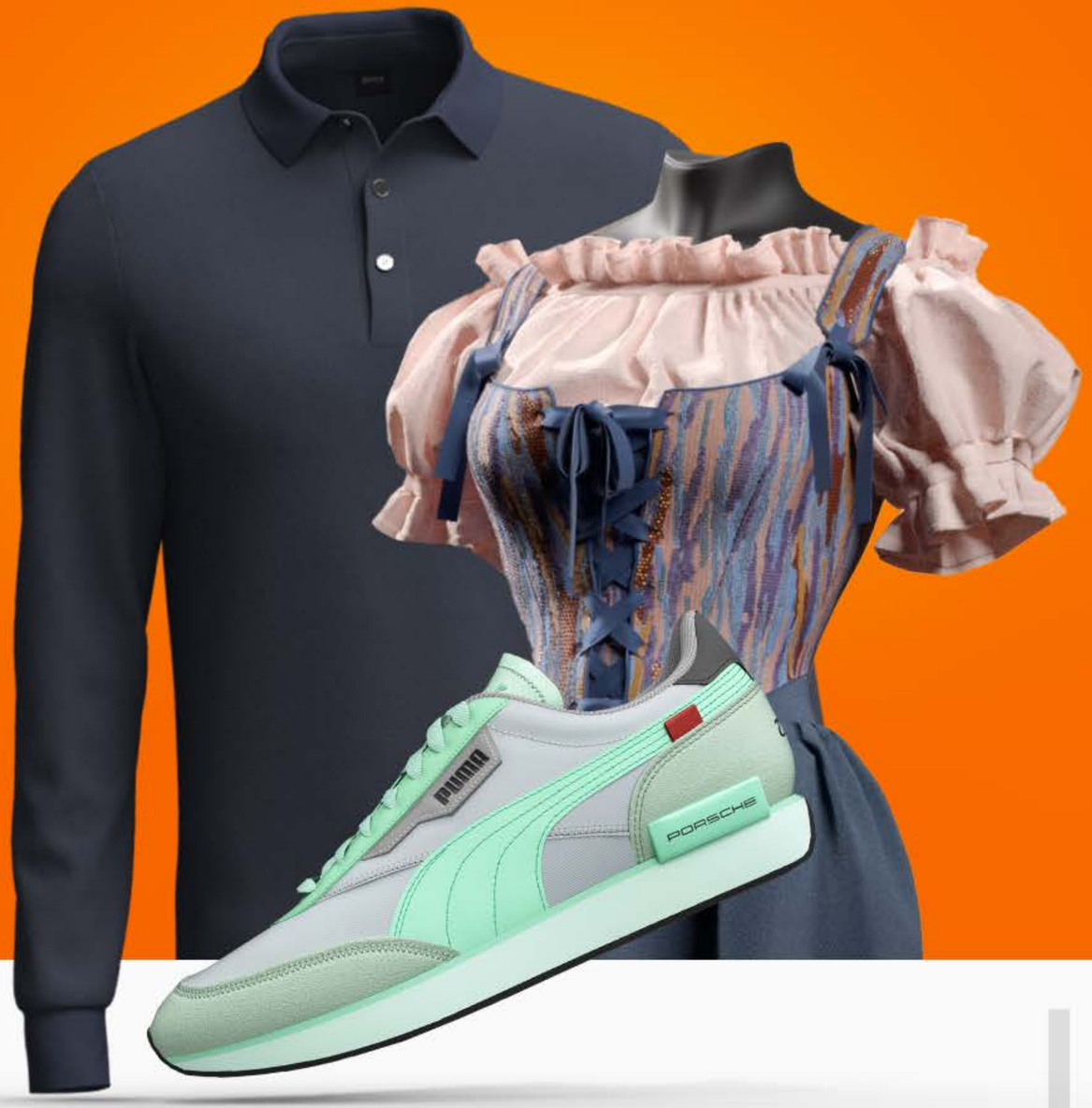
3D TRENDS REPORT 2023

FASHION IN FOCUS



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Adobe 3D Trends 2023

INTRODUCTION

Adobe 3D Trends Report 2023

Welcome to this mini report on the impact of 3D design tools on the fashion industry. As technology continues to advance, 3D has become an increasingly valuable design tool for businesses looking to stand out in their market, and the fashion industry is now embracing this opportunity like no other.

This snapshot examines the current 3D trends in fashion and the sector's response. The fashion industry's adoption of 3D is quickly becoming widespread across the industry and redefining the phrase "wardrobe refresh."

Credit: INDG

I think honestly, what is going to happen over the next five years will be bigger than any of us who have worked in the industry have seen over the last 20.

Matthew Drinkwater
Head of Agency, London College of Fashion Innovation Agency (FIA)

01 FASHION'S 3D MAKEOVER

As designers begin to visualise their ideas more accurately, there is one industry that is particularly embracing this enhanced ability: fashion. Over the past year, the fashion industry has seen a rapid adoption of 3D. While this increased use begins with product design, it flows through into marketing and retail, driving benefit across the entire value chain.

The impact, and potential influence on the wider design community, has not gone unnoticed. According to our survey, 35% see the fashion industry as the field that could benefit the most from the use of 3D in the future, and 42% of respondents believe that 3D fashion will play a major role in the future of 3D design. The benefits for the fashion industry of using 3D within product design are both commercial and creative. Artistically, creativity can thrive.

"Designers working with 3D have much more creative freedom and the process of creating new products is much easier. They can very quickly experiment with different fabrics, textures and colours, according to the requirements. In the past, you had to modify the physical garment to apply some of these changes, which took a lot of time. But now you can play around much faster."

Alongside this creative freedom, there are significant advantages for a business commercially. The easy experimentation, described above by Jan Philipp Wintjes at Hugo Boss, also indicates both time and cost-saving benefits. If an organisation wants to visualise different versions of a product, they can do so without having to manufacture prototype after prototype: "3D as part of our design process enables speed and efficiency as well as creative freedom."

In an industry so reliant on recognising, pre-empting, and responding to changing consumer trends, the benefits outlined demonstrate the importance of 3D to the fashion industry.

Credit: INDG

Brands can make better decisions faster with 3D samples. You can look at products that don't exist yet in a realistic way. So, you're saving time as well as physical waste of producing samples.

Bastiaan Geluk
Head of Digital Fashion
INDG, The Netherlands

Product communications and marketing also benefit significantly. Whether it's the release of a single garment, AI Fashion shows, or the launch of an entire digital collection, the fashion industry is finding new ways to engage and connect with its consumers. At the Fashion Innovation Agency, they describe the impact 3D design technology is having on the concept of fashion shows:

"There's almost limitless creativity for designers. Where do you want your collection to live? How do you want to portray it? Fashion has always been about storytelling. And now any story can be told in a way which feels immersive, compelling, exciting and can be constantly updated and changed. These are things which just weren't possible before with a purely physical collection or a physical show."

Similarly, Bastiaan describes using 3D images instead of the physical product within the wider marketing journey: "Normally you would have to wait until the product arrives at the warehouse and then you can make your content, so maybe only a month or two before product release, you've got your pictures. Whereas, if you are starting with 3D, the product exists for content early, and you get your visual content much earlier." One 3D asset can perform multiple roles, "the same asset can enable all other content needs – think of the marketing content needed out there, social media, campaign content, newsletters, ads, banners etc."

In essence, the use of 3D technology enables rapid and creative product design, resulting in greater cost-effectiveness and reduced wastage (for more information, please read on). This facilitates efficient communication of the designs across various channels beyond the manufacturing process, satisfying both artistic and commercial aspects within organisations.

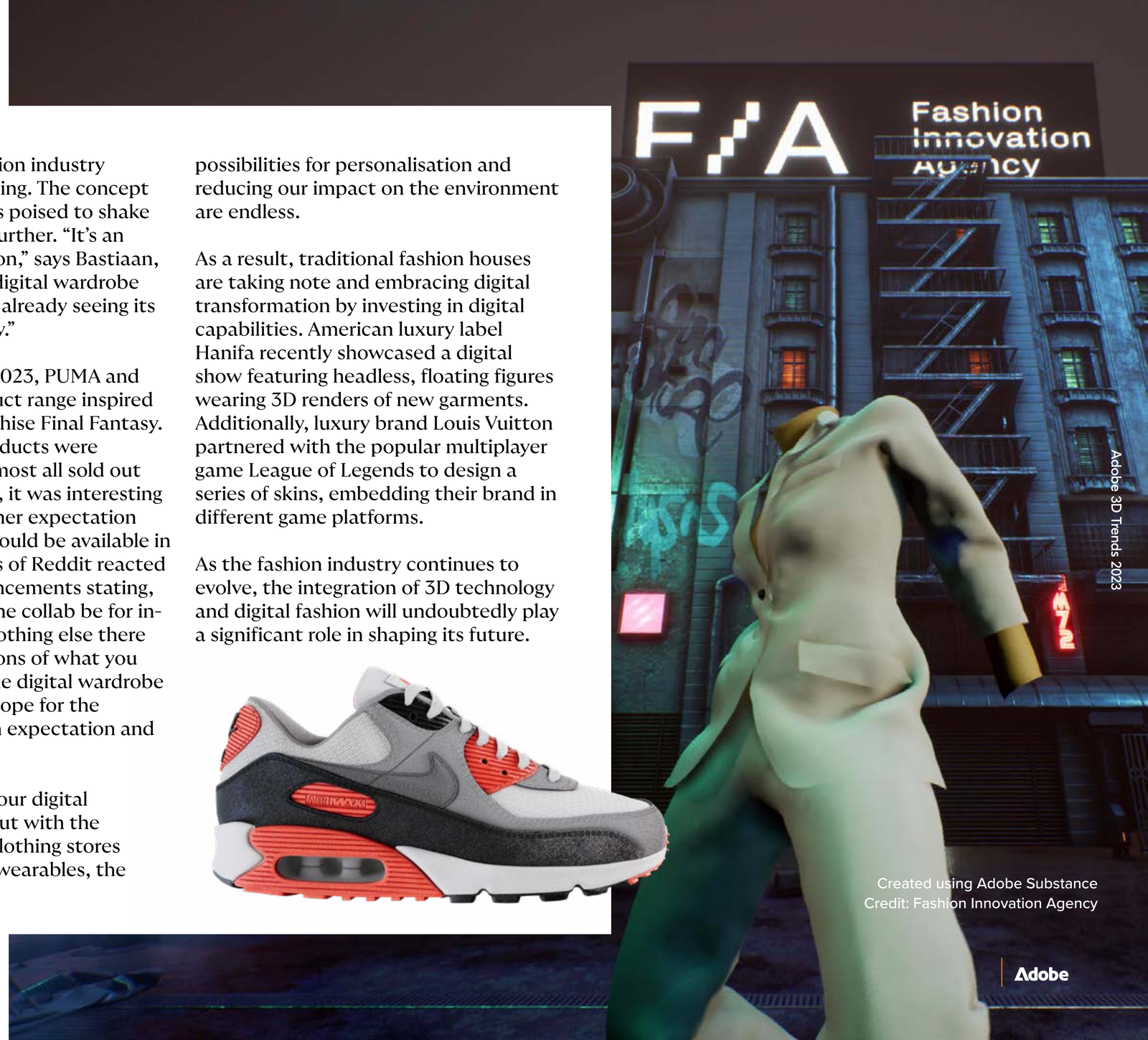
With AR and VR technology poised to shake up the industry further, 3D integration in the fashion industry shows no signs of slowing. The concept of a digital wardrobe is poised to shake up the industry even further. "It's an exciting time for fashion," says Bastiaan, "the possibilities of a digital wardrobe are endless, and we're already seeing its impact on the industry."

As recently as March 2023, PUMA and INDG released a product range inspired by iconic gaming franchise Final Fantasy. While the physical products were extremely popular (almost all sold out at the time of writing), it was interesting to observe the consumer expectation that these products would be available in digital form also. Users of Reddit reacted to the product announcements stating, "I would rather have the collab be for in-game shoes," and "if nothing else there should be digital versions of what you can buy in real life." The digital wardrobe is not a hypothetical hope for the future - it is already an expectation and want right now.

The idea of outfitting our digital personas is not new, but with the emergence of virtual clothing stores and the rise of digital wearables, the possibilities for personalisation and reducing our impact on the environment are endless.

As a result, traditional fashion houses are taking note and embracing digital transformation by investing in digital capabilities. American luxury label Hanifa recently showcased a digital show featuring headless, floating figures wearing 3D renders of new garments. Additionally, luxury brand Louis Vuitton partnered with the popular multiplayer game League of Legends to design a series of skins, embedding their brand in different game platforms.

As the fashion industry continues to evolve, the integration of 3D technology and digital fashion will undoubtedly play a significant role in shaping its future.



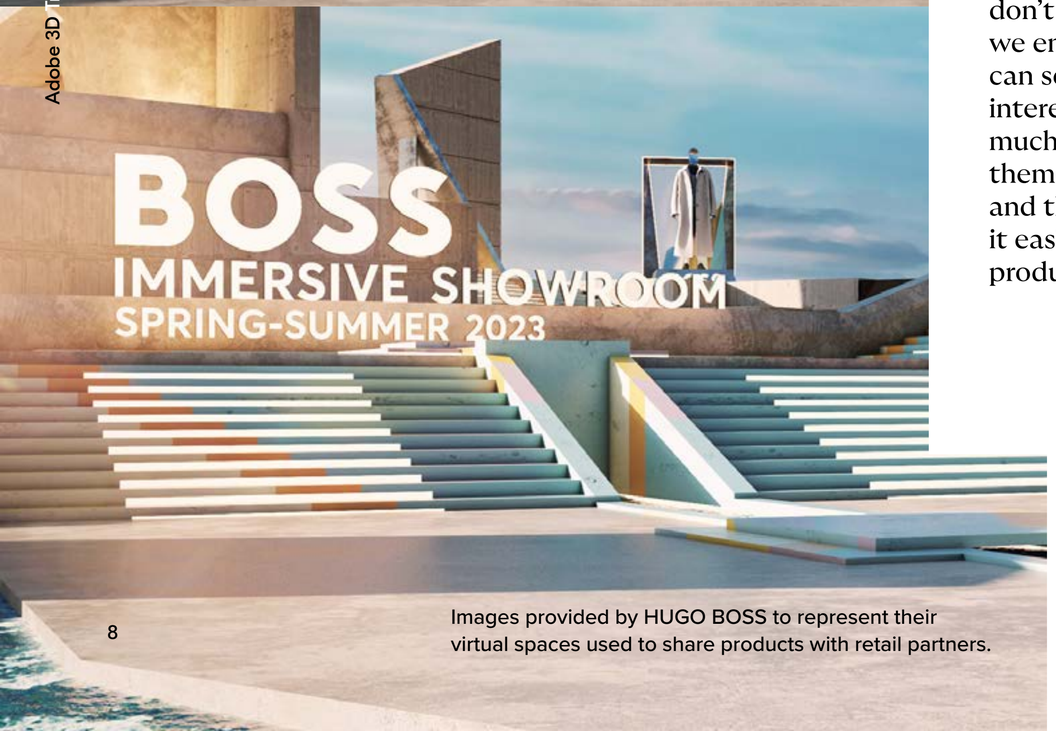
Created using Adobe Substance
Credit: Fashion Innovation Agency

WHY NOW?

With advancements in software, designers are now able to use 3D to achieve levels of realism that were once unattainable. Replicating reality within design has already been widely adopted in the architecture, engineering, and automotive industries where 3D models have provided accurate representations of buildings, structures, and cars before assembly. However, over the past year, designers and businesses across the board have realised that these same tools can be used to create lifelike and detailed prototypes and final versions of their products.

For a long time, there was resistance to 3D renders being equivalent to images taken of the physical product. Those days are no longer acceptable; no one should be thinking it doesn't look the same. It looks better in most cases.

Bastiaan Geluk
Head of Digital Fashion, INDG,
The Netherlands



Images provided by HUGO BOSS to represent their virtual spaces used to share products with retail partners.

02 A NEW FASHION COLLAB: FASHION X AR X RETAIL

Brands like Hugo Boss, Tommy Hilfiger and Nike are using AR in their physical stores to enable virtual try-on experiences. Hugo Boss' Jan Philipp describes the use and benefit: "For example, we find that some people don't like to try on trousers in-store. So, if we enable virtual try-ons in-store, customers can see how they look in the pieces they're interested in, and the whole process becomes much simpler for them. They can see themselves in the garments they like most and then try on only those. It also makes it easier for customers to mix and match products more effortlessly."

Looking beyond the use of AR, and further into the future, Bastiaan envisions customers visiting virtual shops and experiencing products in-digital-situ: "They can be transported to a winter landscape to see how outdoor clothing performs in the snow, or to a beach to test out swimwear. This level of immersion can provide customers with a unique and personalised experience that encourages them to purchase."

03 FASHION'S DIGITAL IMPACT ON THE PHYSICAL WORLD

Sustainability is no longer just a buzzword - it's an essential part of modern business practices. And with the evolution and adoption of 3D design technology, companies can now take significant strides toward reducing waste and carbon emissions associated with traditional manufacturing processes. By creating products on demand, businesses can minimise waste, reduce inventories, and save valuable time and resources.

By using virtual product samples, businesses can make faster decisions avoiding the physical waste that results from creating physical samples. In the case of Hugo Boss, Jan Philipp says, "through our digital showrooms, we have reduced the use and transportation of physical samples by over 70%. This has helped us cut down waste and save energy." This helps to visualise product design mistakes and then correct them before producing anything physically, generating greater efficiency and sustainability.

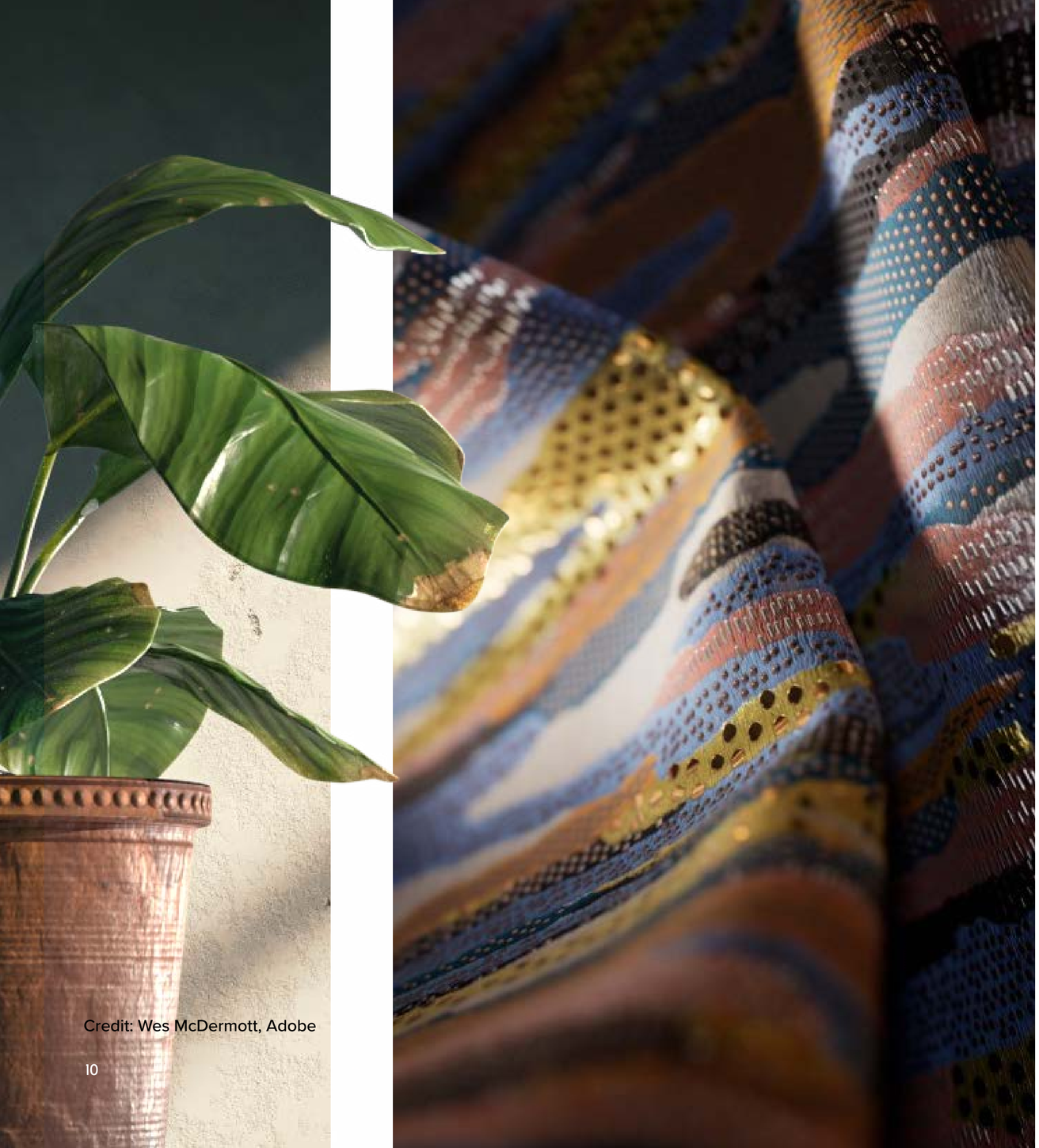
Moreover, there's also the impact 3D design has on the consumer's retail and returns experience, noted at Hugo Boss, by Jan Philipp: "The more consumers explore and shop online, the less they need to return. This is a win-win situation for us, as a business."

With some estimates as high as 30% of all products bought online returned, any reductions of this practice can surely only be a good thing for all of us.

If not all returns, then perhaps at least the digital wardrobe will eliminate the need to buy clothes just to take a picture wearing them on social media (a behaviour which could easily be reduced, and from a survey in 2018, one practised by one in ten shoppers surveyed on behalf of Barclaycard).

With 3D design, the future of sustainable product design within the fashion industry, marketing and consumption is bright. It's not just a trend, but a genuine and dynamic shift towards a more sustainable future. Fashion brands can now reduce waste and carbon emissions while creating products that meet the needs of customers and the planet.

Credit: Wes McDermott, Adobe



Credit: Wes McDermott, Adobe

3D design for prototyping is something that should be embedded immediately for every fashion business, and we need everybody to be working in 3D design to begin to affect really significant sustainability change.

Matthew Drinkwater and Costas Kazantzis
Head of Agency and Lead Creative Technologist,
Fashion Innovation Agency, London College of Fashion, UK

04 NEW DIGITAL PATHWAYS INTO FASHION

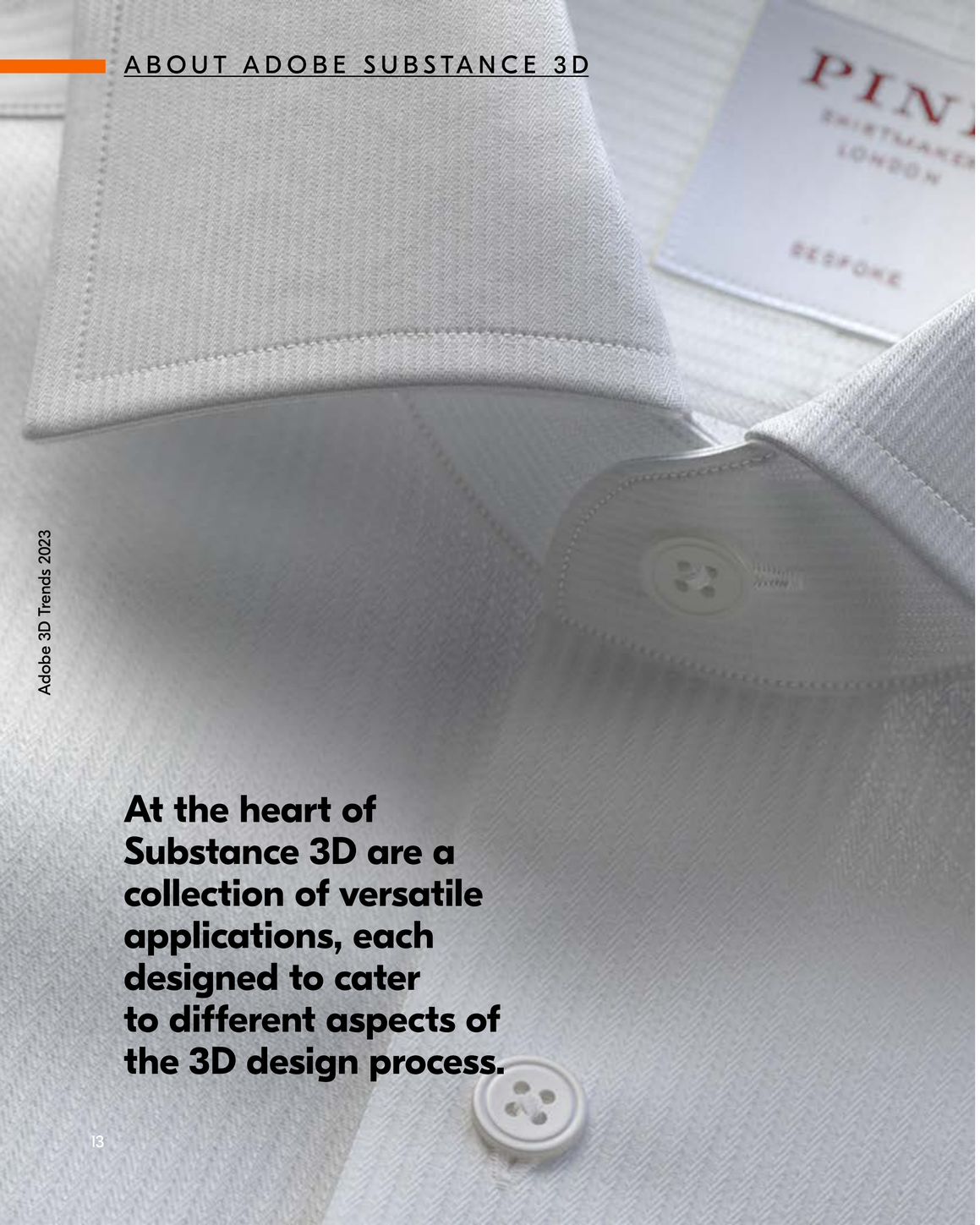
A further impact of the increased use of the fashion industry of 3D in design is the opportunities it is creating for a diverse range of designers to break through in the industry. “Access to the fashion industry has been based on a very traditional way of designing things and people were very often relying on hand sketching skills. But now, 3D means that more people who have the ideas can visualise them through 3D without maybe having hand sketching abilities. So that’s super cool. I think it allows for a much broader group of people or young designers to visualise things that they couldn’t before.” notes Bastiaan. This sentiment is echoed by the London College of Fashion, which sees the rise of 3D design to make the industry more accessible and inclusive. “The fashion industry itself has always had a perception of being a difficult industry to get into and hasn’t always been accessible, but the tools are there now. Genuinely, what’s exciting about that is it begins to suggest that we will see non-traditional fashion businesses being born. I think we’ve known that for some time that the path into the industry is going to change.”

Credit: Anna Natter, Adobe

ABOUT ADOBE SUBSTANCE 3D

Substance 3D Collection is a comprehensive suite of interconnected 3D material authoring, texturing, modeling and rendering tools designed to empower creativity and streamline visualisation workflows in 3D design.

It provides a seamless creative experience with a range of task-specific 3D tools so that creative professionals in design can present their work in realistic, real-world context, maintain material consistency throughout creative pipelines, and enjoy a high degree of control over the creation and editing of content created with 3D tools. Substance 3D tools integrate seamlessly with Adobe Creative Cloud applications, the most common 3D software, and real-time rendering engines, enabling efficient 3D workflows and amazing content.



At the heart of Substance 3D are a collection of versatile applications, each designed to cater to different aspects of the 3D design process.

Substance 3D Sampler

Substance 3D Sampler is a versatile and powerful scanning tool that streamlines the process of converting real-life images into photorealistic materials, 3D objects, and HDR environments. Sampler simplifies the creation of high-quality 3D assets for use across various 3D applications. Featuring seamless integration within the Substance 3D Collection and access to an extensive library of professionally crafted 3D assets, users can effortlessly combine and fine-tune materials using parametric filters, enabling a smooth and efficient 3D workflow.

Substance 3D Painter

Substance 3D Painter offers a comprehensive layer-based painting system that allows users to work directly on 3D models, bringing their creations to life with vivid textures and intricate details. With an array of tools, including Smart Materials, Smart Masks, and generators that automatically adapt to the mesh, users can achieve stunning results while painting with regular, dynamic, or Photoshop brushes, as well as tools and physical particles. It's easy to see why Painter is the go-to choice for texturing 3D models.

Substance 3D Stager

Substance 3D Stager is a state-of-the-art virtual rendering studio designed to create breathtaking visualisations by assembling 3D scenes, arranging assets, applying materials, lights, and cameras. With access to thousands of customisable models, lights, and materials from Substance 3D Assets, users can easily integrate content from the entire Substance family of apps into Stager to craft the perfect composition for product visualisations, marketing imagery, and more.

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Substance 3D Asset Library

Substance 3D Assets is a comprehensive library of customisable 3D models, lights, and materials, all ready-to-use and included as part of the Substance 3D Collection. Substance 3D Assets are designed to accelerate your 3D project creation process and help deliver stunning photorealistic results. Created by material and modeling specialists and world-class 3D artists, this collection of professional content ensures amazing results and seamless integration with various 3D workflows from product design to games and VFX, to marketing and retail creative.

Substance 3D Designer

Substance 3D Designer is a powerful tool that unlocks near infinite 3D creative possibilities through node-based material design, enabling users to create seamless materials, patterns, image filters, and environment lights. Designed for technical artists seeking to craft complex stylised and photorealistic procedural materials, Designer boasts an extensive node library and seamless integration with other Substance 3D tools.

Substance 3D Modeler

Substance 3D Modeler is an innovative 3D design and sculpting app that streamlines the creation of organic and hard surface forms, as well as complex scenes, without the burden of maintaining “good topology”. It boasts seamless integration with other Substance 3D tools, both VR and desktop interfaces, and a comprehensive set of sculpting tools. It enables users to import and adapt meshes, assemble complex scenes, and experience creating in an immersive VR environment.

So, whether you’re in packaging design, product design, fashion, gaming, visual effects, architecture, or beyond, Substance 3D equips you with the tools needed to create realistic, breath-taking 3D content. By leveraging Substance 3D, you can streamline your workflow, saving time in prototyping and photography shoots, and you can experiment with multiple versions and bring your products to market faster.

Unleash your creative potential and immerse yourself and your business in the limitless possibilities of Adobe Substance 3D. With its intuitive workflows, comprehensive toolset, and seamless integration with Adobe Creative Cloud, Substance 3D is the ultimate 3D solution for any business looking to get ahead of the curve.

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INFO

FOR MORE INFORMATION

To discover more about Substance 3D, please visit our website:

adobe.com/uk/creativecloud

Here you'll find further information about Substance 3D, as well as industry-leading resources and materials about creativity and design in 3D.

Or you can get in touch with the Substance 3D team.

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