

SUSTAINNOVATION

FALL '21

THE GAME-CHANGING ROADMAP
TO SAVING BOTH YOUR BOTTOM
LINE AND THE PLANET



WELCOME

Our world has changed in dramatic and unexpected ways over the past couple of years, and these changes have illuminated what heroism looks like. Admiring gazes shifted from celebrities and the super-rich to healthcare workers and baggers at our local grocery stores. Forced into solitude, we were faced with decisions about what was truly meaningful, what we truly valued.

What sprung forth was a renaissance of devotion to the outdoors and all the wonders and magic of nature. The retail stratosphere, and the garment industry, in particular, have been wrestling with the role they play in climate change for decades, with occasional steps forward.

This particular moment in time has been synergistic. Late-adopters were forced to make the move to increased digital shopping. Shoppers were recommitted to being better stewards of our planet. Our planet produced miracles before our very eyes as human beings retreated to their homes, leaving *Mother Nature* to reign for a short time. We saw what was possible, we reimagined what seemed impossible, and we got creative and inspired.



So, what is “sustainnovation”? While those of us on the technology side of commerce have little control over the chemicals that plague the production of garments, there are three important ways that we can make lasting change:

- Millennials live a large part of their lives online. Virtual fashion / NFTs allow for that very Instagrammable-shot minus the need to purchase a physical item that will end up in a landfill. Fewer clothes = fewer chemicals, and less waste.
- Immersive Commerce (I-Commerce™) must continue to advance using AR/VR. These tools have been proven to reduce returns by as much as 40%, which can account for a massive abatement in fossil fuels.
- Robust data analytics should be deployed to drastically reduce overproduction of fast-fashion goods, while also promoting a more focused (and profitable) CX.

As the path forward unfolds in front of you, as you script and cast the future, what role will your brand play? There is always room for one more hero.

- [Gretchen Teasdale](#)

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The Spring of 2020 was a watershed moment for the fashion industry. A \$2.5 trillion market ground to a halt. Factories closed, and stores shuttered.

The coveted seasonal fashion shows were cancelled. The buying public focused on protecting themselves from the COVID-19 pandemic.

Overnight, the world shut down, and fashion became a distant notion. The luxury world used this time to self-examine and look for sustainable alternatives.

The industry became more conscientious of their environmental impact. Fashion also fostered a more sustainable system.

“This industry is about emotional attachment, loyalty, and excitement for brands”. The future of brand loyalty is dependent upon sustainable attributes. The industry should enable or build these attributes with their consumers.

The use of natural and manufactured fibers can take a great toll on the environment and cause a great deal of pollution. Companies will need to consider replacing in-person fashion with digital fashion.

This is a bold and decisive move forward toward Immersive Commerce, or what is known as I-Commerce™. I-Commerce™ presents a new era of virtual shopping experiences and is limited only by a brand's imagination.

Immersive experiences enable aspirational, emotional moments to live in a virtual space. The implementation of I-Commerce™ is beneficial to all companies competing for not just customer retention, but for future customers.

Forty-seven percent of consumers say that I-Commerce™ makes them feel more connected to products. Immersive experiences are a yellow brick road to meaningful CX.



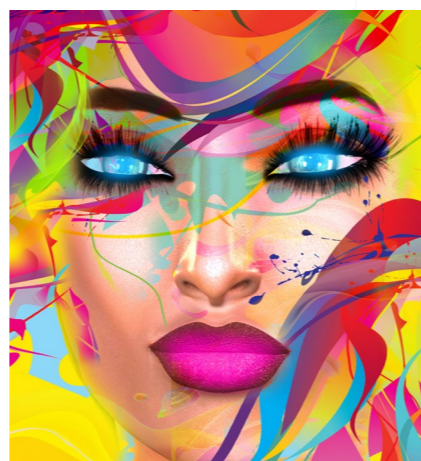
I-COMMERCE™

TechSparq research and industry surveys show that 67% of consumers consider sustainable materials a key factor. Sustainability is no longer just a catch phrase - enlightened biodiversity can reverse the damage done by the fashion industry.

Biodiversity can also create a greener future, and is a pathway to symbiotic existence, environmental stewardship, and profitability. Due to the pandemic, the use of the Internet as an advertising platform has grown exponentially.

Immersive technology will have the quickest impact on sustainability in the fashion industry. This technology can cut the need for travel, wasteful in-person events, and all the resources that surround them.

PAYING



THE PIPER

THE APPAREL INDUSTRY
ACCOUNTS FOR 10% OF
GLOBAL CARBON EMISSIONS

THE COMBINED CHEMICAL FOOTPRINT OF THE FASHION INDUSTRY IS DETRIMENTAL TO THE ENVIRONMENT

The fabrics that the fashion industry currently use are a problem for the future of our planet. Cotton is the natural fiber most used in the creation of our clothing.

Cotton only grows on 2.4% of crop land but uses 22.5% of the insecticides worldwide. In addition, cotton is a water-intensive crop that requires 713 gallons of water to create a single t-shirt. Man-Made Cellulose Fibers (MMCFs) are wood-derived cellulose fibers.



Each year 150 million trees are cut down to create MMCFs. Seventy percent come from tree plantations, and thirty percent come from endangered and old-growth forests.

Water and soil pollution from plantation forests and during pulp processing drives habitat loss and endangers native species.

Twenty-five percent of industrial water pollution comes from textile dyeing and treatment. According to the EU, there are more than 1,900 chemicals used in clothing production.

For the latest on COP26 and its impact on the fashion industry, [Business of Fashion's coverage](#) is a must-read.

Approximately 85% of all textiles end up in landfills via consumer and production waste. This amounts to more than \$100 billion of global material loss each year.

REVOLUTIONARY, NATURALLY

BLURRING THE LINES BETWEEN PHYSICAL AND
DIGITAL MEANS KISSING BOUNDARIES GOODBYE



Digital fashion has created an opportunity for millions of passionate creators across the globe to showcase their brilliance. This new era of fashion is sustainable, digital, and is critical to the evolution of the metaverse.

Digital garments are created in professional 3D applications. The best designers understand pattern making and material selection. The blending of physical knowledge with digital skills creates an opportunity to show how a garment will look, how it will “feel”, how it will move/stretch, and how it will fit.

Typically, designers spend hundreds of hours sketching, sewing, and pinning garments onto un-naturally perfect mannequins. Digital fashion drastically reduces the time spent in physical creation by moving the creation phase to the digital realm.

The impact of this shift cannot be overstated when one considers the amount of physical waste generated during the garment designing and crafting phase.

[The carbon footprint of producing a digital garment is 95% lower than that of a standard physical garment.](#)

The EU classifies 165 chemicals used in garment production as hazardous to human health or the environment. The average laundry load releases 700,000 fibers of microplastics.

Half a million tons of microfibers, a type of microplastic, end up in oceans every year. The washing of synthetic textiles produces 35% of these microplastics.

Microplastics end up in the ocean and their toxic chemicals poison marine wildlife. The international garment

industry causes at least 4% of global greenhouse-gas (GHG) emissions.

This is more than the combined carbon output of France, Germany, and the United Kingdom. The fashion industry must invest in large carbon reduction measures, which can be achieved in any number of non-traditional methods.

The current direction can reduce industry wide emission levels, with predictions at twice that of the Paris Agreement's 2030 target.

190,000 TONS OF TEXTILE
MICROPLASTIC FIBERS END
UP IN OCEANS EACH YEAR

The fashion industry faces the huge challenge of reinventing itself and needs to define new business models, decouple volume growth, and create value growth.

1 pair jeans = 8,000 gallons water

Dr. Rima Trofimovaite, who aids companies in sustainability efforts, put it this way: "Without immediate action, the fashion industry will fail to meet the global targets set in the Paris Agreement, limiting global warming to 1.5 °C."



Money Talks,
Wealth Whispers



Luxury and fashion must show a concerted effort toward sustainability goals and your ethical score is a way to show proof.

- **DEDRICK BOYD**

TURN ON WHAT'S **NEXT™**

*Consumers have moved to using **Quiet Luxury** and **Sustainability** to signal their wealth and status. So, sustainability is no longer a nice-to-have. It's a must-have.*





SUSTAINNOVATION

Non-fungible tokens, or NFTs, are not new to technology, but are only now beginning to gain mainstream attention. If BitCoin and the like are digital currencies, NFTs can be thought of as digital goods.

A philosophical debate simmers in the art world as NFTs sell for millions of dollars, despite the ability for anyone with internet access to right-click and save a seemingly-identical image on their device of choice.

THE UNREAL REAL



Take a cue from Noah Davis of Christie's auction house, who recently facilitated the auction of a digital work by Beeple, which sold for \$69M: "I knew this was going to be extremely important. It was just so monumental and indicative of what NFTs can do."

The question on the minds of many technology-forward designers is simple: Why should digital fashion exist only in gaming?

Social media is an alternative universe that already thrives, largely based on images and video. So what is "real"?

SUSTAINNOVATION

OUR LIVES ARE DIGITAL – OUR FASHION SHOULD BE, TOO.

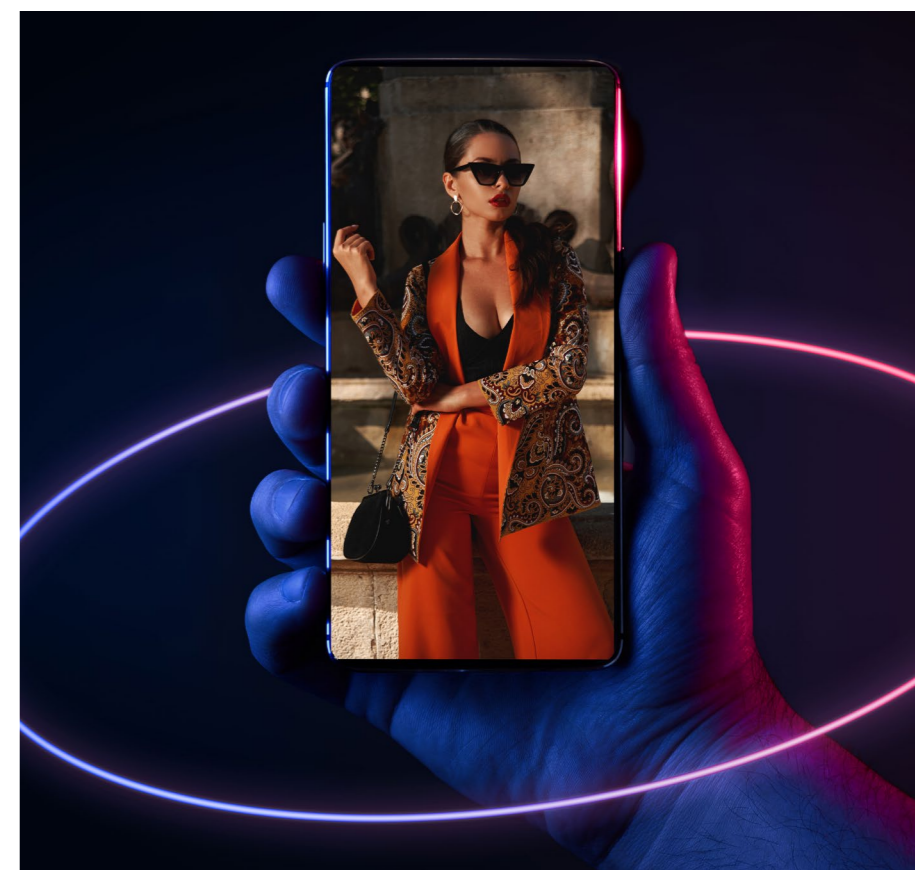
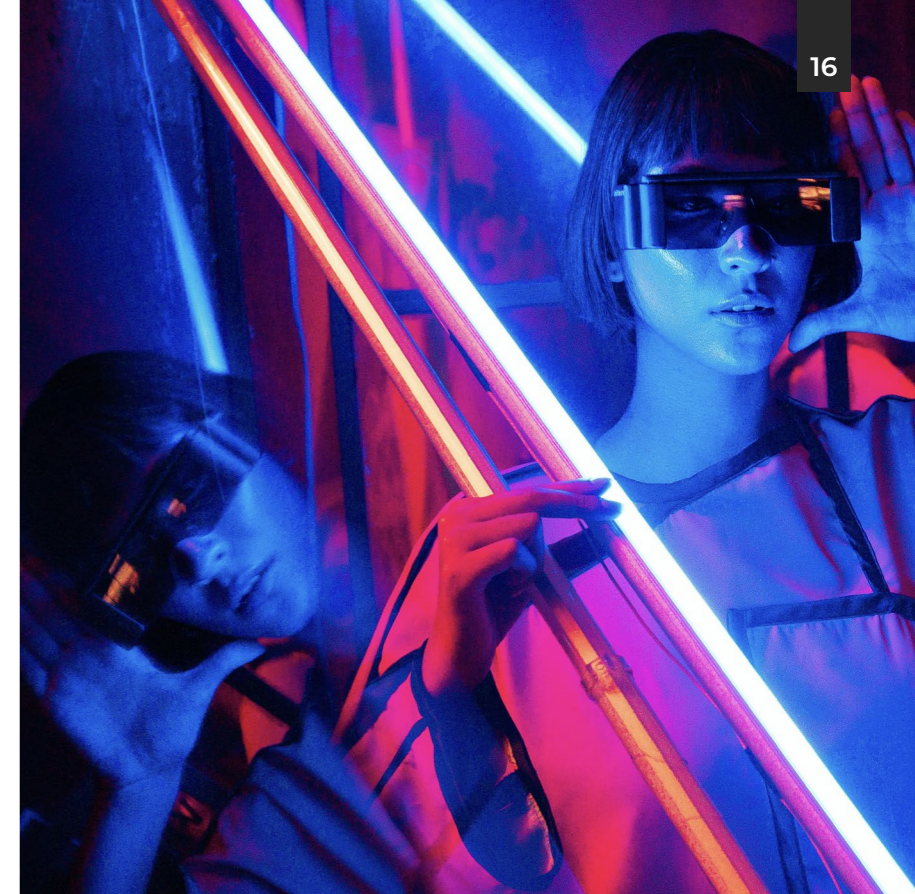
This will leave many to question the value of digital fashion, as there is not a garment to run one's fingers over. We are no longer living in a material world, though.

When an influencer posts a new look, is there a difference, in the eye of the beholder, between a mini-dress made of cotton versus one made of block chain? Gamers have been purchasing skins for their avatars for more than a decade. The term "avatar" has been around since the late 1970's, and avatars are the catalyst for the blurring between the digital and physical worlds of fashion.

Innovative companies like DressX tout themselves as "reinventing multi-brand fashion consumption for an audience looking to fulfill a different type of need - constant fashion newness for their online lives."

With hundreds of digital designers and an impressive and growing list of collaborations, DressX is blossoming into the gold standard of NFT apparel. They are also clearly driven by sustainability and the dire need for conservation within retail apparel.

Their vision statement includes this north star: "We share the beauty and excitement that physical fashion creates, but we believe that there are ways to produce less, to produce more sustainably, and not to produce at all."



IF YOU BUILD IT, THEY WILL COME

OWN THE SHIFT TO DIGITAL



Artificial Intelligence (AI) technology can also apply to textile manufacturing. Manufacturers are looking at innovative ways to automate the production of textiles.

AI can increase the efficiency of production processes. The use of AI can augment the use of human textile employees.

AI is adept at assisting in quality assurance (QA) procedures, while computer vision enables QA to be more streamlined, potentially eliminating human error.

The pandemic has triggered a lasting change, a change that can reduce the fashion industry's contribution to global warming. A shift in this direction can reverse environmental damage, waste, rework, and increase efficiency.



The garment industry represents about 2% of the global GDP. The pandemic has increased the frequency and need for more online shopping.

There was a dramatic increase in online sales in 2020, and that momentum is still growing in 2021. Online fashion retailers are now competing for new and returning customers.

The next level of online shopping is the use of I-Commerce™. The value chain can be improved by embracing I-Commerce™ design and production methods. The goal is to provide personalized experience through improving the fitting process.



And the youth shall lead us

Influence the Influencers

I-Commerce™ can still influence style, trends, outfit suggestions, support, and discounts. [The AI influenced fashion market is predicted to be worth \\$60 billion by 2025.](#)

AI started with Microsoft's Xbox in 2011. Xbox used 3D and infrared technology to track body movement. These methods can be used to make body measurements in lieu of a bespoke tailor.

The worldwide fashion industry has been quick to adopt new trends. 64% of leading brands are investing in I-Commerce™.

This includes the latest luxury tech developments. Immersive technologies include but are not limited to 3D, augmented reality (AR), and virtual reality (VR).

TechSparq and industry research indicates that I-Commerce™ has the ability to boost consumer confidence online by 4% globally, and by 9% in North America

Since March 2020, forward-thinking designer brands have promoted more creative, immersive showings. These events are far more efficient and reduce travel for the fashion industry. Instagram and Vogue have tested a tool called the Brand Collabs Manager (BCM).

This tool supports companies and their brand-influencer partnerships using detailed insights on influencers and campaign audiences. The BCM tool works like Instagram ad-targeting.

Brands can specify the desired audience of the influencer they want to engage. Each selection considers location, gender, age, number of followers, and interests.

Facebook has also started testing this tool. BCM can make a big impact on the eight-billion-dollar (\$8B) influencer marketing economy.

I-Commerce™ offers a way to reimagine in-store and online shopping experiences. The relationship between luxury retail and tech has brought immersive commerce to the fashion world.

BE THE CHANGE

The natural progression within luxury goods and the fashion industry, as a whole, is digital merchandise. The growing concept of trying on digital clothes is being adopted by leading luxury brands.

Gucci has launched a phone app that allows customers to try on its line of sneakers and allows the widest distribution to their customer base in a short amount of time. Customers can have personalized experiences with recommended items and take experience photos to share on social media platforms.

Immersive technology can also change the way fashion companies are designing and manufacturing. Consider that this 360-degree technology brings the bespoke tailor to your customer's home. In minutes, they can be sized, choose colors and patterns, and then see the complete ensemble as it would fall on their actual figure.

Presently, only 60% of garments are sold at full price due to intense overproduction; producing fewer garments with more recycled fibres is essential.

AI predictive approaches in demand projection can reduce forecasting errors and overproduction by 50%. This approach can reduce costs, increase trend prediction, and decrease environmental damage.

The predicted improvement decreases the need for production and quality assurance. Reduced production can decrease the need for fabrics and reduce the production of unnecessary products that often end up in a landfill.

The garment industry has a bold future if they can embrace positive change. Fashion can improve production through advanced technologies, while decreasing its negative impact by moving to more sustainable materials.

The industry must engage I-Commerce™ to promote their products and increase customer experience and satisfaction.

Sustainnovation may be a new word, but it is the guiding light for the fashion industry to follow. Embracing sustainability can lower costs, improve brand likability, and promote environmental stewardship.

I-Commerce™ champions the customer experience, reduces retail brick-and-mortar costs, and is sustainable and scalable. The research and results are infallible: The fashion industry is changing for the better, and other industries will follow their example.

TECHSPARQ

About TechSparq

We help the world's most innovative and leading brands Turn On What's Next™ in e-commerce with [Sparq Commerce](#). Our no wasted-motion policy means more efficiency and higher profits for our clients. Since our founding in 2007, we've been delivering software solutions, process improvement, and cost savings to the Fortune 500.

For more information: www.techsparq.com

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