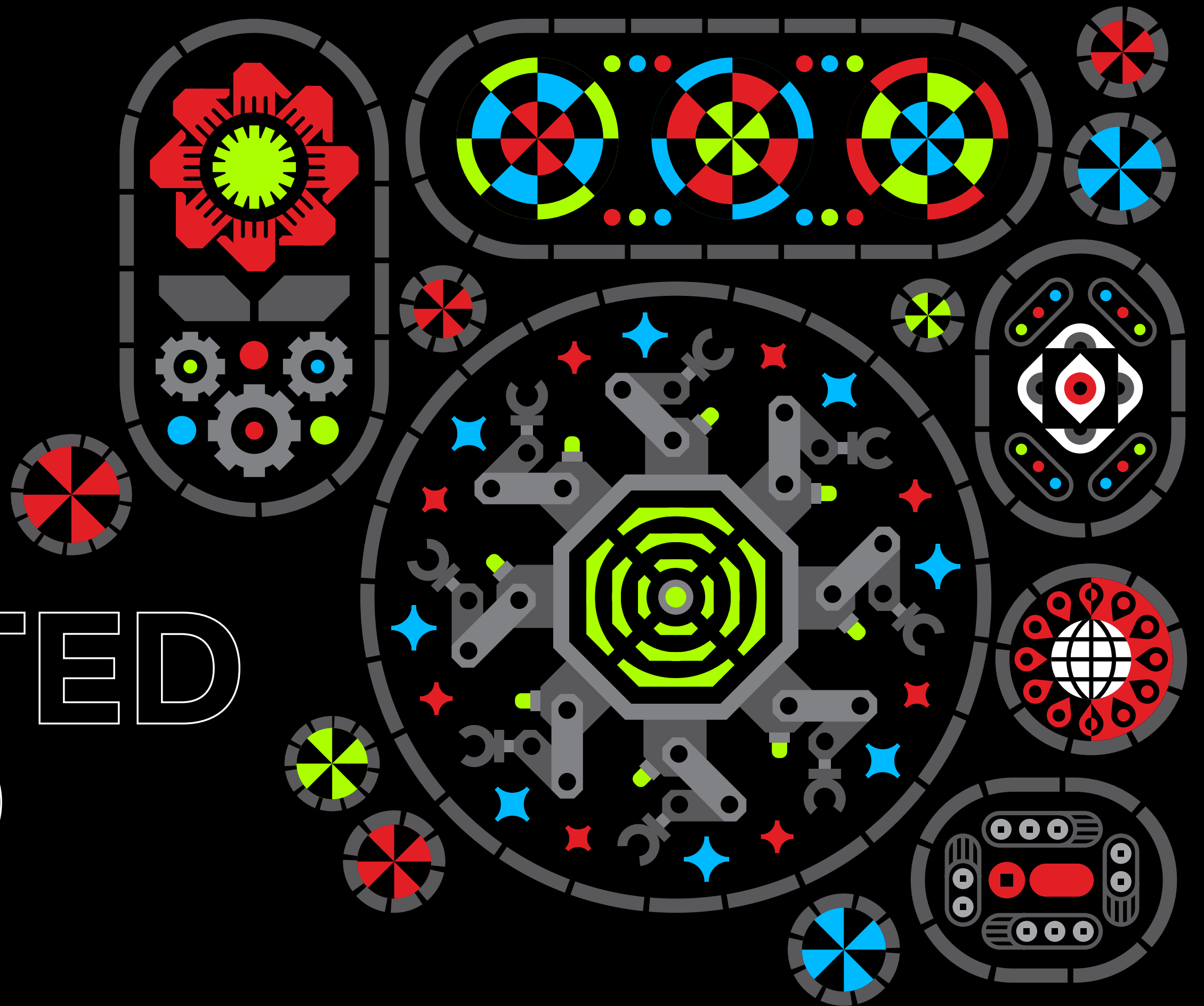


08

Made to Mention

By Avery Dennison

CONNECTED DEMAND





Cover illustration by [Daniel Nyari](#)

INTRODUCTION



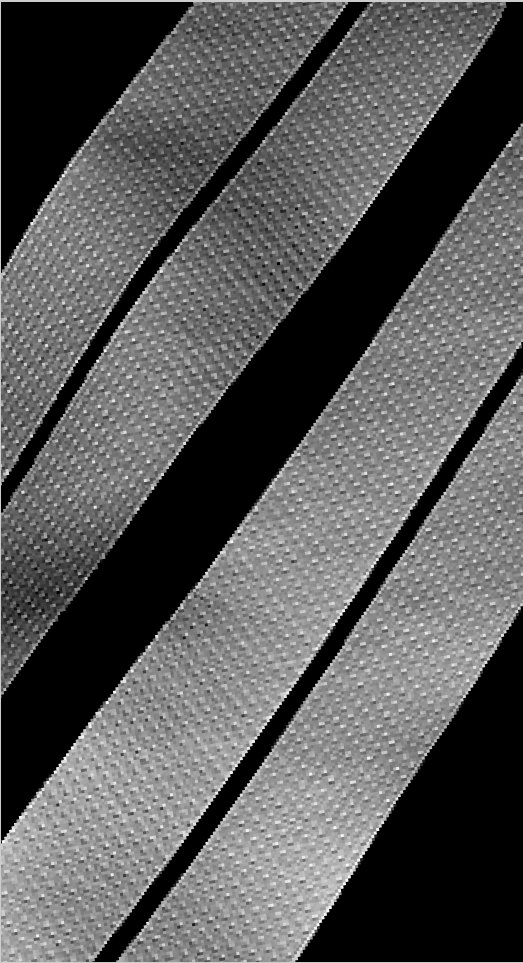
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Amy Lee
Senior Manager
Trends and Insights

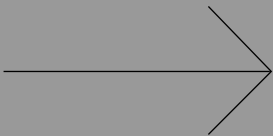
Welcome to our eighth edition of Made to Mention, rounding off 2022 and inviting in a new year with our outlook for manufacturers, brands and retailers alike.

Several market drivers are pushing the apparel industry in the direction of more automation and greater digital connectivity. Considerable, ongoing disruptions are becoming worse and more frequent, exposing vulnerabilities in legacy processes and in our natural surroundings. Changing the way we make, sell and use products is simply non-negotiable.

In this edition, we look at the role of artificial intelligence (AI), advanced analytics and scanning technologies in supply chain connectivity. We then look to the smart, autonomous systems emerging in factory automation, and finally, the trends and insights

casting light upon the future of retail driven by end wearers and the ever-evolving shopper journey.

With a combination of digital trigger technology, hardware and software, we continue to support our supply chain partners with solutions and updates to monitor the garment production process and provide critical connectivity across the entire value chain.



Contact Amy

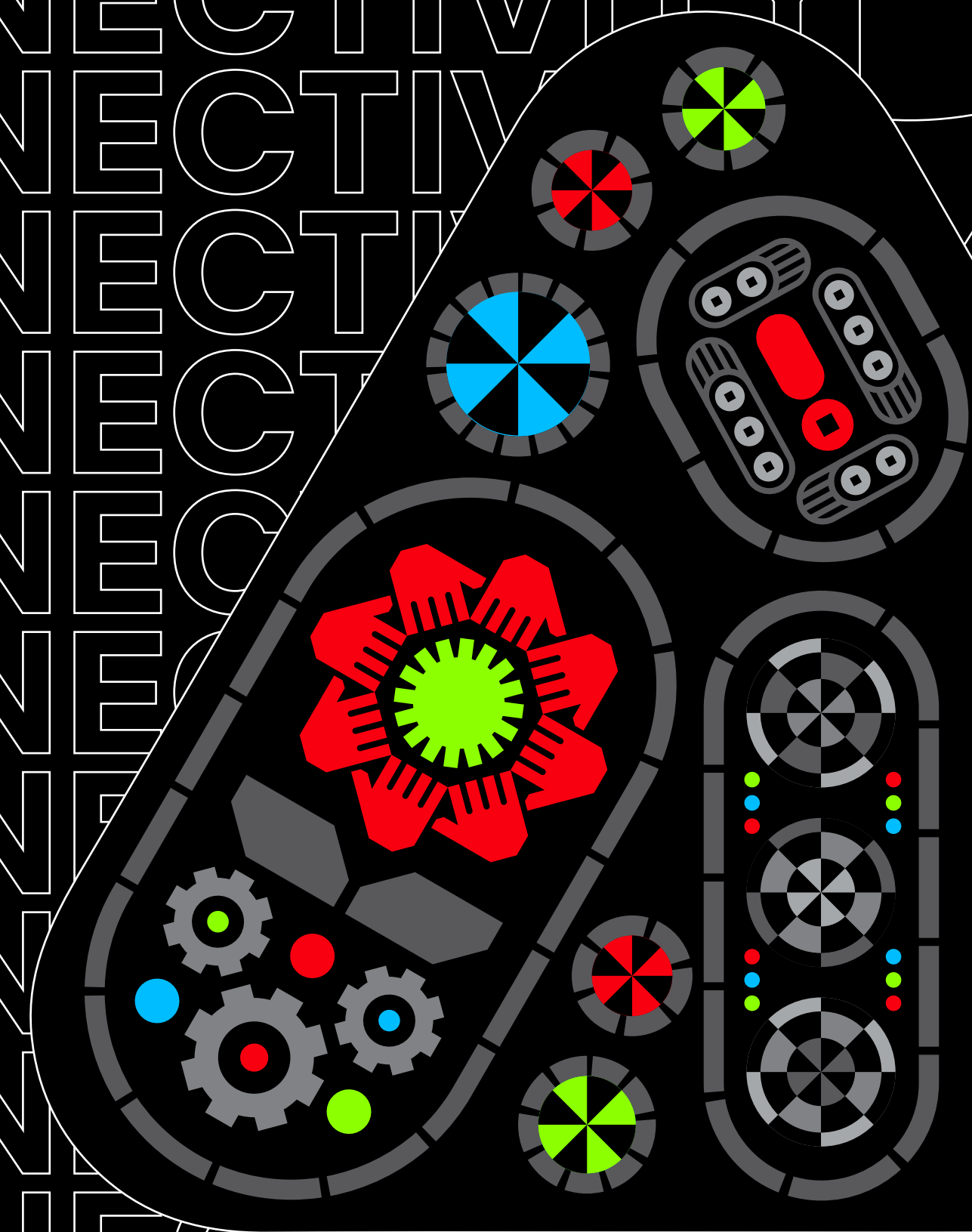


Looking to add value
to your operations?

Read on to learn more...



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Businesses which implement more efficient, less wasteful operations can not only reduce costs, but also earn goodwill from consumers.

Minimizing climate impact

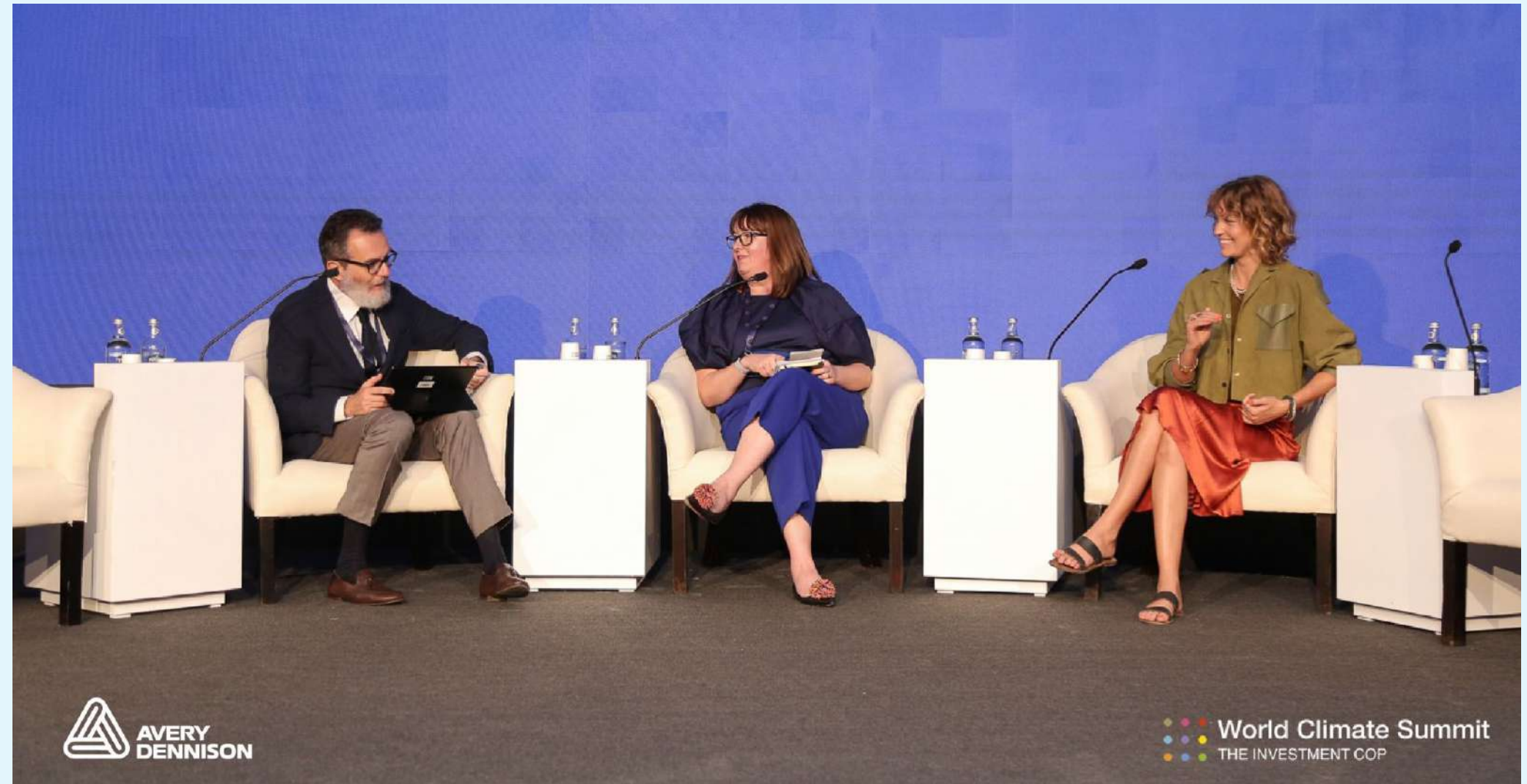
World Climate Summit – The Investment COP 2022, organized by World Climate Foundation, is recognized as one of the most important side events of the annual international climate negotiations (COP).

The two-day Summit took place in-person and digitally in Sharm el-Sheikh, Egypt during COP27. World Climate Summit brings together leading stakeholders from businesses, financial institutions, governments, international organisations and media.

Debbie Shakespeare, senior director, sustainability, compliance and core product line management, RBIS Avery Dennison, was present in Egypt, discussing the big challenges the fashion industry faces, as it endeavors to cut waste and meet net-zero commitments.

Debbie joined model and activist, Arizona Muse, and Simone Cipriani of the UN Alliance for Sustainable Fashion for a fascinating session – ‘Minimizing Climate Impacts across the Value Chain – Best Practices from Sustainable Textiles & Apparel’.

Fashion circularity, Digital Product Passports, textile recycling, and consumer education were all discussed. “Legislation is coming and there’s going to be transparency. We know with Digital IDs on garments we can begin to drive reductions in greenhouse gases through circular models,” said Debbie.



Disruption mitigation

The International Monetary Fund has included supply chain failures among the key factors that resulted in the downgrading of its 2022 global economic growth forecast from 4.9% to 4.4%.

Supply chain vulnerabilities have been exposed by several recent events with disruptions becoming worse and more frequent. Amid this disruption, supply chains must remain functional against a broad range of scenarios. Businesses are forced to find ways to build agile and resilient networks that can flex with unpredictable events.

43%

of Shopify brands are changing their shipping strategies to reduce the impact of global shipping delays

Shopify 2022

50%

of supply chain organizations will invest in applications that support AI and advanced analytics capabilities by 2024

Gartner 2022



Data-driven decisions

Data analytics are helping develop a more agile supply chain while simultaneously reducing over-production and offering a personalized commerce experience.

As consumer-generated content increasingly replaces traditional marketing campaigns, demand can be especially volatile. Gathering real-time data from connecting customers with supply chains and post-purchase engagement is becoming ever-more essential to decision-making and building agility when brand loyalty is lacking.

Additionally, advances in AI will continue to build capabilities in predicting shifts in demand – enabling manufacturers and brands to make proactive, informed decisions on inventory planning and procurement. The accuracy of this intelligence is crucial to transparency and understanding the social and environmental impact of supply chains.

10-15%

Retailers have experienced a 10-15% reduction in inventory costs and improved sell-through and availability from implementing data analytics

McKinsey & Company 2021

71%

of global consumers expect personalization

McKinsey & Company 2021

65%

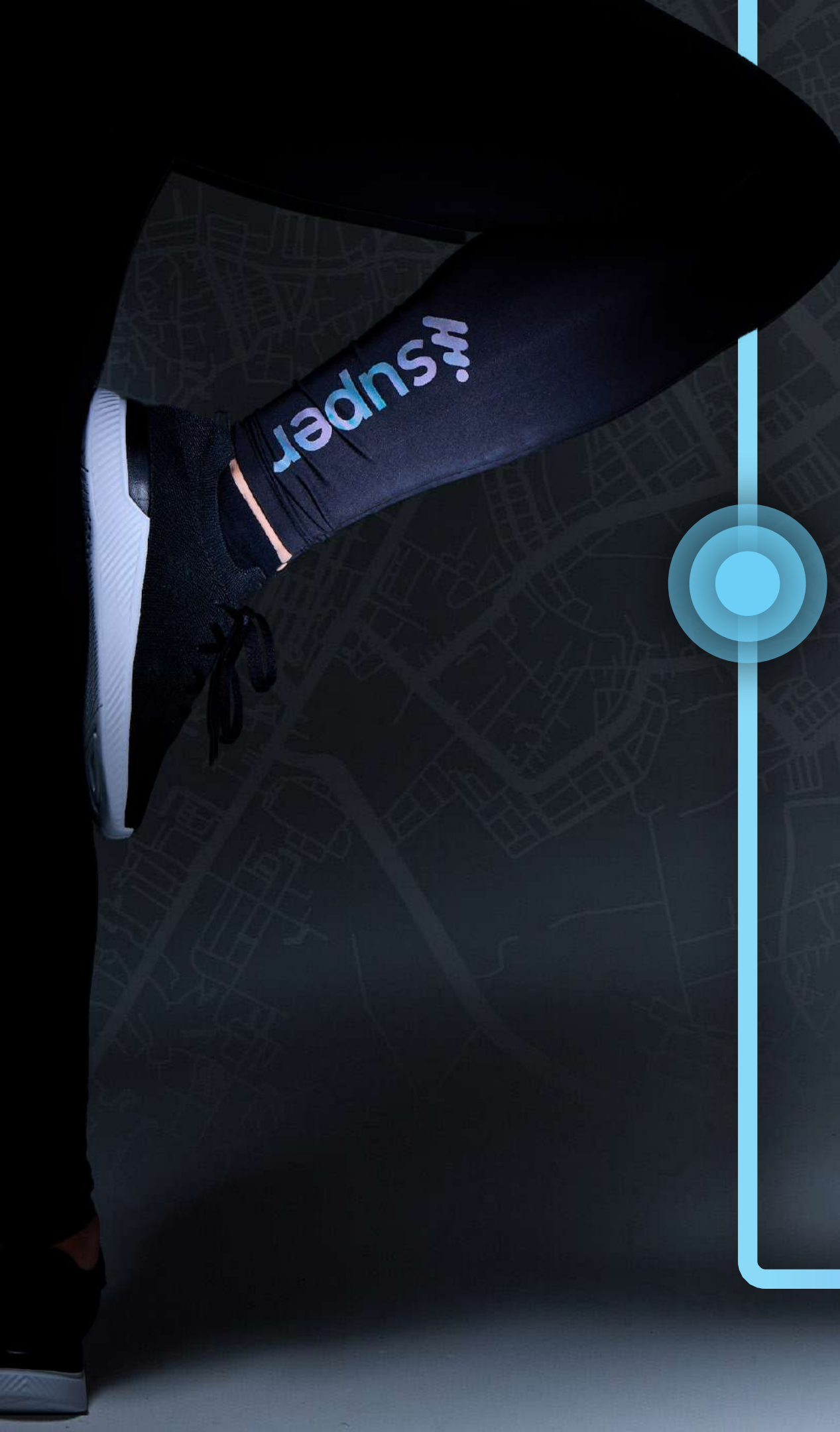
AI-enabled supply chains are over 65% more effective with reduced risk and lower overall costs

Mind Commerce 2021

44.5%

of global consumers are loyal to brands they like

GWI 2022



Connecting communities through localization

As well as mitigating the risks of volatile global networks, the localization of supply chains can have a positive social impact on communities.

Investing in and working with communities at the point of supply supports skills growth, enriches local economies and empowers people to manage environmental impacts to their homeland. Appealing to young tech-savvy workers seeking new skills in these communities requires employers to leverage automation and innovation.

With 40% of consumers wanting to purchase from businesses that align with their social values — including workers' rights and supporting local communities — localization can help build trust and loyalty. Net-a-porter's 'Net Sustain' category, for example, features brands that manufacture locally within and/or by their own community and has increased by 600% in popularity since 2019.

Lower-mileage supply chains are also favorable with conscious shoppers seeking to limit their climate impacts, while simultaneously making delivery expectations more achievable and reliable.



Delivery demands

Despite two-thirds of shoppers being aware that supply chain delays are likely to impact their orders, [Shopify](#) reports that 60% of global consumers still expect same-, next-, or two-day delivery. Retailers face a great challenge to meet demands for quick turnarounds while battling restrictions in their supply chains.

Tel-Aviv startup, [Qle](#), is tapping into the gig economy by providing an on-demand delivery and return service for its app users. Customers order items from nearby stores, try them at home while the driver waits, keeping what they like and returning to the driver any items they don't wish to purchase.

On a wider scale, to meet consumer expectations, retailers are capitalizing on the rapid delivery times of marketplaces, such as Amazon and Walmart. Other retailers are achieving speedy deliveries by decentralizing fulfillment centers and utilizing retail stores as warehouses.



70%

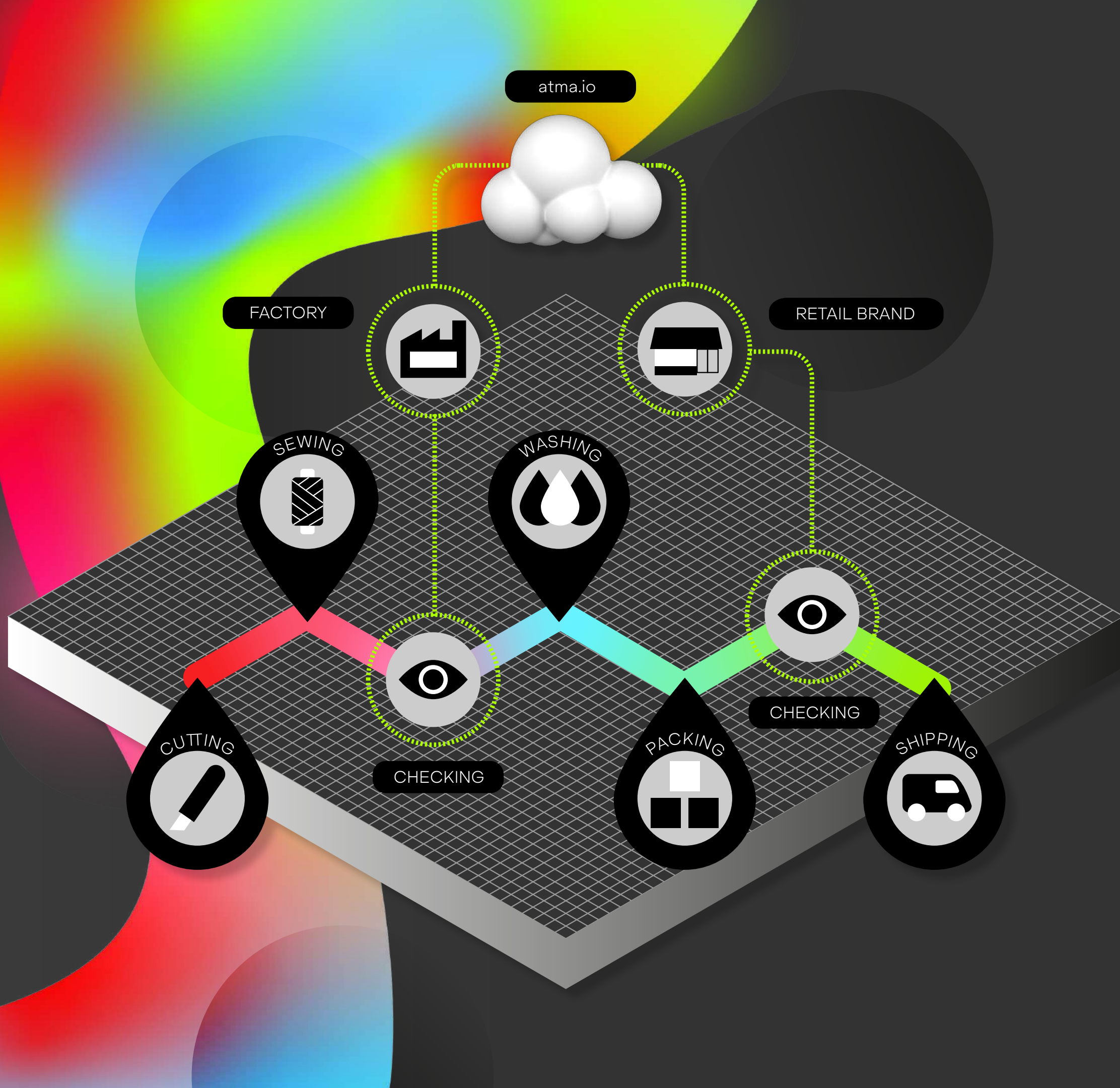
of global consumers wish that retailers offered similar services to Amazon Prime
[Wunderman Thompson 2022](#)

78%

Demand for urban last-mile delivery is expected to grow by 78% by 2030 in the world's top 100 cities
[World Economic Forum 2020](#)

32%

of global customers have abandoned carts because “estimated shipping time was too long”
[Shopify 2022](#)



Short shipments

Sometimes retail brands struggle to locate garments in their shops or distribution centers.

Missing stock is a costly issue that can lead to losing customers and revenue. One of the reasons causing this problem is there is less product in the carton received from the garment factories than there should be.

This visibility problem affects every stakeholder in the supply chain and there is no simple solution to prevent these so-called short shipments. So how do we resolve this?

Avery Dennison is developing a solution with a combination of RFID, hardware and software to ensure carton content accuracy. Together with atma.io, we help factories to monitor the garment production process and provide critical logistics information to retail brands.

This helps to:

- ☐ Reduce factory operation costs
- ☐ Reduce chargebacks to factories
- ☐ Avoid short shipments to brands
- ☐ Avoid empty racks in the brand shops
- ☐ Increase sustainable production processes
- ☐ Reduce wastage and lost items in the factory

Find out more

Our new innovation center in South Korea

Recently, we announced the opening of our latest I.Lab, an innovation center that demonstrates various types of RFID inlays and digital ID solutions in South Korea.

The I.Lab is a showroom where customers can visit and experience RFID technology. This is the sixth global innovation center opened by Avery Dennison after the US, the Netherlands, India, Brazil and China. The space is divided into seven different industry segments (apparel, beauty, healthcare, food and beverage, logistics, aviation and automotive) and visitors can interact with physical demonstrations to learn and experience the benefits of RFID in 'real world' applications.

The South Korean I.Lab will accelerate the awareness and demand for RFID technology, while providing RFID academy programs for corporate customers considering integrating RFID technology.

While RFID has been widely used across South Korea for the last decade, many industry dynamics are rapidly evolving, driving the demand for ID solutions such as RFID.

Marcel Cote
sales and marketing director
APAC, Avery Dennison Smartrac



Accelerating digital with DXC

Paving the way for the digitalization of the apparel industry, we recently opened our newest Digital Acceleration Center (DXC) in Bangalore's Manyata Tech Park.

At DXC Bangalore, we bring together the top talent in big data, IT infrastructure, smart manufacturing and more to drive innovation and digitalize everything we do to create a better, more streamlined and sustainable future for our employees, customers and the consumer.

As part of our journey to bridge the physical and digital worlds, we plan to add more DXCs in other parts of the world, including Dallas, Texas, and Shenzhen, China.

This is one of our many efforts to accelerate digital and data competence for solutions leadership and enhanced customer experience.

Sanjay Agrawal
VP information technology,
Avery Dennison



**DIGITAL
ACCELERATION
CENTRE**

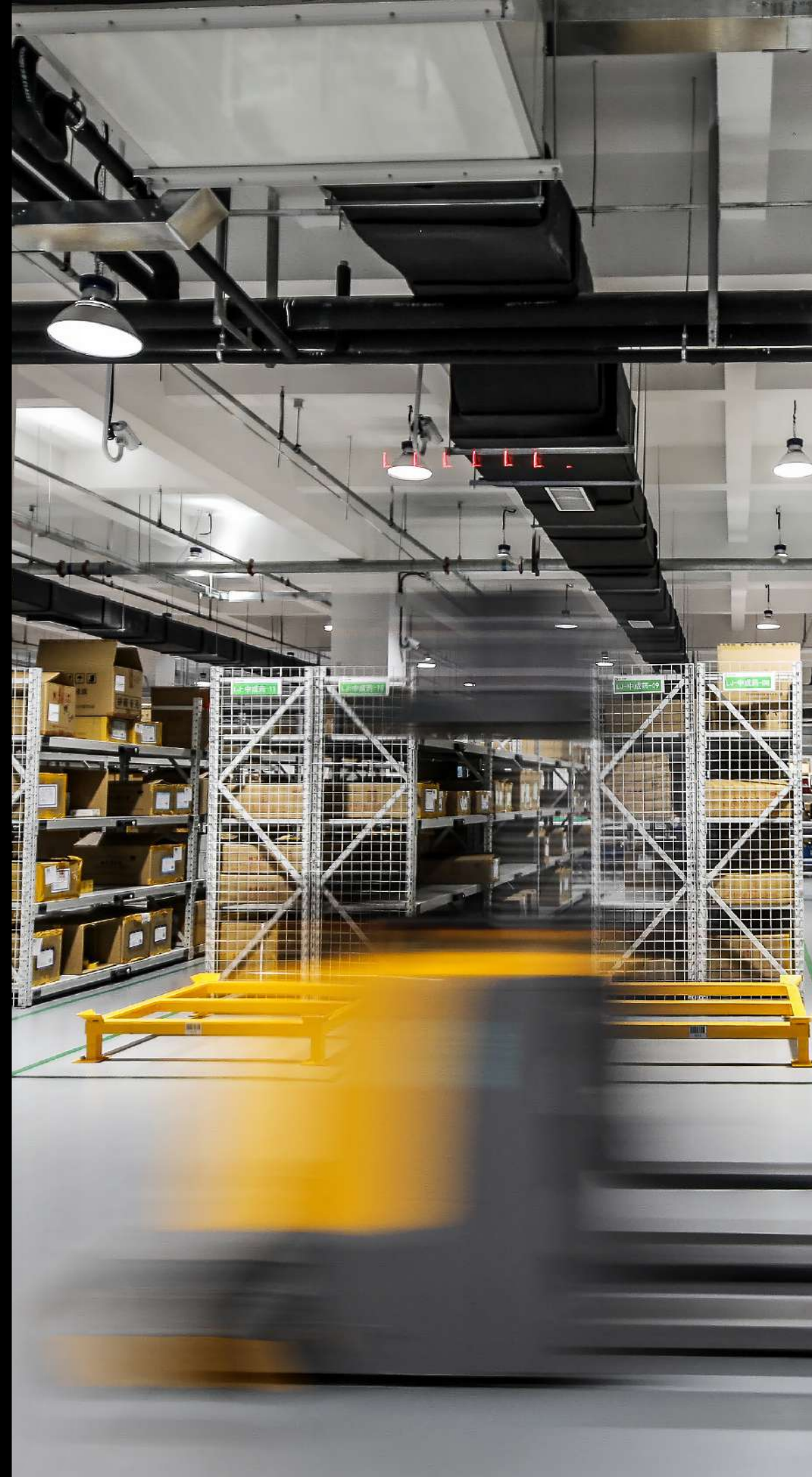
A stylized graphic featuring the text "FACTORY AUTOMATION" repeated in a circular pattern. The text is white and outlined, set against a dark background. On the right side, there is a circular inset showing a close-up of a robotic arm or mechanical component with various colored lights (red, blue, green, yellow) and a small gear-like structure.

Smart, autonomous systems

Often referred to as Industry 4.0, the digital revolution is the fourth wave of industrial development, which sees manufacturing operations enhanced with smart and autonomous systems fueled by data and machine learning.

One crucial technology is digital twins. These are digital copies of physical devices, containing all the component's data, and with the ability to simulate all of its actions. If operations become at risk of disruption, the digital twin can send alerts and enable remedial action. Large collections of digital twins can be brought together to simulate an environment, such as within a factory.

Simulations of the real world, which may combine elements of virtual reality with other layers of information, such as augmented reality, are also known as the industrial metaverse. Alongside advancements in sustainable, human-centric processes, this has been dubbed the fifth wave of industrial development, Industry 5.0.



153%

The number of US patents on industrial manufacturing processes registered was 153% higher in 2001-2020 compared to the previous 20-year period

McKinsey & Company 2021

29bn

The global number of Internet of Things (IoT) connected devices that collect and analyze data and autonomously perform tasks is forecast to almost triple from 9.7 billion in 2020 to more than 29 billion IoT devices in 2030.

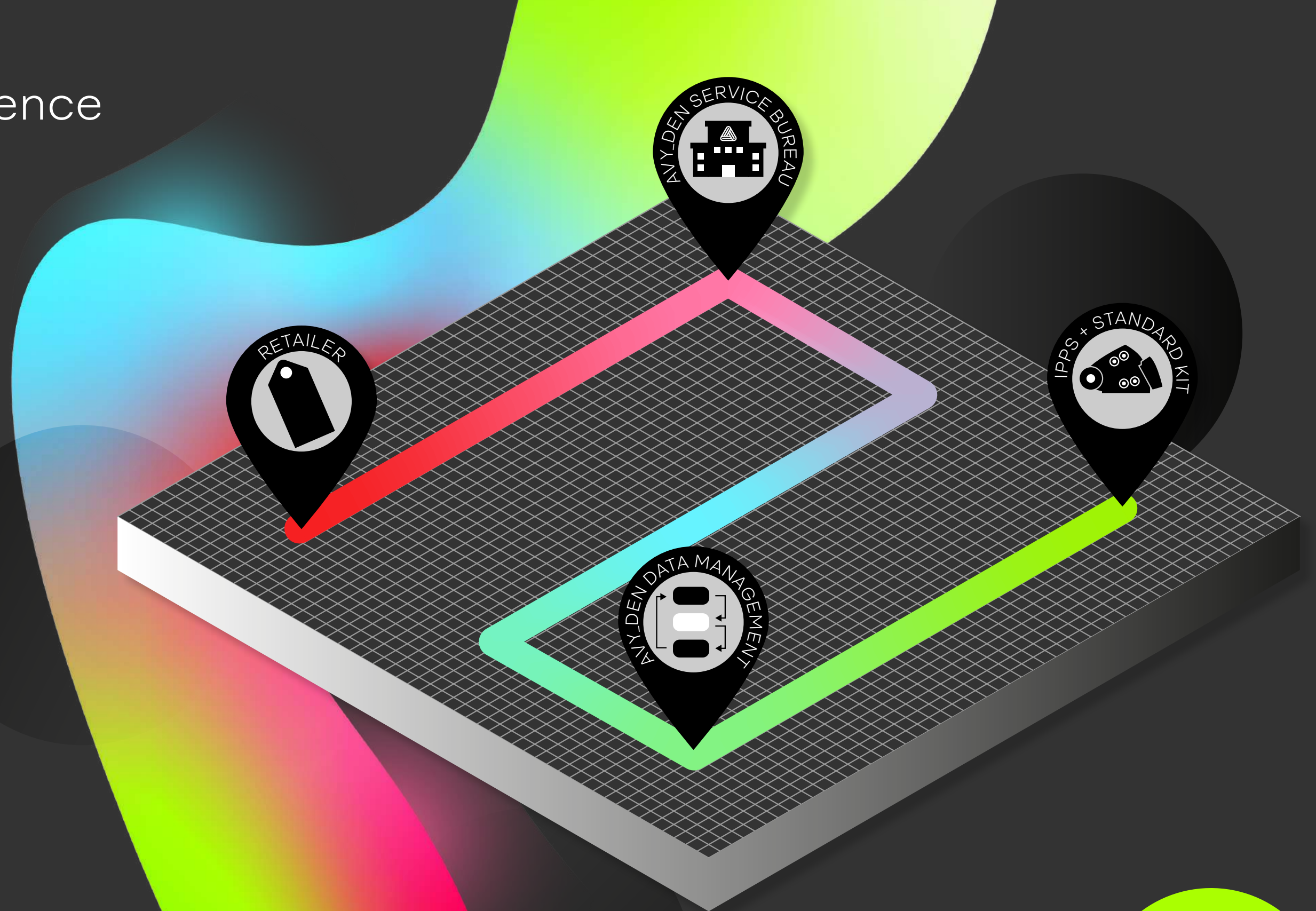
Statista

Speed, flexibility and resilience

We understand how volatile the retail industry can be, and manufacturing solutions are continuously evolving to respond with greater agility. Operations are becoming somewhat more complex, while at the same time smarter, more streamlined and easier to operate.

The traditional labeling process is often not nimble enough to support this volatility. We believe labeling should be on demand and never hold up production.

Our In-Plant Printing Solutions (IPPS) allow you to print your own care labels, price tickets and barcode stickers, regardless of whether or not they are RFID labels. This gives retail brands and factories full control, with no minimum order quantities and the ability to react to last-minute changes and requests, while reducing waste and dead stock. Benefits that directly translate into cost reduction and help the environment.



How does it work?

Brand or retailer HQ initiates new product designs

Avery Dennison sets up new label layouts in online platform

Online system delivers necessary files to factories for label production

Factories equipped with IPPS and the standard kit of printing supplies produce new labels immediately

Find out more



Sport is entering a new age: move fast and be responsive

An influx of rapid newness and innovation from tech-savvy businesses infiltrates every part of our lives, drastically shifting expectations and spending behaviors.

PRECISION
REFLECTIVE



28%

of global sports fans want brands to offer customized/ personalized products

[GWI 2021](#)

61%

of global World Cup fans say that high-quality products most motivates them to promote their favorite brand online

[GWI 2021](#)

When it comes to the world of sport, fans are subsequently conditioned to expect speed, personalization and greater connection from clubs, brands and athletes.

Through a celebration of heat transfer technology, on-demand manufacturing and creativity through customization, we propose a new way of responding to the desires of fans at the speed of culture.

A full-service, end-to-end platform for on-product branding, graphics and trims, Embelex combines decades of materials science innovation with secure, global inventory management and supply chain solutions to power new possibilities for the world's most creative and dynamic brands.

Sports clubs are increasingly driving efficiencies by applying heat transfer names and numbers on demand — thereby utilizing every item of garment inventory and giving maximum sell-through of finished goods. With a 24-48 hour turnaround time, and minimum orders as low as one unit, our centrally located Miamisburg facility in the US is uniquely positioned to optimize inventory and give you the gift of speed.



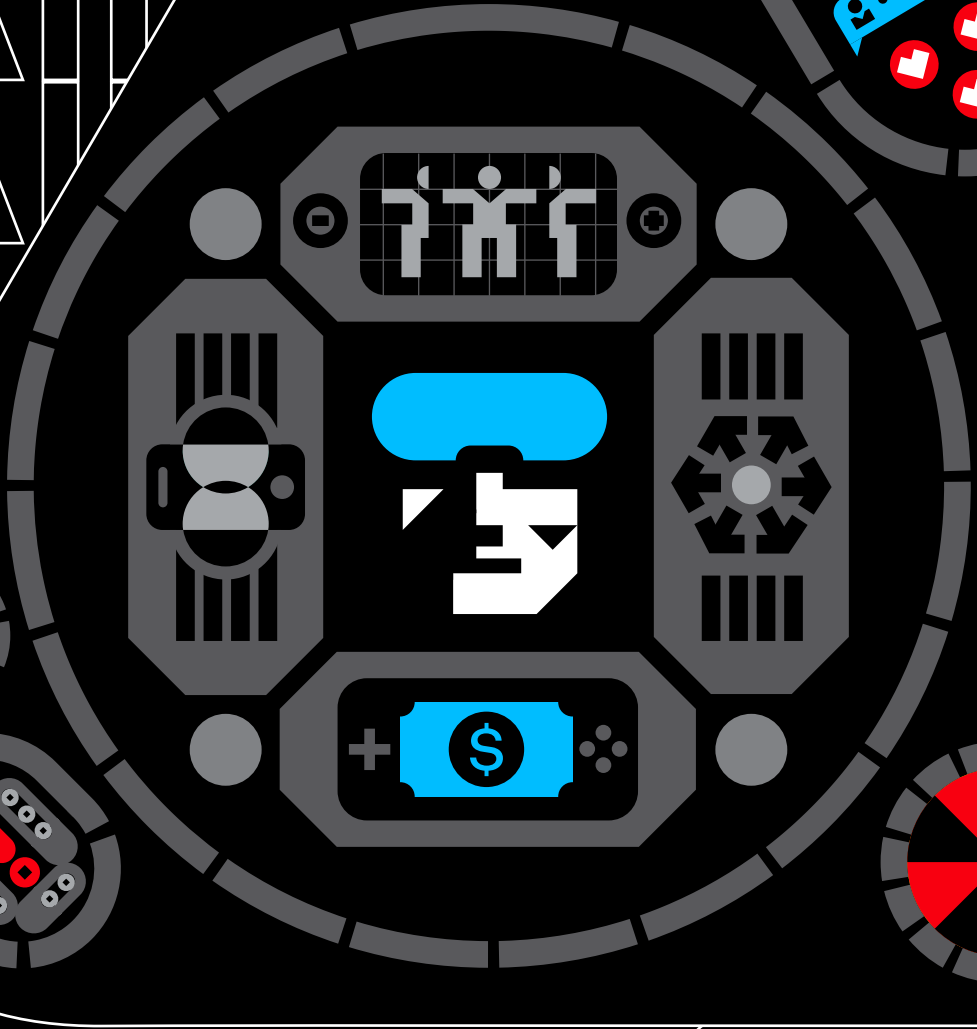
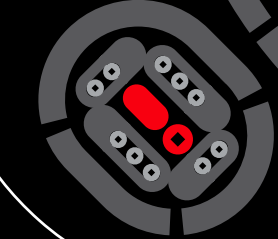
Our digital printing
and laser-cutting
technologies are
critical to enabling
Embelex on demand,
at speed.

Jeremy Bauer
Commercial Director
Embelex
Avery Dennison



A decorative graphic consisting of a vertical column of overlapping circles. The circles are white with black outlines and are arranged in a way that they appear to be part of a larger, continuous pattern. The circles are of varying sizes and are positioned such that they overlap each other, creating a sense of depth and movement. The overall effect is a modern, minimalist design element.

STRENGTH



Multi-channel, multi-lifecycle

The future outlook of retail is set to provide a holistic experience for people seeking highly engaging, efficient and authentic interactions with brands and retailers that integrate seamlessly with their day-to-day online and offline lives.

PwC reports that 80% of global consumers have shopped across at least three channels in the past six months, indicating that by diversifying channels, retailers can meet people where and when they decide to make a purchase.

New circular models of commerce add additional layers to the complexity of these new customer journeys, with resale and rental providing circular alternative purchasing channels.

Connected products with unique digital identities are becoming integral to this fluid connection of all parts of the commerce ecosystem, from procurement and supply chain through to purchase and beyond.



Retailers are reinforcing ecosystems to optimize shoppers' share of life. The future of retail moves away from transactional to an experienced-based relationship.



Faithful to the Bay

Avery Dennison is now an Official Partner of the San Francisco 49ers in the National Football League.

We are delighted to be working with one of the NFL's most storied franchises to add value and services to their fan engagement efforts via digitally-connected clothing technology. Members of the Faithful can now purchase customizable 49ers merchandise and unlock digital content all at the same time.

Our revolutionary smart embellishments and digital labeling technology can be scanned using a smartphone camera, enriching the fan experience and accessing exclusive content unavailable anywhere else online. This innovative merchandise is exclusive to the 49ers Team Store presented by Visa at Levi's® Stadium.

Looking ahead, we will also open an Embelex personalization station inside the 49ers Team Store in 2023.

As the first new 49ers partner whose rights extend to the UK, together we are focused on growing the Faithful abroad through new retail experiences.

A new era of digital fan engagement is emerging, and sportswear provides the perfect gateway to build ongoing dialogue with fans beyond the stadium.

Michael Barton
senior vice president
and general manager
Apparel Solutions
RBIS, Avery Dennison

Avery Dennison will strengthen our already powerful retail business by opening a new world of possibility through technology. We look forward to collaborating on ideas that can serve as a blueprint for global sports franchises seeking ways to interact with their fans in this digital age.

Kevin Hilton
49ers VP of corporate
partnerships

Social and live commerce

Statista reports that sales through social commerce are set to nearly triple by 2026, proving that social commerce is now a necessary part of almost any brand strategy.

TikTok has revealed plans to build a fulfillment center in the US, indicating plans to launch its social commerce solution. Earlier this year, TikTok piloted a live commerce function in partnership with Shopify, connecting consumers to products through livestreams. Live commerce continues to be popular in China, with sales currently reaching an estimated \$423 billion.

Social and live commerce provide an intuitive and compressed shopping experience by integrating products into social platforms that people are actively using in their day-to-day lives.

50%

of adult US consumers made a purchase via social media in 2021

Insider Intelligence 2022

\$2.9tn

Global social commerce sales are forecast to reach around 2.9 trillion U.S. dollars by 2026

Statista 2022

Social Media



Virtual commerce brings metaverse malls

To date, virtual storefronts such as Forever21's Shop City on Roblox and Charlotte Tilbury's Shop with Friends virtual store, have provided a simulated shopping experience allowing customers to socialize and shop with friends through avatars.

The launch of virtual metaverse mall, TheMall, in late 2022 sees the next evolution of multi-store formats with retail and entertainment vendors across 100 floors.

As awareness of the metaverse grows, shoppers are already looking to engage with virtual commerce, with 1 in 4 claiming to have shopped in a virtual store.

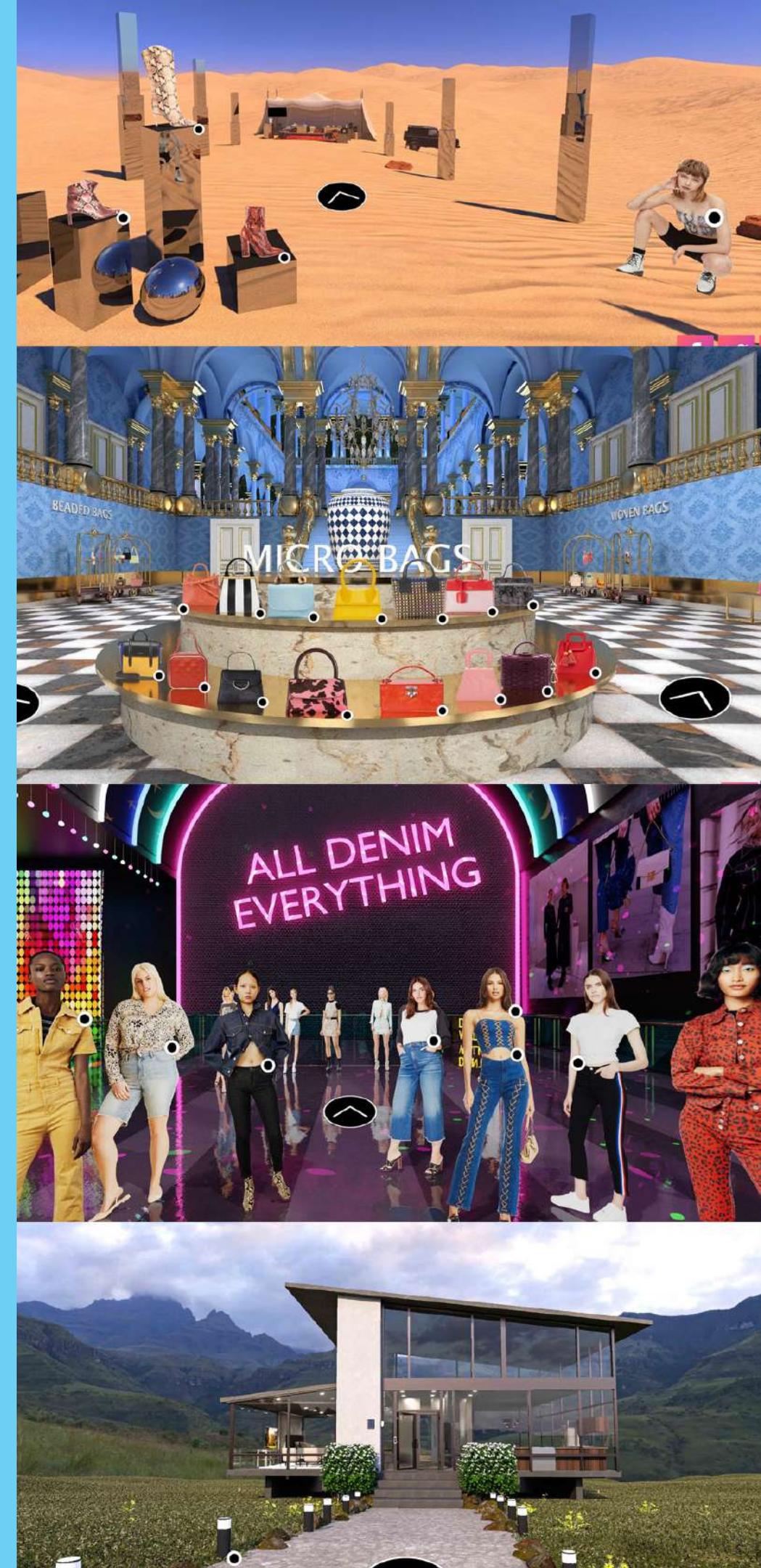
70%

of consumers who visit virtual stores have made purchases

Wunderman Thompson 2022

Brands are thinking about how to take their websites from just search and transactions to an end-to-end brand experience. They are using virtual commerce platforms as creative contextual experiences, not just as virtual storefronts.

Neha Singh
Founder and CEO
Obsess



Digital payment evolution

Quick and efficient payments are critical for driving trust and loyalty.



As high as 61% of consumers say they have abandoned purchases due to checkout frustration involving payment methods, resulting in a \$20 billion loss for merchants, according to [Signifyd](#). Listening and adapting to preferences can better support purchase completion.

With the increased adoption of cryptocurrency, payment services must adapt to meet demand. [Mastercard](#) reports that 40% of consumers planned on paying with cryptocurrency in 2022, forcing retailers to consider enabling crypto payments through digital wallets. Brands such as [Fendi](#), [FARFETCH](#) and [Pacsun](#) have already enabled these payments with RFID digital wallets for crypto customers.

29.2%

Digital wallets account for 29.2% of US regional transaction values

[Signifyd 2022](#)

74%

of global retailers will begin accepting crypto payments

[Deloitte 2022](#)

29%

of global consumers say that a quick and easy checkout process increases the likelihood of purchasing

[GWI 2022](#)

We hope you enjoyed this edition of Made to Mention magazine. If you wish to contact us about any of the features or solutions, please reach out to Amy.

Keep in touch!



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