Digitally Born Products

By Craig Crawford



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ost-Covid consumer expectations have been the driver of brands to be more forthcoming about the impact of the fashion industry on human, environmental, and animal welfare.¹ Advances in technology are providing brands with toolsets for transparency—pending legislation on both sides of the Atlantic that could mean legal compliance is not far away.²

"This is a serious wake up call for brands that have been slow to embrace supply chain traceability," says Martina Schiuma, head of sustainability for traceable and transparent fashion supply chains at The ID Factory. Based in Arzignano, Italy, The ID Factory is a platform that allows brands to manage supply chain activities with full transparency from raw material creation to product fulfilment.

"The problem is most brands don't know much about their supply chain beyond tier one," explains Massimo Brandellero, Founder of The ID Factory. "90% of brands don't have visibility to tier two level and only 7% have visibility of raw materials. This is an industry based on heritage, not tech. Our goal was to create a data-centric platform for the fashion industry to support brands to easily manage their supply chain and to gain end-to-end visibility over all materials. Transparency is the first step towards sustainability. But traceability is not the scope—it's the process," he explains.





Brandellero comes from the leather trade and originally developed the platform to help brands and suppliers facilitate supply chain collaboration, order placement and fulfilment, and resolve leather quality issues. The platform gathers information from dayto-day operations, integrated to processes already being performed.

"The platform is not a data aggregator," he explains. "It's not a platform to input data from other systems. We started out by putting a physical QR code on every hide before shipment. This was a simple way to easily understand who the supplier was, the details of the tannery, etc."

"In 2015 I created the ID Factory to expand this solution that already has been validated by several big brands in several countries." Today their clients include Hugo Boss, Calvin Klein, Geox, and Tommy Hilfiger with the platform in use in more than 22 countries.

"What we're seeing in industry is a lot of greenwashing," says Schiuma, who is also co-founder of B Corp B Fashion, the first online community aimed at bringing fashion brands and B Corps together. "By greenwashing, I refer to environmental claims that aren't true or cannot be verified," Schiuma explains.

Since 2006, B Corp has aimed to help create businesses that are better for the world regardless of size or sector. Rigorous analysis in five key areas: governance, workers, community, environment, and customers, formally approves and legally binds companies. Certification has only been granted to less than 5,000 of nearly 145,000 applicants. Well known B Corp brands include Patagonia, allbirds, Ben & Jerry's, and The Body Shop. The ID Factory is also a B Corp.

According to the government of the United Kingdom Green Claims Code, 40% of green claims made online could be misleading. Green claims are genuine when they properly describe the environmental impact of the product, brand, business or service, with evidence to back it up.

I Fought the Law and the Law Won

Developed by the United Kingdom's Competition and Markets Authority (CMA), and effective there since January 2022, the Green Claims Code outlines six points to verify that environmental claims are genuinely green. Those points are:

- Be true and accurate
- Be clear and unambiguous
- Do not omit or hide important information
- Only make fair and meaningful comparisons
- Consider the full life cycle of the product
- Be substantiated

In the European Union (EU), The Directive of the European Parliament (amending Directives 2005/29 /EC and 2011/83 /EU as regards consumer empowerment for the green transition by improving protection from unfair practices and information) will no longer tolerate:

- claim as "green" without a proven origin
- statements such as "eco-friendly" without scientific evidence
- slogans such as "climate-positive by 2030" without a concrete and scientifically proven plan to achieve these objectives

In March of this year, at the Circular Economy Stakeholder Conference, one of the objectives set forth in The Circular Economy Action Plan is that the EU introduce the Digital Product Passport on clothes to communicate data on the production value chain to the consumer.

Already in force in Germany, and proposed in February for all of the EU, the Due Diligence Law requires large companies to monitor the social and environmental compliance of the supply chain—with fines of €50K to €8M for non-compliance. For companies with revenue of over €400M non-compliance fines could increase up to 2% of total revenue.

The proposed US Fashion Act would legally bind apparel retailers with revenue of US\$100M and higher to report adverse environmental and social impacts of at least half of their businesses, and require disclosure of materials used in products, along with details about energy, water, and chemical use in manufacturing and finishing. Again, fines up to 2% of annual revenue could be imposed for failure to comply.

What's Tech Got to Do with It?

To boost authentication, transparency, and sustainability, brands must utilize new technologies to store and share product information.

A digitally-born product allows consumers to interact with a QR code to learn more about the product's provenance—from raw material origins and creation to finished good construction and distribution—guaranteeing a product's authenticity. As a traceability certificate, a product's digital passport helps customers make verifiable sustainable choices.

According to the Business of Fashion-McKinsey State of Fashion 2022 Survey, two out of five fashion executives plan to adopt product passports in 2022, or have already done so.

"This is hard to do because often the data is in different systems," explains Simon Jones, founder and director of UK-based Traceability Transparency Advisory (TTA) Consulting. With more than 20 years supply chain industry experience, Jones provides advisory services to manufacturing and brand owners to achieve objectives through technology and process change. "The role of the digital product is to access information when the consumer wants it. But data is still siloed, and so this is still hard for brands," he explains. "And then what do you as brand want to share? Not everything. Brands will shout about what they want to shout about but also have to acknowledge that there is still work to do," he says.

Technology like RFID — where there are increased supply chain values "along the serialization way"—are great enablers, Jones adds. But not every brand has implemented a RFID-enabled supply chain.

Finally, he says, the lack of agreed data sets, standards, and integrations make this very challenging for large existing brands with global supply chains.

"Global brands like Ralph Lauren first implemented this technology to authenticate product at the consumer level to stop counterfeit product from entering the market," he explains. "Now they are examining how they can leverage existing authentication technology to create supply chain transparency."

Other brands choose to partner with existing supply chain technology providers to enrich platform capabilities to feed digitally-born product platforms.

Pivot88 is a Hong Kong-based supply chain quality and compliance platform, now leveraging a combination of its modules and applied Artificial Intelligence (AI) to reconcile the digital history of a product, from raw material through to finished product.

"We co-developed with Pivot88 a tool to track, with our bill of materials, all the components we are using on our finished products," explains Xavier Laforge, global quality manager of Oakley, a California-based eyewear and apparel brand. "This means for fabric, trim, and accessories we have the carbon footprint indication, we know exactly where it has been made and by which factory, and we're going to be 100% transparent with our consumer," he says.

London-based Fashion Enter is a non-profit social enterprise which serves as a center of excellence for sampling, grading, and production as well as for learning and development skills within the fashion and textiles industry. Award-winning Fashion Enter has been hailed as the UK's factory of the future, and brands they produce for include global fast fashion brand ASOS.

For four years in the making, they co-developed and use Galaxius, a platform which documents the journey of a garment from sampling to delivery.



Tanti is a QC & Finisher Associate with Fashion Enter.

Boyko is a Cutter Associate with Fashion Enter.

Galaxius provides real time information about the machinists, explains Jennifer Holloway, Fashion Enter CEO. "The machinists scan a code and it will tell us what the garment is, what they are working to, what the rate is. It has absolutely revolutionized our factory," she says. "Consumers can then scan the QR codes on finished garments and see 'Who Made My Clothes."

Pioneering Brands

Just before the pandemic, Vanessa Barboni Hallik launched Another Tomorrow, a values-based, ethically focused US luxury womenswear brand. Supply chain transparency was built in from the inception.

"Clients value the idea of modern, timeless luxury that honors the Earth," Barboni Hallik says. "We source only environmentally certified, ethical, and traceable materials and maintain direct relationships with regenerative farms. For transparency and future authentication, every item we produce includes a digital identity in the care label, so customers can learn how their garments evolved from farm to fabric to atelier." Another Tomorrow, also a certified B Corp, uses the Digimarc "evrthng" platform for customer engagement.

"What I love about B Corp is you have to back up factually what you say you do. I am proud that we were the first in the luxury fashion segment to earn both Climate Neutral and B Corp certifications and participate in 1% for the Planet," she explains. The brand has recently launched online resales of its authenticated product, making further use of the product's digital passport.

"We seek to encompass an organic and less-damaging approach to design, production, distribution, and life with sustainability, inclusivity, and innovation at its core," explains Joshua Scacheri, London-based Love Hero founder and creative director. "We believe that full transparency of our supply chain is important, so you know that we pay our artisans a fair living wage."

Love Hero was featured on season two of the Amazon Prime Television series "Making the Cut," where Scacheri won 3 challenges on the series, further expanding awareness of his brand purpose. In April, Love Hero was awarded the 2022 Drapers Sustainable Fashion Ones to Watch Award in London.

"Winning the Drapers Award reaffirmed that we are on the right track," Scacheri says. "I want to make a systematic change. I want people to say, 'they are the brand that pioneered the movement."

Love Hero uses Retraced, a block chain-based technology platform to store garment provenance.

"We go all the way to the region our organic cottons were grown, and into the forests on our viscose," he explains. Customers can explore product provenance through QR code engagement.



Gonul is a Blouse and Trouser Machinist Associate with Fashion Enter.



Singh is a Sewing Associate with Fashion Enter. PHOTOS COURTESY OF FASHION ENTER

What Does the Future Hold?

With technology still in development, data sets and standards undefined, consumers demanding transparency about sustainability, and regulators pushing for legislation to keep brands honest and accountable, what's a brand to do?

"It's an exciting time, and a genuine opportunity to bring value to the brand, the consumer, and the data regulator," says Jones. "Regulation has the opportunity to change the industry rather just 'tick the box' to define the minimum. It really goes back to data collection and sharing. The answer is always in the data. Brands can shape this by being part of the process now. We are asking the tier one's and tier two's in supply chain to take the risk. The most trusted and transparent will rise to the top."

References

- 1. AATCC Review, "Reputation Matters" DOI: 10.14505/ar.21.3.1
- 2. *AATCC Review*, "The Smart Supply Chain: A Digital Revolution," DOI: 10.14504/ar.19.3.2

Craig Crawford is a 2019 Tabbie award winning author and founderprenuer of Crawford IT, (www.crawfordit.com) a London-based consulting firm specializing in the digital transformation of brands; Twitter @getamobilelife; Instagram getamobilelife; +44 07834584785

