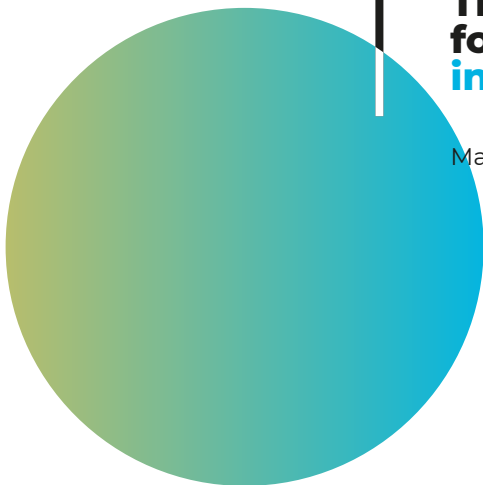# CERTILOGO

Blockchain for Digital Transformation:
When and Why?

**The essential guide
for executives driving
innovation in fashion**

March 2020

Contents

What is blockchain?

Blockchain is a tool for recording and sharing information digitally. Much like a standard database, it stores **blocks** of digital information in chronological order, **forming a chain** of events. But unlike a standard database, the information contained in a block cannot be altered or deleted after the fact. In the parlance of the field, it is immutable.

Immutability makes blockchain the ideal tool for regulating the creation and exchange of cryptocurrency such as Bitcoin: the purpose for which it was created. **Immutability inspires trust** in the truthfulness of information that a blockchain contains. Fraud can happen[1], but not without leaving a trail that is visible to others.

Another source of trust in blockchain technology is decentralisation. No single person or organisation has the power to accept a new block in the chain. Instead, **power is distributed** across a network of authorised users, each of whom 'owns' an identical copy of the data.

Authorisation and terms of use are governed by the style of blockchain environment in use. An environment that is fully public is called 'permissionless' because anyone can participate. Semi-public and private blockchain environments are called 'permissioned' because **access and actions can be restricted** to users with permission from a central authority or consortium.

Unless otherwise noted, the analysis in this paper focuses on permissioned blockchain environments, since to date these are the style of blockchain environment that is best suited for achieving key business objectives in fashion.[2]

Three styles of blockchain

	Public	Semi-Public	Private
Access	Open read and write	Permissioned write and/or read	Permissioned write and/or read
Speed	Slower	Faster	Fastest
Security	Open network	Open + approved participants	Approved participants

Certilogo Insights

Why use blockchain for fashion?

The breathless hype that characterised early discussions of blockchain for fashion is finally quieting down.

Today, objective sources will acknowledge that a blockchain ledger is simply a tool. It will not protect animals from cruelty or ensure fair wages in factories. It will not stop counterfeiters from forging products that pass as real goods. Nor will it end the staggering waste of energy and raw materials in a culture of throwaway fashion.

So why are luxury leaders like LVMH exploring blockchain? What problems can

blockchain solve better than competing digital technologies? And when is the right time to invest?

If you are a fashion executive charged with answering these questions, it can be helpful to begin with a review of the three dominant macrotrends that are driving interest in blockchain by brands and consumers: **Transparency**, **Authenticity**, and **Circularity**.

Macrotrend 1
Transparency

An immutable record of the fashion supply chain — the "who, what, when, where" of each step, from raw materials to finished product — is a tantalising prospect for brand leaders with a focus on **sustainability**.

Sixty-six percent of consumers say they are

willing to pay more for sustainable goods.[3] But absent a clear definition of what is 'sustainable' in fashion, established and heritage brands are losing the trust they once enjoyed with conscientious consumers, especially younger ones.[4]

Today 42% of Millennials and 37% of Gen Z say they want to know what goes into products, and **how products are made**, before they decide to buy.[5]

Transparency is the antidote proposed by the exploding number of consumer advocacy organisations such as Fashion Revolution, which wield it as **a lever for change.** The group's annual Fashion Transparency Index ranks 200 global brands on participation in the index and their progress on transparency criteria such as "traceability" and "know, show & fix". Brands leading the index win kudos in newspapers and social media; laggards get dunned.[6]

Consumer awareness is growing fast enough that Fashion Revolution policy director Sarah Ditty predicts conscious, digitally connected consumers will view transparency data as a basic requirement for fashion purchases within 5 years.

> *"I think staying secret will actually hinder companies,"* Ditty told Business of Fashion. *"The more others get on board, the more consumers expect that information is there, and when they don't find it, they question why… . You can only hide for so long."*

McKinsey's 2019 Apparel CPO report suggests brands are getting the message. In a panel of 64 chief purchasing officers responsible for a combined USD$100 billion in sourcing value, their number one concern was sourcing sustainable materials. In second place, 8 in 10 named transparency and traceability a top business objective for the coming five years.

Top 3 priorities for CPOs in the apparel industry 2020-2025

1	2	3
Suistainable materials	Transparency and traceability	Supplier relationship
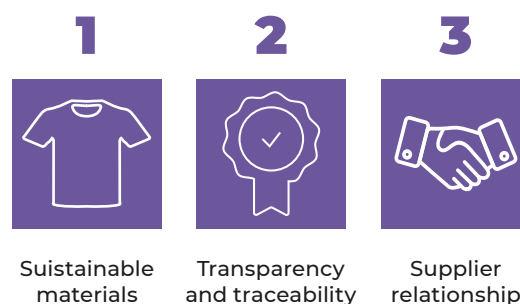
Source: McKinsey survey of apparel chief purchasing officers, 2019.

Macrotrend 2
Authenticity

If there is a silver lining to the storm clouds of fake news, fake identities and fake videos that populate our online lives, it is the growing conviction among consumers that **authenticity is precious**.

In a panel of 1,500 global consumers surveyed by Certilogo in 2019, an overwhelming 87% called it *Very* or *Extremely Important* to know that a product they purchased, or were about to purchase, is authentic rather than a counterfeit, and 77% would use a free digital service to verify that a **product is genuine**, if one were available.[7]

The same survey found that product authenticity — and the opportunity to prove it — was especially valuable to consumers who had spent more than €500 euros on a single fashion purchase in the past 12 months: 86% percent would verify a purchase digitally if given the option.

Reasons to verify a product vary from the rational to the emotional.

The OECD estimates that more than 3.3% of global trade is diverted into counterfeits and piracy annually, with fashion and luxury suffering the bulk of attacks. In turn, **replica products** pretending to be genuine appear everywhere from credible-looking online retailers to single-unit listings in peer-to-peer marketplaces.[8]

The Certilogo survey found that 36% percent of consumers were regularly worried that a product they bought, or were considering buying, might be a counterfeit.

Another third reported being interested in using a digital service to verify product authenticity simply because feel an affiliation or kinship with the brand: "*I feel better about myself when I know I have an authentic product from a brand I admire.*"

"I worry that a product I bought, or am about to buy, might be a counterfeit…"

Regularly

36%

Occasionally

32%

Rarely

32%
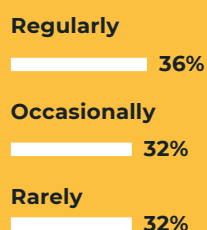
"I would use a free digital service to verify a product is authentic…"

Regularly

77%

Occasionally

18%

Rarely

5%
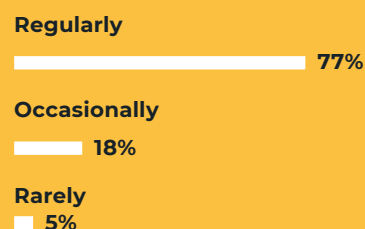
Certilogo Insights: The Rising Value of Real

Macrotrend 3
Circularity

While transparency in fashion refers to sharing how products are made, and authenticity confirms their brand origin, circularity in fashion refers to initiatives that design, source, manufacture, and maintain products for **maximum use** and **minimum environmental impact**.

On the front end of the product life cycle, circularity is pushing brands to design apparel, shoes and accessories using fewer virgin materials and more recycled ones.

And on the back end, when a product can no longer be used, circularity demands processes to **recycle** the obsolete item, **recover** its usable materials, and **return** them for **reuse** in the supply chain.

The 4 Rs of Circularity in Fashion

Re-use
Return
Recycle
Recover

In between these two ends, circularity offers the enticing opportunity for brands to build services that **monetise additional moments in the product and customer lifecycle** — unlocking an estimated $4.5

trillion of new value across industries.[9]

The booming market for pre-owned apparel, alone, is expected to double in size over the next five years, with Millennials and Gen Z adopting **second-hand shopping** 2.5x times faster than other age groups.[10]

Brands seeking inspiration for circularity can look to innovators in the related domains of transparency and authenticity. For instance, sustainable denim brand Nudie Jeans backs its published commitment to ethical and transparent production with free repairs and a 20% discount on a new pair of jeans to customers who return their old ones.

"*It's beneficial for both them and us,*" Nudie Sustainability Coordinator Kevin Gelsi told Business of Fashion, "*and we establish more long-term relationships with our customers*".[11]

Brands still on the fence should not wait long to get started, adds Rebecca Robins, global chief learning and culture officer at brand consultancy Interbrand. At this point in the conversation, Robins said:

"*What we're seeing with the brands we're talking to is that anyone absent from the debate and action is noticeably absent.*"[12]

69% of consumers say a stellar experience with one company raises their expectations with others.

Salesforce: State of the Connected Consumer, 2019.

When is the right time to invest in blockchain?

Like any consideration for digital transformation at scale, it is important to evaluate if blockchain is the technology your brand needs. The answer will depend on your business objectives.

To analyse these more clearly, it is helpful to map the three macrotrends of transparency, authenticity and circularity to an integrated model of the "circular economy" in fashion, divided into three stages

Stage 1

is the supply chain that sources materials and constructs the finished product: the focus of advocates for transparency, shown as *Source* on the chart at right.

Stage 2

is the distribution chain that delivers and sells the new, authentic product to consumers in authorised points of sale, ensuring their authenticity. On the chart this stage is called *Sell*

Stage 3

follows the product from its first owner to resale to its disposal at end-of-life, ideally in a recycling center that will recover materials and return them to stage 1 for reuse. Called *Serve* on the chart, this segment is the domain of circularity.

The circular economy for fashion

Certilogo Insights

To date, planned or completed blockchain implementations in fashion have focused almost entirely on bringing transparency to the supply chain. In the areas of authenticity and circularity, blockchain adoptions are fewer and less well understood. We discuss why in the sections ahead.

**When is
the right time
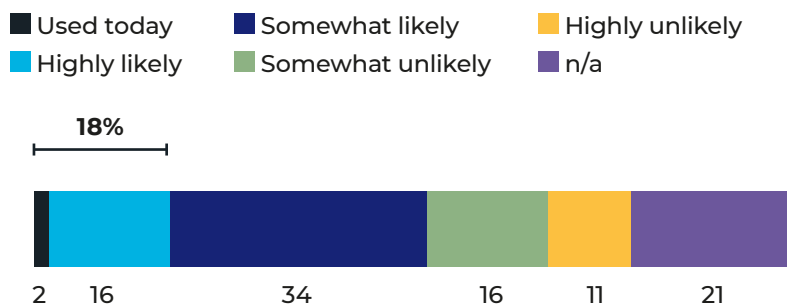to invest in
blockchain?**

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Transparency

The pressure to demonstrate that a brand is using sustainable methods of production — or at least making measurable efforts in the pursuit of greener goals — has pushed blockchain to the front of the agenda for brands pursuing **consumer trust that the brand is sustainable**.

While far from being the majority, nearly 20% of executives surveyed for Business of Fashion's State of Fashion 2020 report named "radical transparency" as one of the top three themes impacting their business last year.[13]

Roughly the same percentage of apparel chief purchasing officers interviewed by McKinsey in 2019 reported having a blockchain environment in use in 2019 (2%) or being highly likely to adopt one in the next five years (16%). [14]

Blockchain in fashion, 2020 - 2025

■ Used today   ■ Somewhat likely   ■ Highly unlikely
■ Highly likely   ■ Somewhat unlikely   ■ n/a

18%

| 2 | 16 | 34 | 16 | 11 | 21 |

McKinsey 2019 Apparel CPO Report

For brands still on the fence, or new to evaluating their potential return on a blockchain investment, it's important to evaluate the role of environmental sustainability in the brand's positioning with consumers.

A brand which makes reducing waste, animal welfare, sustainable sourcing, carbon footprints, or materials reuse or recycling a central element of their brand positioning is likely to face consumer pressure for detailed data that backs up the brand's commitments.

Blockchain allows this data to be collected and documented in a trustworthy format that can eventually be shown to the end consumer, for instance, by scanning a "smart tag" on the product with a smartphone.

**When is
the right time
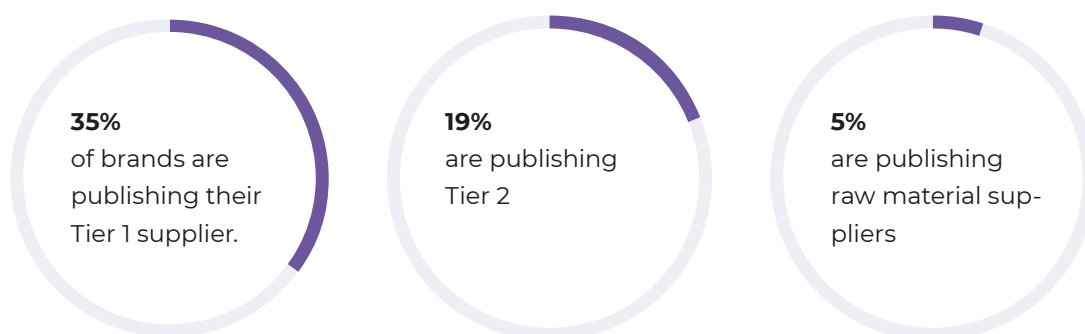to invest in
blockchain?**

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As attractive as that might sound, it is important for brands evaluating a transparency implementation with blockchain to understand that, like any digital technology, blockchain is only a means to the end.

Populating a blockchain ledger to share data for full transparency first requires a brand to have transparency internally — that is, the brand has to understand precisely where, when and how their products are being made; and not just once, but for every new product line and collection.

Achieving transparency on a fashion supply chain from the ground up is difficult enough. Untangling a sprawling multi-national network, with its many layers of contractors and sub-contractors, is a feat that many global fashion brands aspire to accomplish but vanishingly few have achieved to date.

One reason it can be difficult to document the steps in apparel supply chains — let alone document, track, and share those steps in perpetuity on a blockchain ledger — is that many suppliers prefer it that way. Many brands have relationships with their tier one factories where clothes are cut and sewn, but details deeper in the chain are notoriously difficult to verify.

35%
of brands are publishing their Tier 1 supplier.

19%
are publishing Tier 2

5%
are publishing raw material suppliers

Fashion Revolution

Consider, too, that the data in a blockchain chain is only as accurate as the people who put it there. In the words of one industry consultant blogging against blockchain hype in 2018:

"Blockchain systems do not magically make the data in them accurate or the people entering the data trustworthy, they merely enable you to audit whether it has been tampered with. A person who sprayed pesticides on a mango can still enter onto a blockchain system that the mangoes were organic."

In summary, a brand whose core positioning with consumers is based on a competitive advantage in sustainable sourcing and manufacturing would be wise to invest in a detailed analysis of their supplier networks and expected returns from a blockchain implementation.

Strategies to raise those returns are the subject of the chapter "We're ready. What's next?"

**When is
the right time
to invest in
blockchain?**

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Authenticity

In stage 1 initiatives for supply chain transparency, the primary source of added value from blockchain is *notarisation* — that is, announcing in an immutable and shareable format that an action has taken place. Brands with a blockchain implementation can extend their value capture in stages 2 and 3 of the value chain using the separate but related principle of *unique identification*.

Unique identification is the process of identifying a single unit of product with a distinct number, code or image that distinguishes it from identical products and can be used to verify its authenticity. **Items with a unique identification have a distinct birth, life and death that can be documented, stored and retrieved for review over time,** much like a passport holds the birthdate, birthplace, and selected travel records of a person.

In the case of fashion, luxury and other physical products, a unique identification that will be used to prove authenticity **must be attached to the product** in an analog or digital "smart tag" format that can be recognised and retrieved using a corresponding "reader" technology such as a smartphone.

The more visible and accessible the tag technology, the more widely it can be used. (See "What is a Smart Tag?")

What is a smart tag?

RFID Code
Scan at brand store
Inventory, In-store engagement

Least accessible to consumers

Digital Fingerprint
Scan with designated app
Easy addition to packaging

NFC Code
Tap with enabled smartphone
Fast on eligible devices, New

QR Code
Scan with smartphone camera
Durable, Low Cost, Familiar

Access Code & URL
Type code in a smartphone or desktop browser Universal Access, Low Cost

Most accessible to consumers

Certilogo Insights: The Rising Value of Real

**When is
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blockchain?**

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Scanning or entering a smart tag in the reader connects the user to digital data and experiences that have been assembled, typically using a platform in a protected cloud server, to provide a specific experience or service to the user.

In cases where brands have gathered supply chain transparency data on a blockchain, they can decide to share that information with consumers who connect using the product smart tag and verify that the product is authentic. It's just important to remember that a blockchain ledger cannot prove the authenticity of a physical product on its own.

Another motivation for tagging products with a Unique ID and authentication service capable of proving authenticity is the opportunity to engage and interact digitally with omnichannel consumers in distant locations and sales channels that brands do not control.

86% of fashion high spenders would use a free digital service to verify a brand name product is authentic

Certilogo Insights: The Rising Value of Real

In summary, a fashion executive whose most pressing objective is to enrich the consumer experience with digital brand content and a support brand integrity with a proof of authenticity at points of sale can accomplish that objective without the time and expense of a blockchain implementation.

Alternatively, in cases where a blockchain implementation for supply chain transparency is planned or already in place, the brand can multiply its returns on that investment by adding a unique identity technology accessible directly to consumers using a smartphone.

Learn how 80+ connected brands are using a complimentary product authentication to engage discerning consumers who demand the best brand names, everywhere they shop.

**DOWNLOAD THE
AUTHENTICITY EFFECT**

Circularity

It remains to be seen if an expensive and time-consuming investment in blockchain is the right strategy for fashion companies pursuing circularity.

Blockchain could be used to capture the same "trust dividend" for circularity initiatives that consumers are demanding for transparency in the supply chain. But delivering on that promise requires the additional step of tagging the product with a unique identification technology accessible to consumers, ideally using a smartphone. (See the Authenticity section above for an explanation.)

> **83%**
> of consumers say the experience a company provides is as important as its products and services
> *Salesforce, The State of Marketing 2018.*

One of the primary motivations that have been proposed for extending blockchain tracking to stage 3 of the value chain in fashion is the opportunity to track products and interact with consumers after sale, giving brands an opportunity to monetise transactions in the aftermarket.

For example, a blockchain ledger combined with a digital smart tag for authentication could be used to deliver a product's supply chain and ownership history at resale, allowing the seller and buyer to agree more easily on a price, or reward an owner with cryptocurrency when a product is submitted for recycling at end of life.

At the same time, similar services are already available in simple, plug-and-play formats using a unique identification tag alone. The underlying blockchain would add an additional layer of trust for remote transactions between strangers, but one that may not be sufficiently appreciated — at least not yet — by a consumer market focused on closer and more pressing topic of environmental sustainability and transparency in the supply chain.

In 2017, Global Fashion Agenda (GFA), the world's foremost leadership forum for sustainability in fashion, launched the *2020 Circular Fashion System Commitment* to accelerate the industry's transition to a circular fashion system.

But with the June 2020 deadline in sight, GFA CEO & President Eva Kruse admits it's unlikely the pact's 90 brand signatories will achieve more than a fraction of their goals, ensuring that the transparency conversation — and the effort to show consumers that brands are making an effort— will continue.

"We're not ready. What now?"

First, you're in good company. The digital readiness and associated resources required to justify an enterprise investment in blockchain is out of reach for most apparel brands, and is likely to remain that way for some time.

Still, with online searches for "sustainable fashion" up 300% between 2016 and 2019, it's unlikely the demands for transparency will subside anytime soon. What else can brands do?

Consider that "radical honesty", in lieu of radical transparency, has proven to be an effective strategy for winning trust with consumers, Robins, of Interbrand, told Business of Fashion. That means being open about your failures and limitations as well as successes, being sensitive to consumer needs, and steering clear of claims that can't be backed up.

Following this approach, **brands don't have to wait for supply chain transparency to make smart, meaningful innovations** that earn trust and appreciation from consumers. They can propel their digital transformation forward immediately by embracing proven strategies for **authenticity** and **circularity**.

1. Start with a Unique Identity

Giving products a unique, item-level digital identity, also called a Unique ID, is the fastest and most cost-effective way to support your brand goals for authenticity and circularity, without waiting for blockchain.

As Jill Standish, Senior Managing Director & Head of Global Retail, for Accenture, explained in The Connected Products Economy:

A digital identity "*creates a breakthrough opportunity for the industry to share granular, product-level data across the value chain and to create new product data and insights that have never been available before. And with the costs of digital technologies decreasing rapidly, the economics of digital identity are becoming increasingly attractive.*" [19]

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2. A Unique ID is the backbone of authenticity

With the right technology partner, anything from a serial code to a care label to a familiar black-and-white QR code can be digitally paired with a digital unique ID in a format that renders the product unique and easy to authenticate in an online server.

More than 80 global brands offer their consumers a fast and reliable product authentication experience with Certilogo. **See our services**

3. Adding a unique identity supports circularity

Giving products a unique identity is a game changer for circular economies and strategies for digital consumer engagement generally.

Brands typically lose track of their products and customers beyond the point of sale. As a result, they have no idea how customers use the garment, how long they keep it, how durable it is, and whether it gets recycled.

Products with a unique identity, on the other hand, can communicate with consumers at any moment in the consumer lifecycle. All that's left is giving them a reason to engage.

4. Monetise new services

The digital connection between products and consumers gives brands a rich new opportunity to dialogue with consumers by offering them services that enhance their ownership experience.

With the proper opt-ins and terms of use, the interactions between consumers and products create a rich new source of data for marketing personalisation. Just keep in mind the advice of Miguel Sciancialepore, corporate counsel, Microsoft, who notes that privacy is a critical aspect of any program for digital authentication.

"Consumers will only use technology that they trust; applying privacy, security and ethical principles when designing technology is good business and the right thing to do." [20]

Digital Transformation in fashion **without using blockchain**

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A digital ID is uniquely matched to the physical product

Each finished product is assigned a unique digital identity during manufacturing. A security tag marks the unique identity on the product with a serial code, QR code, NFC tag, or digital fingerprint that can be read with a smartphone.

Connected Products

Finished Products

Brand Manufacturers

Shipping

Suppliers

Optional transparency data

Raw Materials

Recycled Materials

Data

BRAND®

Recycling

Resale

Exclusive Brand Experiences

Personalised offers

Product care & How To

Authentication

Distributors

Physical Stores

Online Stores

Authentication

Sale

Purchase Data

Product Information

Digital authentication is an opportunity to engage connected consumers

1. Source

Brands working towards transparency store the supply chain information of their choice in a secure database that links the information to products by batch, date and manufacturing location (optional).

2. Sell

Consumers and retail partners use a smartphone to "connect" with the product and verify authenticity before purchase, after purchase, and during returns, wherever products are sold. Authentic products share supply chain details supplied by the brand (optional)

3. Serve

Connecting to an authentic product unlocks access to added brand content and services that enrich the brand experience, deliver personalised offers, and encourage circularity initiatives chosen by the brand, such as product recycling.

"We're ready. What's next?"

You've chosen a blockchain environment to create an immutable, decentralised ledger of movements in your supply chain. Now it's time to take care of the demand chain: the consumers who determine the market value of products and services you create.

Engaging an authentication partner who can help consumers to identify your genuine products quickly and easily with a smartphone is the best way to protect your investment in blockchain tracking — and extend its value to every moment in the product life cycle.

For new products, a digital "smart tag" added at manufacturing allows you to package selected data from your blockchain and deliver it directly to your brand consumers. Digital product interactions affirm product authenticity and, in turn, add value to the brand experience, raise willingness to pay, increase conversions, and neutralise threats from illegitimate sellers.

For pre-owned products, an investment in a consumer-facing smart tag for authentication protects consumers from fraud and — for brands that are ready to do more — **unlocks the potential of circularity** in the fashion supply chain.

The opportunities are vast, says Douwe Jan Jostra, former head of circular transformation for the C&A Foundation:

"In a circular economy, we can reverse the one-way flow of materials and protect the value of all manufacturing inputs — leading the shift away from wealth generation (based on 'take-make-waste') towards smarter product design, more efficient production processes

and new business models."

In summary, the immutable records of supply chain **transparency**, combined with a secure method for verifying product **authenticity** in a real time with a smartphone, sets the stage for **circularity** in fashion — a three-pronged accomplishment that maximises brands' investment in blockchain and the experience their consumers enjoy.

The decision to document your supply chain and product movements in an immutable ledger with blockchain technology is an excellent first step toward meeting the mounting consumer demands for transparency for consumers.

Combining your investment in transparency with an investment with a secure method for verifying product authenticity in real time with a smartphone sets the stage for circularity in fashion — a three-pronged accomplishment that will maximise your investment in blockchain and the digital experience consumers enjoy with your brand.

7 Essential considerations for choosing an authentication provider

1 Mind the implementation

Every product in your blockchain ledger will have a unique digital identity in the form of a serial number or virtual fingerprint. The same unique number or fingerprint must also be added to the physical product during production — the pivotal step known as "tagging" the product. Factory know-how is indispensable to implement tagging in complex manufacturing environments at scale.

2 Tag technologies vary

Be wary of vendors pitching a "one tag fits all" solution for digital interactions with consumers. Choose a partner that is experienced with multiple tag technologies and can walk you through the pros and cons of each.

3 Don't confuse identity with authenticity

Modern counterfeiters are skilled at copying or cloning digital and analog identity tags of every type, including NFC tags, to deceive consumers. Look for a platform-based solution that uses multiple factors to confirm authenticity rather than relying on a hardware solution on its own.

See the exhibit below: "End-to-end security for product tagging & authentication at scale"

4 Involve marketing

Consumers won't interact with digital services they don't know about. Involve marketing from the outset to ensure the digital connection on your products is attractive, easy to find, easy to use, and promoted at every consumer touchpoint in your arsenal.

5 Maximise incentives

A successful digital tracking and authentication service adds value to your brand experience for consumers and customers. But could it do more? Examine your brand and its audience for additional opportunities that could be delivered exclusively to consumers who engage with your products digitally.

6 Be there in key moments of truth

In a world where the global counterfeit market is estimated to exceed 3.3% of world trade globally[21], any robust authentication project needs procedures to identify scammed consumers, support them in obtaining a refund, and guide them to safer purchase channels. Handled with care, the right partner can deflect hurt feelings and build positive sentiment for your brand.
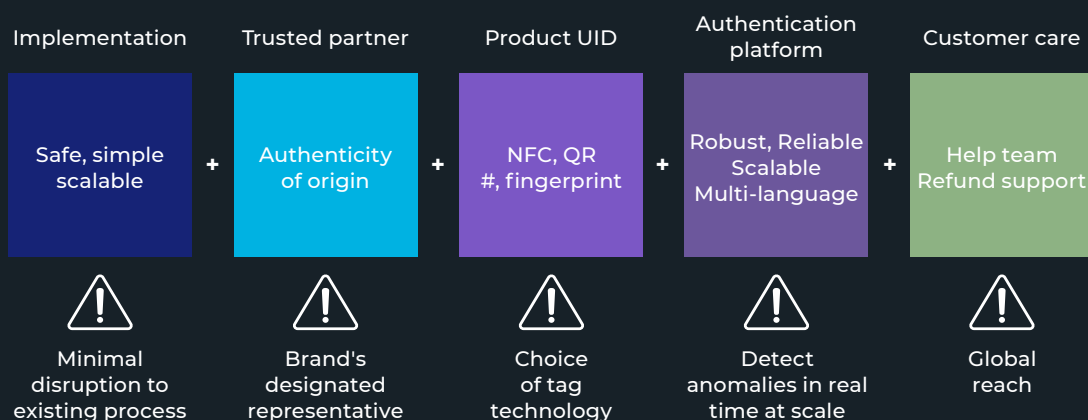
7 Think enterprise

An investment in product tracking, authentication and after-market services can benefit every aspect of your business if planned properly. Consumer-product interactions can drive conversion, differentiation, omnichannel communication, lead generation, incremental revenue opportunities and loyalty campaigns — and that's just in marketing.
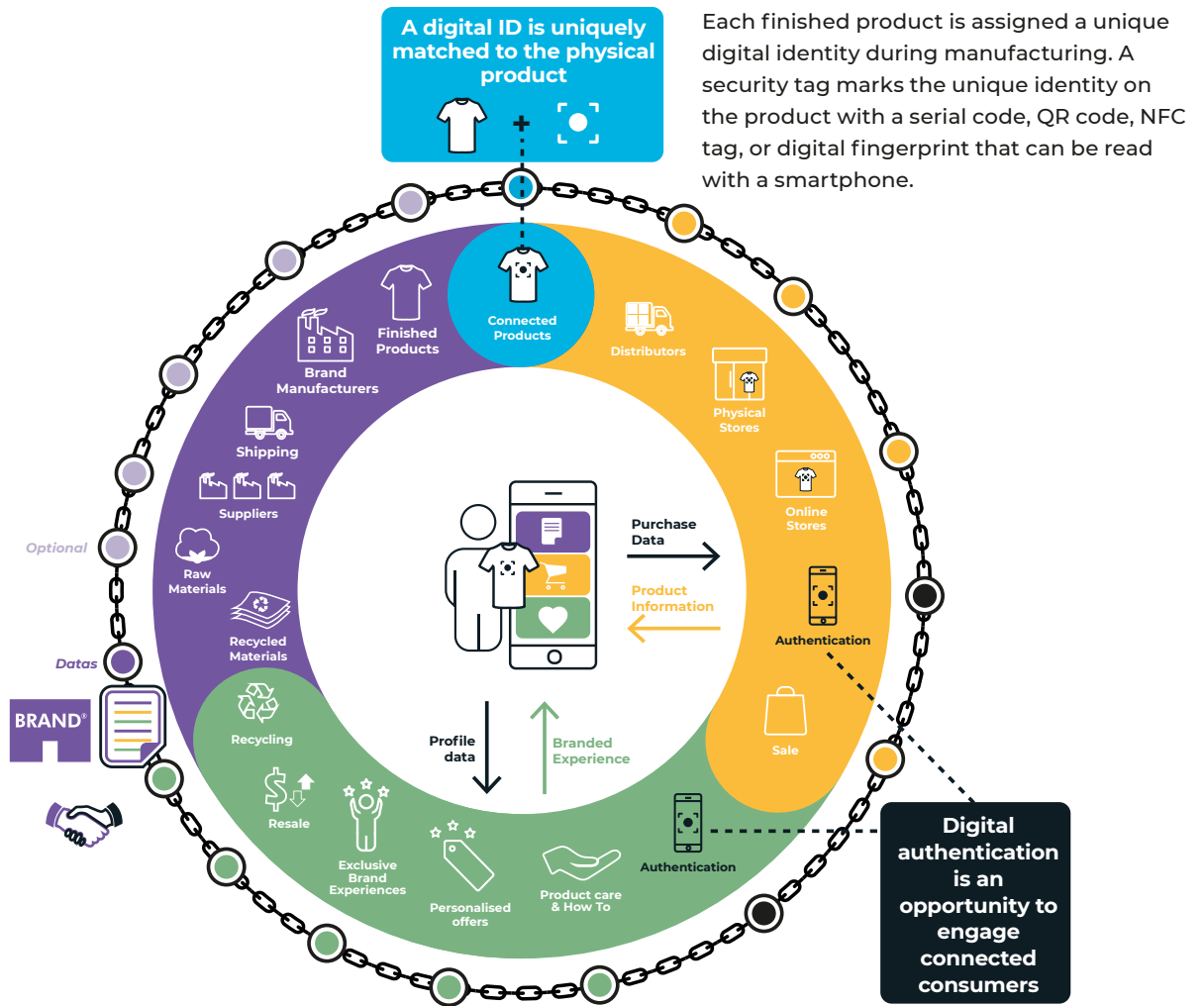
Designers can get rich new feedback on product performance, secondary market behaviors, end of life and materials recovery. Operations get supply chain visibility. Brand protectors get rich new insights on illegitimate sellers in primary markets, and a new ability to protect brand integrity in secondary markets as well.

Certilogo Insights

End to end security for product tagging at scale

Implementation		Trusted partner		Product UID		Authentication platform		Customer care
Safe, simple scalable	+	Authenticity of origin	+	NFC, QR #, fingerprint	+	Robust, Reliable Scalable Multi-language	+	Help team Refund support
⚠		⚠		⚠		⚠		⚠
Minimal disruption to existing process		Brand's designated representative		Choice of tag technology		Detect anomalies in real time at scale		Global reach

Digital Transformation for product *using* blockchain

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A digital ID is uniquely matched to the physical product

Each finished product is assigned a unique digital identity during manufacturing. A security tag marks the unique identity on the product with a serial code, QR code, NFC tag, or digital fingerprint that can be read with a smartphone.

Connected Products

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Online Stores

Raw Materials

Recycled Materials

Purchase Data

Product Information

Authentication

Recycling

Sale

Optional

Datas

BRAND®

Resale

Exclusive Brand Experiences

Profile data

Branded Experience

Personalised offers

Product care & How To

Authentication

Digital authentication is an opportunity to engage connected consumers

1. Source

Immutable digital records from suppliers and manufacturers are "connected" to the finished physical product using a unique digital identity. Brands select which transparency information that will be shared publicly and information that will remain internal.

2. Sell

Consumers and retail partners use a smartphone to "connect" with the product before and after purchase, wherever products are sold, to verify **authenticity** and review transparency data selected by the brand.

3. Serve

Connecting to an authentic product unlocks brand content, product records, and services selected by the brand to encourage loyalty and **circularity**, such as product buy-backs and recycling.

Key Takeaways

Blockchain is a tool with exceptional power to secure and share information in specific digital transactions. But it's not a cure-all for fashion.

Whether your brand's current priority is transparency, authenticity, or circularity, your role as a leader charges you with the responsibility to extract maximum value from your brand's primary asset — in other words, from the product itself.

Connecting products with a digital smart tag is a cost-effective strategy to engage your brand consumers, authenticate their purchases, and deliver experiences that satisfy your consumers:

- at any moment in the product life cycle,
- anywhere on the globe,
- in any channel for new and pre-owned sales,
- online and off.

The remarkable business insights that connected products generate are a bonus we will explore in a separate paper. Suffice it to say that an investment in product authenticity, like an investment in blockchain, is best approached as an enterprise project, with advantages for everyone from designers and manufacturers to marketing and brand protection teams.

Contact our team to learn more.
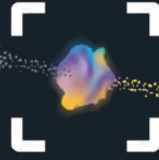
About Us

180 Countries
10 Languages
Any digital device

Certilogo engages high-value fashion and luxury consumers to authenticate their purchases everywhere they shop — a disruptive digital service that, since it was created in 2006, has grown to serve 1 user every 8 seconds in 180+ countries and 10 languages.

Participating brand products are connected to the Certilogo platform with unique identifiers in RFID, NFC, QR, numeric, and fingerprint formats that are recognised instantly when consumers interact with the service using a smartphone or digital device.

Authenticating a product engages consumers with a best-in-class digital experience before and after purchase and connects them directly with the brands they love. The same real time results unmask clones and replicas of brand labels, safeguarding loyal customers and ensuring data integrity for products tracked in private databases and distributed blockchain ledgers.

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ENDNOTES

[1] **Raconteur:** "Blockchain is not a silver bullet for fraud prevention," by David Cowan (6 September 2018): https://www.raconteur.net/risk-management/blockchain-fraud-prevention

[2] See, for example, the arguments by ConsenSys, partner in the ongoing development of the AURA blockchain platform announced in 2019 by LVMH: "In reality, privacy is not a property of any blockchain. Rather, there are layers of privacy that can be applied to any blockchain, even public chains, allowing for private or "shielded" transactions on a public blockchain. This allows companies to benefit from the decentralized security of a public blockchain while concealing private information." From "Busting the myth of private blockchains. It's time to talk about layers": https://consensys.net/enterprise-ethereum/best-blockchain-for-business/busting-the-myth-of-private-blockchains/

[3] McKinsey, "What Radical Transparency Could Mean for the Fashion Industry" (Feb. 2019): https://www.mckinsey.com/industries/retail/our-insights/what-radical-transparency-could-mean-for-the-fashion-industry

[4] Business of Fashion & McKinsey, "The State of Fashion 2019": (2019) https://www.mckinsey.com/~/media/McKinsey/Industries/Retail/Our%20Insights/The%20influence%20of%20woke%20consumers%20on%20fashion/The-State-of-Fashion-2019.ashx

[5] McKinsey, "What Radical Transparency Could Mean for the Fashion Industry" (Feb. 2019).

[6] Circular, "Just 21% of circularity targets met by global fashion brands" (June 2019): https://www.circularonline.co.uk/news/just-21-of-2020-circularity-targets-met-by-global-fashion-brands/

[7] Certilogo, "The Rising Value of Real" (2020): **https://discover.certilogo.com/en/blog/resources/rising-value-real-strategic-insights-about-consumer-attitudes-toward-authentic**

[8] OECD, "Trends in Trade in Counterfeit and Pirated Goods" (February 2019): http://www.oecd.org/gov/trends-in-trade-in-counterfeit-and-pirated-goods-g2g9f533-en.htm

[9] Peter Lacy and Jakob Rutqvist, "Waste to Wealth. The Circular Economy Advantage," Palgrave Macmillan, 2015.

[10] ThredUp, 2019 Resale Report: https://www.thredup.com/resale.

[11] Business of Fashion, "Lessons From Fashion's Journey to Radical Transparency" (February 2020): https://www.businessoffashion.com/articles/education/case-study-radical-transparency-supply-chain-sustainability (paywall)

[12] Ibid.

ENDNOTES

[14] BOF & McKinsey "The State of Fashion 2020" (2020)

[13] BOF, Lessons From Fashion's Journey to Radical lTransparency

[15] McKinsey, "Fashion's new must-have: Sustainable sourcing at scale" (October 2019): https://www.mckinsey.com/industries/retail/our-insights/fashions-new-must-have-sustainable-sourcing-at-scale

[16] Medium, "Blockchain in not only a crappy technology but a bad vision for the future" (April 2018) https://medium.com/@kaistinchcombe/decentralized-and-trustless-crypto-paradise-is-actually-a-medieval-hellhole-c1ca122efdec

[17] Entrepreneur, "The Fashion Industry is Insanely Wasteful. Can Blockchain Fix it? (April 2019) https://www.entrepreneur.com/article/331229

[18] BOF, Lessons From Fashion's Journey to Radical Transparency

[19] "Making the invisible, visible: How digital identity supports circular fashion across the value chain," The Connected Products Economy (2020), p. 20.

[20] "Trust and privacy in a connected world", The Connected Products Economy (2020), p. 44.

[21] OECD, "Trends in Trade in Counterfeit and Pirated Goods" (February 2019): http://www.oecd.org/gov/trends-in-trade-in-counterfeit-and-pirated-goods-g2g9f533-en.htm

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