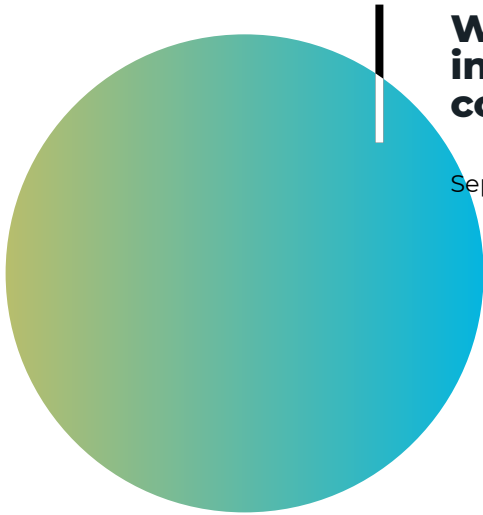


# The future of supply chain digitalisation in Fashion

**Why a true end-to-end  
infrastructure can't keep  
consumers out**

September 2020



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# Introduction

## The time is now

The penetration of digital in shopping behaviour is an unstoppable trend that pushes companies towards an out-and-out digitalisation of their whole value chain, including the supply network. While brands acknowledge the chance to be more effective, **the ways to implement a digital supply chain are many, and so are the benefits — if identified and exploited correctly.**

A phenomenon accelerating the digitalisation of supply chains in Fashion is the ever-growing focus on sustainability and transparency as influencers of consumer demand. However, there's a more stringent, urgent need behind the race towards digitalisation: a well-tracked supply chain also provides the bases for more efficient and transparent production processes, granting Fashion brands the flexibility they need to respond to sourcing issues and to quickly change the allocation of production resources in terms of speed, volumes and geographical distribution. As a matter of fact, the real challenge posed by the growth of online purchase transactions

has more to do with production and logistics than with the launch of an e-commerce website.

According to Bain&Company, **by 2025 the online channel will account for 25% of the value of the luxury market<sup>1</sup>, with nearly all purchases influenced by online interactions.** This leaves companies with the need to be digitally-ready in a few years from now, especially in a world shaped by the coronavirus crisis, a “world of remote everything”, as Microsoft said in a recent announcement<sup>2</sup>.

What does “being digitally ready” mean then? Is supply chain digitalisation an operational issue, or is it the first building block of a virtuous cycle that generates significant return only when it's designed with customer-centricity in mind?

This paper investigates the main options for digitalisation to identify those which generate the highest Return on Investment.

# The silver lining of a digitalised process

## A wide range of opportunities

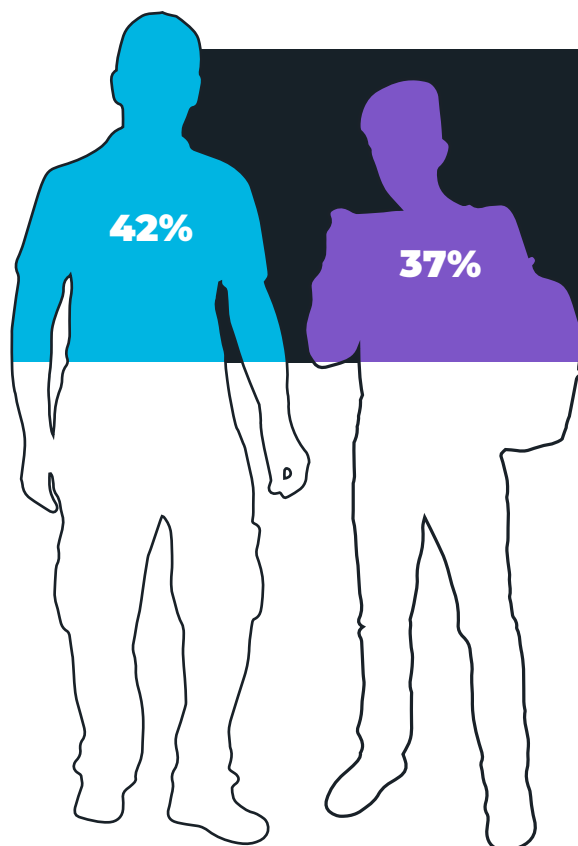
The switch from a linear, to a digitally integrated supply chain means resolving many efficiency pain points as well as creating a **competitive advantage for the whole business model**.

**Traceability** is the first key benefit of a digitalised supply chain, as technology allows brands to see where their products are at any stage of the chain, from manufacturing to retail.

**Luxury companies in particular can rely on digitalisation technologies not only to track the production process, but also to grow the direct-to-consumer activity, including purchases on their owned online retail stores.** At the same time, monitoring their genuine products along the supply network can help brands fight one of the ever-rising issues of the luxury market,

that is counterfeiting. Between 2013 and 2016, the share of trade in counterfeit and pirated goods within global trade grew from 2.5% to 3.3%<sup>3</sup>. Because of online sales of fake goods, luxury brands lost USD 30.3 billion<sup>4</sup> in 2017 only.

Keeping a record of every phase of the production process also means knowing where raw materials come from and manufacturing happens, as well as how items get dispatched. Such information is becoming increasingly relevant to consumers, given their **rising sensitivity towards sustainability and brand transparency**. According to Nielsen, by 2021 sustainable goods will make up 25% of store sales in the US; a 2.7% increase compared to 2017 - a year in which 30.5% of such sales were of transparent label products<sup>5</sup>.



42 percent  
of Millennials  
and 37 percent  
of Gen Z

want to know what goes into  
products and how they are made  
before a purchase

Brands relying on sustainable materials, recycled packaging, low-emission manufacturing, and so on, can **use a digitalised supply chain as a means of providing details about their environmentally-friendly and ethical practices**, which are increasingly relevant to consumers. According to McKinsey, 42 percent of Millennials and 37 percent of Gen Z want to know what goes into products and how they are made before a purchase<sup>6</sup>. It is well known that shoppers under the age of 40 are reshaping the industry: in Asia only, they make up 30% of all luxury spending, driving 85% of global luxury sales growth<sup>7</sup>.

Monitoring the supply chain can also streamline **risk management and decision-making**. By combining digitalisa-

tion with big data analytics and cloud computing, **companies can prevent and assess any disruption of the supply chain** caused by outside events, strengthening their own resilience. As the 2020 impact of the COVID-19 crisis on the personal luxury market is expected to account for a 30-40 billion Euros decline<sup>8</sup>, the significant amount of unsold inventory, for instance, could be more easily managed through digital processes.

Over time, such analytics will go beyond keeping a record of what happened in the past or providing supply chain information: it will be used to **predict future outcomes, allowing companies to understand how to achieve optimal operational results**.

# The limits of a source-to-distribution approach

## RFID technology: a matter of distance

When it comes to supply chain digitalisation, radio frequency identification (RFID) is the leading technology nowadays: according to a study by Accenture, 69% of surveyed global retailers had already a significant level of RFID technology adoption by 2018<sup>9</sup>. It consists of tags including a speck-sized microchip and an antenna that can be **embedded in any type of consumer product** at the point of manufacture. Each chip can be read through specific gates, usually from between ½ to a several meters away, transmitting its own

unique ID number to provide information on the product itself. In this way, **assets can be tracked wirelessly and more accurately** without physically handling them.

**Distance is indeed a key advantage of RFID technology.** Not only such tags can be scanned by unattended reading stations at any point of interest indoor and outdoor, **they can also be read simultaneously**, so that any piece of clothing contained, for instance, in the same box can be identified at the same time.



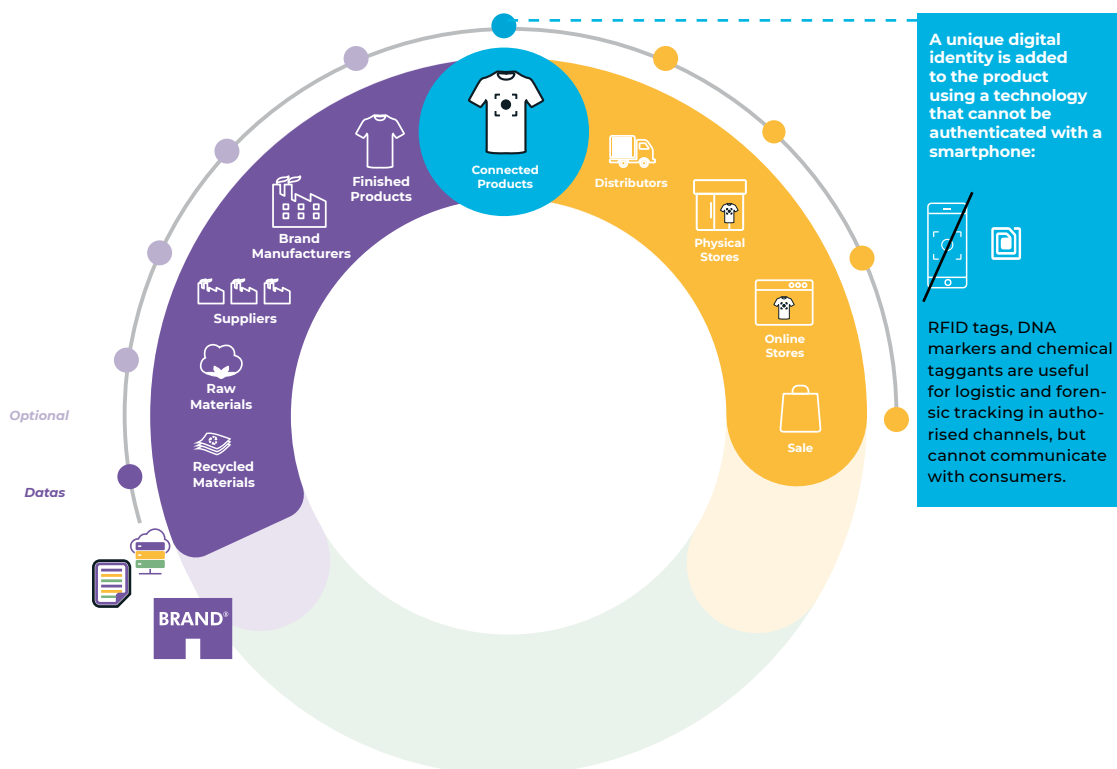
## Must the digital journey end at the point of sale?

RFID technology can be exploited by brands throughout their authorised channels to collect **information for logistics and forensic purposes**. When it comes to **internal operations**, the pros of the adoption of such technology include:

- **Process optimisation**, as inbound and outbound checks become quicker and more reliable, producing more accurate data about where parcels and stocks are located at any time, from warehouse to distribution process and in-store assets
- **Inventory**, as stores in particular can rely on RFID to get almost real-time inventory availability across all sales channels, providing consumers with more precise and

faster responses when they are looking for specific items or sizes.

- **Product information** for internal stakeholders and regulators, as each product is paired to a unique digital identity that includes specific details such as where its raw materials come from and where it has been manufactured.
- **Authenticity inspection**, so long as products are located where brands can control them *before* they get sold. In this case, brand investigators and authorised retail partners can check RFID chips as proof of genuineness.

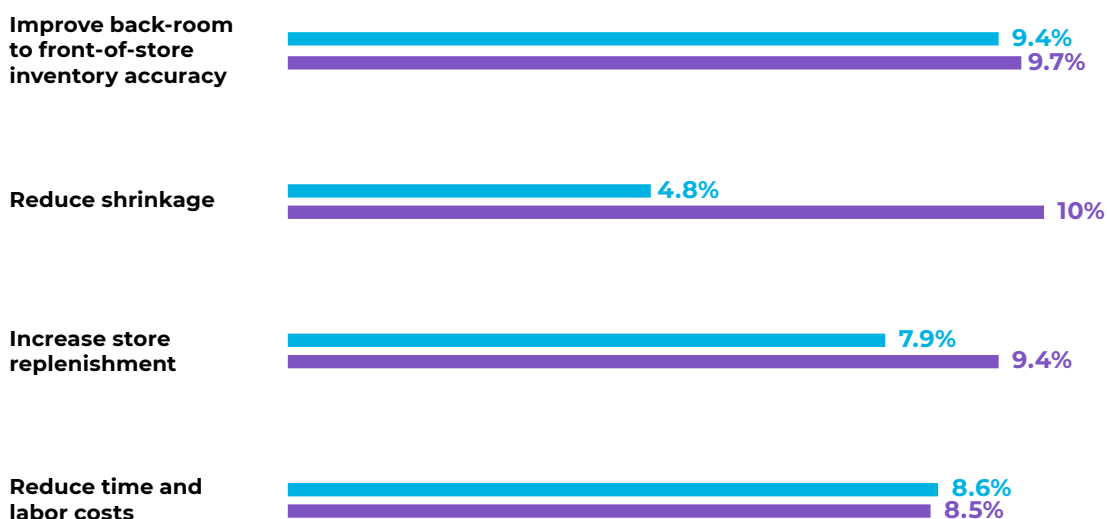


## Enhancing ROI on internal processes

Where internal operations are involved, increased inventory accuracy resulting from the adoption of RFID leads to high ROI's. Over time, the more brands adopt this technology, the less RFID tags and

required equipment impact their spending. According to the study carried out by Accenture, **almost all RFID adopters reported a ROI over 5% in at least one usage scenario**<sup>10</sup>.

Reported RFID ROI by use case by maturity level



Source: Accenture, *Transforming Modern Retail* (2018)

Piloting Full Adoption

## But what about consumers?

For all its advantages, RFID technology has one major weakness: it requires industrial readers and therefore it cannot be used to interact with consumers. In fact, handling or **buying a product with an RFID tag does not make much difference to customers**, since the pros of such technology end at a store level, with no after-sale benefits. This creates a missed opportunity not only for

clients but most of all for brands: **choosing a digitalisation that relies only on technologies that don't take consumers into account means making an investment that cannot scale up completely**. Engaging consumers is indeed the ultimate digital strategy, especially when it comes to maximising the return on investment.

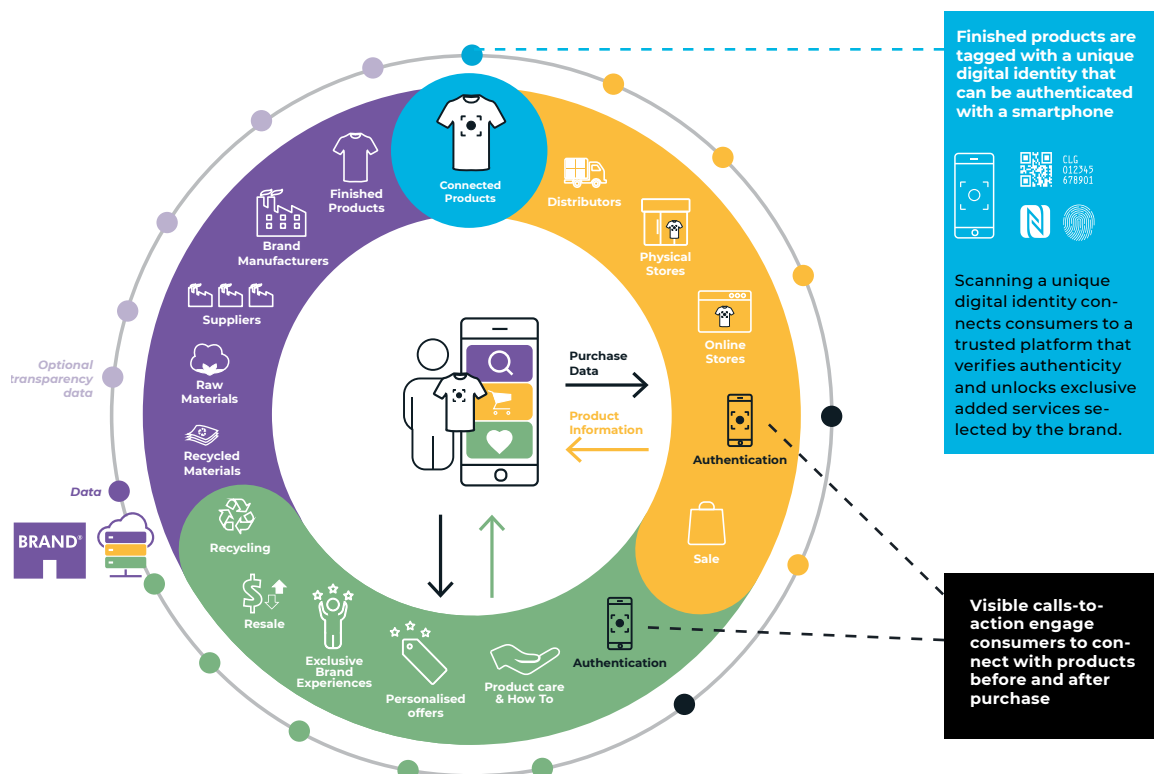


# Getting close to consumers is *the competitive advantage*

## Filling the gap with smart tags

So how can brands digitalise their supply chain while engaging consumers in the process? By making their tags smart through identification technology that allows interaction with people, such as QR codes and Near Field Communication (NFC) wireless technology, for example. Although their functionalities are similar to RFID in terms of speed and unique identity, **smart tags can be activated at short**

**distance and it takes just a smartphone to read them.** They can be programmed to provide consumers with a wide range of information that spans from supply chain data for brand awareness to call-to-actions to spur interaction with brand content or campaigns. Using both RFID and smart tags means **brands can exploit any stage of the supply chain to the fullest, including the after-sale phase.**



## Consumer interaction is a game changer for brands

Smart tags turn a piece of clothing into a **connected product which interacts with consumers who are willing to be contacted by brands**, as they scan these labels to gain information. The benefits of a spontaneous interaction are almost unlimited. The first one is collecting customer leads as consumers provide their data to access the information they are looking for. To do that, **they do not need to buy the product they are handling**, since smart tags can be easily scanned when trying a garment in the changing room or even when just looking at it in store. Therefore, these tags offer brands the opportunity to gain more leads than just those related to actual clients, to be used for marketing purposes to boost sales. The bottom line? **By engaging consumers, brands get the chance to sell more, maximising their digitalisation ROI.** At the same time, smart tags enhance the **customer experience before and after a purchase**, as they can be used to ac-

cess information, offers and the brand's world itself anytime and anywhere.

Being uniquely paired to a single product, smart tags **extend authenticity verification outside authorised channels**. If RFID tags can be used by brands to check the genuineness of an item as long as it belongs to the supply or distribution chain, **smart tags empower consumers to check for authenticity** too, even at home. When shopping for apparel, especially online or outside owned offline retail stores, it takes just a few seconds for customers to check whether what they hold in their hands is genuine or not. If a garment features a smart tag, they will just scan it with their smartphones to find out. Such information helps both clients and brands: on the one hand, buyers can return what turned out to be fake; on the other, **brands can collect this data to understand where their counterfeit products come from.**

Authentication increases consumer propensity to engage with brands by **33%**. Learn why connected products are so important to fulfil the ever-growing expectations of customers.



**DOWNLOAD  
THE AUTHENTIC SIDE  
OF ENGAGEMENT**

Similarly, smart tags provide consumers with data that would be otherwise used just for logistics and internal purposes, if working with RFID tags only. The availability of information on raw and recycled materials, manufacturing locations, suppliers and so on, mirrors **brand transparency**, helping customers make more informed decisions when it comes, for instance, to sustainable shopping. Given the longevity of smart tags, ethics-related data are meant to stay: those buying second-hand

will know a garment is genuine and how it was made, while brands will be informed that their product is still out there and is going to be owned by someone else. This lays the foundations for a **more efficient circular economy**, where pairing RFID and smart tags plays a crucial role: brands can use internal inventory data over time to adjust production and reduce landfill disposals, while consumers can buy used apparel more safely.

## (Some of) What Smart Tags can do for a Brand every time consumers scan them



- Trace whether and where collections are **counterfeited**
- Help check that stocks did not end up on the **grey market**, as authentications by consumers can prove a garment was sold where it was supposed to or not
- Identify third-party unauthorised **excess production**
- **Engage consumers** with exclusive content such as a new collection sneak peek
- Start a **lead generation** process by interacting with potential clients
- Encourage future in-store or online **purchases** through related product suggestions
- Invite consumers to enrol into **loyalty programs**
- Drive traffic and followers to official **social media** pages and profiles
- Provide useful information on the product, such as how to wash it, **additional services** available and so on
- **Gain information** on consumers through brief surveys
- **Draw traffic** to the owned online retail store by offering benefits or rewards
- **Inform consumers** about special promotions, campaigns, initiatives, contests by using temporary calls to action

## Is investing in blockchain mandatory?

Among those technologies that can be adopted to fully digitalise the supply network, blockchain is the most recent and discussed, as it can provide substantial improvements to the fashion ecosystem and the luxury one in particular. How so? Blockchain stores any digital information in chronological order, forming a **chain of events that leaves a permanent trace every time it gets modified**. Therefore, any action is indefinitely trackable. As of now, blockchain is primarily exploited for internal database purposes, but it is just a matter of time before consumers start benefiting from it too. To that end, blockchain means strong security: working as a distributed network, it is not controlled by one entity that may pursue its own agenda, but by many authorised and trackable users. For this reason, it is extremely hard to hack: being a decentralised system, it does not consist of an individual core that

can be damaged in a single action. Overall, blockchain offers **first-time levels of security and traceability** that brands can exploit, for instance, to make information available to consumers or strengthen **one's reputation for being transparent**. Given its capability to grant digital data records that cannot be falsified, keeping track of any change permanently, brands can use blockchain to gain a new level of traceability for internal and external operations. When it comes to keeping record of every stage of garment manufacturing, blockchain can deliver, on the one hand, a more visible step-by-step process that is simpler to maintain for companies; on the other, it can reassure consumers with its unalterable stored information including sourcing, date and place of creation, point of sale, as well as, in the coming future, who owned a second-hand item before its resale.

Learn how to use blockchain for fashion, when is the right time to invest in it and the edges of its adoption

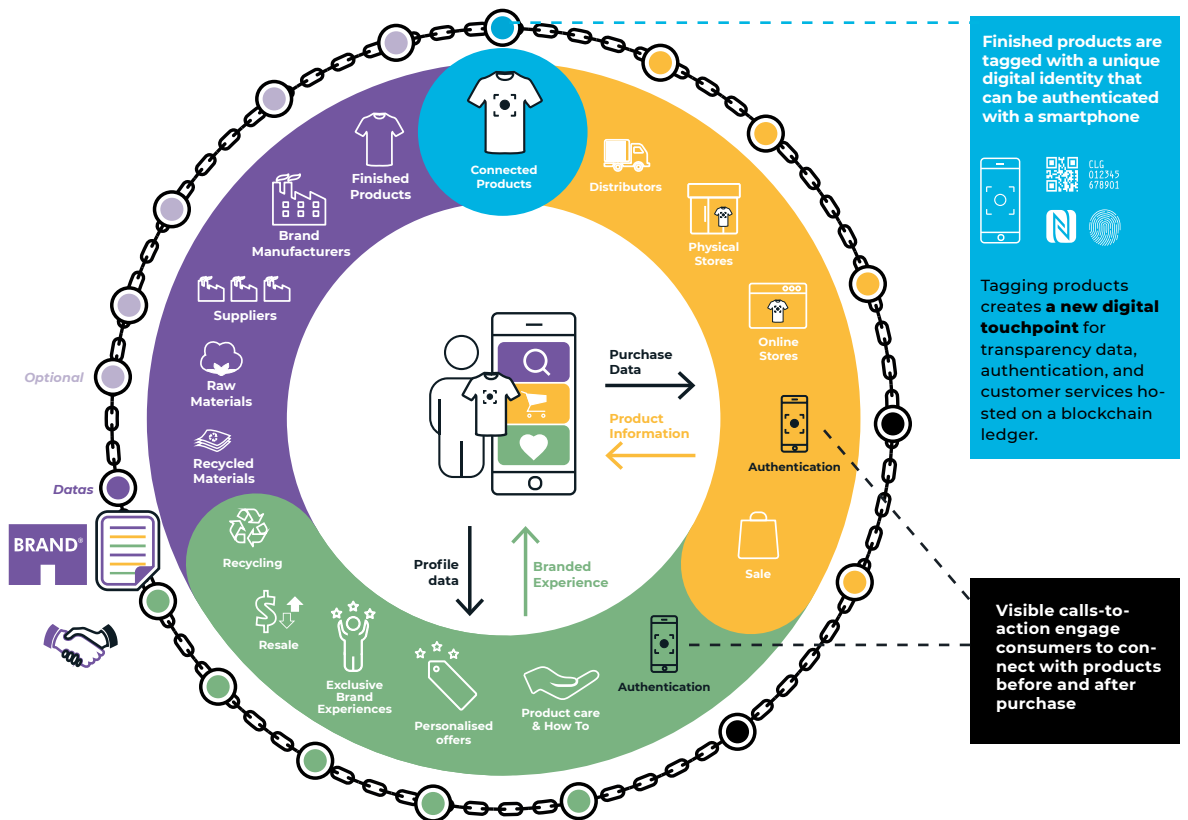


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**BLOCKCHAIN FOR DIGITAL**  
**TRANSFORMATION:**  
**WHEN AND WHY?**

**Getting close to consumers is the competitive advantage**

Blockchain-based traceability projects come with a cost that may be too burdensome for many companies. Yet, this does not mean these companies should give up their ambition to digitalise and trace their supply chain, protect their brand from counterfeiting and provide transparent information to their customers. In terms of consumer engagement, smart tags alone can in fact deliver consumers almost the very same information in a cheaper, easier but equally unique way, which makes blockchain not mandatory when starting a digitisation process. **Brands willing to offer consumer-centred experiences can**

**consider adopting just smart tags in the first phase of digitalisation**, to achieve engagement benefits for ROI maximisation without making an initial investment that could turn out to be too onerous or complex to implement. This, however, does not prevent companies from enjoying the advantages of blockchain at a later stage of their digital transformation. Blockchain can strengthen a well-designed customer journey, fully exploiting the potential of modern digital technologies in order to extract maximum value from a brand's primary asset, namely the product itself.



**1. Source** 🔍

Brands collaborate with suppliers to document their supply chain in a blockchain ledger owned by the brand or a trusted partner, creating **transparency** for consumers.

**2. Sell** 🛒

Consumers and retail partners use a smartphone to "connect" with a tagged product, verify **authenticity**, and review transparency data stored in the blockchain ledger.

**3. Serve** ❤️

Connecting to an authentic product unlocks brand content and services that add value and promote loyalty – for example, a **circularity** initiative that rewards customers with tokens or discounts in exchange for recycling.

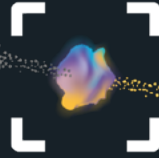


# Conclusions

## Engaging consumers by design is a must

Why use a product that can be read by specific scanners only rather than create a connected product that can interact with final users too? If the benefits of RFID tags are making internal processes faster and more accurate, that is also their limit, as they are designed to be industry-oriented only, with no capability of interacting with consumer devices. Logistics is just one part of the transformation journey: to be complete, the supply chain digitalisation **has to include consumers by design**, providing products with a **digital identity** that allows loyal, occasional, new and even potential clients to interact with brands. Over time,

smart tags serve as a one-on-one source of information that enables consumers to find out what they want and allows brands to collect leads and data to perfect their sale strategies and, more broadly, the understanding of customer behaviour. In a world where digital activities continue to grow, especially after the pandemic, brands have to explore new means to be able to engage consumers remotely and safely, **and that is exactly the goal of smart tags**. Engaging consumers is thus the ultimate digital strategy, especially when it comes to maximising the return on investment.



# 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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Learn more at [www.certilogo.com](http://www.certilogo.com)  
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## ENDNOTES

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