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How NFC can help clothing & footwear brands grow their business



Bridging the physical and digital world



The clothing and footwear industry is a highly competitive market, driven by a new generation of consumers who increasingly uses digital technologies to shop online, search for recommendations, and interact with brands. At the same time, consumers expect fashion brands to step up their sustainability initiatives and consider eco-friendly commitments to be an important factor in their buying decision. NFC technology can address these challenges, as it provides a means to communicate with customers, and can ease recycling initiatives.

A DIGITAL SHIFT

What are the benefits of using NFC technology?

NFC (Near Field Communication) is a wireless connectivity technology based on RFID (Radio Frequency Identification) enabling contactless communication between a reader and a tag. A tag is a small electronic component that can be embedded in the labels of clothing and footwear items, such as jackets, t-shirts, dresses, shoes etc.

Adding an NFC tag to an object connects it to the digital world.

Implementing NFC allows fashion brands to track their products around the world, ensure their authenticity, and create a direct two-way communication channel with consumers via their smartphone, used as an NFC reader.

How does it work?

The NFC tag embeds several advanced features like the memory protection of the its content and authenticity verification (TruST25*), thereby helping brands and consumers differentiate authentic goods from counterfeit ones.

The tag also embeds a user memory, which allows companies to store different types of information that their customers can access anytime using their NFC-enabled mobile phone.

For example, a website URL can be configured into the tag, and by simply "tapping" the NFC-enabled object with their smartphone (bringing the mobile phone and the tag in close proximity), end users can find out more about their product of interest before and after the purchase (stock availability, recommended products etc). By opting for NFC, fashion brands provide their customers with a digital experience and can more easily engage with their audience.

Specifically designed to enable these applications, ST offers the **ST25 Tag IC product line**, available now.

28%
of the value of
global sales of
apparel & footwear
comes from
e-commerce (*)

(*) Source: Euromonitor International, December 2020,
[available here](#)

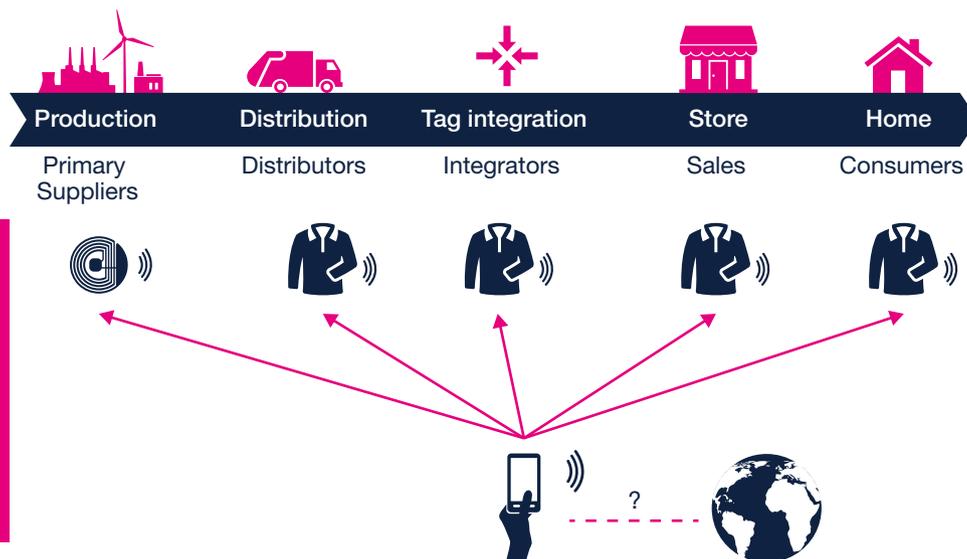
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Protecting the brand and consumers

On top of the security it delivers, NFC technology offers brands many other advantages, as the same NFC tag can be used for several use cases.

Use case 1: traceability

A company can use NFC technology to verify that the goods equipped with an NFC tag have followed the entire supply chain flows as expected.



HOW CAN NFC IMPROVE YOUR SUPPLY CHAIN MANAGEMENT?

- Track supply chain flows
- Easy access to item provenance
- Guarantee product authenticity
- Locate items anywhere, anytime once connected via NFC

Use case 2: consumer engagement

NFC tags can also be used to help end consumers find out more on the brand's products, before and after the purchase. By using their NFC-enabled smartphone to read the NFC tag, consumers can access more information on the brand, its products and their origin.

ENABLING MULTIPLE APPLICATIONS

Track & Trace

Thanks to their unique identifier (UID) coupled with other information coming from the application (e.g.: timestamp, etc), the goods can be geolocated by anyone using an NFC reader or an NFC-compatible mobile phone everywhere and all along the supply chain, from production to store.

By setting several check points throughout the supply chain, stock management can be improved, and the status of each tagged item can be easily accessed and updated by the supplier of the goods.

This is also an efficient and secure way to fight against grey markets and unauthorized channels by knowing what product is where at any time.

The NFC tag's small form factor allows it to be hidden when necessary, depending on what the NFC tag will be used for. If a company wants to use the tag for traceability purposes, the tag can be fully integrated into the goods and be made invisible to the outside world.

However, if the tag embeds multiple application possibilities, such as traceability and consumer engagement, its location on the product must be clearly indicated so that consumers can easily find the tag in order to read it and access the information it contains.

Increasing consumer engagement



A two-way communication channel between brands and consumers

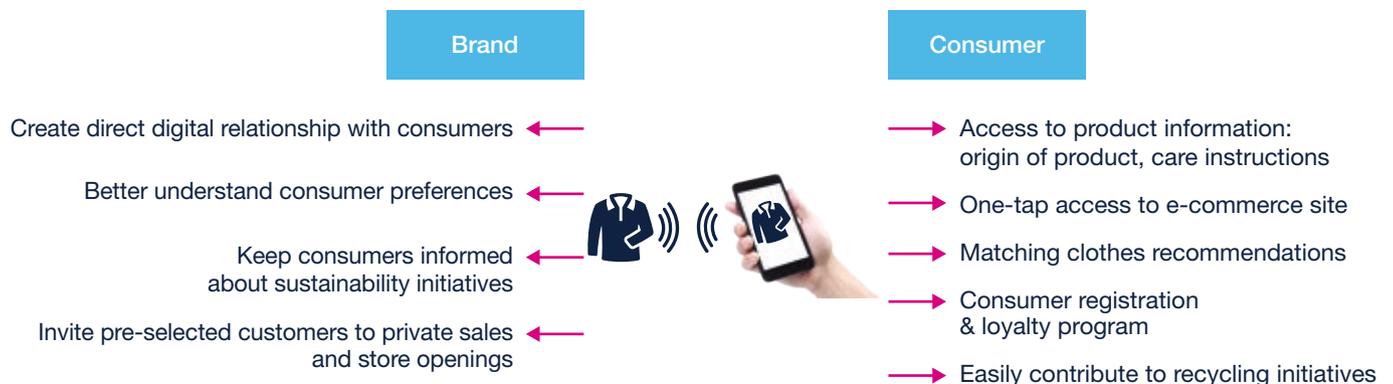
NFC technology delivers the benefits of digital marketing to physical products.

Secure and ready-to-use, NFC tags can easily be configured with personalized content (authentication, product information and more) which consumers can access by simply tapping the tag with their smartphone.

By providing access to product information (origin, fabric), offering personalized shopping advice, and giving details on sustainable initiatives, such as where to recycle or donate a piece of clothing after use, NFC technology helps fashion brands establish a direct communication channel with their customers. On a wider scale, NFC technology can also be implemented to organize the recycling of used items: by including an NFC reader in company containers and an NFC tag in clothing items, fashion brands can track their items and measure the impact of their recycling initiatives.

The information stored in the tag must follow a specific format that can be read by an NFC-enabled mobile phone (NDEF format). Consequently, any NFC mobile phone can interact with the connected product.

ST offers a wide range of ST25 tags which are certified by the NFC Forum and fully support the NDEF functionality, thereby ensuring interoperability with NFC-compatible smartphones.



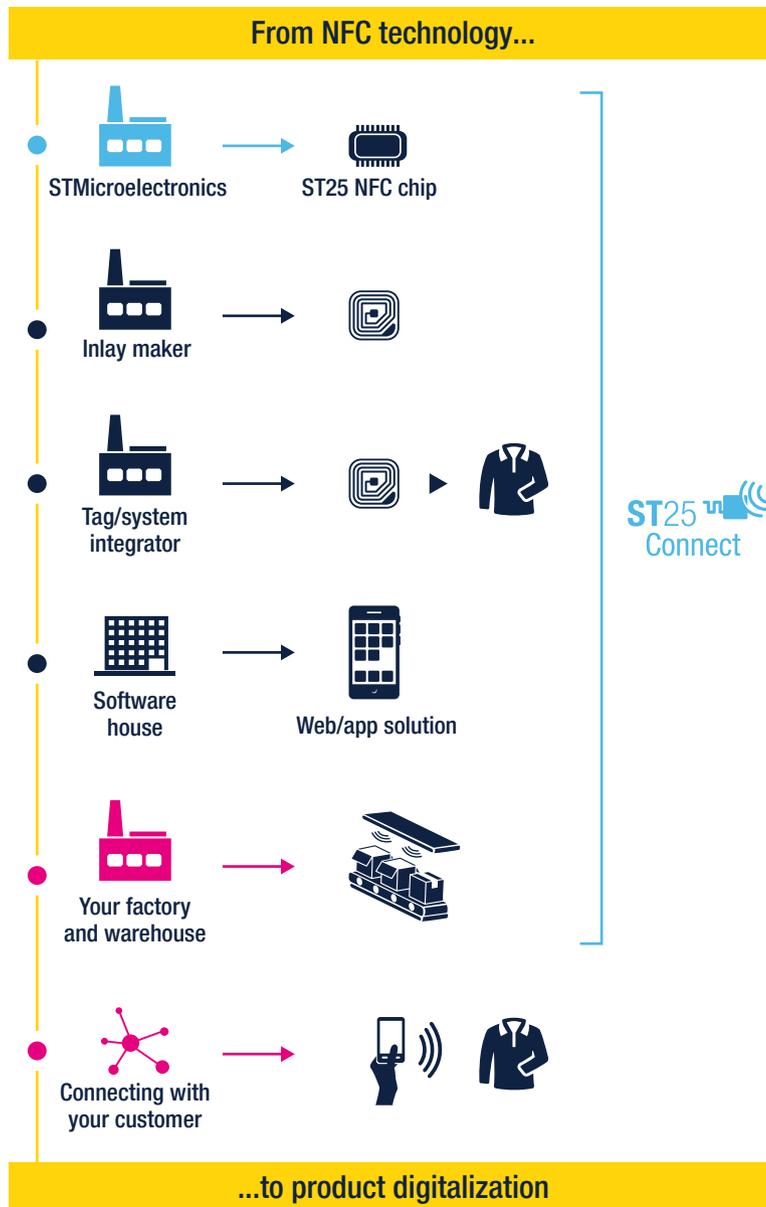
ST25Connect program

Helping brands grow their business with NFC

In practice, the successful integration of NFC technology in consumer products involves multiple stakeholders and requires technical expertise, time, and resources, especially if you are new to NFC technology.

The ST25Connect program is a service provided by ST to ensure the best product integration and implementation of NFC technologies.

With ST25Connect, you can benefit from ST's technological expertise and our network of trusted partners. In direct contact with ST's experts, you will be provided with personalized advice and the NFC technology you need to grow your business.



ST provides semiconductor technologies and supports companies in the implementation of NFC technology.

With over 20 years of experience in the design of NFC readers and tags and an active member of organizations like the ISO and the NFC Forum, ST has strong expertise in NFC technology, and will create a complete and customized solution addressing your needs and challenges.

Leveraging our network of recognized partners, ST's team of NFC experts will help you break down barriers to NFC adoption. Depending on your needs, requirements, and location, we will suggest the ideal business partners (inlay makers, tag integrators, certified laboratories, etc) for your project.

Once we have defined together how your company can benefit from NFC technology, we will provide a customized solution, based on ST's portfolio of ST25 NFC readers and tags.



CURIOUS TO KNOW MORE?

Visit www.st.com/st25connect
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Order code: **BRST25CLOTH0920**

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