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# How NFC can help luxury brands grow their business



# Bridging the physical and digital world

With over 80% of market growth over the past years fueled by a new generation of consumers, the luxury-goods industry is facing a generational shift. (\*) More consumers are buying online and this trend is expected to grow in the coming years. To ensure a competitive edge and long-term market growth, luxury brands need to adapt their strategy by focusing more on digitalization. The growth of online sales offers multiple business opportunities, but also brings about more counterfeiting, which can namely lead to sales losses, decrease consumer trust, and negatively impact brand reputation.



(\*) Sources:

The Fashion Law (2018) "Chinese American Millennials buy more than half of the world's luxury goods"

Danziger P.N. (2019) "3 Ways Millennials And Gen-Z Consumers Are Radically Transforming The Luxury Market" Forbes

D'Arpizio C., Levato F., Prete F., Del Fabbro E. and de Montgolfier J. (2019) "The Future of Luxury: A Look into Tomorrow to Understand Today" Bain & Company

over  
**\$30**  
billion

**Total losses of  
luxury brands  
due to online  
counterfeiting in  
2017 (\*)**

(\*) Source:

Driver R. (2017) "Luxury brands lose \$30.3 billion due to online counterfeiting in 2017" Fashion Network

## 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 which adds wireless connectivity to physical objects, such as luxury goods including bags, watches, jewelry, perfume bottles and more. Adding an NFC tag to an object connects it to the digital world.

Implementing NFC allows luxury 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 its content and authenticity verification (TruST25\*), thereby helping brands and consumers differentiate authentic goods from counterfeit ones.

The tag embeds a user memory, which allows a company to store useful information such as product provenance. For example, a website URL can be configured into the tag, and by simply "tapping" the NFC-enabled object with their smartphone (bringing the smartphone and the tag in close proximity), end users can find out more about their product of interest. This allows brands to engage with their consumers.

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

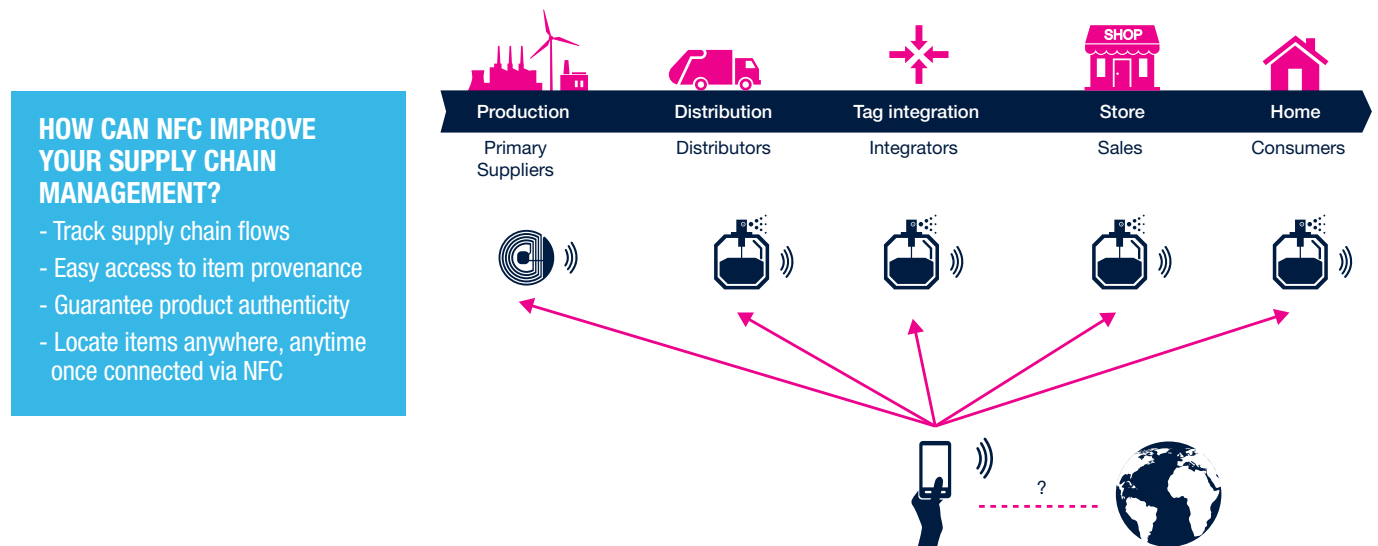
\* is a registered and/or unregistered trademark of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere.

# 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.



## 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.

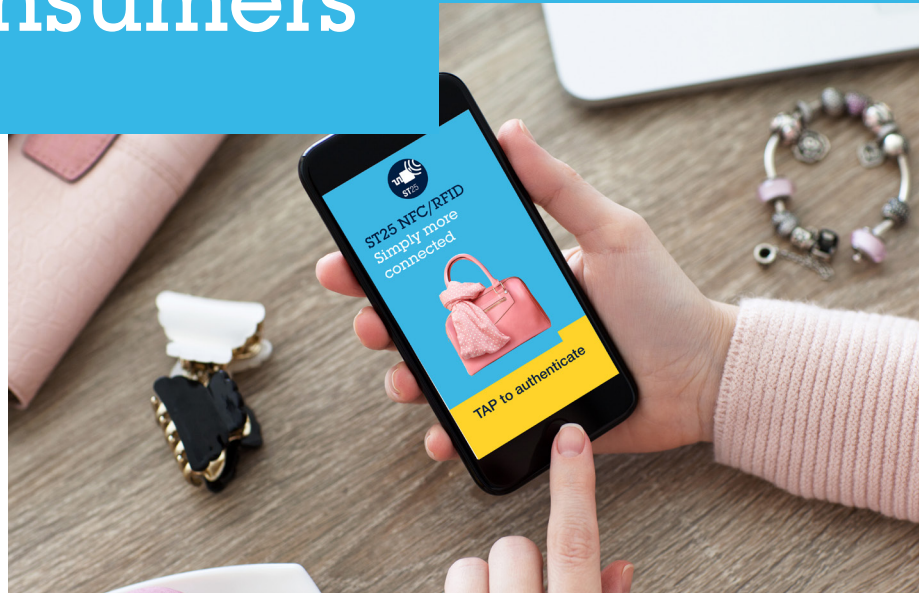
By setting several check points throughout the supply chain, stock management can be improved, and the status of each tagged item can be easily accessed and updated by the supplier of the goods.

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 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.

# A two-way communication channel between brands and their consumers



## Tap & Link

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 (product origin, URL to the brand website, and more) which consumers can access by simply tapping the tag with their smartphone.

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 a product featuring an embedded NFC tag.

The so-called “tap & link” approach allows the brand to create a unique and direct relationship with the consumer by sharing information about the product, but also about the brand itself, since the company decides on the information to be stored in the tag, depending on the target application. One NFC tag can combine multiple use cases (tracking, consumer engagement etc). The data is personalized during the production phase and protected by a password if necessary.

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.



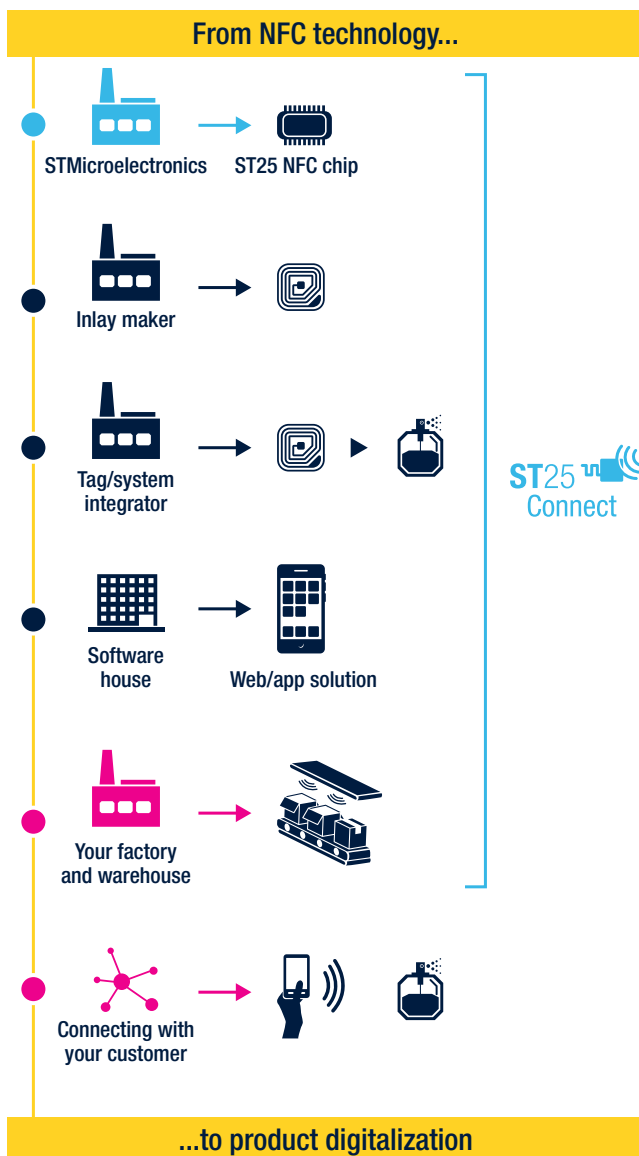
# ST25Connect program

## 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.

**ST25**   
**Connect**

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Visit [www.st.com/st25connect](http://www.st.com/st25connect)  
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