



life.augmented

How NFC can help health & wellness brands grow their business



Empowering consumers to more easily monitor their own health

The healthcare & wellness industry is dramatically changing, as people worldwide turn towards digital technologies to monitor their own health and be more involved in health-related decisions. In line with new customer expectations, the rising adoption of mobile Health (mHealth) and smart medical devices is creating new opportunities for device manufacturers today, and in the near future. However, with the market for connected healthcare devices becoming increasingly competitive, device makers need to offer a tailored experience to set themselves apart from competition.

17.6%
expected
compound annual
growth rate of the
global mHealth
market from
2021 to 2028^(*)

(*) Source: Grand View Research (2021), available [here](#)



NFC FOR THE MOBILE HEALTH INDUSTRY

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 adds wireless connectivity to physical objects, such as healthcare and wellness goods including blood glucose meters, plural, toothbrushes, connected scales, blood pressure monitors and more.

Implementing NFC allows healthcare and wellness brands to track their products around the world, support consumers in their daily use of devices and help them monitor their own health.

How does it work?

The NFC tag embeds several advanced features like the memory protection of its content, which safeguards sensitive user data.

The tag also embeds a user memory, which allows a company to store the information that is relevant for its customers, such as a link to an online tutorial or product information.

By opting for NFC, health and wellness brands offer their customers a digital experience. For example, a link to a tutorial 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 to allow the tag to be read), end users can find more information on how to use their device properly. This allows brands to engage with their consumers.

Specifically designed to enable these applications, ST offers [the ST25 Tag IC product line](#), available now.

What NFC technology can bring to brands and consumers

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

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.

Thanks to their unique identifier (UID) coupled with other information coming from the application (e.g.: timestamp, etc.), the goods with an embedded NFC tag can be geolocated anywhere along the supply chain by anyone using an NFC-enabled reader or a smartphone.

There are multiple benefits of this so-called “track & trace” solution. 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.

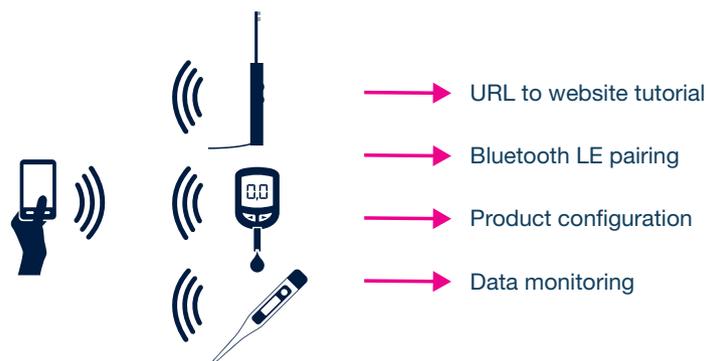
This is also an efficient and secure way to fight against grey markets and unauthorized channels by knowing what product is where at any time.

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.

Consumer engagement

NFC tags embedded in mHealth devices can also be used by patients to monitor their own health. By using their NFC-enabled smartphone to read the NFC tag containing their medical data, patients can easily get access to more information on their daily health and vital signs.

Thanks to their small size and weight, NFC tags can be integrated in very small healthcare and beauty products, allowing consumers to benefit from automatic product configuration. For example, if the NFC tag integrated in the head of an electric toothbrush embeds information on the rotating speed of the brushes, the NFC reader in the main unit of the toothbrush can read this information and automatically configure this setting upon first use.



Enabling more interactions with healthcare professionals



Tap & Monitor

Small, secure, and easy to use, NFC tags offer unlimited design possibilities, as they can be integrated into devices, regardless of their form factor.

The tag can easily be configured with personalized content (URL to a tutorial, product information and more) which, consumers can access by simply “tapping” the tag with their smartphone.

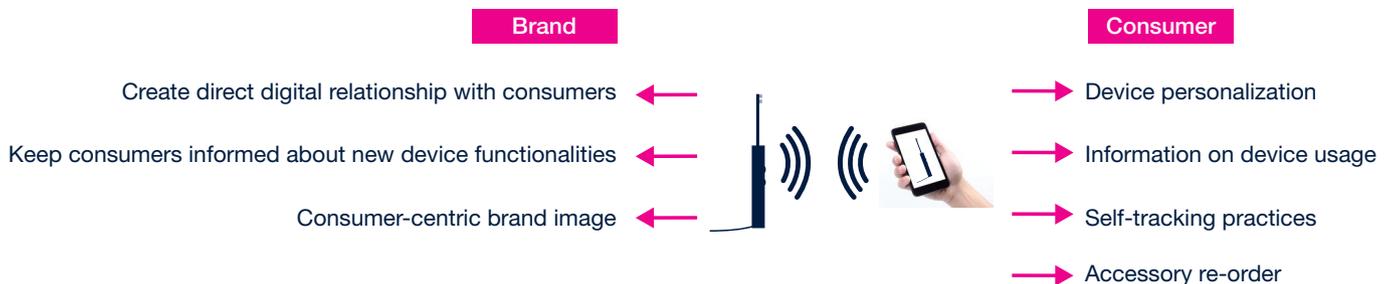
The information stored in the tag must follow a specific format that can be read by an NFC-enabled mobile phone (NDEF format). Consequently, any NFC mobile phone can interact with a product featuring an embedded NFC tag.



NFC technology allows patients to share medical information with health professionals more easily. It can be used during face-to-face appointments between patients and doctors to facilitate the Bluetooth LE pairing of IoT devices to share medical data, or by patients at home, using an NFC-enabled smartphone.

The NFC reader embedded in the mobile phone can read the contents of the NFC tag in the mHealth device, and transfer the data to a dedicated mobile application, which stores information and makes it readily available for healthcare professionals.

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



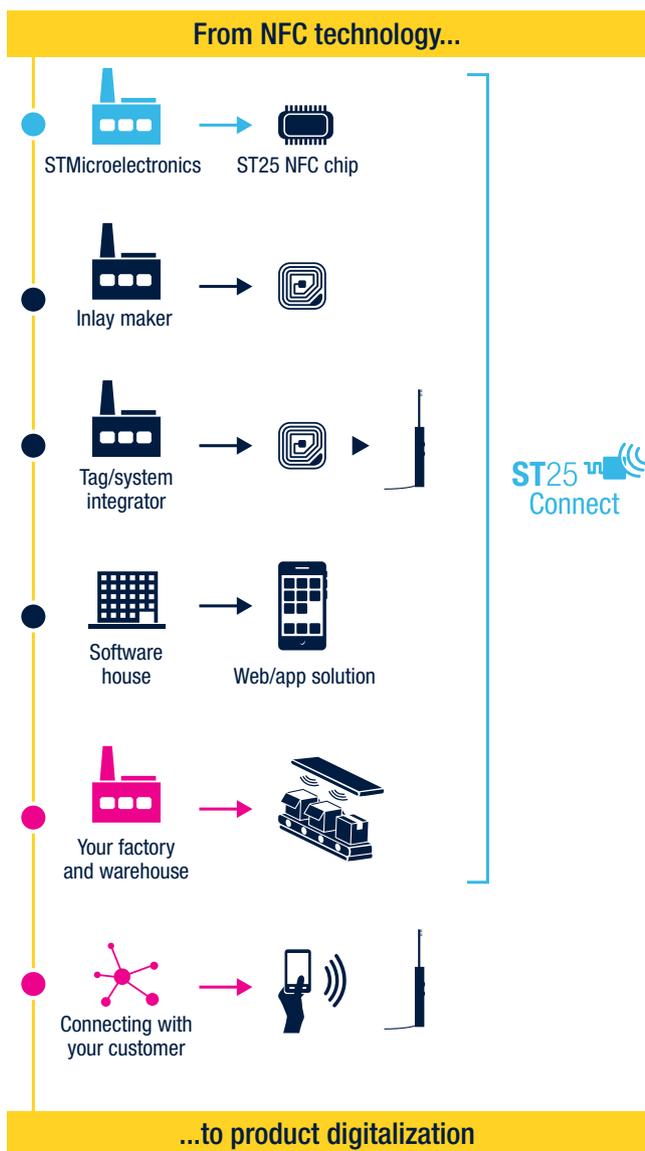
ST25Connect program

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

CURIOUS TO KNOW MORE?

Visit www.st.com/st25connect or contact us by email

life.augmented



Order code: BRST25WELL0921

For more information on ST products and solutions, visit www.st.com

© STMicroelectronics - September 2021 - Printed in the United Kingdom - All rights reserved
ST and the ST logo are registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere. In particular, ST and the ST logo are Registered in the US Patent and Trademark Office. For additional information about ST trademarks, please refer to www.st.com/trademarks.
All other product or service names are the property of their respective owners.

