

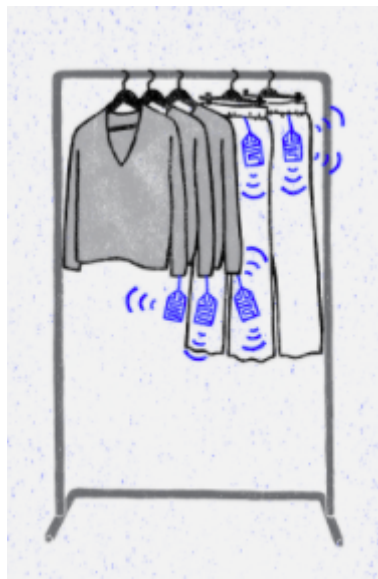
TECHNOLOGY

The tech shaking up fashion's inventory load

Radio frequency identification (RFID) technology is in the fashion spotlight as omnichannel and resale present new uses post-pandemic.

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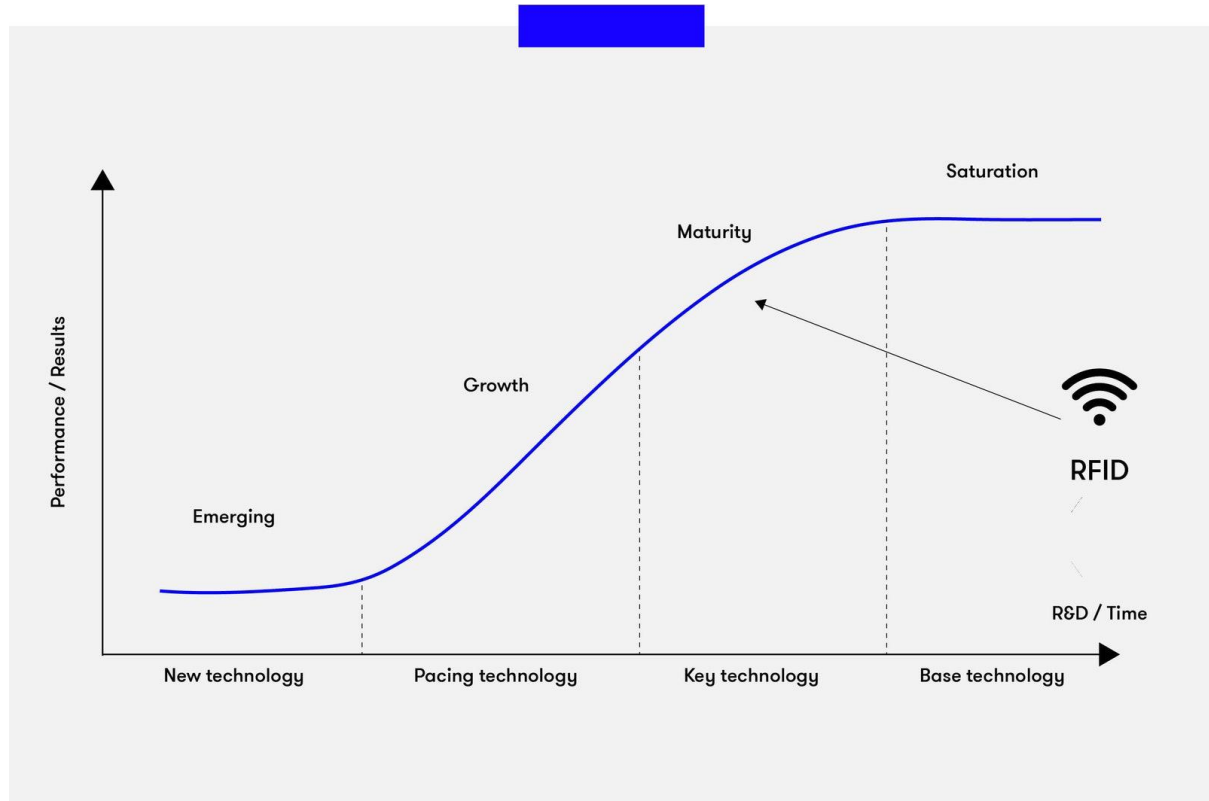
Until recently, Dutch fashion label Scotch & Soda tracked inventory like most fashion companies do: employees hand-counted items in stores once a month by scanning individual barcodes. Now, the 36-year-old company is switching all inventory to RFID, or radio frequency identification, starting with a Netherlands store in August. The impetus, says Scotch & Soda global procurement director Rik Kok, is to get full visibility of stock online and offline.

RFID scanners can read multiple codes at once and remotely. By giving individual products unique digital identities, RFID provides an accurate view of total inventory, unlocking capabilities like ship-from-store, click-and-collect and in-store tracking. The tech is especially useful for high-value items, as it can be used to authenticate and track them during courier shipments. It's not a new tool for retail, but RFID has seen newfound significance in the aftermath of the pandemic, which exposed the many problems riddling fashion and apparel's inventory management and supply chains from lack of visibility on inventory, excess stock and returns.

"Covid forced a lot of retailers to rethink their strategies and how they engage the customer with the same experience, whether it's through e-commerce or a store visit", says Ailen Li, RFID expert and director of Nedap's iD cloud platform in the US; the software is used by Scotch & Soda and Ganni. "In the pandemic, you'd place an online order and then be disappointed when you spent time browsing and then ordered something, only to wait two days for the retailer to tell you, 'Sorry, we don't have it; your order has been cancelled.' That kind of experience is a death sentence in this market".

Others to recently introduce RFID and similar near-field communication (NFC) tech include Mango, Adidas, Nike, Ebay, AZ Factory and Vestiaire with Alexander McQueen. Prada Group's new COO, Massimo Vian, challenged a group of graduate students at IMLux Master of Politecnico di Milano to develop new uses for RFIDs, NFCs and QR codes in fashion, which 45 students presented last week. The brand announced this spring

that it is adding RFIDs to all products globally, and will use RFID in conjunction with the newly announced Aura Blockchain Consortium.



DATA SOURCE: DETEGO, RECREATED BY VOGUE BUSINESS

“The pandemic shed a light to all the brand owners, retailers and manufacturers on the vulnerabilities of their supply chain. They don’t have enough data to manage it, and the consumer demand changed as well,” says Uwe Hennig, the director of global RFID market development for apparel and food at Avery Dennison, which is the largest provider of RFID tags to the apparel industry.

RFID technology is the rare exception in that fashion and apparel is driving adoption before other industries, Hennig adds. Avery Dennison's “smart label” business rose 9 per cent in 2020, with most of that growth in apparel.

The global RFID market is expected to grow from about \$10.7 billion now to \$17.4 billion by 2026. Li estimates that about 70 per cent of retailers are interested in implementing RFID within the next year. “Smartphones have enabled a digitally connected customer, and now RFIDs are making digitally connected products,” says Joel Goodson, content marketer at Detego, whose RFID software platform is used by Levi’s, Adidas and Reiss.

Full visibility

Already adopted by leading e-commerce players like Yoox Net-a-Porter, whose seven-building logistics hub in Bologna uses RFID tags on its e-commerce orders to check the contents in packages before being shipped to customers, RFIDs are now being used in-store to give brands a more accurate picture of what’s selling and what needs replenishment.

RFID tags also make store fulfilment, often a more profitable option, easier to roll out. Ganni is using RFIDs to fulfil online orders from stores, aimed at eliminating the need for separate stock for web order fulfillment and store orders. This could end overstocking and overproduction, says Karolin Stjerna, Ganni’s supply chain director. In two weeks after implementation, inventory accuracy in one of its stores jumped from 93.4 per cent to 99.5 per cent.

With omnichannel services the new status quo for the fashion industry, RFID’s ability to improve stock accuracy is crucial, says Goodson. “You can’t offer omnichannel without stock accuracy and real-time visibility.

‘Stock accuracy’ sounds unglamorous but it doesn't do it justice for how it can transform retail.”

Mango recently added RFIDs to its new Barcelona flagship, which it refers to as giving each item “a license plate” that allows the brand to know which garments clients take to the changing room and ultimately take home: “This technology ... is a way of having very relevant information that we previously only had through our online channel,” the brand said in a statement.



Mango (left) is expanding its use of RFIDs from warehouses to stores, and Scotch & Soda (centre) is adding them to stores globally this year. AZ Factory (right) uses NFC tags to communicate with customers. MANGO, SCOTCH & SODA, AZ FACTORY

Fixed RFID readers in store, which track the product (rather than reading tags with handheld devices that move through the shop floor and stockroom) can also map which areas of the store lead to the most sales.

AZ Factory products include NFC tags that, when scanned, open a special “Alber & Amigos” website where customers can see selfies from other customers, pieces they have bought and other content. Scotch & Soda is also linking its RFIDs with QR codes that can be used for brand storytelling.

Beyond the sale

RFIDs have more adoption around the beginning of product life cycles than after they are sold, but that is changing. Permanent, washable tags can be used to prevent fraud, enable authentication and aid in returns, rental and resale.

For example, point of sale systems know the exact item that is sold, so the system can identify if someone tries to return something that was never sold, says Dean Frew, CTO and SVP of RFID solutions at SML Group, which works with Nike, PVH and L Brands. Additionally, dual-frequency RFID inlay can replace traditional electronic article surveillance systems that trigger in-store alarms that monitor theft, adds SML Group CEO Ignatius K.C. Lau. Rental platform Caastle, meanwhile, uses washable RFIDs to track items as they flow through its fulfilment centres.



Ebay (left) adds NFCs tags to authenticated sneakers and luxury handbags. Alexander McQueen clients can sell back some pre-owned pieces (right), which will be given an NFC tag by Vestiaire Collective for use by future buyers. EBAY, CHRIS MOORE CATWALKING.COM

In February, resale platform Vestiaire Collective partnered with Alexander McQueen on a resale programme that gives pieces an NFC tag that enables buyers to access item information. (Smartphones can “read” NFC tags without external hardware, but most RFIDs used in stores require an additional reader.) Earlier this month, Ebay introduced a similar programme that authenticates handbags from brands including Saint Laurent, Gucci, Celine and Balenciaga, and gives each an NFC hangtag, building on its sneaker NFC programme. Nike and Adidas already use near-field communication chips in many products, and as they establish buyback and recycle programs, the same IDs can authenticate products and carry provenance information.

NFCs will improve and “future-proof” both buying and selling of sneakers and handbags, says Ebay’s VP of Fashion, Charis Márquez. NFCs also allow Ebay to share information about a specific shoe style, plus content such as the popularity of the shoe and similar styles. “Our shoppers voraciously consume information about sneakers, and we want to be a resource for that,” Márquez says. At the same time, understanding when, where and how consumers interact with the NFC will allow a “deeper understanding of the wants and needs of Ebay’s enthusiast communities,” while helping brands forecast based on secondary market trends.

As more brands invest in RFIDs when items are manufactured, multi-brand retailers will also be able to take advantage of the benefits without the investment, Nedap’s Li says. (While there are various service providers, all RFID scanners can read all RFID tags, and retailers are already accustomed to multiple label providers, she says.) Already, a brand can use its RFID-tagged products to communicate with retail associates and monitor inventory activity. It could, for example, provide information to associates about which items to merchandise on the store floor, and which are selling best.

“Moving forward, I see a huge focus on different types of experiences you can provide with RFID,” Li says. “More and more retailers are, this year especially, in a very interesting exploratory phase”.

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DENNISONNEDAPTECHNOLOGYOMNICHANNEL**