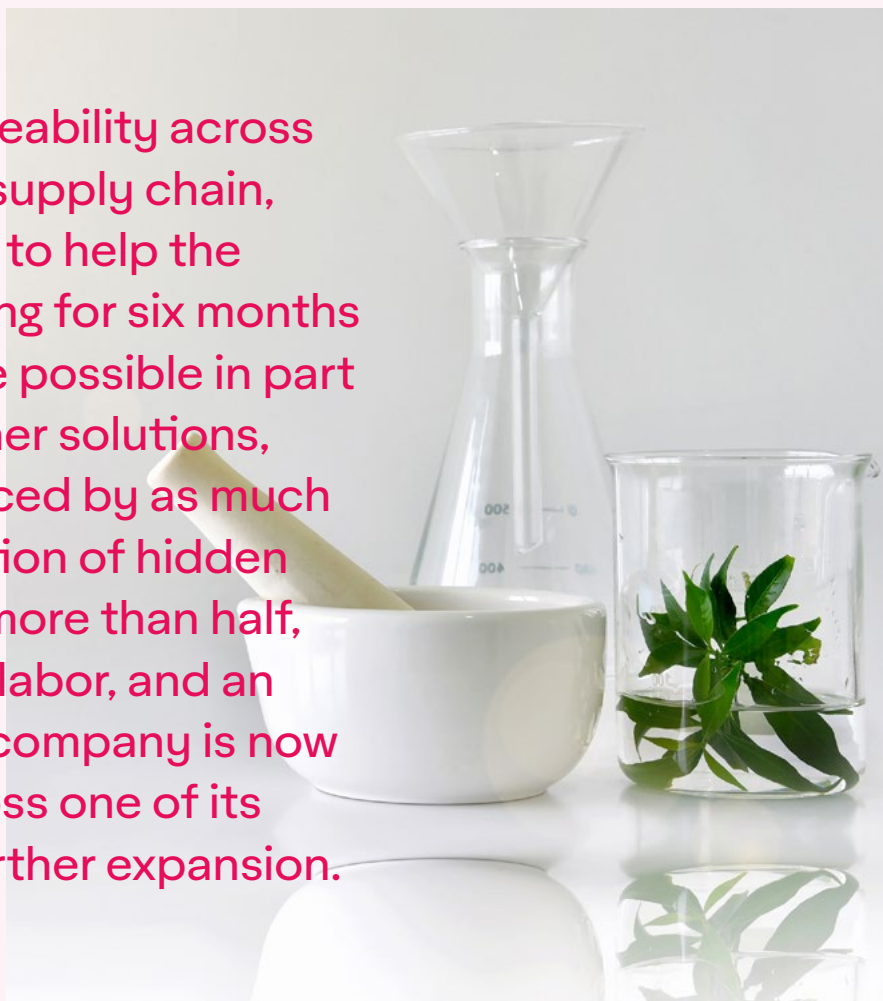


Seeking end-to-end traceability across its increasingly complex supply chain, Grupo Boticário hired EY to help the company test RFID tagging for six months in 2018. The results, made possible in part by on-metal tags and other solutions, included stockouts reduced by as much as 97 percent, identification of hidden stockouts increased by more than half, a 14 percent decrease in labor, and an increase in revenue. The company is now fully deploying RFID across one of its brands, with an eye to further expansion.



A business as big as Brazil

Grupo Boticário is the second-largest cosmetics company in Brazil and the largest beauty franchise network in the world. It comprises five brands—oBoticário, Eudora, quem disse berenice? The Beauty Box, and Multi B—that sell makeup, fragrances, skin care products and more. The company operates a complex supply chain that includes branded retail stores, online channels, direct sales, and partnerships with other retailers. Founded in 1977, Grupo Boticário is present in 12 countries and growing. It produces some 335 million items annually at two factories in Brazil and ships 100,000 items daily, supplying inventory to about 9,000 points of sale in Brazil and abroad.

The right moment for RFID

Supply-chain management is a challenge for any beauty company, and one that had grown more formidable for Grupo Boticário as the company experienced double-digit growth across Latin America and the U.S. Routine problems included poor inventory visibility, stockouts, high product loss, slow product flow, and inaccurate data for demand planners.

With a supply chain poised to become even larger and more complex—and with the company investing for growth generally—Grupo Boticário determined that the time was right to move to a digital supply-chain management system that could provide item-level traceability from

end to end. Hiring global consultants EY to manage and advise on the project, they set out to investigate the best technology for their needs.

After assessing several options—including infrared, ultrasound, video and 2D barcode visual ID—EY and Grupo Boticário identified RFID as the solution most likely to meet their needs. Drawing input from a multidisciplinary team including personnel from logistics, operations and other parts of the company—and with the essential support of company leadership—the project team prioritized 10 use-cases for RFID and set out to test them during a six month pilot that began collecting data in the third quarter of 2018.

Choosing Avery Dennison

RFID-enabled tracking begins with the tag—in this case a self-adhesive, ultra-high frequency UHF inlay, containing an antenna and chip, encoded with a unique digital identifier. Although the company stressed an “agnostic” approach to choosing its technology, selecting Avery Dennison to provide the RFID tags was an easy choice, says Fabiano Negrao, an executive director with EY Brazil who managed Grupo Boticário’s pilot.

“We were looking for tag providers who specialized in beauty, who could show they had developed tags for beauty products. I talked with Avery Dennison at a trade show and saw quickly that they not only understood beauty and had designed products specifically for beauty packaging, but also that they were very interested in what we were doing and positioned to give great attention to our team. Their expertise was very important—not only technically, for the purposes of the pilot, but also in giving leadership at Boticário the confidence that we were working with a company that really knows, and is committed to, RFID for beauty.” A visit to senior directors by Avery Dennison’s Vice President and General Manager for RFID further demonstrated the company’s commitment.

A big part of what makes Avery Dennison tags beauty-ready is the fact that several are specially designed to work on metal packaging and on packaging containing liquids. That means they can be quickly and reliably read in parallel, identifying individual items not only in the dense merchandising environments typical of beauty retailers, but also at carton level, as products leave the distribution point and enter store receiving. Avery Dennison was the first RFID media supplier to offer an on-metal tag with those capabilities at a price that makes high volume tagging feasible.

“We tested on-metal tags from other companies, but Avery Dennison’s were the best,” said Fabiano. “They were smaller and performed better.” The project team chose Avery Dennison’s AD-456u8 tags for metallic products, AD-301r6 tags for general-purpose tagging, and AD-160u7 tags for liquids and typical cosmetics packaging, including lipstick tubes and pencils.

A global presence—including a local team in Brazil in addition to R&D, manufacturing, and distribution centers worldwide—was another factor in Grupo Boticário’s decision to use Avery Dennison tags and printers. Fabiana Wu, Avery Dennison’s Business Development Manager for Latin America and the leader of the Avery Dennison team in Brazil, said that the company’s worldwide reach proved invaluable.

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“We were able to support Boticário with people on the ground in Brazil, people who spoke the language and who understood the country, its business landscape, and its regulations,” she said. “At the same time, we were able to draw on expertise from parts of our business beyond Brazil to meet the customer’s needs as they emerged.”

One example: When Grupo Boticário ran into tag-printing challenges during an early stage of the pilot, printer experts from a different Avery Dennison business unit were called in to help, and seamlessly resolved the issue.



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”
Fabiano Negrao, an executive director with EY Brazil

Laying the foundation

Before launching the pilot, the EY / Grupo Boticário project team designed the required IT infrastructure, opting to build a separate, RFID-based system for the purposes of the test, so its performance could be compared with the company’s legacy system. Applications in the DCs and stores ran with middleware hosted on Grupo Boticário’s servers, with all DC process and stores operating on the same middleware. Fixed readers were used to scan RFID tags at the DCs; at stores, staff used handheld readers for tracking inventory, and pad readers were used at checkout. The tests adhered to GS1 EPC UHF standards.

The team also exhaustively tested the placement of tags on more than 2,000 SKUs, and multiple product types. They tested tags under varying conditions, working with Grupo Boticário’s packaging designers to arrive at tag positions that offered the right balance of function and aesthetics. Additional testing by Avery Dennison’s technical experts added another layer of confidence. Together we’ve now tagged more than 1.2 million items.

All that careful testing sometimes left little lead time for ordering tags. “We had a challenging timeline,” acknowledges Fabiano. “But Avery Dennison was able to fulfill and deliver orders as fast as we needed.”



Inventory distortion in apparel is typically around 35 percent; in beauty, it’s 50 percent or more



Testing begins

For in-store visibility, RFID tags are attached to individual items. They can be read on the shelf, in the stockroom, at the point of sale, and even at store exits. The same item-level tags also can lend visibility to individual items as they pass from manufacture through the supply chain.

For the pilot, RFID tagging took place near the end of the outbound process at one of Grupo Boticário's distribution centers. DC personnel first registered every shipping carton and each of the products inside by scanning their SKU numbers into a database. Then they printed RFID tags associated with each SKU number on Avery Dennison ADTP1 printers and applied the tags to the cartons and the items within them. Finally, each carton was checked before shipping to make sure there was an RFID tag for every recorded SKU. (As part of the pilot, the team also tested tagging at the end of a packaging line at a Grupo Boticário factory, and there, as in the DCs, were able to read several hundred items in a single carton in a matter of seconds).

Cartons were shipped to four stores—two retail stores, and two wholesale stores selling products to the company's direct-sales representatives. At the stores, the RFID system was applied to improve five processes: shipment receipt, shelf replenishment, inventory counting, checkout, and demand planning.

Store employees saw improvements right away: Received shipments could be checked in faster and more accurately, with employees able to check-in all items in a carton with a click of a scanner outside the box, rather than opening the carton and checking in each item one by one. Inventory could be categorized in the store's database as "back of store" or "front of store," making it easy to see at a glance when shelves needed replenishing—and making it possible to track merchandise from back to front when it was moved. Alerts about products with imminent expiration dates enabled store staff to discount those items and sell them before they expired, capturing more revenue and reducing waste. At checkout counters, multiple products could be rung up all at once, rather than item by item. And inventory could be counted in a fraction of the time it took with the legacy barcode system, and with greater accuracy. As a result, demand planners received better information that enabled them to order the right products for replenishment and better forecast sales.

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The results

The pilot's outcomes exceeded expectations. Stockouts, projected to shrink by 50 percent, were reduced by between 78 and 97 percent at participating stores. Identification of “hidden stockouts”—stockouts identified by RFID that were missed with the company's legacy system—increased by more than half. Inventory-related labor hours came down by 14 percent, thanks to faster processes. And revenue at stores equipped with RFID was higher than at stores without it. That lift was attributed to RFID-driven improvement in inventory accuracy and near elimination of stockouts, which increased in-store product availability.

Throughout the pilot, Avery Dennison's tags performed dependably and with readability crucial for beauty.

“The quality was very good. We were able to read as many as 400 tags inside a box at one time, on average,” notes Fabiano.

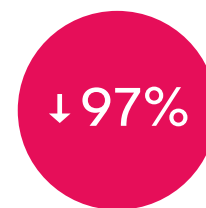
Bob Pernice, Avery Dennison's Global Director of Market Development, says that the outcomes of Grupo Boticário's pilot demonstrate why RFID is such a powerful solution for beauty companies.

“The beauty industry is discovering what the apparel industry already knows—that item level RFID tagging dramatically increases inventory accuracy and subsequent turnover,” he said. “Inventory distortion in apparel is typically around 35 percent; in beauty, it's 50 percent or more. This is because beauty brands and retailers offer many SKUs, often with low stocking depths in self-service environments. Also, shrink tends to be higher in beauty.”

In addition, he says, shoppers hold strong brand and color loyalty for beauty products, so there's less substitution than in apparel if a desired item isn't available.

“A certain shade of lipstick or eye shadow can easily be out of stock on a gondola or store shelf before either the POS system or an associate notices. Altogether, this means lost sales, and, worse, disappointed customers, especially if the retailer intends to expose its brick and mortar inventory to e-commerce sales.”

Pilot results



Stockouts



Identification of hidden stockouts



Labor

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It was very helpful to have a global company as well-respected as Avery Dennison confirm that we were doing things right.

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The confidence of collaborating with a global leader

Based on the results of the pilot, Grupo Boticário now plans to roll out RFID across one of its brands, encompassing 70 stores, and might further explore RFID application for theft prevention, recall control, vendor integration, and more.

EY's Fabiano Negrao says Avery Dennison's RFID tags were an essential element in the implementation of a technology that stands to transform Grupo Boticário's business. Just as significant, he says, was the service and knowledge from Avery Dennison's RFID team.

“They have a lot of experience with RFID implementations,” Fabiano said. “In addition to the local team, some of their experts traveled to Brazil from the U.S. a couple of times. We took them to a DC and to one of our stores so they could see how things were going and offer their perspective. They reinforced when we were on the right path and suggested improvements where they saw opportunity—for example, they confirmed that we were on the right track with our software development, for example.

“It was very helpful to have a global company as well-respected as Avery Dennison confirm that we were doing things right,” says Fabiano. “I think we have a bright future together.”