Case study :
Inventory Management in Apparel
With EPC/RFID, Japanese company gains in-store efficiency

I.T.'S. international is a Japanese private-label clothing and accessory manufacturer founded in 2009 by Flandre (an apparel manufacturer), Sumikin Bussan (a trading company) and three other companies. In addition to designing and manufacturing its own line, I.T.'S. also has a chain of retail stores, the first of which opened in the heart of Tokyo's Harajuku fashion district in February 2010. As of May 2012, there were 13 I.T.'S. stores in operation.

First to deploy item-level EPC/RFID tagging in Japan

I.T.'S. was an early adopter of EPC/RFID: the company's management realised the many advantages this technology could bring to their stock management, store operations and logistics and decided to use this as a competitive advantage. As a result, they were the first company in Japan to implement item-level tagging. Whether jackets, skirts, trousers or socks, every single item in every I.T.'S. store has a hangtag or product label with an EPC/RFID chip embedded in it.

The system was developed by Toshiba TEC and Sumikin Bussan. It follows the implementation guidelines issued by the Japan Apparel Fashion Industry Council (JAFIC). This guideline, developed with the support of GS1 Japan, calls for the use of GS1 Identification Keys and EPC UHF Gen2 tags.

Efficient stock-taking for store employees

EPC/RFID tags encoded with GS1 Serialised Global Trade Item Numbers (GS1 S-GTINs) are attached to individual articles at the manufacturing factories. They are first read when clothing items arrive at distribution centres. Once the shipment is received and contents are verified, each carton of items is labelled with an EPC/RFID tag. This tag is encoded with a GS1 Serial Shipping Container Code (GS1 SSCC), uniquely identifying it as a logistics unit. This allows the entire carton to be inspected in mere seconds when it arrives at a retail shop, simply by scanning the label with a handheld EPC/RFID reader. The tags on the individual items of clothing enable a full-store inventory to be taken at any time, in just a few hours.

I.T.'S. has achieved significant benefits by deploying this solution, saving time and money on store operations. Their retail stores each stock about 15,000 items. Performing a store inventory without this system would likely take two employees four days to complete. With the system in place, a single person can take a complete storewide inventory in less than two hours. The shops now take inventory every month, ensuring increased inventory accuracy.

Faster checkout for shoppers

The EPC/RFID system doesn't just benefit workers in I.T.'S. stores – their shoppers are also seeing a noticeable difference. In I.T.'S. boutiques equipped with this system, when a customer brings her chosen articles of clothing to the check-out counter, a clerk simply puts her selection down on the countertop and the total price appears instantly on the cash register. The points of sale are equipped with RFID scanners that immediately read the chosen items and calculate the amount to be paid. Thanks to GS1 standards and EPC/RFID technology, the shopping experience is faster, smoother and more enjoyable on both sides of the cash desk.

Further innovations on the horizon

I.T.'S. is expanding its presence in Tokyo, and all new shops will of course be equipped with this system. The company is also looking to take advantage of other services made possible by the item-level EPC/RFID tags that are already on their products, such as smart fitting rooms, which "suggest" to shoppers other items that would match what the person is trying on; or EPC/RFID-enabled Electronic Article Surveillance to prevent shoplifting.

> "The biggest benefit of EPC/RFID is in inventory management. Stock-taking in shops like ours with a lot of items is time-consuming if we scan the barcodes one by one. With EPC/RFID, we save significant time and effort."
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> *Ryuta Fujiwara*
> Manager, Harajuku Store
> I.T.'S. international

GS1 EPC/RFID standards

GS1 is a neutral, not-for-profit organisation that develops supply chain standards. EPCglobal, a subsidiary of GS1, is leading the development and adoption of industry-driven standards for real-time, automatic identification of information in the supply chain to support the use of RFID. For more information on GS1 EPC/RFID standards, visit: www.gs1.org/epcglobal

Contact information:

Interested in learning more about this case?
- Watch the video at www.gs1.org/epcglobal/implementation
- Contact GS1 Japan at epcdesk@dsri.jp or Ms.Yuko Shimizu at GS1 Japan at y-shimizu@gs1jp.org

Interested in learning how item-level tagging with EPC/RFID could bring benefits to your retail store? Contact your local GS1 Member Organisation at www.gs1.org/contact

With special thanks to:

I.T.'S. international

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