



Case study

Galeria Kaufhof

Galeria Kaufhof, a division of Metro Group, has deployed a fully integrated RFID system in its menswear department. The high end retail store in Essen, Germany uses an extensive range of services based on EPCglobal RFID standards. The system fully integrates a wide range of retail technology applications, including item-level RFID tagging, smart mirrors, point of sale (POS) and Electronic Article Surveillance (EAS) giving them benefits such as increased supply chain and back room inventory visibility as well as better theft prevention.

Galeria Kaufhof deploys RFID in menswear

All 30,000 items in the menswear department are labeled with RFID tags containing Electronic Product Code (EPC). These unique tags refer authorised users to information such as details about the manufacturer as well as sizes and prices.

Customers in the menswear department are able to access additional product information quickly and easily. At the same time, staff can rely on the technology to control stock levels on the shopfloor and in the warehouse as well as order more stock in time.

The RFID tags are placed on clothing at the department store's regional distribution centre in Neuss-Norf, Germany. Upon arrival at the store in Essen, around 60 RFID readers in the receiving and stock rooms interrogate the tags and track the garments' locations. All the transfer gates in the department store are also equipped with RFID/EPC technology. RFID readers are generally installed between storage areas and sales floors as well as on hangers and cash registers. Galeria Kaufhof's customers can ask for the Smart Chip (RFID tag) to be removed at point-of-sale.





Benefits gained so far

The deployment project has already seen increased visibility of the department's tagged items and significant reductions in out of stock instances. Galeria Kaufhof's customers can also use the RFID-enabled dressing rooms, displays and smart mirrors that capture data from the tags. The smart dressing rooms use RFID to identify pieces of clothing that customers are trying on and display useful information such as price, materials and care instructions. The smart mirrors also suggest accessories and possible combinations as well as available sizes and colours.

Adopting EPCglobal standards

Globally consistent specifications for RFID are crucial for the technology's successful implementation. As an EPC-global member, Metro Group works closely with the global standards organisation to develop universal technical and business standards for RFID worldwide, helping guarantee optimal coverage and quick data transfer.

The deployment is the first of its kind to incorporate the full range of EPCglobal standards:

- EPC Class 1 Gen 2 tags using the EPC tag data standard.
- The low-level reader protocol (LLRP) standard is used to integrate more than 60 fixed and handheld interrogators.
- The application level events (ALE) standard for obtaining, formatting and filtering RFID-generated data.
- EPC Information Services (EPCIS) for data transfer and sharing. Data such as what, when, where and why can be captured, stored and exchanged between the department store and the distribution centre. This provides real-time information on the available stock of individual articles of clothing and accessories.

"At METRO Group we believe that UHF RFID item level tagging with GS1 EPCglobal standards can help to enhance customer service and increase the availability of products due to higher visibility of the flow of goods," said Dr. Gerd Wolfram, Managing Director at MGI METRO Group Information Technology GmbH.

The strong commitment at Galeria Kaufhof in bringing EPC and RFID technology to life helps GS1 drive the adoption not only in Germany but also on an international level. The Galeria Kaufhof project will run until the end of 2008.

