Metro MGI Informatik GmbH

Synopsis:
Retail chain implements an IBM Wireless e-business Solution based on Radio
Frequency Identification (RFID) technology, creating a "Store Of The Future" that optimizes
product tracking and improves customer loyalty

Location:
Düsseldorf, Germany

Industry:
Retail

Focus Area:
e-business infrastructure, Wireless

URL:
http://www.future-store.org/

Customer Background:
Metro MGI Informatik GmbH is a subsidiary of Metro AG, a multi-division retail group that sells
everything from clothes to food. With 700 employees in Germany and abroad, Metro MGI
Informatik provides IT services for Metro's branches. Its services include the development of user
interfaces, the operation of computing centers in several locations and IT consulting.

Business Need:
One of the Metro AG subsidiaries, Extra Markt, wanted to distinguish itself from the competition
by offering technology-driven, value-add services to its customers while optimizing business
processes. Its vision was a "store of the future," with which the retail chain could control in-stock
availability, increase per-transaction revenue, improve supply chain processes and enhance the
customer experience.

Extra Markt turned to its IT provider, Metro MGI Informatik, to design and deploy a solution based
on Radio Frequency Identification (RFID) and a wireless local area network (WLAN), which would
enable the use of technologies like electronic shelf labels and unattended check-out.

Solution:
Metro MGI Informatik sought out an IBM Wireless e-business Solution for system integration
services, having identified three areas to be integrated: inventory management, in-store
information and SmartCheckout. IBM took a leadership role in the following areas:
- RFID Labeling
- RFID Goods Received/Shipped
- RFID Backroom Storage
- SmartShelf
- RFID EAS deactivation.

The result is an end-to-end solution that makes the entire lifecycle of a product transparent - from
backend supply chain management to inventory tracking on the shelves to its ultimate purchase.

For example, pallets with boxes leave the distribution center, headed for the store in Rheinberg. As soon as they pass through the dock door, the pallet and cases are scanned and the shipment data is sent automatically to the store warehouse information system. The Rheinberg store manager knows in realtime that the shipment has left the distribution center, and knows what products to expect.

As soon as the shipment arrives at the store, the RFID-tagged pallets are scanned again and checked against the previous data. If anything is missing, the store manager will know immediately without performing a manual count.

Finally, when users enter the store, the RFID-equipped shopping carts are scanned, giving the store the ability to track the number of shoppers and how long each one stayed. A kiosk gives shoppers the ability to sample products like DVDs, CDs and tapes by scanning the product's RFID tag and displaying a corresponding video clip.

Some shelves have built-in RFID to inform the store manager when they need to be restocked. Such a shelf can also detect unusual shopping behavior and thus help prevent theft.
Upon checkout, the items are scanned, the Electronic Article Surveillance (EAS) is disabled, the item is subtracted from the inventory and the supplier gets an update on the stock level of this specific product in the store. When the customer leaves the store, the cart is scanned again.

Benefits of the Solution:
By implementing an IBM Wireless e-business Solution based on RFID technology, Extra Markt puts itself forth as a technological leader and innovator in the market. The stores can increase customer loyalty while optimizing its back end processes. The wireless integration with the existing warehouse information application enables Extra Markt to use realtime data to track inventory and shipments automatically. This new process saves the company from having to perform time-consuming manual counts and saves money through tighter inventory control.