

## The Warehouse Picks IBM in RFID Trial That Puts Customers First




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### Overview

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#### ■ **The Challenge**

*RFID can deliver significant benefits in the retail supply chain. Until now, though, most trials and pilots have focused on bulk logistics: the movement of products from the supplier and distributor to the store. The Warehouse Group wanted to trial RFID as a way of improving the efficiency of its in-store stock management, providing a direct benefit to customers through improved stock availability.*

#### ■ **The Solution**

*In the trial, cases of product had RFID tags attached to them, allowing them to be located on a shelf top using RFID readers. As part of this trial, the solution provided a real-time view of where stock was in-store. IBM applied its RFID consulting expertise*

*to develop this solution, which brought together IBM hardware and software, and used RFID readers and tags from Alien Technology, RFID printers and labels from Saito Group, and handheld readers from Psion Teklogix.*

#### ■ **The Benefits**

*The proof of concept demonstrated that the technology is suitable for use in a store environment. RFID is expected to deliver a significant return on investment through improved stock availability, leading to increased sales. RFID will also deliver improvements in The Warehouse's supply chain efficiency.*

In what is believed to be the first significant retailer-led initiative of its kind in Australasia, The Warehouse has partnered with IBM to bring innovation to its supply chain by exploring how Radio Frequency Identification (RFID) could be used to improve the efficiency of its in-store stock management and stock availability for customers.

The Warehouse Group, comprising of The Warehouse New Zealand and Warehouse Stationery is one of New Zealand's largest retail businesses. The first store opened in 1982 on Auckland's North Shore, and since then The Warehouse has grown to 85 stores across the country, known as the "Red Sheds".

#### **Identifying the opportunity**

The Warehouse began to formally investigate RFID in August 2004, when it established a cross functional RFID team lead by Group IT and Supply Chain.

"During late 2004 and early 2005 we built an extensive understanding of; RFID theory, RFID in retail, opportunities within The Warehouse and the current capability of the Australian/NZ market to support RFID programmes of work," says The Warehouse.

In April 2005, the RFID team undertook a 'check and confirm' trip in North America and Europe. The team met with a variety of hardware vendors, service providers and leading global retailers in both the US and Europe.

"We believe RFID in retail is real, standards and the cost curve are driving the reality closer to wider consumption and the leaders are learning by doing," says The Warehouse. "We have evaluated a number of potential uses for RFID across our organisation and have focused on in-store stock management; this being the application which we believe will provide the greatest benefit to our customers at this point in time."

The Warehouse selected IBM as the lead partner for the Proof of Concept due to IBM's strong global commitment to RFID and a strong local presence. The proof of concept employed IBM's expertise in RFID consulting along with IBM software and hardware.

#### **A different approach**

Most retailers that have conducted RFID pilots and trials have concentrated on the bulk logistics end of the supply chain – from the supplier and distributor to the store. The Warehouse, however, wanted to take a different approach; focusing on in-store use to deliver the greatest benefits to its customers.

For its RFID proof of concept, The Warehouse used an empty warehouse on Auckland's North Shore, where mock aisles simulate a live store environment.

Traditionally, The Warehouse stores use small back room storage areas and storage on the top shelves of store aisles. Existing systems gave store managers a picture of what was in their stores, but not a 'live' view of its location within the store. The objective of the pilot was to deliver innovation within the system to give a real-time view of not only what stock is in-store, but where it is. This knowledge can then be used to improve the availability of that stock to customers and drive sales.

IBM New Zealand Wireless Practice Leader Brent Menzies says that The Warehouse's proposed Retail RFID model is the first and most progressive of its kind in Australasia. "We were optimistic that The Warehouse would see a significant return on its investment in RFID through being able to offer improved service to its customers and drive improvements to supply chain efficiency and capability."

#### **Pinpointing stock location**

In its RFID proof of concept with IBM, The Warehouse aimed to prove that the technology was suitable for the store environment. Its success led to an expansion of the project to further refine the application of the technology in-store.

Cases of RFID-tagged product were tracked as they moved through the store, from the back dock onto the trading floor and on to the shelves or top storage shelves. This was achieved through the use of fixed RFID readers at certain points in the store, and a mobile stock-take bearing a power-pack, laptop and RFID reader which was rolled down the aisles to pick up RFID signals. Using the system allowed store managers a clear view of where stock was within the store.

In retail stores of the future every individual retail item could have an RFID tag on it, making automated store checkouts a reality. Customers could say goodbye to queues at the cash register forever.

#### **For more information**

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#### **Key Components**

Software

- *WebSphere premises server (RFID specific software, running on WebSphere portal)*

Servers

- *IBM System x server*

Services

- *Global Business Consulting services for process design*
- *Global Technology Services for hardware integration and testing*