the last word Christchurch City Libraries

Christchurch City Libraries has 22 branches and enjoys huge popularity – over 72% of residents are library members. In 2009 the library service celebrated its 150th anniversary and the decision was made to convert the collection to RFID. Australian company FE Technologies was selected to install RFID hardware and software into the libraries and by 2010 work had commenced to convert the collection to RFID.

RFID technology replaces the old barcode system that existed in the libraries. Unlike barcodes, RFID does not need line of sight, meaning items can be read quickly and in multiples when placed on or near an RFID reader.



Christchurch City Libraries were looking forward to a new world of improved customer service – RFID gives the library's patrons the ability to checkout their own items, which frees up staff time to provide valuable services such as research assistance, running children's programs, and other specialist library services.

But things were thrown off schedule when in February 2011 a catastrophic earthquake struck, resulting in a large loss of life and significant damage to buildings and infrastructure across the city.

The conversion project at the library service had to be put on hold as many of the Mobile Retrospective Encoders, (mobile equipment used to print and encode RFID tags) were left trapped inside damaged buildings. Thankfully no staff or patrons were injured. Undeterred, Christchurch City Libraries and FE Technologies put their heads together and formulated a revised project plan. FE Technologies extended the loan period of the Encoders and, after some time, the buildings were declared safe and the Encoders were retrieved, tested, and put back to work.

Over the next few months with further shocks and tremors, building standards in New Zealand changed rapidly which continued to challenge project schedules. Fortunately FE Technologies' conversion system has been cleverly designed so that libraries can actually stay open during the conversion process with no loss of security for the collection. Shipments of RFID equipment were often held in warehouses or moved between sites, until eventually the Papanui Library was reopened to the public with a full suite of RFID equipment including:

- Self Loan Stations easy to use touchscreen kiosks that allow patrons to borrow up to 5 items at a time
- Security Gates 3D security gates able to read items in any orientation and featuring people counters to give valuable information about peak traffic times
- Circulation Assistants facilitate multiple item processing and even the ability to encode new tags for items returned after

RFID amid Earthquakes

the conversion process had finished.

- Portable Scanning Unit a special portable mini computer and wand
- Smart Bin returned items are automatically and instantly checked back in.

Patrons were delighted to have their library open again, and with several branches still out of action due to the quakes, Papanui was inundated. It was now hosting patrons from across the region and performing three times the number of loans than previously. This is where RFID technology and its multiple items processing capabilities really stepped up to the challenge. The Self Loan Stations are so easy to use – a simple three step borrowing process and onscreen animations mean patrons were borrowing books themselves, auicker and more efficiently than ever before. In fact, reports library staff showed that patron self checkout was at a staggering 90 – 100 percent!

So busy was Papanui that FE Technologies approached library management to see if it could test its new Smart On Holds Shelf at the branch. The innovative Smart On Holds Shelf uses RFID technology to transform the onerous reservations process. At Papanui patrons are notified that they have an item awaiting pickup at the Self Loan Station which tells them which shelf number their item is located and prints a docket. Expired items are automatically identified and can be either placed back into circulation or left to await the next patron waiting for the item.

Christchurch City Libraries are now three quarters of the way through their RFID project, and are impressed by the efficiency gains they are already seeing at the newly installed branches. Patrons are enjoying the interactive touchscreens, and the speed and ease of borrowing. Staff are delighted to be performing the high-value customer service oriented tasks that they enjoy and with the recent delivery of a customised Emperor Penguin Self Loan Station, even the youngest patrons are borrowing their own items without staff intervention.

Shane Forde
FE Technologies
shane.ford@fetechgroup.com
www.fetechnologies.com.au

