



Item-level
asset tracking
delivers *visibility*



ITEM-LEVEL ASSET TRACKING DELIVERS VISIBILITY

A world-class wireless asset-tracking pilot in retail has successfully delivered real-time supply chain visibility with up to 99% accuracy, well above the current industry average of 65%. The project, which uses Electronic Product Code/Radio Frequency Identification (EPC/RFID) technology, has been so successful that Telstra Retail is strongly considering implementation into its 130 stores estimating that it could deliver a positive return on investment (ROI) within 18 months.



GS1 Australia CEO, Maria Palazzolo, said this project was important as while EPC/RFID asset tracking had been done successfully at container level in other countries, it was significant to achieve successful item-level wireless tracking. "This project lays a blueprint for multi-industry adoption of global standards via Electronic Product Code (EPC) enabled Radio Frequency Identification (RFID). It is a clear example of using EPC and GS1 Identifiers to drive business value and of providing visibility upstream in the supply chain," she said.

The lack of visibility in the movement of goods between handover points in the supply chain is a key business issue for retailers, especially as some supply chains contain many handover points. Lack of visibility means the accuracy of inventory records usually averages approximately 65%, so physical inventory can deviate from inventory records by up to 35%, translating into billions of dollars of stock variances and a drop in profit. To stem this problem, businesses incur hours of manual administrative activities and pay the price of labour costs for backroom activities. Lack of visibility also severely limits optimising demand-driven supply chains and vendor-managed inventory (VMI) strategies.

Being aware of when and where loss occurs is important to help reduce shrinkage. In 2007 the total value of retail shrinkage in Australia was \$AUD2.256 billion, representing an average shrinkage rate of 1.39% of sales. Australian retailers experienced more retail shrinkage from fraudulent employees (40.2%) than customers (36.6%). Unexplained shrinkage (i.e. not due to damage or returns) occurs in stores and also in transit (Goods Lost In Transit, GLIT).

Visibility at item level is even more crucial for high value goods. With phones ranging from \$150 to over \$1000, Telstra Retail is constantly working on improving its stock visibility. Brightstar Australia, the third-party logistics provider for Telstra's electronic devices, initiated a pilot project for Telstra Retail to tackle this problem.

Conducted with Telstra Enterprise and Government's Wireless Asset Tracking solution team and NEC, the pilot was designed to determine whether EPC/RFID technology would enhance the visibility of mobile phone handsets shipped from the distribution centre to six designated Telstra Retail outlets in Australia during a period of three months. By automating the tracking and tracing of tagged handsets to the stores and providing this information via a web-enabled portal, the pilot sought to demonstrate that significant productivity gains could be achieved for all stakeholders, especially the retail outlets.

The key to the pilot was a new sensor-based wireless asset-tracking solution developed by Telstra Enterprise and Government. It enables businesses to track a wide array of valuable resources in real time, monitor delivery times, and report on location and condition of company products and inventory. The solution is underpinned by the Telstra Next G™ network, and Telstra's wireless resources, network integration, application hosting, consulting and managed service expertise.

The pilot involved the identification and tagging of mobile phones by fixing a Radio Frequency Identification smart label containing an individual and unique Electronic Product Code to each handset as it left the distribution centre. Phones were individually tracked through RFID 'choke points' to provide identity, location and time data, which were made available through Telstra's web-based portal, Adaptive Asset Manager (AAM), for the respective stakeholders.

The AAM web portal gave access to the stored data providing information such as inventory levels, goods lost in transit, dwell times, and transit time and could trigger events such as alarms for delayed delivery or daily notification of out-of-stocks.

By implementing the wireless asset-tracking solution across all of its 130 stores, Telstra Retail estimated the managed solution could save \$4 million per year in labour costs linked to non-customer-facing activities. As such, a positive ROI would be reached within 18 months. As demonstrated in other pilots, a positive ROI could be achieved even sooner by including indirect benefits such as an increase in sales and a reduction in stock holdings.

Further non-quantifiable benefits were noted by the store managers – for example, the wireless asset tracking solution and Adaptive Asset Manager were extremely useful in enforcing existing inventory management processes.

Other pilots have also shown further benefits of increased visibility. These include a reduction of 10% in stock holdings, and significantly, an increase in sales.

The pilot delivered dramatic results. The automated capture of all unique items passing through the various read points resulted in visibility of up to 99% of all items shipped, received and moved within the stores. The heightened visibility was able to deliver the following benefits:

- Productivity gain at the store with a potential reduction of receipting activities by 75% and stocktake activities by 50%. This is achieved by automating receipting and reconciliation of stock movements in real time
- Real-time audit capabilities on stock variances and service levels resulting in 50% reduction in investigation time. It was enabled by an audit trail of missing items with alarm notifications to stock managers and the distribution centre
- Support improvements in forecasting and planning by providing real-time stock-on-hand data in addition to the point-of-sale data. Lifecycle management capabilities were provided with specific reports with time alerts such as out-of-stock and ageing reports
- Improved stock accuracy enabling improvement on stock-in-hand
- Common data repository for multiple systems and stakeholders in the supply chain
- Capacity to support and enforce existing inventory management processes

One of the biggest benefits delivered was a reduction in time spent on non-customer-facing activities.

- The need to manually identify each phone on delivery disappeared with staff focusing only on items not received or items not read.
- There was a reduction of 75% in receipting time, with added capabilities provided to the stock controller such as checking in one click the exact content of the consignment currently in transit.
- Improved accuracy and integrity of data at receipting and visibility of stock moving between the stockroom and the sales floor reduced the need to conduct stock takes by 50%.
- Stock controllers' investigation time for any missing items was reduced by 50% and occurred in real time providing a better opportunity to act on the cause.

For more information

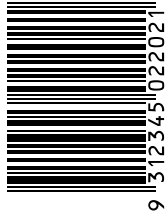
Contact your Telstra Account Executive

www.telstraenterprise.com/productservices/paymentstransactions/transactions/Pages/ManagedRFIDSolution.aspx

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