



The Top 5 Reasons for introducing Data Capture in your Warehouse

Craig Westcott, who leads our Supply Chain practice based out of Melbourne, has considerable experience in the implementation of data capture solutions. Craig works with all our supply customers in both a leadership and hands on capacity and has developed this article based on trends and discussions he is engaged in.

Automated Data Capture (ADC) in warehouses has become a popular way to gain rapid returns from technology investments. This trend has been further fuelled by the hype around RFID. But what are the *real benefits* that you gain from implementing a data capture solution in your operation? How can these be translated into business terms to justify such an investment? And does it make sense for you?

Firstly, for some background, Automated Data Capture is a method of automatically identifying objects (eg stock or assets), collecting data about them, and automatically entering the data into your back-end computer systems without human involvement. But before introducing data capture in your warehouse you need to identify your stock (using barcode labels or RFID tags), and be able to capture data in real time (using scanning technologies that are integrated with your back-end systems). This typically includes installing wireless infrastructure, RF technologies and software that is integrated with your back-end inventory/ERP system.

WHY BOTHER?

WHY SHOULD THIS BE A PRIORITY FOR YOU?



GET RID OF COSTLY IN ACCURACIES

An immediate gain that you will see from data capture is improved stock accuracies. It is commonly known that data capture almost eradicates inaccuracies from manual data entry in the warehouse. Humans make mistakes, automated data capture solutions don't!

Studies have shown that with manually collected data, the "substitution error rate" the percentage of errors that creep in during data collection is 1 in 300 characters. We have come across companies that struggle to achieve 1 in 25! The cost of even one such error can be significant. For example, the cost of shipping a container load of stock to the wrong location could easily run into thousands; and, this does not take into account the cost of damaged customer relations.

With data capture users can reasonably expect an error rate better than 1 in 1 million. Given that warehouses are often fast-moving and tasks repetitive, the gains from accuracy alone can justify a project. Further, this builds the foundation for more sophisticated operational initiatives, such as forecasting and supply & demand balancing.



GAIN REAL-TIME VISIBILITY OF YOUR STOCK

Data capture yields best results when it is fully integrated with your back-end ERP or inventory system. This means that every warehouse transaction is visible immediately in the back-end system, effectively making the solution an 'automated extension' of your existing system. Given that data capture literally occurs at the speed of light there is no delay between the time that a warehouse transaction takes place and your visibility of it. This fundamentally changes the speed in which you can respond to activities in the warehouse and equally important, this gives you all of the information that you require to communicate effectively with your customers and suppliers immediately.



IMPROVE THE PRODUCTIVITY OF YOUR OPERATIONS

Not only does manual processing cause inaccuracy but it also results in delays through paper trails and bottlenecks. It is not uncommon to find paperwork lost or misplaced in a paper tray in somebody's office – particularly when staff are on leave or seconded to perform other roles. Coupled this with the fact that most transactions are already outdated by the time that they are manually processed in the system, reducing productivity further!

At one customer we found that inefficiencies and resource constraints prior to implementing an RF solution meant that people weren't even recording certain transactions. Inventories were only ever correct following a full warehouse stock-take which meant that the warehouse had to be offline at frequent intervals of time. In contrast RF provided immediate and accurate inventories all the time.



SLASH COSTS ACROSS THE BOARD

By eliminating manual data entry fixed labour costs are reduced immediately; this cost savings can be justification in itself. But other labour costs can also be reduced. For example, administration is reduced because less time is spent correcting errors, reconciling and doing setup.

Reduction in inventory costs is another quick gain for customers. One source estimates the annual cost of carrying inventory amounts to at least 25% of average inventory value. Carrying stock can therefore amount to substantial unnecessary cost however this pressure needs to be balanced against the minimum stock levels required to operate efficiently and keep customers happy!



IMPROVE CUSTOMER SERVICE

Accurate data that can be accessed and reported on in real-time fundamentally changes the way you do business and engage with your customers. It takes your staff off the back-foot, away from the daily grind of reactively fighting fires, and allows them to focus on the things that really matter – managing the business. Customer service then becomes a function that you can control; you are no longer in the dark when a customer asks you for an update on their order!

As one customer succinctly put it – "For the first time we had real time data! Because of this, supply and demand planning worked straight away. This was one of our key objectives of the project, and its benefits alone justified the project."

As technology has advanced over the years, and the industry matured, Automated Data Capture is no longer an expensive solution only within the grasp of larger, more affluent companies. More importantly, this solution is now cost-effectively implemented in a phased manner to provide quick wins.

You may find that there are more reasons than not to put data capture on your priority list!