Wireless Network Tracks Finished Goods Inventory at Guide

Guide Corporation, a full service provider of high quality automotive lighting solutions, serving automobile manufacturers worldwide, faced the age-old story of the integrity of their finished goods inventory at their Anderson, Indiana facility.

Guide's ERP system provided the inventory data used to determine shipping availability and manufacturing requirements. Yet on a daily basis, supervisors, stock chasers, and shipping people could be found hand counting inventory to make sure they had the "right" numbers. In addition, Guide was making way too many inventory adjustments. The substantial dollar variance attributed to these adjustments finally brought the problem to a head.

Guide uses standard shipping labels printed in numerous manufacturing work cells and affixed to the loads. The label contains bar coded stubs for inventory counting and shipping. In the cell, the workers would tear off the inventory stub and place it in a pouch. Various truck drivers then moved the loads to the two shipping docks and stored them by location. Separately, production control people would collect the pouches and take them to the shipping room offices where, throughout the day, the stubs were scanned into their QAD system. The bar codes on the stubs were PDF417 format, containing all the necessary data required to complete the inventory transaction when scanned.

This process worked fairly well, but it had flaws. Often loads were shipped before they had been scanned for inventory. The separate paths taken by the loads and stubs to get to the shipping areas were an opportunity for error. However, this process got the job done with fewest extra bodies and with the least amount of equipment. Getting control of inventory was important to Guide, but they had significant budget restraints. Richard Prather, Senior Business Analyst at Guide, was tasked with finding a data collection system within these constraints.

"After several calls discussing our situation with potential vendors, I invited Purple Oak to visit," said Prather. "They came and spent most of the day with us. I was impressed with Purple Oak's approach to the whole process – not an immediate proposal, but a discussion paper that captured the requirements and presented multiple solutions with cost estimate ranges. As a business analyst, I have always believed the formulation of the problem is far more essential than the solution. Most always this approach leads to the simplest, most cost effective solution. That is exactly what we got from Purple Oak – a good analysis of the requirements up front, great knowledge of the resources and tool sets available, and a simple straight forward cost effective proposal."

The solution Guide chose to implement was a real time wireless local area network, consisting of multiple Cisco radio access points connected to an existing Ethernet network. HHP Dolphin 7450 hand held computers with integrated bar code scanners would function as mobile ANSI terminals, connecting to the Unix host running their existing QAD application software.

This solution allowed Guide's QAD data entry screen to be used directly on the hand held computers. They could also use their existing PDF bar code label stubs. No proprietary software or custom programming was required. The data would go directly into QAD, with no interfacing, downloading, uploading or other intermediate processing steps required.

Guide recognized immediate results. According to Prather, "We implemented the project at both shipping docks and have received feedback from the plant about the good results, evidenced by the reduction in the number of inventory adjustments and negative inventories. They also believe in the inventory figures provided by the system and feel the inventory process is in much better control. Not only did we realize savings from the application, but thousands of dollars were saved compared to the cost of the other solution being proposed. Purple Oak met our business needs, and did it with the right solution – all for less than the amount we had approved for the project."