Shaw Industries Gains Value by Graduating RFID From Compliance to Strategic Value

Shaw Industries Group, Inc. is a full service flooring company with over \$5B in annual sales. Shaw is a Berkshire Hathaway company. Residential and commercial collections include carpet and hard flooring under brand names such as Philadelphia Carpets, Cabin Crafts, Queen, Sutton, American Home Fashions and Expressive Designs.

Business Challenge: Finding Value

Shaw is a major supplier of area rugs to Wal*Mart. Shaw needed to label its products with RFID tags to meet Wal*Mart's compliance mandate. The challenge arose when their VP of Distribution wanted more out of the RFID system than just an added cost of doing business. The internal mandate was to find other applications using this new technology. The Shaw team needed to identify areas that could leverage RFID to solve issues and reengineer business processes which would drive shareholder value.

Partner Selection: Putting Trust in Expertise

The first step for Shaw was to identify the basic strategy behind meeting the compliance mandate. Once that was accomplished they looked at areas where a business process could be fixed using RFID. Once the team had several opportunities it was time to execute a competitive analysis of various companies offering RFID "expertise". Shaw has long-standing relationships with global system integrators, bar-code manufacturers and system automation vendors. Those relationships were leveraged as well as inviting RFID-specific providers. In the end Shaw selected Quake Global because the business process change was so specific to the technology that having deep expertise and understanding the entire RFID life-cycle was deemed critical to project success.

"All the vendors said this [reading dense pallets of product] wasn't possible, but the product is being read with 100% accuracy."

Randy Carter,

Manager of Information Systems Development, Shaw Industries

Step I: Make Compliance Easy with Automated Accuracy

Compliance was seen largely as a cost of doing business. Shaw needed a simple, automated process for labeling pallets which would address the complexity and volume of Shaw's products. They are a high volume supplier of area rugs, small rugs and bath mats which are both rolled and in boxes. Many of Shaw's boxed goods have high product counts per pallet. Quake Global's' solution was to implement a well-proven RFID portal design which would read all of the products on a pallet while the product is being stretch wrapped. When the pallet of goods enters the stretch wrapper, a sensor is activated, the pallets spins several times while being read and a message with all the RFID tag IDs (EPC Codes) is sent to Shaw's mainframe system. A pallet tag is then printed, and any missed case tags are printed as well.

Quake Global achieved 100% read rate accuracy by utilizing its patented EasyReaderTM optimization software to configure and tune Intermec's IF5 readers. The Intermec reader was chosen for its specific high performance in the Shaw environment after a rigorous process was followed to choose the optimal hardware, software and architecture.







Step II: Leveraging RFID for Supply Chain Efficiency

The area of business process improvement identified was the flow of finished goods and work in process information between facilities. The information, more than the actual goods, was the value to providing better customer service, real time notification, and asset visibility. Shaw envisioned a system to track the movement of products between its 39 central and regional distribution centers. Truck arrival and departure times were not tracked well and the reported times were often incorrect. It was a business process that RFID could improve immediately.

The Shaw and QUAKE team created a system to add RFID tags to master bills of lading for each shipment from its central distribution center in Dalton, Georgia to regional distribution centers. The RFID system tracks the master bills of lading when they leave central distribution center and again when they arrive at a regional distribution center. Knowing the departure and arrival times along with shipment contents increases Shaw's visibility into its operations and allows better management of its drivers and carriers. Shaw's overall goal is to see an increase in efficiency in the distribution of its products and improve customer service.

The first step was a pilot to prove the business case and ROI with a two facility pilot. The initial pilot proved so successful Shaw Industries and the Quake Global team are now moving to roll-out 37 additional facilities across the continental United States.



"Shaw met with several vendors and ultimately selected Quake Global for the new projects because we judged QUAKE to be the most knowledgeable."

Jim Nielsen,

Manager Infrastructure Planning, Shaw Industries.

Solution Components

Shaw's RFID Solution utilizes QUAKE's Common Reader Interface, QUAKE's design and deployment services and the QUAKE Waterproof outdoor rack enclosure. The solution includes Intermec readers and printers and the system integrates into home grown and packaged Shaw legacy systems via IBM MQ Series.

Benefits

- Wal*Mart Compliance
- Increased Supply Chain Visibility
- Better Shipping Efficiency

About Ouake Global

Quake Global is the leader in the physics of RFID solution design, deployment, and installation optimization software. RFID is a big part of what we do. Global corporations on four continents leverage Quake Global's expert engineers and patent-pending RFID optimization tools to achieve accuracy, visibility and speed in RFID deployments. In addition to client deployment services, Quake Global is also the publisher of the RFID Benchmark Series, the industry's first and most referenced head to head performance analysis of leading RFID tags and readers. Quake Global is also author of RFID for Dummies published by John Wiley & Sons.



