American Textile Maintenance—Going Paperless with Mobile Technology

Software transmits all information electronically—from soil sort to packout, invoicing, service and more



By Camille Peters

People who try to run totally paperless operations would surely hit roadblocks in washroom stalls and janitorial closets. But in today's warehouses and offices, paper used for invoicing and related accounting purposes is becoming obsolete.

That's a blanket statement, but most textile services industry professionals wouldn't argue the point with you. Whether it weighs down route service representatives (RSRs), shippers, team leads or receivers of soiled inventory, paper invoicing causes multiple headaches.

This point isn't lost on Gail Reynolds, controller for Los Angeles-based American Textile Maintenance Co. In her other role, as head of technology for American Textile, she helped replace piles of printouts with mobile technology in the company's trucks. The benefits of this move include increased responsiveness to customer needs while RSRs are on the road and fewer errors during end-of-shift procedures.

Reynolds knew staff inside the plant could also cut down on excessive paper usage and the resulting inefficiencies. If mobile device usage helps RSRs do their jobs better, why not put the same tools in the hands of in-house staff?

With that idea in mind, Reynolds and her colleagues approached American Textile's mobile technology partner, Mobile Computing Corp. (MCC) based in Mississauga, Ontario, Canada.

'PHABLET' FAST

Reynolds herself uses MCC's M-LINXTM on her office computer. It shows information accumulated from RSR-issued tablet-sized mobile phones, also known as "phablets."This software program turns the phablets into complete realtime routing, delivery, data entry and manifest tools.

Phablets communicate with company servers via Wi-Fi networks in the plant (and cellular networks everywhere else). They come with cameras and GPS receivers that make data and location-services information easier to capture.

Success in the shipping department became apparent as shippers began to pack out delivery trucks using phablets (instead of clipboards) loaded with Production Load Management software. "When staff used paper to load trucks, they scratched items off long lists as they went," Reynolds says. "They were always looking down the list to see what wasn't scratched off."

Long lists could result in missing items, which led to managers doing emergency deliveries and investigating the source of errors. These extra steps wasted time, which affected customer

Republic Master Chefs employees, like the one shown above, have improved their efficiency and service by moving to paperless ordering/ invoicing technology.

IT INNOVATION

service, and so on. Paper-based processes also made it difficult to fulfill last-minute orders.

Reynolds chalks up improved loading accuracy to the Production Load Management software interface. "When an item is loaded, it just disappears from the list on the screen," she says. Those lists show only items that remain to be loaded.

MEETING DIVISIONS' DIVERSE DEMANDS

American Textile's two business divisions update shipments using slightly different methods. Republic Master Chefs Textile Rental Services can quickly add textiles to rolling racks before loading racks onto trucks for delivery to its customers in the Food & Beverage (F&B; i.e., restaurants, bars) sector.

Stringent standards for medical facilities served by the company's Medico-Professional Linen Services preclude such easy addition of inventory to deliveries. These deliveries must leave the plant in pre-wrapped bundles, so any additions to orders take the form of split or "sub-bundles."

In both divisions, labels had to be printed by the accounting department. Should any slips be lost or changes required, "Our people had to go all the way upstairs to pick up any packing slips and take them all the way back down before they could pack trucks," says Pete Calzada, service manager for Republic Master Chefs. With electronic invoicing, this time-consuming activity is no longer needed.

Lost slips of paper or unfulfilled changes to orders sometimes meant that drivers would have manifests on their tablets but no corresponding inventory to deliver.

Now, shippers for both Republic Master Chefs and Medico-Professional create packing labels using Production Load Management on their handhelds and print them on demand via Wi-Fi using printers found on the plant floor.

Since they use the same phablets as the drivers, "Everything is real-time," Calzada says. "When we punch in an order, it

Attendees of TRSA's Production Summit and Plant Tours, March 18–19, at the Embassy Suites (LAX South) in El Segundo, CA, will get a first-hand look at the software system described above during a tour of Republic Master Chef's Los Angeles plant. goes right to the handheld. We don't lose packing slips any more, since there's no paper to lose."

"Our production workers get an alert that additional product needs to be loaded on a route," adds Kenneth Jones, district supervisor for Medico-Professional. "It ensures customers get their product" even if they order it at the last minute."

Supervisors and shippers also receive alerts if "ready" times are missed, so they can act quickly to fix issues and send trucks on their way. In addition, different trucks now can be assigned different priorities on the fly. As a result, more packouts are accurate and delivery costs have fallen.

Reynolds notes a new accountability too. "In the past, we didn't know who packed what," she says. "We now know who packs which bundles and which trucks. If errors occur, we can work with the person responsible to correct the process."

DATA FLOW: IN AND OUT OF THE PLANT

Handheld usage (i.e., replacing paper) has had as positive an impact in the receiving department as it has in shipping.

"We count soiled inventory when it comes back because that's how we know what to take back to the customer," Reynolds says. American Textile also tracks missing inventory so it has the option to charge shrinkage back to customers.

As with outbound inventory, inbound textile record-keeping also depended on paper. To begin the process, RSRs picked up mesh bags containing soiled inventory from customers. They attached pre-printed "tickets" to these bags.

RSRs had to estimate and request the number of paper tickets needed for each customer. They never wanted to run short, so they overestimated. Reynolds figures RSRs requested double the number of 4¼-by-5½-inch pieces of paper than they actually used. Multiplied by the thousands of deliveries RSRs perform daily, unused papers accumulated quickly. "We were drowning in them," Reynolds recalls. "Everybody in the company used them as scratch paper."

Those papers sometimes would go missing. When this happened, soil-counting station staff could not track damaged or spoiled rentals. Even when papers made the trip with the bags, manual data entry at soil-counting stations proved time-consuming. Errors due to transposed numbers and other causes added to issues that staff had to fix. When records are faulty, shrinkage charges can cause unwanted debates with customers. Sometimes, American Textile absorbed the cost.

American Textile now uses an Electronic Soil Ticket Management software system. Reynolds's first idea, washable RFID tags affixed to the mesh bags, wasn't cost-effective, so they chose adhesive labels that RSRs can attach to the bags.

Each 1-by-8-inch label contains a generic number and barcode. RSRs take a label off a roll of sequentially numbered labels to mark a bag, then marry that label's number to a customer's invoice by scanning the barcode using the handheld's camera. RSRs also can type the label's number into the handheld if needed.

"A customer number links to however many tickets RSRs use for that customer," Reynolds says. "There's no waste, and it's faster for the RSRs, since they just take the next ticket off a roll, attach it to a bag and scan it."

Adhesive labels also make the journey to soil-counting stations more reliable than the papers they replaced. Soil-counting staff can scan the barcodes into their equipment, reducing data entry time and error rates.

All information generated by handheld-equipped staff pours into American Textile's system and is visible on the "At A Glance" centralized soil-tracking reporting dashboard. "You have a better idea of where inventory is," Jones says.

That management comes easily, says Calzada. He estimates that workers need about three days to switch from using paper to using handhelds on the job. Calzada credits the handheldbased system for his newly acquired real-time access to numbers. "You don't have to wait a day to find out that an account was off-balance and then investigate," he says as an example. "In the web portals, you can see if orders have been fulfilled, if they're en route, or if they're short and haven't been fulfilled. You don't need to pick up a phone to ask other people for answers. All the information is right in front of you." IS

Camille Peters is president and CEO of Mobile Computing Corp. Inc. (MCC), Mississauga, ON, Canada. MCC is a provider of real-time mobile route delivery and optimization solutions designed to improve customer service and lower costs. Contact her at cpeters@mobilecom.com or 905.405.4861.