SimulScan helps ProTrans save time, money

Logistics services provider benefits from more efficient barcode scanning

ProTrans, an Indianapolis-based third-party logistics services provider, recently reduced barcode scanning time by about 75% at warehouses that supply parts to an automobile manufacturing customer. After ProTrans equipped its drivers’ handheld mobile computers with an application that uses Zebra® Technologies’ SimulScan Multi-Barcode solution, the company has minimized its truck waiting time and driver overtime, improved warehouse throughput and shipped orders faster.

ProTrans piloted SimulScan in late 2017 to evaluate the solution’s potential to shorten barcode scanning time. The pilot is typical of the company’s early adoption of technologies that have aided continuous operational improvements. Allen Phelps, ProTrans’ chief technology officer, notes that its Zebra partner has worked closely with the company to identify handheld mobile computers with a variety of design form factors that are well-suited to different workflows. Also, ProTrans’ application development team has used Zebra software to develop mobile applications for the devices to dramatically enhance workflow efficiency through the years. The use of SimulScan is one example.

Parts verification was slow

The process of verifying automotive parts against purchase orders at suppliers’ warehouses used to be an inefficient one for ProTrans’ drivers.

Although the Automotive Industry Action Group (AIAG) developed a single barcode standard that uses prefixes denoting data fields to ease data grouping in databases nearly 40 years ago, not all suppliers adhere to the standards. Even in cases where suppliers adhere to the standards, they do not necessarily position barcodes in an order that aligns with the ProTrans mobile application.

Drivers had to study barcodes before scanning each label four separate times to capture the part, quantity, serial number and package code data fields in the right order—a slow, laborious process, Phelps says. When ProTrans determined that scanning pallets full of parts was taking longer than staging them for loading, it was time to do something.

“You can imagine our drivers waiting an hour and a half and all of a sudden the dock fills up and the parts suppliers are trying to get trailers out the door,” Phelps says. “Many of our suppliers use small 50,000-square-foot warehouses and if we don’t get that freight moving in a timely fashion, it just backs up the trucks and the dock and they can’t move new orders into that truck lane.”
Right data, right order, in one scan

Zebra’s partner informed Phelps and ProTrans that an application using SimulScan could capture just the right data, in the right order, to accelerate this workflow. Using SimulScan’s Variable Quantity functionality, an application can enable workers to capture data from a predefined number of barcode labels in a given scanning workflow—four in this case—in a single scan. Also, as in this case, SimulScan’s logic can direct an application to capture only certain data, e.g., dates and part quantities, from barcodes and automatically populate fields in a database with the data.

Phelps and ProTrans decided to pilot the solution. Using sample AIAG labels, its developers worked with Zebra’s development team to build four barcode data fields (part, quantity, serial number and package code) into ProTrans’ application, in the correct order, in one scan.

Scanning time reduced by 75%

Phelps and a colleague visited one automotive parts supplier to time the barcode scanning process for a typical truckload using a Zebra TC75X Touch Mobile Computer. Without the SimulScan-powered application, the process took about two hours. With the application, it took about 35 minutes. “Instead of having to scan each label four times, we only had to scan it once,” Phelps says. “Plus, we did not have to scan barcodes in any particular order.”

He adds that one automotive customer told him they stopped hearing complaints from a parts supplier about operational disruptions in its warehouses that used to result from the difficulty ProTrans drivers had with scanning barcodes on automotive parts. Also, ProTrans has drastically reduced unnecessary driver overtime that used to result from scanning inefficiency. “Drivers aren’t sitting there for two hours to complete the scanning process and suppliers are happy because they are able to get freight off of their docks sooner,” Phelps points out.

To learn more about how you can automate your data-capture process with SimulScan, visit zebra.com/simulscan