A closed loop scanning system tracks items from picking to loading to delivery, thereby closing the loop on each item as it moves through distribution centers and gets delivered to the customer. By scanning a package’s barcode at key check points, warehouses create tracking records as packages move along their journeys.

With Closed Loop Scanning, companies have real-time data showing what’s been picked, what’s been loaded, and what’s been delivered to customers.

**Deliver perfect orders and keep customers happy.**

The goal of any warehouse is perfection. Perfection in picking, perfection in loading and perfection in deliveries. That’s a tall order for distribution centers that have thousands of items moving through their building at any given minute. However, companies have found that implementing a Closed Loop Scanning System will help them get very close to achieving the goal of perfection.

**Checkpoints happen:**
- as every item is picked into a box,
- as every case is picked onto a pallet,
- as every case or pallet is loaded on a truck, and
- as every case or pallet is delivered to a customer.

71% of U.S. warehousing and logistics providers use barcode scanners in their distribution centers, according to a 2019 survey by Statista of approximately 250 providers.
**Errors are Expensive**

*Mistakes can occur at every point* in the warehouse ecosystem, whether in picking, loading or delivering. In the picking process alone, studies show that error rates average between 1% and 3% in today’s warehouses. The costs of these mistakes add up quickly and become significant in a short amount of time. Nationwide, the average cost of picking errors ranges from $50 to $150 per error. That reduces overall company profitability a whopping 11 to 13 percent.

**Where Mistakes Happen**

- **Picking**
  - Wrong items/quantities
  - Products look the same
  - Employee fatigue
- **Loading**
  - Packages misplaced
  - Packages loaded on wrong trucks
- **Delivery**
  - Drivers delivering packages to wrong customers

*Data based on ProCat Customer Feedback*

**The costs of mistakes cover a lot of ground.**
- Added cost to redeliver the correct item.
- Lost productivity of drivers looking for items that are not on their trucks.
- Added costs to issue credits.
- Increased labor to retrieve wrong items from the customer.
- Added costs to restock returned items that were incorrectly shipped.
- Potential for a total loss of the item, depending on the product.
- Increased loss of reputation, as repeated errors affect the customer’s perception of your company.

Companies benefit greatly by eliminating errors throughout their operations. The most effective way to eliminate errors is to have confirmation that items are being picked, loaded and delivered correctly. The best way to achieve confirmation is through scanning.
**Benefits of Closed Loop Scanning**

**Increased picking accuracy**
The largest opportunity for error is in the picking operation. Wilkens Foodservice, a mid-size distribution center in University Park, Illinois, found that the most common picking errors involved incorrect product picks, incorrect quantities being picked or products being skipped and not picked at all. They were experiencing 20 to 25 picking mistakes daily and even with half being caught and rectified, it was still too many.

"It was most often the picker’s fault and happened when they were not looking closely enough at the product description," said Keith Murphy, Wilkens Foodservice’s vice president. "Each mistake cost us between $75 and $100, including additional man hours for redelivery. It also impacted our credibility with customers, and there’s no price tag on that."

By incorporating scanners and a closed loop scanning system into its operations, Wilkens has not only virtually eliminated mistakes, it now has real-time information on an item’s status, no matter where it is in their delivery process. Murphy said, “The system not only helped with picking errors but enabled us to better track product and know who picked it and when. This lets us gauge how our pickers are doing and reward our top guys. Implementing a closed loop system is one of the best decisions we’ve made.”

**Reduced loading errors**
Closed Loop Scanning gives distribution centers the ability to know that the correct package is loaded onto the correct truck. Loading errors are particularly frustrating in that products have been selected correctly but have no chance of being delivered to customers correctly because they are not on the truck.

By scanning packages when they are being loaded, companies can be confident that trucks have been loaded accurately. When companies have scan records of packages that have been loaded, they can confidently tell drivers who call about missing packages that the package is indeed on the truck. Those calls will soon stop as drivers gain confidence that their trucks have been loaded accurately.

At Soto Foodservice, a mid-size distributor in City of Industry, California, picking errors were slowing down the entire operation. “Drivers were not happy having to work overtime, so overall morale was affected,” said owner Johnny Renna. “Also, when there are too many mistakes, customers will find someone else to do business with.”

Once they implemented Closed Loop Scanning, driver confidence increased. Drivers became more efficient because trucks were being loaded by stop, not in bulk, and drivers quickly became confident that package counts were correct. What was supposed to be on the truck was indeed on the truck. Drivers were no longer wasting time looking for packages that were never loaded on their trucks. The result was lower frustration and higher productivity.
Increased delivery accuracy
Closed Loop Scanning gives distribution centers proof that every package has been delivered to the correct store. There is no substitute for a stellar reputation, which results from getting orders right the first time and every time. Increased accuracy increases customer trust and customer retention, while improving your reputation.

Ability to deliver perfect orders
With food items, accuracy is especially important, making scanning technology and a Closed Loop Scanning system even more valuable to food distributors.

At Soto Foodservice, rising costs for mis-picks, loss of driver productivity and impact of errors on reputation motivated the company to look into barcode scanning and a closed loop system.

Due to the perishable nature of their food products, traceability was a big issue and accurate record keeping became even more vital in order to deliver on their customer service promises.

“Our chain customers want us to be able to trace lot codes and track cases from the farm to restaurant,” said Renna. “With our closed loop system, if there’s a recall, we have all the necessary information to track the order.”

More efficient labor force
In addition to a more productive workforce thanks to scanning technology, once a warehouse has eliminated nearly all errors with a Closed Loop system, they will require less labor. This is particularly significant in the tight labor market that currently exists in the U.S. Less wasted labor hours equals less employees. And, less frustration also leads to happier employees and lower turnover.

“We went from 97% to 99.7% order accuracy and improved productivity 34%. Our guys are over the moon in how much easier barcode scanning technology has made their jobs.”

— Chris Leitner, Partner and General Manager at S&L Food Sales in Chico, California

2020’s average turnover rate for foodservice warehouse employees.

— IFDA

37.7%
ProCat Distribution Technologies offers a bundle of three modules that help distribution centers ensure orders are picked correctly, loaded onto the correct trucks, and delivered to the correct customer. Working together, the three modules capture scan data each time a product moves through process, and offer robust reporting and analytics to help management with tracking and improvements.

**PickRight** is a hands-free order picking solution built on barcode scanning that eliminates picking errors and delivers 99.9% accuracy. PickRight prints package labels with unique barcodes that can be affixed to every package as part of the picking process. This same package label is scanned at loading and again at time of delivery. The PickRight package label creates the foundation of a Closed Loop Scanning system. Because PickRight is easy to learn and easy to use, it also increases picker productivity 20-40%. It includes batch picking, team picking, and zone picking functionality to reduce wasted walking time, and incorporates on-screen prompting for continuous workflow. PickRight’s built-in reporting tools enable management to track individual pick rates, shift pick rates by pick area and more, which helps reward workers.

Customers report choosing PickRight because it helps create operational excellence with increased accuracy and increased productivity. They also report a return on investment in under 12 months, a reduction in labor costs and a reduction in customer claims. The end result: PickRight makes wholesalers better operators which results in high customer satisfaction and a low rate of lost accounts.

**LoadRight** uses the same equipment as PickRight and enables truck loaders to scan package barcodes at time of loading. That ensures the right packages - and all the packages - are loaded onto the correct truck before trucks leave the building, which makes drivers more efficient. Missing packages are displayed on the scanner’s screen and remain open until loaded. The advantages add up: employees have an opportunity to fix problems before the driver leaves the building; customer service, accounts receivable, and sales representatives do not need to get involved; documentation that shows packages were loaded on the truck reduces claims due to “missing” packages; and documentation validates counts of high-value items at loading (i.e., steaks and coffee). Like PickRight, it is easy to learn and fast to get started.

**ShipRight** is ProCat’s driver delivery module that runs on a hand-held device which displays routes in stop sequence and enables drivers to scan package labels at time of delivery. By standardizing the driver delivery process, it ensures accuracy at point of delivery and eliminates paper manifests, which improves customer satisfaction. A scan record is created for every package delivered, providing real-time delivery receipts that provide proof of delivery signature, number of packages delivered, and lists temperature of frozen and refrigerated products at time of delivery. A robust module, ShipRight provides many extras such as arrival time alerts, A/R instructions, refused products handling, store door scan, and a camera. ShipRight also gives management driver performance reports, assisting with driver training and rewards.
Warehouses and distribution centers face ever-increasing competition and pressure to perform on thinning margins. Improving accuracy in every function of the distribution process is the best way to minimize bottom-line costs of errors and improve business reputation. A Closed Loop Scanning system can help get any operation close to perfection.

**About ProCat Distribution Technologies**

ProCat Distribution Technologies helps small to medium size distribution centers implement barcode scanning technology into their operations. ProCat has developed a suite of 14 modular software solutions that improve accuracy and productivity in every part of a warehouse. PickRight, ProCat’s order picking solution, has proven to achieve 99.99% order accuracy and a 90% reduction in customer claims. PickRight is able to interface with any ERP and does not require any changes to your current WMS.

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