



# STEP 5 UPGRADE INBOUND HANDLING OPERATIONS

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Receiving and sortation are critical steps in assuring flawless fulfilment. They're critical because issues in receiving all too often morph into other issues throughout the warehouse management process. To streamline inbound operations, today's warehouses must be able to manage two growing trends. First, their systems must be prepared to take advantage of increases in the number of incoming items that have barcodes. In a recent Zebra Technologies study, respondents predicted that the percentage of barcoded items will grow from about 67 percent today to almost 84 percent in the next five years. Second, they need to respond seamlessly to shifting supplier requirements, some of which the survey identified as the increased use of Advance Ship Notices (ASN), RFID systems, GSDN data and GS1 standards.



# **RECEIVING AND SORTATION CHALLENGES**

Overall, the goal is to make sure workers at the receiving dock are enabled with real-time access to inventory, accounting and order systems. When workers can quickly scan an item barcode or access an ASN, shipments can be automatically identified and reconciled. With an increasing number of returns pressuring inbound receiving processes, streamlined reverse logistics are becoming more important and widespread. In addition, many companies need their receiving processes to help assure compliance with today's increasingly stringent track and trace regulations, to capture OS&D (overage, shortage and damage) issues and to provide evidence of supplier noncompliance with standards and requirements.

# **RECEIVING AND SORTATION POINTS OF PAIN**



#### THE PAPER CHASE

Pen-and-paper and other manual and fragmented technology processes result in lost time, reduced accuracy, decreased productivity and lower ROI.



#### **SLOW DOCK-TO-STOCK**

Delays caused by pen and paper processes and isolated technological solutions reduce inventory control, lead to false out-of-stocks and lost sales.



# **POOR VISABILITY**

Slow and inaccurate receiving and put-away are barriers to real-time inventory visibility and control, as well as to effective cross docking, task interleaving, traceability and tracking processes.



# MANY UNHAPPY RETURNS

Increasing return rates and inefficient reverse logistics result in slow return of product to inventory, delayed customer credit processing and decreased customer satisfaction.

# RECEIVING AND SORTATION MOBILE AND DATA CAPTURE SOLUTIONS

At the receiving dock, mobile processes empower workers to be more accurate and more productive. A simple scan of a barcode, RFID tag or RMA label enables incoming shipments to be identified and verified in real time. It also allows returns to be quickly validated and updated, with automatic issue of any customer credit due. Orders are delivered right to the worker, enabling accurate staging of shipments for put-away or cross docking, and streamlining the handling of any errors in the shipment.

At the same time, velocity and productivity in the receiving and sortation functions increase because the same workforce can process more shipments, reducing dock-

to-stock cycle times. This increased inventory visibility allows you to intelligently direct put-away or conveyance for items that are low in stock first, reducing costly OOS impact on the order fulfilment process. Returned items are automatically noted in the inventory systems and instantly available for fulfilment of new orders. Real-time visibility into the order system also enables more efficient cross docking, reducing handling time and costs for incoming shipments. If an item is received with a damaged barcode or without a barcode then a fixed or mobile printer can be used to print the required label and ensure onwards visibility through the supply chain.

# **LEADING SOLUTION COMPONENTS**



#### LS3578-ER RUGGED BAR CODE SCANNER

A cordless Bluetooth®-enabled laser scanner that reads 1D bar codes from near or far.



#### **RS507 HANDS-FREE CORDLESS IMAGER**

This rugged scanner boasts advanced ergonomics and Bluetooth cordless capability, allowing unparalleled comfort and freedom of movement.



# MC9190-Z HANDHELD RFID READER

A high-performance, industrial-grade RFID handheld reader that delivers best-in-class RFID read range and accuracy. Rugged, reliable and ergonomic, it excels in demanding environments.



# **ZT400 SERIES INDUSTRIAL PRINTERS**

The ZT400 Series is designed for durable, reliable printing in tough environments. Loaded with advanced features, RFID capabilities and Zebra's Link-OS environment, the ZT400 is ideal for the receiving dock.



#### **G-SERIES DESKTOP PRINTERS**

Meet your labelling needs with these versatile and compact desktop label printers. Space saving, feature-rich and user friendly, these thermal label printers are a smart choice.

# **PUT-AWAY AND REPLENISHMENT POINTS OF PAIN**



#### **INVENTORY ON IDLE**

Product sitting on a dock or misplaced in inventory is more than simply idle; it's also unavailable, which can mean lost sales and dissatisfied customers.



#### **CLOGGED AISLES**

Slow, inaccurate manual processes and the limited throughput of older technology can cause congestion in your aisles, wasting time and decreasing productivity.



#### **FALSE OUT-OF-STOCKS**

Put-away errors and delays can create inventory inaccuracies, which can result in erroneous OOS situations, unnecessary product replacement costs and lost sales



#### **EQUIPMENT MISUSE**

Poor visibility and inefficient management of material handling equipment (MHE) like fork lifts and crawlers reduces MHE availability and productivity, and increases maintenance costs.

# PUT-AWAY AND REPLENISHMENT MOBILE AND DATA CAPTURE SOLUTIONS

With immediate access to the WMS, workers can quickly scan a barcode or shelf tag (or read an RFID tag), ensuring that the item is put in the correct place and via the most efficient route. This helps reduce OOS situations, and enables warehouse workers to increase throughput by being able to process more put-away orders every hour. The system also provides a record of the placement of the shipment so you know the exact location of all inventory to a highly detailed level. This real-time visibility provides the information required to implement first in/first out (FIFO) or last in/first out (LIFO) inventory management, which can have a significantly positive impact on the company's

profitability analysis and tax liabilities. In addition, the solution improves MHE utilization through reduced travel time in the warehouse aisle, which reduces wear and tear and maintenance requirements for the vehicles.

Real-time visibility can also support and automate lean replenishment techniques. Material Flow Replenishment can eliminate the need for manual and labor intensive processes by delivering real-time data from the factory floor to help you quickly respond to changes in inventory, production status and customer requests.

# **LEADING SOLUTION COMPONENTS**



# VC70N0 ULTRA-RUGGED VEHICLE-MOUNTED MOBILE COMPUTER

Achieve new levels of productivity and throughput in your toughest warehouse environments.



# VH10 VEHICLE-MOUNTED COMPUTER

Get maximum productivity and flawless fulfilment in your most challenging environments with the VH10.



#### DS3500-ER SERIES

Developed to enable both 1D and 2D bar code reading, the DS3500-ER Series offer the scanning range, rugged design and speed that will make a difference in your business.



# MATERIAL FLOW SUITE

A comprehensive manufacturing execution management solution that optimises material flows and streamlines the entire replenishment process.

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