# Change is the New **Normal in Warehousing**



Disruption and volatility have put warehouse operators under pressure to adapt to continual change.



# Which of these disruptions are you navigating?



Rapid growth of e-commerce



Higher volume of orders



Rise in item-level fulfillment



Shorter delivery times



Unpredictable availability of inventory



shortages

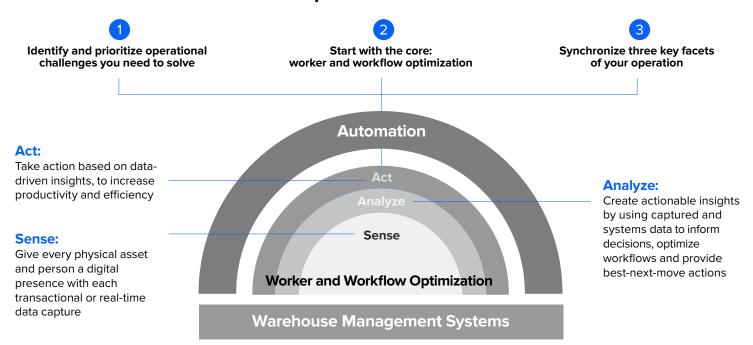


turnovers



Employee safety concerns

# When Responding to Supply-Chain Disruptions, **Start at the Front Line of Your Operations**



### The Path Forward is Best Achieved in Phases

Taking a phased approach allows you to increase operational visibility at your own pace, without upending operations.

# Plan Your Next Move with the **Zebra Warehouse Maturity Model**

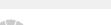


# Identify and prioritize operational challenges



#### How many do (or don't) we have?

Inventory inaccuracies result in operational inefficiencies



- Track every inventory move
- Connect each worker to your WMS with modern mobile devices



#### How do we handle more volume?

Higher order volume, more item-level picking and inventory moves increase daily transactions



#### How do we alleviate congestion points?

Worker-initiated, scan-based processes aren't fast or accurate enough



#### What's my best next move?

Unable to quantify decisions and optimize in the moment



#### How do we respond to quickly changing demands?

Being ten steps ahead is a necessity today



#### Phase 1



#### Phase 2

- Deploy devices to fit each task, increase comfort and effortlessly data capture
- Optimize WMS data for dynamic mobile workflows



#### Phase 3

- Automate data capture in targeted areas where compliance is critical
- Utilize labor efficiently by managing by exception



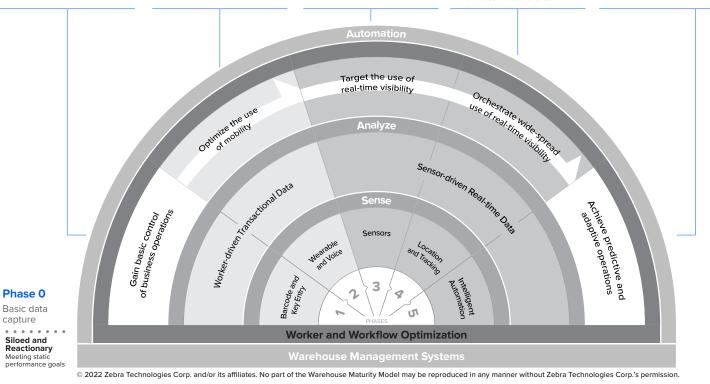
#### Phase 4

- Get operational visibility with real-time location data
- Deploy the closest worker or asset for the task
- Reduce steps in processes with automated alerts



#### Phase 5

- · Fuse all sensor data sets together using intelligent automation
- Predict and adapt in real time



# Show me how to apply this framework in my operations

Contact us today!

## Any Size, Any Challenge

Zebra's breadth and depth of hardware, software, solution and service offerings can address all the operational areas within your warehouse—resolving today's unique logistics challenges. The result: minimum risk and maximimum return on your investment.



# **Your Most Accurate Inventory Yet**

# With solutions that give you visibility



The accelerated pace of e-commerce, paired with customers' on-demand expectations, is driving an urgent need to prioritize inventory visibility to constantly know the quantity, condition and utilization of goods and assets. To keep pace, you need every worker visible, connected and optimally utilized. Augment your workforce with the right technology and tools, purpose-built for your environments for faster fulfillment. Strategically power your way forward with the Zebra Warehouse Maturity Model to achieve your goals.

#### **Boost Inventory Accuracy**

for increased productivity and asset utilization



Move away from paper processes and capture cycle counts digitally-eliminate the duplication of effort.



Android™ Handheld Mobile Computers with All-Touch Terminal Emulation, Ultra-rugged Scanners and Zebra DNA productivity tools.



#### Phase 2

More cycle counting per shift with ergonomic scanning, large intuitive touch screen and team communication. Replace damaged or lost labels on the spot.



#### Phase 3

Eliminate counting errors from the start by automating data capture for critical inbound



Gain nearly 100% location-level accuracy for goods and returnable assets for a broad area.



Go beyond counting inventory. Data fused together, gives frontline cycle counters the full picture of the state of the inventory.



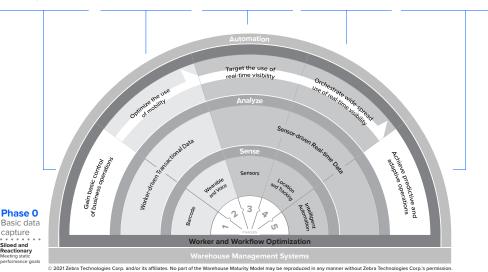
Touch Computer. Mobile Printer, Zebra Workforce Connect™.



Zebra Fixed and ATR7000 RTLS Reader, Handheld RFID Zebra MotionWorks" Readers and Printer/ Warehouse\* and Zebra Encoders. MotionWorks™ Asset.



Partner or customer applications, Zebra Data Services APIs.



Modernize your business with the proven strategic framework of the Warehouse Maturity Model. Zebra's broad portfolio of purpose-built hardware, software solutions and services will boost your bottom line and help you meet your KPIs.

Contact us today to configure an inventory management solution to support your Phase of warehouse modernization.

### Move Forward With Confidence, Backed by Zebra

\*May not be available in all regions. Contact your local Zebra sales representative or partner.

# **Did you Know?**



of warehouse decision makers report the use of RFID for cycle count and inventory validation today.

Source: Warehousing Vision Study research, Zebra Technologies, 2019



of organizations reported utilization of inventory tracking functionalities of their warehouse management system today.

Source: Warehousing Vision Study research, Zebra Technologies, 2019



# **Put Accuracy on Center Stage**

## Leverage pack-leading innovation



The accelerated pace of e-commerce, paired with consumers' and business partners' on-demand expectations, is driving needs for greater levels of visibility on the outbound dock. To keep pace, you need every worker visible, connected and optimally utilized. Augment your workforce with the right technology and tools, purpose-built for your environments for faster fulfillment. Strategically power your way forward with the Zebra Warehouse Maturity Model to achieve your goals.

#### **Ship Correct, Complete Orders Every Time**

Take a phase-by-phase approach to modernizing outbound operations:



#### Phase 1

Verify order accuracy, record your final inventory moves and print clear shipping labels that ensure delivery.







Ultra-Rugged Scanner and connected Desktop Printer.

capture Siloed and Reactionary



Keep packing and shipping workers handsfree to easily handle and sort cartons, print color-coded labels onthe-spot and seamlessly communicate with their work devices.

Wearables, Mobile

Printing, IQ Color

Workforce Connect™.

Labels, Zebra



Automate and document pack validations at distribution center for irrefutable receipt at

Fixed RFID readers and

antennas positioned

above conveyor to

staging area.



#### Phase 4

Automatically identify outbound shipments in each staging location in real time; send an automatic alert to the staging manager if any orders are incomplete.



#### Phase 5

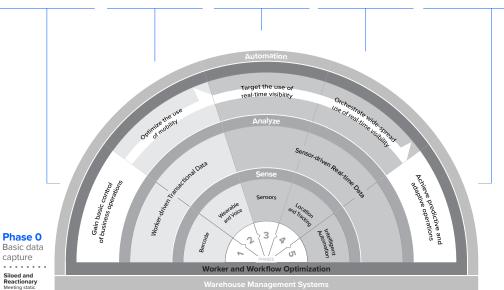
Fuse multiple sensor and transactional data inputs to power machine learning and intelligent automation to validate order readiness.



Zebra MotionWorks<sup>1</sup> Warehouse\* and Real-time Location System (RTLS).



Partner applications and Zebra Data Services APIs.



Modernize your business with the strategic Zebra Warehouse Maturity Model framework. Zebra's broad portfolio of purpose-built hardware, software solutions and services will boost your bottom line and help you meet your operational key performance indicators.

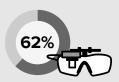
#### Move Forward With Confidence, Backed by Zebra

Contact us today to make a plan to optimize your outbound operations - phase-by-phase

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### **Did you Know?**



Going hands-free will be the trend for 62% of decision makers, as they plan to upgrade or add wearable computers by 2022.



Worker augmentation paired with partial automation is preferred for packing operations by 73% of warehouse leaders.

Source: Warehousing Vision Study, Zebra Technologies, 2019



# **Modernize Your Picking Processes**

## With Proven Solutions that Deliver Agility and Accuracy



The accelerated pace of e-commerce, paired with consumers' and businesses' on-demand expectations, is driving a new level of urgency to advance picking operations. To keep pace you need every worker visible, connected and optimally utilized. Augment your workforce with the right technology and tools, purpose-built for your environment. Strategically power your way forward with the Zebra Warehouse Maturity Model to achieve your goals.

### Get the Momentum you Need to Move Picking Operations Forward

Boost productivity with phase-by-phase picking workflow optimization



Replace paper pick tickets and update inventory electronically without duplicative work.



Android™ handheld mobile computers with All-Touch Terminal Emulation.



Optimize workflows and keep workers handsfree, heads-up and in their picking zone to maximize productivity.





Zebra FulfillmentEdge™ paired with wearable mobile computing, scanning and printing



#### Phase 3

Eliminate manual scanning during pallet picking.



Fixed RFID reader in portal area exiting pallet storage location.

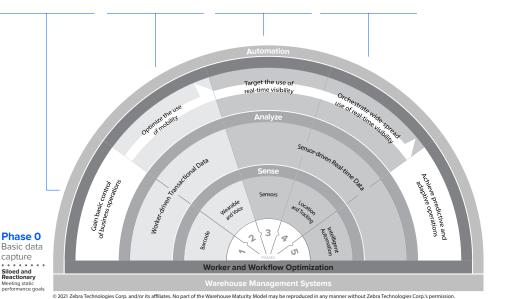


#### Phase 4

Reduce manual material movement to pack stations to increase picking productivity.



Zebra FulfillmentEdge™ orchestrates workers and autonomous mobile robots (AMRs).



Modernize your business with the strategic Zebra Warehouse Maturity Model framework. Zebra's broad portfolio of purpose-built hardware, software solutions and services will boost your bottom line and help you meet your operational key performance indicators.

### Move Forward With Confidence, Backed by Zebra

Contact us today to make a plan to optimize your picking operations - phase-by-phase



### **Did you Know?**



Picking operations can account for almost 50% of warehouse labor and is often an area with frequent turnover - as high as 30% annually.

Source: Commissioned McKinsey Intelligent Automation Study for Zebra Technologies, 2019



Sixty percent of warehouse decision makers reported labor recruitment and/or labor efficiency and productivity are among their top challenges.

Source: Warehousing Vision Study. Zebra Technologies, 2019



# **Receive with Next-Level Speed and Precision**

## Faster, error-free inbound operations



The pace of warehousing is accelerating today. To keep pace, you need every worker visible, connected and optimally utilized. Augment your workforce with the right technology and tools, purpose-built for your environments for faster fulfillment. Strategically power your way forward with the Zebra Warehouse Maturity Model to achieve your goals.

#### Optimize Your Labor and Workflows Starting at the Receiving Dock

Take a phase-by-phase approach to modernizing



#### Phase 1

Enable the use of advance ship notices (ASN) by mobile workers to receive, sort and label efficiently.



Equip lift truck operators with taskspecific devices to keep heads-up, focused and safe while unloading.



#### Phase 3

Automate receipt of goods as they are unloaded on conveyors or by pallet.



#### Phase 4

Know with near 100% accuracy where assets are located in staging areas for faster. error-free put-away.



#### Phase 5

Fuse multiple sensor and transactional data inputs to automate receiving decisions through intelligent automation



Partner applications and Zebra Data Services APIs.



Computers, Desktop Printer with Battery, Ultra-Rugged Scanner, Zebra DNA.



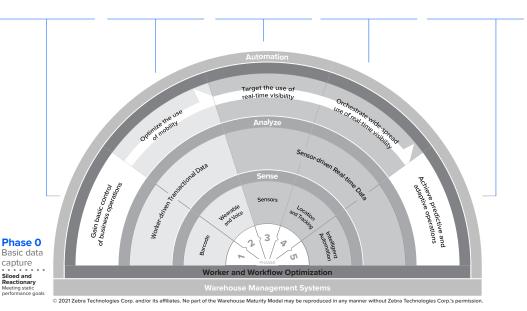
Vehicle-Mount Computers and Tablets with Ultra-rugged Zebra Workforce Connect™.



Zebra Fixed RFID Readers and Antennas, Fixed Industrial Scanning.



Zebra MotionWorks™ Warehouse\* and Real-time Location Systems (RTLS) Technology.



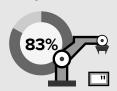
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### Move Forward With Confidence, Backed by Zebra

Contact us today to make a plan to optimize your inbound operations - phase-by-phase



### Did you Know?



Receiving is going to get more complex. Eightythree percent report they will increase number of SKUs carried by 2024.



By 2024, 81% of warehouse decision makers plan to expand returns management operations.

Source: Warehousing Vision Study, Zebra Technologies, 2019

