



# Lowe's Digital Transformation Streamlines Operations and Bolsters Omnichannel Capabilities

Leading home improvement retailer converges in-store and supply chain solutions to form a cohesive ecosystem of enterprise-grade devices and software applications

## Rising to the Challenge

Lowe's completes approximately 19 million customer transactions a week from nearly 2,200 stores in North America. The company is a world-class omnichannel retailer with an intense focus on building its operational capabilities to better serve homeowners, renters and professionals in improving their homes and businesses.

Over the last several years, Lowe's has made strategic investments in merchandising excellence, supply chain transformation, operational efficiency and customer engagement. Thanks to this proactive strategy, it was well prepared to rapidly respond to changing consumer demands brought about by the pandemic. Working with Zebra, the business doubled down on its technology investments in its stores and regional distribution centers (RDCs) to ensure it could meet and exceed heightened consumer expectations. "We've seen a steady increase in our net promoter scores, and we believe a big part of that is based on Zebra's mobile technology," says Vincent Scalese, Senior Vice President of Store Operations at Lowe's.

According to Lowe's leaders, they had a clear choice at the onset of the pandemic. The company could have easily slowed down and frozen changes. Instead, it started deploying both consumer and associate-facing technologies at a faster pace. This approach helped Lowe's better prepare for demand surges, changes in customer channel preferences and supply variability.

## Evolving the Lowe's Experience

Today's shoppers have sky-high expectations for the retailers they buy from online and in stores. They see little difference between a retailer's digital and physical experiences and expect to navigate seamlessly between the two.

No one knows this better than Lowe's, which has focused on engineering the friction out of the shopping experience and putting omnichannel fundamentals in place. Unprecedented market disruption and a wave of consumers turning their attention to home improvement translated into increased demand for Lowe's. As an essential retailer, the company found new ways to serve and communicate with



### SUMMARY



#### Customer

Lowe's  
 Mooresville, North Carolina

#### Industry

Retail

#### Challenge

A patchwork of legacy mobile computing, printing and scanning devices limited Lowe's associates' operational efficiency and communications as market disruption created a new imperative for technological optimization

#### Zebra Solutions

- Handheld Mobile Computers
- Wearable Computers
- Handheld Barcode Scanners
- Rugged Tablets
- Vehicle Mounted Computers
- Printers
- Software Applications

#### Results

- Flipped the ratio of time store associates spend with customers versus completing tasks from 40%/60% to 60%/40%
- Enhanced communications and increased visibility to optimize operations
- Streamlined workflows, improved task management and enabled faster responses to inventory questions
- Increased omnichannel capabilities to evolve along with shoppers' needs
- Improved customer service experience leading to increase in Net Promoter Score (NPS)

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customers. Lowe's leadership team placed more emphasis on digital transformation at the retail and RDC levels to keep up with changing demands. "Customers have become more reliant on different types of omnichannel retail," Scalese says. "They really want to see that frictionless experience, whether they come into the store to shop, order online and come into the store to pick up, or have their merchandise delivered directly to their homes."

### Connecting Workers

Recognizing the importance of seamless communications, Lowe's implemented Zebra's enterprise Workforce Connect™ application, which allows employees across the business to collaborate instantly and dynamically using their tablets and handheld mobile computing devices. Associates can connect with individuals or groups using voice, text and messaging from anywhere within Lowe's facilities, extending to the parking lot, garden center and other outdoor spaces connected to the wireless network. With more visibility into each inventory, order and task status, stores and RDC teams can function better within the geographically distributed retail ecosystem, improving receiving, picking and fulfillment processes at all locations.

### Achieving Results

A new combination of hardware and software solutions gives corporate decision makers, store managers and associates, and RDC employees real-time visibility into current supply and evolving demands, transforming Lowe's operations and enabling better and more efficient customer service.

Lowe's has enhanced associate productivity and store simplicity by focusing on mobility first. Zebra's mobile solutions enabled the retailer to converge multiple computing and communication devices onto the same Android™ enterprise-grade operating system (OS). Though multiple Zebra mobile computer models are deployed across Lowe's operations, workers only need to carry a single device throughout their shift to effectively collaborate with one another and complete tasks.

This consolidation of all critical workflow applications and communication tools has helped improve associate efficiency and enhance job safety and satisfaction. It has also reduced the burden on IT as there is now consistency in the OS platform across the entire fleet, which can be remotely configured, secured and managed.

Zebra's mobile devices also outperform legacy tools with improved battery life and rugged durability, both on store floors and in RDCs, where environmental conditions and intense use typically challenge mobile devices. Overall, Zebra's comprehensive mobility solution has enabled store associates to shift their focus from completing tasks to spending more time delivering quality customer service.



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## At a Glance: Zebra Solutions at Work



### In Stores

Associate Task Management & Communications	Merchandising	Mobile Price Execution	Mobile/Curbside Checkout
TC51/TC57 Mobile Computers Workforce Connect Reflexis Task Management	TC51/TC57 Mobile Computers ET51 Rugged Tablet	TC51/TC57 Mobile Computers ZD420/ZD421 Desktop Printers	TC51/TC57 Mobile Computers ZQ511 Mobile Printer
Order Fulfillment (Packing, Staging, Lockers, etc.)	Receiving	Store Audits/Review & Equipment Swap	Tool Rental
TC51/TC57 Mobile Computers ZQ511 Mobile Printer ZT610 Industrial Printer RS5100 Wearable Scanner	MC9300 Mobile Computer	TC51/TC57 Mobile Computers Reflexis Task Management	TC57 Mobile Computer ET56 Rugged Tablet



### In Regional Distribution Centers (RDC)

Badge Printing	Associate Mobility & Communications	Conveyor Label Printing	Fulfillment Label Printing (Picking and Shipping)
ZXP7 Card Printer	TC72/TC77 Mobile Computers Workforce Connect	ZE500 Print Engine	QLn420 and ZQ630 Mobile Printers ZT610 Industrial Printer
Device Health	Associate Access Badge Scanning	Order Picking	Scanning Pallets/Boxes
VisibilityIQ™ Foresight	DS8100 and DS9208 Handheld Barcode Scanners	MC9300 Mobile Computer WT6000 Bluetooth Wearable Scanner RS5000 Wearable Computer	VC80x Vehicle Mount Computer ET50 Tablet DS3608 and DS3678 Handheld Barcode Scanners



## Elevating the In-Store Experience

A typical Lowe's home improvement store stocks approximately 40,000 SKUs, with over two million additional items available online and through the company's special-order sales system. Stores typically operate seven days a week and average approximately 112,000 square feet of retailing space, which encompasses both indoor and outdoor areas. Industrious home improvement consumers and professionals can find everything from lumber, paint and appliances to home décor, cleaning and pet supplies, all under one roof.

### Finding Productivity Through Simplicity

"We're going through a transformation right now, and our real goal is to drive simplicity into the stores," says David Shoop, Senior Vice President of Technology for Stores, Corporate Services, Pro and Services at Lowe's. "And with that simplicity, we get productivity."

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The key to achieving that simplicity in stores was finding the right solution provider to implement and maintain new technologies across the business.

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For example, Lowe's replaced legacy and consumer mobile devices with Zebra TC5x Series rugged touch computers to assist with order picking and mobile/curbside checkout. Zebra's ZD421 desktop printers, made portable by durable printer carts, enable team members on store floors to quickly update shelf labels while remaining present to assist shoppers. Store managers also use Reflexis Task Management for store audits, reviews and equipment swaps.

Mobility empowers front-line workers to know where to find every individual item and answer questions on the spot, rather than having to leave customers to return to a terminal or find and ask another team member.

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“We want to get data in the hands of our associates so they can serve our customers wherever they are, whether it’s in the aisle of the store, outside in lawn and garden, or in the mulch pit,” Shoop says. “We’re focused on making sure that from the time a product comes in the back of the store as it travels through the store to the shelves and out the front door, that we’re able to manage it very effectively.”

Equipped with the TC5x Series handheld mobile computers, associates can help shoppers locate items within the front or back of the store. If they are out of stock, they can immediately confirm if those same items are available online or can be shipped to the store for later pickup – all without leaving customers’ sides.

Zebra’s Reflexis Task Management software allows for even more efficient sharing of information throughout Lowe’s ecosystem. The software application can be used by corporate and field leaders to communicate and monitor the execution of vital store projects, like signage changes and safety recalls.

### How It Works

Associates receive assignments and updates on their mobile devices in their preferred language. Task Manager integrates seamlessly into third-party systems, such as the one associates use to manage store equipment requests and exchanges. This consolidated user experience reduces the complexity of the associate’s job and saves time, as they don’t have to switch back and forth between multiple apps to receive, coordinate and close-out requests. They can do it all in Task Manager.





## Connecting and Empowering

One of Lowe's top priorities was converging store and warehouse communications onto a single Android platform, allowing for a more consistent device ecosystem. Previously, teams used a patchwork of devices, from two-way radios and intercoms to consumer smartphones and tablets, to request and share information.

Lowe's ensures its newly deployed Zebra mobile computers are all equipped with Zebra's enterprise mobile communication and collaboration application Workforce Connect. This powerful application enables associates to connect directly with customers and associates from anywhere on the floor using PBX and push-to-talk (PTT) voice technology, SMS texts and other in-app messaging tools. Workforce Connect brings these functions together into a single device – and a single app – while integrating with Lowe's existing voice platform. This means that the same system used for PTT between associates can also be used to speak with customers calling into the store for assistance.

"In 2020, we used Workforce Connect 165 million times. That's 165 million times I didn't have to run three aisles over to find somebody or 165 million times I didn't have to get on the P.A. system and make a bunch of noise or more importantly, 165 million times I didn't have to say to the customer, 'I don't know.' It is a big, big change for us and one that our associates absolutely love," says Scalese.

### Shifting the Focus from Task Completion to Customer Service

"We've been on a path to change our labor hours from task based to customer service based," says Rob Baker, Vice President of Omnichannel Fulfillment at Lowe's. According to Baker, store operations have flipped from 60% task based and 40% customer service based to 40% task based and 60% service based.

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Additionally, by outfitting associates with the TC5x Series handheld mobile computers and ZQ511 mobile printers, Lowe's has gained the ability to line bust and process customer transactions more quickly. Associates can now create mobile checkouts wherever shoppers are located so transactions can be processed anywhere within the store, in the garden center or even in the parking lot.

### Adding Mobile Printers Makes Price Changes Faster and Easier

Previously, making markdowns and price changes required store associates to print large batches of labels before going to the aisles to replace outdated labels. If associates ran into an incorrect label or needed to reprint during the process, they had to return to the workstation terminal and printer where they started. Now, associates use Zebra's TC5x touch computers and ZD421 desktop printers on carts to complete ad-hoc printing of a single label on the spot. This solution enables associates to maintain more floor presence, so they can readily assist shoppers when needed.

"The combination of these devices and applications has made this process much more efficient and easier," Shoop explains. "We can now make more price changes every day, and we can do it more efficiently, which then leads to a higher level of accuracy through the entire store."

### Maximizing the Power of the Physical Store

After improving the mobile checkout and price change processes, Lowe's turned its focus to its receiving and parcel teams at the back of the store. Associates were outfitted with Zebra MC9300 mobile computers to capture, share and receive information. The addition of these devices has simplified and streamlined complex tasks like unpacking trucks and inventory management. The intuitive Android platform makes the devices easy for associates to use and requires minimal training, which is especially beneficial during seasonal hiring periods when new workers need to reach full productivity quickly.

Lowe's is also leveraging its impressive physical retail footprint to supercharge its omnichannel capabilities and turn the store into another fulfillment center for online orders. Customers can now choose from quick home delivery and curbside pickup to in-store pickup from lockers. With Zebra mobile computers and wearable RS5100 Bluetooth® scanners, associates have the tools right at their fingertips to process, pick and ship online orders from the store faster and more accurately than ever.

"We need to be in front of the customer wherever that customer may be," says Scalese. "Mobile technology is going to be at the heart of what we do, and Zebra is the core of that technology."

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## Fortifying Fulfillment at Lowe's RDCs

Lowe's has accelerated its digital transformation strategy to keep up with demand surges, supply chain variability and customer channel preference. Zebra's hardware, software and services enable Lowe's RDC teams to upgrade and scale their technology solutions faster.

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After the successful rollout of Zebra mobile computing and printing solutions in its retail stores, Lowe's applied some of the same technology to improve operations at its RDCs.

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Zebra devices and software applications power faster and more accurate inbound receiving and put-away operations within the RDC environment and streamline critical outbound tasks such as picking, staging and loading.

### Mobility and Visibility Strengthen Inbound and Outbound Operations

The retailer relies on Zebra's mobile computers to maximize inventory visibility and improve accuracy. Both the TC7x Series and MC9300 handheld mobile computers have integrated barcode scanners that help assure fast and accurate barcode scans. Wearable devices, like wrist-mounted computers and wearable Bluetooth scanners, enable the hands-free completion of tasks like picking and order packing. Vehicle-mounted scanners allow faster barcode verifications for receiving boxes and pallets at the dock.

Zebra devices offer improved scan engines over legacy devices and drive greater accuracy and efficiency in scan-intensive tasks. With a more extended range and additional scanning angles than legacy and camera-based scanning devices, associates can complete their jobs more quickly, regardless of the size, condition or number of barcoded items.





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Zebra also enables faster printing across the distribution center, from shipping labels to associate badges. Mobile printers allow front-line workers to produce e-commerce labels on the go, while industrial printers are used for larger shipping labels. The ZE500 print engine was installed in each RDC and enables automated, print-and-apply labeling on conveyor lines. This powerful print engine can stand up to heavy workflow demands without slowing anyone down.

### Equipping RDCs with the Right Tools to Communicate

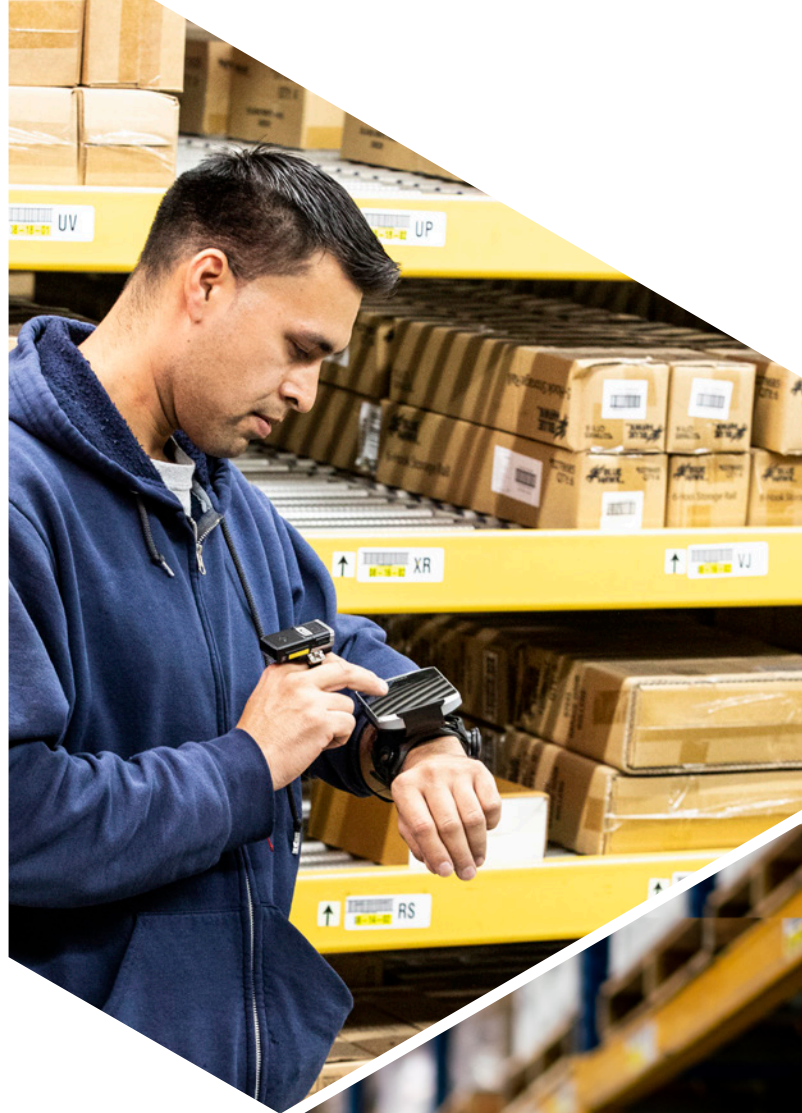
Similar to the stores, introducing next-level mobility and better communication across company operations required Lowe's to migrate more capabilities onto the enterprise-grade Android platform and away from dated green-screen applications. Lowe's is deploying TC7x mobile computers to its front-line RDC workers to manage all communications and tasks within a single platform. The rugged TC7x combines smartphone capabilities with a powerful barcode scanner, camera and PTT app in a single device. Added 4G LTE functionality ensures the devices continue to provide superior communication even in areas where Wi-Fi is hard to access, such as the yard.

Lowe's Android application engineers are currently building native apps specifically for the Zebra devices. The company has also enabled enterprise asset management software on the Zebra touch screen devices and is planning to add new apps in the near future, including one that provides access to its records management system.

### Improving the Associate Experience

Lowe's is in the business of providing excellence in its products and customer experiences, and creating an ideal environment for associates is the first step. As omnichannel grows, more products will pass in and out of distribution centers, making it critical to improve the employee experience across facility functions.

Android-based mobile devices are intuitive and easy to use for associates who employ smartphones and other consumer devices in their everyday lives. With a dedicated training app on the Zebra devices, onboarding of RDC associates is fast and simple. Many are up and running within hours. This on-demand learning capability is key to overcoming any potential



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labor shortages or other unexpected market disruptions in the future, as it enables Lowe's to quickly scale and upskill its workforce as needed.

The retailer also prioritizes its associates' well-being by investing in user-friendly, ergonomically designed technology. Zebra's TC Series and MC9300 mobile computers have proven to be easy on the hands and wrists of employees who spend much of their time scanning, which helps avoid injuries due to overuse. Lowe's plans to invest in more hands-free solutions like Zebra's RS5100 wearable Bluetooth scanners and the WT6000 wearable mobile computer so that all employees will have the option of a wearable versus a handheld computer.

### Devices that Stand Up to the Task at Hand

Zebra's mobile computers have the rugged capabilities needed to withstand all-day use across various working environments. They have superior battery life and can perform through an entire shift of continuous use on a single charge, avoiding costly and inefficient downtime.

According to Lowe's, device downtime is a pain point. The company reports that the new batteries are 50% better than the old ones it was using in the RDCs.

The batteries are hot swappable, meaning the devices do not have to be powered down while a user takes out the dead battery and inserts a fully charged one. They also feature enhanced battery monitoring technology that lets associates and IT staff know via the Zebra VisibilityIQ™ dashboard when batteries are nearing the end of their life, allowing them to be swapped out proactively before creating a stall in operations.

### Achieving Best in Class Omnichannel Retail

The Lowe's mission to deliver the right home improvement products with the best service and value across every channel and community it serves is made all the more possible by its more than 300,000 associates, augmented and supported by powerful technology solutions. As Scalese summarizes, "Technology impacts everything within our store operations and our customer experience, and it's woven into every fabric of what we do."

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Vincent Scalese, Senior Vice President, Store Operations, Lowe's



To learn more about how Zebra can help your business achieve real-time operational visibility and engineer frictionless omnichannel experiences, visit [www.zebra.com/retail](http://www.zebra.com/retail)



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