ZEBRA

5 Ways

New Technology Helps Your Warehouse Operations Keep Pace:

Increase Workers' Productivity to Meet Modern Day Demand

RADLEY
CORPORATION

Fast, accurate order picking and fulfillment has always been critical to the success of a warehouse operation. That's why most warehouses have transitioned from paper-based to electronic systems, including barcode scanning and other forms of automatic identification, electric data collection, wireless communication, and point-of-task computing and printing solutions.

However, even technologically advanced warehouses have already extracted the maximum available efficiency increases from their current mobile and automation technology. At the same time, there are new pressures generated by e-commerce and omnichannel sales that require warehouse operators to further improve accuracy and throughput, and deliver at a lower cost.

Online sales and home delivery have generated major increases in order volumes and SKU proliferation. Thanks to the "Amazon effect," customers expect expedited service, flexible shipping options, real-time tracking, and low-cost or free shipping. A changing warehouse workforce, which includes a younger generation, also has elevated expectations about the technology they use to do their jobs. Having grown up with advanced mobile computing technology literally in their pocket, the often aging mobile solutions (featuring terminal emulation "green screen") found in most warehouses are seen as slow, unintuitive, and a drag on productivity.

Competition is increasing, and warehouses that can deliver faster, more accurately and at lower cost are in demand. These warehouses need to balance meeting increasing customer demands while delivering product faster and maintaining their own profit margins. That has created a sense of urgency around new technology innovation to stay current and effectively meet the need for higher volumes of single-item orders from multiple channels.

These warehouses need updated technology in order to modernize their operations, and achieve even more productivity by further reducing the time it takes for employees to pick and fulfill orders. Increasingly, that means eliminating wasted steps in the mobile computing process by reducing the need to scan, tilt and read the display of the mobile computer. This wasted motion can reduce productivity and throughput.

To improve productivity, warehouses need to deploy the latest, most advanced mobile computing and inventory management solutions. In this e-book, we present five critical benefits that transitioning to a modern mobile computing platform can provide today's warehouses.

1. Employees can work faster, helping your operation save time and money.

It may be difficult to imagine, but there is a "tilt" productivity drain in your scanning process. With traditional handheld barcode scanners, employees constantly have to tilt the device to check the screen in the middle of the scanning process to confirm a correct order. If you are using green screen/terminal emulation solutions, there are also multiple screens that must be navigated to process a work order or pick.

According to research conducted by Zebra Technologies, this scan/tilt problem wastes an average of 3,600 seconds per worker, per shift, amounting to an hour of wasted motion per day for each employee. Over the course of a single year, that means warehouses are losing the equivalent of several full shifts per month for every employee handling a scanner.

That research led to improvements in the design of Zebra's TC8000 mobile touch computer. The device leverages an innovative screen angle that eliminates thousands of device tilts that would otherwise be needed to verify a scan.

By eliminating the need to tilt, the design saves hours of wasted effort per day – resulting in a 14% productivity gain. In addition, the design reduces wrist motion by 55% and muscle effort by 15%. These improvements, combined with the fact that the device is 33% lighter than previous models, helps reduce strain and fatigue for employees while making the device much more comfortable from an ergonomic perspective.

The design not only keeps workers productive, but also keeps them safe from potential repetitive motion injuries that can lead to downtime, employee turnover, and additional expenses.

2. Employees can transition to new technology at their own pace.

With impending end-of-life and end of support for legacy Windows mobile platforms in the warehouse, companies must prepare to transition to new solutions based on the Android OS. New mobile computers, such as the Android-based Zebra TC8000 and MC3300, make that transition easier.

With a product like Zebra's All-Touch TE solution, these Android-based computers provide support for legacy TE apps out of the box, making it possible to transition those green screen terminals to a graphics-based, all-touch screen interface with no coding or host application modifications.

Doing so can vastly simplify these apps by reducing the number of screens needed to navigate through each process. Multi-keystroke entries can be converted into a single touch operation. Users can also create custom soft keyboards for specific screens in order to maximize data input simplicity. And these changes only affect the front-facing user interface – the original green screens are still available on the device if needed.

In addition, transitioning to a graphics-based interface makes these mobile computers more familiar to a workforce that's accustomed to using smartphones and other personal mobile devices. This helps reduce training cost and time for new employees, and helps seasoned workers improve efficiency by giving them a more intuitive way to work.

With flexible platforms like the Zebra MC3300, users have the option of a pistol-grip, turret, straight shooter, or angled scan gun configuration, as well as glove-friendly physical keypads (with alphanumeric, numeric, and functional numeric options). The devices can be customized to best fit each operation within the warehouse.

3. Employees make fewer mistakes.

Implementing new technology allows warehouse operators to streamline existing processes and move toward more automated data collection.

With advanced mobile computing devices, warehouses can gain the ability to scan any barcode, from any orientation, even if they are damaged or when the barcodes are distorted under packaging. This helps improve picking and shipping accuracy by reducing or eliminating mis-reads.

With greater accuracy throughout the inventory handling process, employees will make fewer mistakes — leading to higher efficiency, less waste and lower costs.

In addition, by equipping team members with industrial-grade barcode printers (either mobile or stationary), warehouses can create on-demand labels at the point of activity. This further improves labeling efficiency while ensuring that the right label is affixed to the right item.

4. Employees gain greater visibility to inventory.

With the right hardware and software in place, the level of inventory visibility available in the warehouse increases exponentially. Handheld computers coupled with automatic data collection allow employees to do their jobs more efficiently, and to quickly transmit information about orders and inventory into back-end management systems.

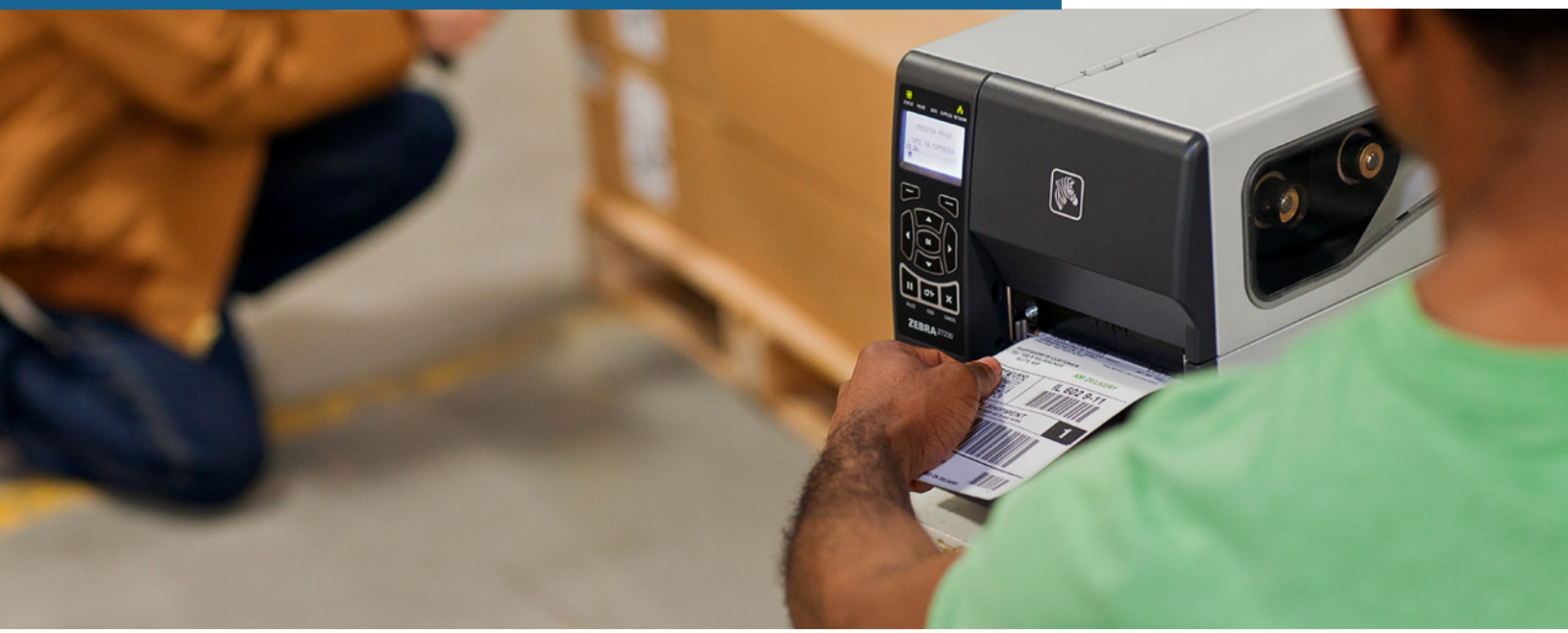
Not only are inventory handling tasks streamlined, but error-proof data allows for accurate tracking of inventory across multiple warehouses (even without an ERP solution). This enables your operation to meet consumer demand for faster shipping speeds and overall efficiency.

As a result, warehouses can control their inventory in a way that works for their own business mode, without being hemmed in by a rigid, out-of-the-box system. Choose a solution with configurable dashboards, fields and labels that reflect your industry's terminology, and can deliver real-time visibility.

Radley Inventory Control software, for example, provides such a configurable dashboard that can be customized based on industry and company requirements. Fields and types can be easily renamed or redefined, and the system can generate custom, personalized reports. Managers can easily view KPIs and audit trails, and have them exported to an ERP solution or to an Excel spreadsheet. Automated alerts can also be set up to help stay on top of inventory expirations or min/max quantities on hand.

The inventory management software that can be deployed with these advanced computers also continues to push the boundaries, providing a greater degree of configurability and customization.

This allows for even more workflow optimization. Often warehouses are locked into specific workflows or functionality found in their existing ERP or WMS solutions. However, today's state-of-the-art solutions have the ability to configure to how you do business and scale up as needs change. Upgrading to a modern data collection software and hardware platform drives new efficiencies, provides the ability to exchange real-time data across the value chain, automatically maintain compliance, and gain better visibility and control over these warehouse processes.



5. It will force you to re-evaluate your workflow and implement positive change.

Before investing in new technology, it's critical to evaluate your existing workflows to identify areas where productivity needs to improve. In this way, you can ensure you find the right solution to benefit your processes. Just the evaluation process itself can generate improvements in advance of the technology deployment. Most warehouses are following workflows that were developed years or decades ago, and the factors that influenced those decisions may have changed. A new technology deployment can break that workflow obsolescence.

This evaluation should also include the order in which you do each task in a workflow. Is there a better way to sequence? Modern warehouse solutions help identify the logical order of tasks for greatest efficiency and profitability. By re-ordering and consolidating tasks, workers waste less time. Employees in the warehouse can complete replenishments, put-aways, consolidations, cycle counts and picks in a logical sequence, simultaneously. Tasks can be efficiently combined and sequenced to reduce deadheading, waiting, and other wasteful operations.

Conclusion

Modern mobile computing and inventory management solutions can improve productivity, increase accuracy, and make it easier and safer for your employees to do their jobs.

Holding on to old technology for too long can harm your business. Ask yourself if your current hardware and software solutions are hindering productivity and profitability, and potentially placing you on uneven footing with your competition. Consult with a solutions provider that can help you leverage the right technology to control your processes.

About Radley

Radley Corporation provides a platform of EDI, Warehouse and Manufacturing solutions which allow organizations to re-engineer their business processes and workflows for optimum efficiency. Incorporating industry-specific functionality in a configurable and easy-to-use interface, Radley offers enterprise-class Automated Data Collection, Inventory Control, Task Management and EDI software that adapts to your unique requirements, integrated to your ERP or implemented as a standalone solution. With over 40 years' experience, Radley consultants have the expertise to evaluate, install, configure and support your needs whatever your industry and environmental challenges may be.

A competitive edge is crucial in today's manufacturing and warehousing environments. Find out how Radley can help get your workforce operating at maximum productivity, production costs lowered, compliance/quality standards met and overall efficiency increased, all while continuing to grow your business.

About Zebra

With the unparalleled visibility Zebra provides, enterprises become as smart and connected as the world we live in. Real-time information– gleaned from visionary solutions including hardware, software and services – gives organizations the competitive edge they need to simplify operations, know more about their businesses and customers, and empower their mobile workers to succeed in today's data-centric world. For more information, visit **www.zebra.com**.