





Expanding the use cases for wearable technologies

The future of wearable enterprise technology is here. In a competitive marketplace, companies of all types face mounting pressure to do more with less and are turning to mobile technology to improve agility while lowering operating costs.

Zebra is at the forefront of wearable form factors on the market. The WS50 Android wearable computer, the latest in Zebra's family of wearable devices, puts the power of a mobile computer on the worker's wrist to connect them with the resources they need to keep workflows moving, and customers satisfied.



### **Unmatched Capabilities in a Single Device**

The WS50 is designed to transform the many disconnected workers in warehouse, transportation and logistics, retail and hospitality into a fully connected and highly productive workforce. As the world's smallest Android enterprise-class wearable mobile computer, its game-changing platform adapts to a wide range of applications and is intuitive to use for most workers.

What's more, its versatile computing core offers a modular design with three mounting options (wrist, back of hand or two-finger) that enable businesses to get the best fit for their unique use case and environment. This flexible design means our customers can right-size their investment when it comes to the types of wearables they introduce to their workforce.

Unlike traditional ring scanners, the WS50 is a true one-piece wearable solution. Because it does not require a connection to a mobile computer, the device is a more accessible investment for enterprises to roll out across workers of all types.

#### **Purpose-Built for Enterprise Performance**

Consumers have embraced wearables and brought the technology into the mainstream, from health-tracking rings to smartwatches. However, there are significant differences between consumer wearables and those designed for use at the enterprise level. Zebra's application partners take the WS50 to the next level, meeting a variety of enterprise needs with ruggedized hardware that can stand up to heavy use in environments ranging from manufacturing plant floors and warehouse loading docks to retail stores, restaurants, hotels, and more. The opportunities are virtually limitless.











Demand for wearable technology is growing across industries as enterprises seek hands-free solutions to increase operational efficiency and enable better communications.



# Wearables Experience Staggering Growth

BY 2026



67% of supply chain and manufacturing leaders will adopt wearable technology.1



**96% of retail decision makers** are planning to deploy wearables in their business.<sup>2</sup>

MHI and Deloitte, "2021 MHI Annual Industry Report," 2021.
 Zebra Technologies, "14th Annual Global Shoppers Vision Study," 2021.

#### **PARTNERS**

### **Cutting-Edge Applications Take Enterprise Operations To New Heights**

It is more important than ever for organizations to leverage new mobility and edge technology-driven workflows to transform their operations. Thanks to Zebra's alliances with leading application developers, an ecosystem of impressive mobile applications for the WS50 has already emerged. With capabilities ranging from task management to order picking to employee communications, Zebra's partners can help enterprises quickly evolve along with the speed of technology.

#### **PICKING, SORTING, PUT AWAY**



#### Invanti Wavelink

Supercharges warehouse operations with powerful automation that enhances the functionality of telnet and web-based apps. Easily migrate and modernize existing apps while preserving enterprise systems, deploy across a variety of devices and operating systems and run multiple sessions with a single tap.

ivanti.com/products/velocity



#### **StayLinked**

Improves enterprises' speed, reliability, and productivity with one of the industry's most advanced terminal emulation solutions. Quickly and easily integrate new technologies, such as Zebra's WS50 wearable device into the WMS improving productivity and efficiency.

staylinked.com



#### Moving2U

Expedites tracking of stock movements throughout the warehouse from order receipt and picking to returns, transfers, and inventory counts. This software solution acts like an add-on to the existing ERP, extending its scope to the warehouse, while all stock management continues to be managed by the ERP.

moving2u.pt/en/m2u-logistics-mobile

#### **VOICE-DIRECTED PICKING**



#### **AccuSpeech Mobile**

Facilitates hands-free, eyes-free workflows with a completely device-based solution. Achieve double-digit improvements in productivity, accuracy, workforce safety, and operational efficiency. Seamlessly connects to any WMS, ERP, EAM or CMMS.

accuspeechmobile.com/voice-picking



#### **Almasons**

Simplifies warehouse management, improves efficiency, and helps increase profitability with voice-directed solutions that interlink with virtually any WMS and keep workers' hands free and eyes focused on the task at hand.

almasons.com/gini



#### **Invanti Wavelink**

Unleashes the power of mobileproductivity initiatives with fully featured voice enablement solutions. Easily enable Windows or Android devices with voice capabilities in weeks and at a fraction of the cost of traditional voice applications.

ivanti.com/products/velocity



#### Lucas

Transforms warehouse work, delivering immediate improvements in productivity and accuracy by combining voice, scanning, and vision to automate manual, hands-on processes to improve end-to-end warehouse tasks.

lucasware.com/voice-directed-warehousing



#### **Sysdev**

Specializes in the creation of development tools and apps for mobile devices that enables companies to create mobile apps without requiring an expert programming team, and with low code or no code, mobile apps can be quickly created.

kalipsostudio.com



#### Voxware

Helps distribution operations in some of the most intense working environments achieve nearly perfect picking accuracy. Optimize speed, accuracy and efficiency to improve profits and exceed customer expectations.

voxware.com/voxware-vms

#### **TASK MANAGEMENT**



#### **Aucobo**

Revolutionizes communications and collaboration on the shop floor. Provides an intelligent collaboration solution for industrial wearables that enables workers to self-optimize the distribution and processing of production, logistics, and maintenance tasks.

aucobo.de



#### **TaskWatch**

Delivers custom process automation and connected worker capabilities on wearables through a zero-code cloud platform. Workers can respond on handsfree devices to business events identified via Al/computer vision, IoT sensors, software systems, ERP systems, and more.

taskwatch.com



#### WORKERBASE

#### Workerbase

Offers a workflow and task management system that allows businesses to build apps for any Zebra device without the need to do any programming. A range of pre-made apps allows for fast deployment, and apps can also be created from scratch in a few hours.

workerbase.com

#### **ASSET TRACKING**



#### **RedBeam**

Gives complete visibility to high-value assets in an easy-to-use, scalable platform. Getting started is as simple as barcoding assets, scanning them into the system, and tracking asset data on a unified platform – no more spreadsheets or manual entry.

redbeam.com

#### WARFHOUSING

### Integrated Features for Optimized Warehousing

There's no such thing as too fast in today's warehousing landscape. Wearables can help speed up task-based workflows so workers can work smarter, not harder. That translates into less time waiting for instruction on what to do next or thinking on their feet when trying to solve a problem and more time getting things done. Combined with powerful task management and communication applications, the WS50 gives workers all the information they need when they need it.

#### **KEEPING YOUR TEAM CONNECTED AND COORDINATED**



#### **Constant Communications**

Communication within a warehouse can be a significant challenge for teams fanned out across expansive facilities. The underlying advantage of any wearable has always been hands-free picking – but in the case of the WS50, its enablement of communication via Push-to-Talk (PTT) or a connected Bluetooth headset is game-changing.



#### **Task Management**

The WS50 wrist-mounted module allows supervisors to push messages to workers without physically tracking anyone down or requiring workers to carry multiple devices. Workers can respond to text or voice communications confirming receipt and completion of tasks.



#### **Picking**

Workers equipped with the WS50 can get real-time picking instructions, using the same device on their finger/ring or the back of their hand to scan items or shelf tags. With hands-free capabilities, workers have more flexibility and can easily reach into tight picking booths. As robotics become an increasingly important part of the warehouse environment, workers can also use the device to call for the support of an automated mobile robot (AMR).



### **Item Sorting & Put-Away**

Workers can use the WS50 converged scan feature to efficiently move goods from the receiving zone to the warehouse shelves. The two-inch display on the WS50 converged back of the hand mount provides line-of-sight instructions to workers on the proper bin locations for scanned items. The screen is the ideal size for a clear display of information while remaining ergonomic to wear for the duration of a shift.





### KEY APPLICATIONS FOR WAREHOUSING

- Sorting
- Put Away
- Picking
- Loading and Unloading
- Task Management



KEY APPLICATIONS
FOR MANUFACTURING

- Sorting
- Put Away
- Picking
- Loading and Unloading
- Task Management

ISV SOLUTIONS GUIDE

#### MANUFACTURING

### **Supercharging the Manufacturing Workforce**

To compete in today's market, manufacturing operations need to achieve faster cycle times, increase visibility, and maintain product quality, all while meeting compliance and keeping the workforce safe on the job. Zebra's WS50, paired with the right enterprise applications, enable manufacturers to see more, know more and do more to become more agile, optimize plant floor performance and embrace market changes.

#### ALL-IN-ONE TECHNOLOGY FOR STREAMLINED ASSET & FACILITY MANAGEMENT



#### **Task Management**

The voice-centric WS50 devices allow floor supervisors to push messages and tasks to any worker, no matter where they are within the facility. Workers can then confirm completion of each task.



#### **Line Side Replenishment**

Materials managers wearing the WS50 on their wrist can receive alerts of low component stock on the assembly line, enabling restocking without slowing down the flow of operations.



#### **Equipment Maintenance**

The WS50 allows maintenance workers to monitor equipment status dashboards while on the go, rather than tethering them to a desktop or larger device. The ergonomic device can receive alerts when machinery needs repair, helping avoid costly downtime.



#### **Rugged Performance**

Designed to survive and perform even in challenging manufacturing environments, the WS50 supports -10°C to +50°C operations.

#### TRANSPORTATION & LOGISTICS

### **Getting Ahead with Future-Proofed Fulfillment**

With Zebra and our suite of application partners, enterprises can experience more dynamic fulfillment and realize transformational changes. With integrated scanning and the power of a mobile computer in a device that fits on the worker's wrist, the WS50 hardware and software can be configured for the needs of any logistics operation or use case. From staging and loading to unloading and sorting, more connectivity means more agility to streamline cross-docking workflows. What's more, there is an added benefit to wearable devices that can't be easily left somewhere like the back of a truck leaving the facility.

#### A CLEAR LINE OF SIGHT INTO ALL YOUR TASKS



#### **Task Management**

Equipped with an all-in-one data capturing device, workers can receive tasks and messages from managers no matter where they are located.



#### **Staging**

The WS50's two-inch screen size is optimized to deliver line of sight on-screen instructions for workers to ensure they are placing the correct package on the proper conveyor.



#### **Truck Loading**

When loading a truck, the WS50 converged scanner on the finger mount supports high-intensity scanning, with audio, haptic, and visual feedback for good versus bad load. The worker receives voice-directed instructions to ensure every package is loaded on the proper truck.



#### **Sorting**

Workers can scan boxes with the converged scanner on the WS50 wrist mount and receive on-screen instructions identifying the proper bin for each package or item, ensuring everything gets to where it needs to go, as quickly as possible.





### KEY APPLICATIONS FOR TRANSPORTATION & LOGISTICS

- Cross Docking
- Sorting
- Loading
- Unloading
- Task Management





- Pricing
- Product Markdowns
- Back of Store Operations
- Task Management

**RETAIL** 

### **Keeping Up with Consumer Expectations**

According to Zebra's 2022 Shopper Vision Study, consumers are looking for more options for retail fulfillment: 60% of those surveyed said they expect retailers to let them pick up items in store, curbside, or in another location as a locker or kiosk.<sup>3</sup> Wearable devices enable faster, more accurate picking when fulfilling orders from the store. On store floors, the WS50 also connects workers for easy task management, for example, alerting them that a shopper needs assistance or directing them to a spill or accident location.

#### SEAMLESSLY CONNECTING THE SALES FLOOR AND THE BACKROOM



#### **Task Assignment & Completion**

With the WS50, store supervisors can push messages and tasks to any worker — without having to physically track anyone down. When workers receive an urgent task request, they can quickly confirm receipt and job completion.



#### **Constant Communication**

The WS50 supports PTT, allowing voice communication between workers via the embedded speaker and microphone or a Bluetooth headset. Outfitted with these powerful wearables, sales associates can contact the backroom to request an item or get help from another associate on the floor without leaving the customer's side.



#### **Price Management**

The WS50 helps associates keep on top of real-time price changes, enabling them to send new labels via a wireless connection to a printer.



## **Back of Store Inventory Operations**

The WS50 supports scan-intensive tasks such as moving inventory from the loading dock to the backroom or the sales floor.

<sup>&</sup>lt;sup>3</sup> Zebra Technologies, "The Next Wave of Retail Fulfillment," 2021.

#### HOSPITALITY

### **Making Guests' Visits Worth the Trip**

Running a hotel is a complicated operation requiring the orchestration of many moving parts to deliver next-level customer experiences. From the back of the house operations — including receiving personnel, serving assistants, and housekeeping staff - to the front of the house — such as floor managers, hotel porters, and room service attendants, wearable technology can help keep hotel staff in seamless communication with one another so each request can be sent, seen, and completed without a hitch.

#### **ENABLING 5-STAR SERVICE**



#### **Task Management**

Within a hotel environment, the front desk can push messages and tasks to any worker throughout the facility, such as a request to a bellman to help a guest with their luggage. For larger establishments, this can help avoid time wasted waiting for a staff member to reach their desk.



#### **Housekeeping Requests**

Wearables can also keep housekeeping staff in direct connection with guest needs. A team member can receive requests for guest towels, for example, using the device to confirm receipt and task completion.



#### **Maintenance Requests**

The WS50 devices and workforce communication applications allow disparate teams to remain in close contact, solving problems as soon as they arise. For example, housekeeping staff could utilize PTT to contact maintenance if they encounter issues like a leaky sink.



#### **Food Service**

Hotels can win over the hearts and stomachs of guests with fast room service fulfillment. With a WS50 device on their wrist, food service workers can receive on-screen delivery instructions and complete deliveries at top speed.



#### **Inventory Management**

Large hotels intake an array of deliveries, from foodservice and cleaning supplies to linens and laundry. If individual items are equipped with a barcode, an employee with a WS50 at the receiving dock can quickly scan each one for a more efficient and accurate count of supplies on hand at any given moment.



### KEY USERS IN HOSPITALITY

- Restaurant Servers
- Room Service Attendants
- Housekeeping
- Janitorial Service
- Bellman

### **Applications for the Future of Mobility**

At Zebra, we are leading the development of enterprise-level solutions. Together with applications from our distinguished ISV partners, our vision is to drive faster, smarter workflow decisions by more users across the business. With a choice of modular configurations to fit your enterprise's needs, the WS50 line of purpose-built wearable devices is designed to help your workforce stay in touch and in control in virtually any situation or environment.

To learn more about Zebra's WS50 wearable devices or ISV partners, visit www.zebra.com/ws50

If you are an independent software developer interested in learning more about Zebra's PartnerConnect program, visit www.zebra.com/us/en/partners/partnerconnect/independent-software-vendors.html



