



Future Ready Warehouse

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Increasing Demands On Supply Chain



Increase in volume of items shipped by 2023



62%

Increase in annual inventory turns by 2023



- Shipping Air
- Improper Loading
- Manual Paperwork
- Costly Idle Time
- Missed Freight

- Lost/Misplaced Freight
- Mis-shipments
- Low Trailer Turns
- Under Utilized Assets
- Delayed Deliveries

Improved operational efficiency = Higher revenue & margins

Demands on Warehouse Operations are **higher** than ever

- Margins are compressing, causing pressure to drive efficiency—improve productivity
- Consistent and reliable customer experiences
 are critical—maintain customer loyalty
- Requirements to increase asset utilization
 amidst increasing logistical complexity
- Visibility of goods and assets is critical as they move through the supply chain
- Compliance requires change, evolving regulatory, mandates and systems



Enabling Intelligent Fulfillment

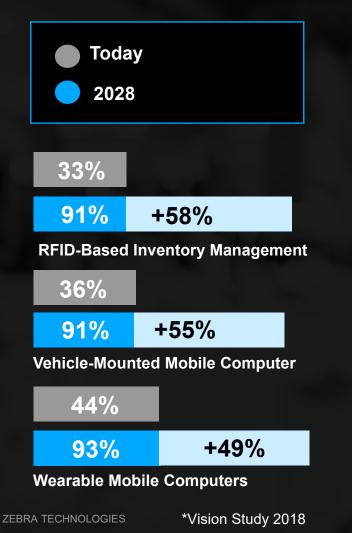
Workforce Management Tools on the Rise

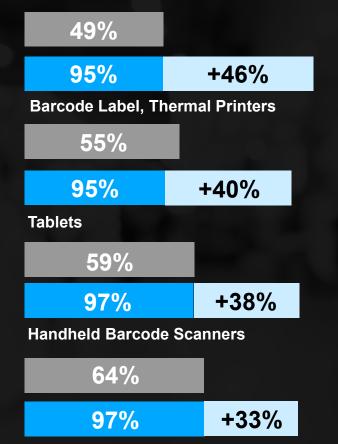
	Ioday	2028
Demand forecast planning	55%	97%
Labor workforce management	48%	98%
Freight document handling and archiving	48%	98%
Transportation management system	45%	97%
Warehouse management system	44%	97%
Tracking and event management	41%	96%
Inventory planning and management	40%	97%
Route optimization and scheduling	39%	97%
Sensors and monitoring	37%	96%
Network optimization system	37%	97%
Electronic interfaces with carriers	36%	98%
Electronic interfaces with shippers	35%	98%
Yard management system	34%	94%

Source: Zebra Future of Fulfillment Vision Study 2018



Moving from Manual to Digital What changes are End Users expecting in the next 10 years?





Handheld Computers with Built-In Barcode Scanners



Don't Risk Playing it Safe

Misconception: Legacy Windows[®] technology is the safest business choice.

Reality: It's not built to overcome evolving industry challenges.

VS.

Why Change Your Mobile Warehouse Technology? Stabilities and Capabilities



Keep up with the growing demands of e-commerce



Increase fulfillment speed and accuracy



Shorten training times



Market Pressures Are Escalating

So are the limitations of aged,

Windows-based devices

Change is inevitable

The sooner you migrate, the sooner you capitalize on advantages

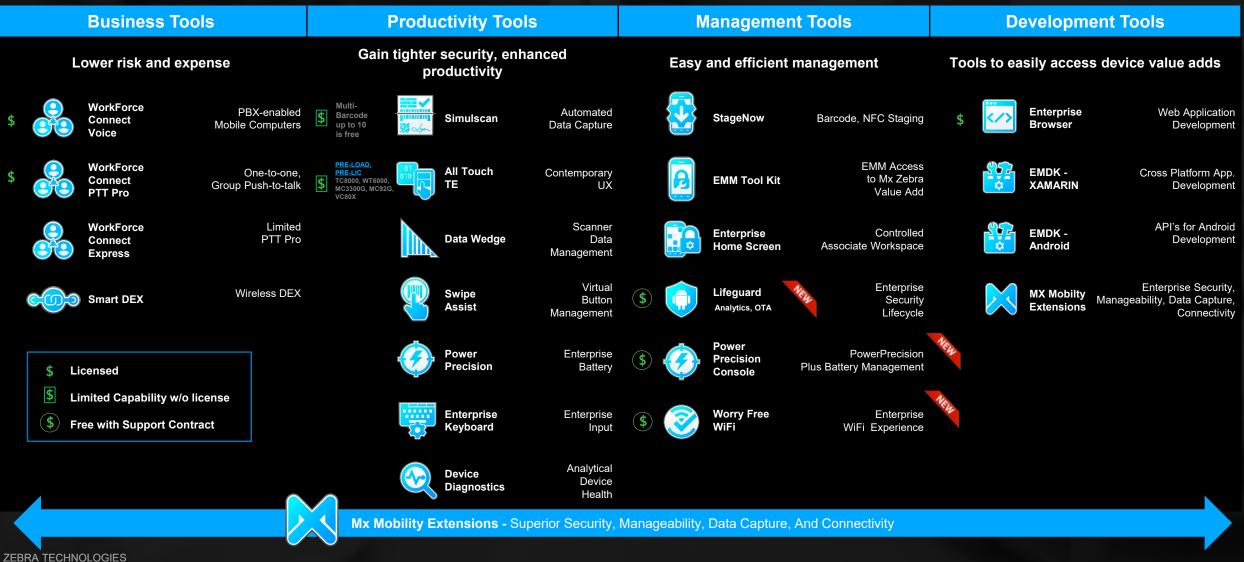
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Zebra Paved the Way For Android In The Enterprise Building Mobility DNA Over 8 Years



Zebra Mobility DNA

Enterprise Capabilities for a Simplified, Integrated & More Secure Solution



Security Demands

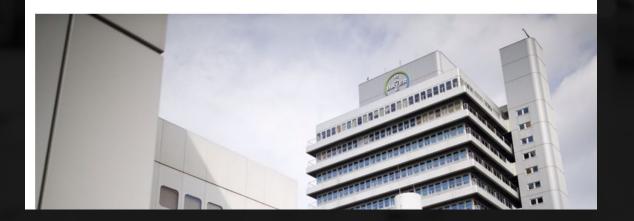


Datensicherheit

Hackerangriff auf Chemiekonzern Bayer

Erneut haben Hacker versucht, einem großen Industriekonzern sensible Informationen zu stehlen. Sie könnten im Auftrag der chinesischen Regierung gehandelt haben.

4. April 2019, 12:59 Uhr / Quelle: ZEIT ONLINE, dpa, gra / 38 Kommentare



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androidcentral

STATE OF SECURITY

Android security patch downloads increased by 84% in Q4 2018

Google also cracked down on spyware apps.

JOE MARING 29 Mar 2019



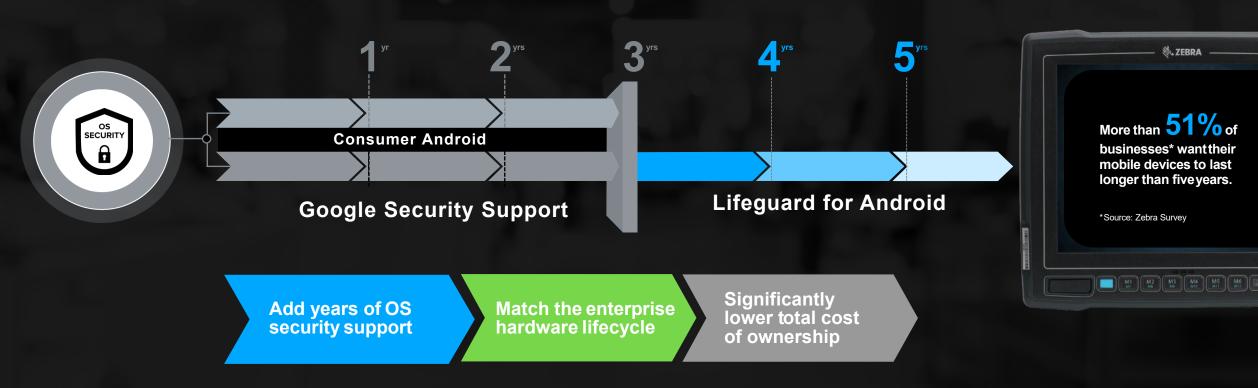
O nce a year for the last five years, Google releases something called the "Android Security & Privacy Year In Review" — essentially a look back at the past year and the overall state of security for Android as a whole.



The Safest Choice: LifeGuard[™] for Android[™]



Zebra's software security solution that extends the lifecycle of **Android Enterprise Mobile Computers**



Terminal Emulation "Green Screen" interface is 50 years old Todays Workers Expect a More Modern Interface

Keypad legends are required

 Up to 35% of display space is often utilized to present input codes for each step/task

No visual information hierarchy

Hard-to-find actionable

Many key strokes are required

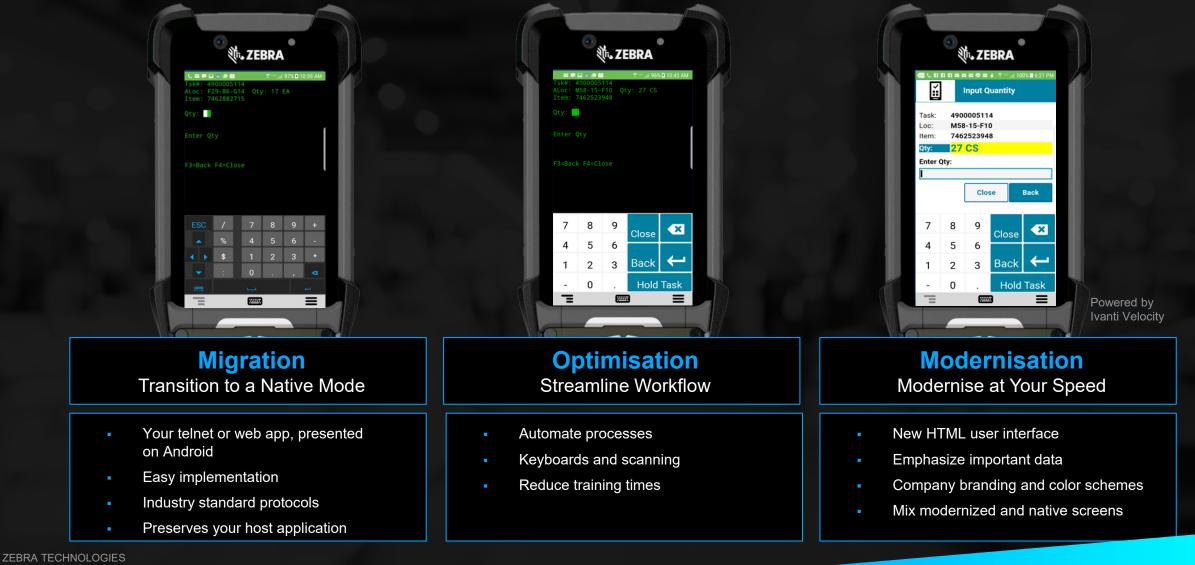
- Adds time, reducing worker productivity
- Increases opportunity for keying mistakes



Green screen interfaces are traditional, but outdated with unformatted text and cumbersome navigation

Workers expect modern, more intuitive interfaces like their personal smartphone application

Migrate WMS Interface Applications at the Customers Pace Take the MOM Approach – 1. Migrate, 2. Optimise, 3. Modernise



The Widest Range of Rugged Warehouse Devices



Printing and supplies Barcode, color-code and RFID printing enable digital tracking and sorting of returned goods from customer drop-off to final disposition.



Scanning and mobile computing

Update item status in enterprise systems from the front line of operations with scanning, mobile computing and real-time visibility from RFID



Location solutions Increased visibility of returns provides businesses with collaborative workflows to track and manage returns profitably.

Build a future-ready warehouse operation of your own



Ultra-rugged handheld scanners



Wearable scanners & computers



Handheld mobile computers



Rugged enterprise tablets



Handheld readers

RFID



Mobile printers



Desktop

printers

Zebra DNA

New In 2019 Expanding the Warehouse Portfolio in 2019 MC9300 April – September 2019







Supply Chain Visibility

Integrated Portfolio



STOP / REDUCE

Shipping Air Instead of Cargo Penalties due to Missed commitments

STOP / REDUCE

Missing Critical Cut-Times Fuel Consumption # of Trailers Safety/loss prevention issues Inefficiencies in utilization

ZEBRA

SMARTPACK[™]

Trailer



NO MORE

Lost/Misplaced Freight Mis-Shipments Under utilized assets



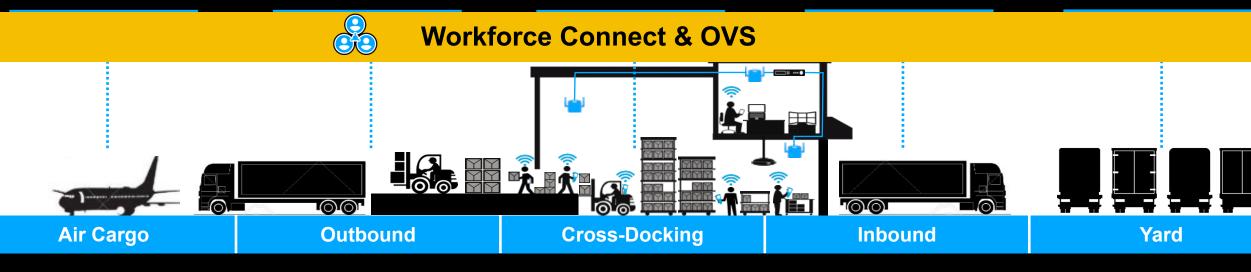
REDUCE

Poor Vendor Compliance Improper Packing # of Inbound Trailers Costly Idle Time Package Left Behind



REDUCE

Trailer Turn Times Time to locate Trailers & Equipment Manual check-in, check-out process Time to inventory Lost Trailers/Lost Goods





MotionWorks Location Solutions

ZEBRA ••••• MOTIONWORKSTM Powered by Savanna Warehouse Zebra Location Solutions takes accurate and efficient information from the edge and transforms it to give you:



Visibility of goods, assets and people



Supply chain activity visibility



Measurability of business practices



Workforce compliance



Asset location and usage



Operational control



Information to help solve the problems unique to your business

How can Zebra MotionWorks do all this?

It all starts with the **Savanna[™] Location Engine**

Savanna collects and analyzes data from technologies capable of sensing location... And creates insights from that data to optimally mobilize action at the edge to solve the identified business need



Solution Environment: Asset Management

- Your ability to manage your inventory and serve your customer is only as strong as your ability to keep track of your assets
- Less time searching for assets means more time serving your customers
- Results: With accurate asset inventory status, you minimize wasted time finding equipment while maintaining peak availability and condition of the tools you own



Workforce Connect 2.0

Enterprise Messenger

WorkforceConnect – Zebra's Enterprise Messenger

Professional voice and messaging solution

- Employees need to
 - Collaborate and communicate with colleagues in an effcient way
 - Provide or receive adhoc information
- The real world:
 - Realtime information is missing to take the best decision
 - Limited communication capabilities due to different technologies
 - Complexity carry, manage and train several devices



Barcode Scanner



Radio



Instore loudspeaker system



DECT phone



Desk phone

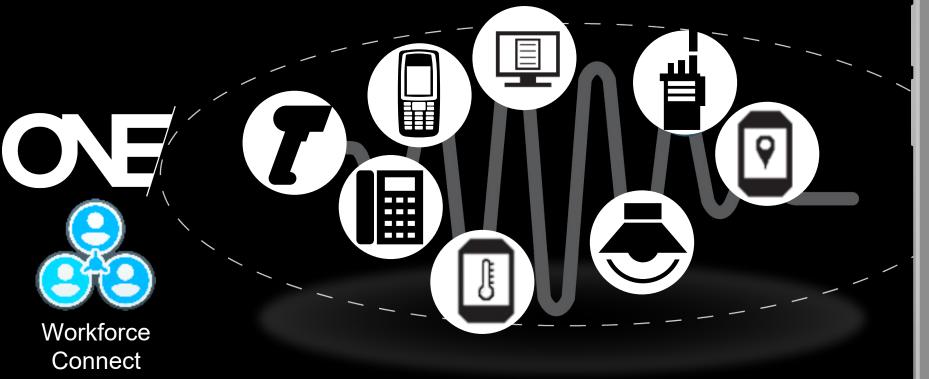


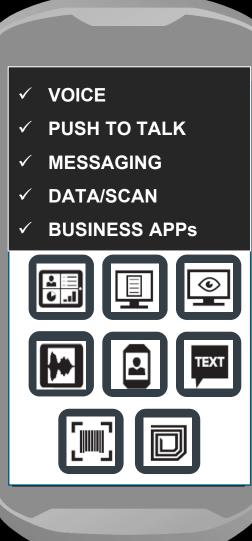






WorkforceConnect – Zebra's Enterprise Messenger ONE device for all tasks and communication





Thank You



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