**祯 ZEBRA** 

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10:00

Thursday, September 27

**TC72/TC77** 

THE ULTIMATE IN ULTRA-RUGGED ENTERPRISE-CLASS ALL TOUCH COMPUTING ZEBRA

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# AGENDA

Business Challenge and Solution

Features and Benefits

Mobility DNA Markets and Applications

Global Services Zebra a True Mobility Partner



### **The Business Challenge and Solution**

Whether you are...

Operating a nationwide chain of stores

Optimizing delivery vehicle routes or Keeping the manufacturing floor running smoothly...

# THE CHALLENGE

It takes the best possible service to earn a sale and repeat business. To deliver that level of service, your front line workers need instant access to business critical information, wherever work takes place.

## Workers want a device that is as refined and easy to use as their smartphone... BUT CONSUMER DEVICES FALL SHORT IN THE ENTERPRISE

TCO for consumer devices is 33% higher*	Inferior scanning solution impacts productivity	Scanning sled attachments impact ergonomics and durability	Typical consumer batteries are not replaceable and won't last a full shift
Audio isn't designed for the noisy enterprise environment	Mobile Device Management (MDM) lacks granular control	Inconsistent regional support — lacks a global footprint	Lifecycle for consumer devices is typically just one year

\* Mobile Device TCO Models for Line of Business Solutions; Volume 1/Track 7: Enterprise Mobility Mobile Device TCO; David Krebs; VDC Research Group, Inc.; 2012 (Slides 4, 18, 28 and 29)

# INTRODUCING THE TC72/TC77

Designed to take customer service to the next level by delivering everything your workers need to achieve peak efficiency, with trouble-free reliability. **领,ZEBRA** 

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# 10:00

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## THE TC72/TC77 TOUCH COMPUTERS



# Ultra-rugged enterprise-class touch computers

- Android Oreo with support for future versions
- Latest data capture technologies
- Powerful voice technology
- Enterprise-class Wi-Fi and cellular option
- Rugged for all day use in the field
- Comprehensive backwards compatible accessories
- Industry's most mature ecosystem of value-add software tools
- Centralized management
- Growing library of tested business applications

## SHOULD YOU CHOOSE ENTERPRISE FUNCTIONALITY OR DEVICE DESIGN?

What if you didn't have to choose?



## With the TC72 and TC77 Touch Computer

you get it all...

THE ULTIMATE USER EXPERIENCE THE ULTIMATE RUGGED DESIGN THE ULTIMATE IN VALUE ADD SOFTWARE THE ULTIMATE DEVICE MANAGEMENT OPTIONS

## ... in the smartphone styling your workers want.

ZEBRA TECHNOLOGIES





### **Features and Benefits**



# The Ultimate User Experience

Fhursday, September 27

# Android For Instant Familiarity

Enables the highly graphic interactive apps your workers expect Your workers already know how to interact with an Android device

Virtually eliminates training time and adoption curves 刹 ZEBRA 🏾

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## 10:00

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## ADVANCED Touchscreen Technology

Easy and familiar multi-touch operation, such as pinch and zoom 4.7-inch display offers plenty of real estate for graphics intensive applications Best-in-class outdoor readability high definition screen is easy to read, even in bright sunlight







#### Gloved finger

#### ...EVEN WHEN WET

ZEBRA TECHNOLOGIES

# Easily capture it all...

#### Barcodes

1D, 2D and Digimarc Printed barcodes

Electronic barcodes displayed on a cell phone or other screen

#### Labels

Capture multiple barcodes on a label or specific barcodes with just a press of the scan button\*

### **Documents**

Capture and process information on documents with just one press of the scan button\*

\* Available with SimulScan, a pre-loaded Mobility DNA application

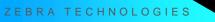
#### Images

Signatures

Multiple barcodes

Add date and time

...AND MORE



## Ultimate Scanning Performance – with your choice of scan engines

#### SE4750 1D/2D Imager

#### THE INDUSTRY GOLD STANDARD FOR 1D/2D IMAGING

**PRZM Intelligent Imaging technology** — lightning fast capture of even damaged barcodes

**Extraordinary working range** — significantly wider working range than competitive scanners

**True point and shoot simplicity** — omnidirectional scanning, workers never need to align scanner and barcode

Wide field of view — easily capture large barcodes

**Exceptional motion tolerance** — no need to pause between scans, captures data as fast as you pull the trigger

#### SE4770 1D/2D Imager

#### THE LATEST IN ZEBRA IMAGING TECHNOLOGY

**Get the same great performance as the SE4750** — offers all the same features and scanning performance that have made the SE4750 the industry's gold standard

Quick and accurate aiming in scan-intensive applications with bright illumination and a clearly defined field of view

**Future ready** — will meet your data capture needs for years to come



User
replaceable
Easy to
remove design

Extensive battery metrics Easily spot and retire aging batteries that can no longer hold a full charge Complete solution Battery management software to easily view battery metrics Warm swap mode

Swap batteries without a reboot Fast charging support

Batteries are charged and ready to go in record time

4620 mAh standard capacity with longer cycle times — delivers an impressive 15 hours of power to last even the longest shifts 15 HOURS OF POWER PER CHARGE

SWAP BATTERIES WITHOUT REBOOTING

## ...with unmatched extensive battery metrics

#### PowerPrecision+ provides insight and visibility into battery performance.

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K Battery Management	Contraction Contractico Contra		< 🔯 Battery Management		
Battery status Charging	Battery voltage 4200 mV		00:00:00 Resulting cha	arge	
Battery level	Battery temperat	ture	0 mA Battery part number		
Battery health Good	Battery technolo	gy	BT000018A01 R. Battery serial		
Battery charge cycle	Battery remainin	ng time	Battery manu 2015-02-13	facture date	
Battery capacity 6400 mAh	Battery current -529 mA		Backup Batte	ery status	
Battery scale	Time since last o	charge	Backup Battery voltage		
	5		$\leftarrow$		

## **Superior WiFi Connections**

Supports the latest WiFi enhancement: 2x2 Multiple-User Multiple Input Multiple Output (MU-MIMO)

Get faster and more reliable connections via beamforming

Enables access points to communicate simultaneously with multiple mobile devices

#### **GREATER RANGE**

**GREATER SPEED** 

**LESS POWER** 

# **TC77**



## **Complete Cellular Network Flexibility**



## Fast global connectivity

Support for the fastest networks provides workers anywhere in the world with dependable cellular service



## Faster application performance

Carrier aggregation substantially increases data capacity and speed



## Connect first responders

Support for the Public Safety LTE network prevents network congestion from impacting critical communications



## **Dual carrier support**

Support two carriers simultaneously — ideal for workers that travel to areas better served by different carriers



## **SUPERIOR BLUETOOTH CONNECTIONS**

Increases application flexibility and performance for Bluetooth peripherals, such as printers and headsets with Bluetooth 5.0

**4X** the range Up to 800 ft./240m **2X** the speed Up to 2 Mbps

## **ALL** WITH LESS POWER

...for longer battery cycles

The enterprise can be a noisy place. That's why the TC72 and TC77 feature...

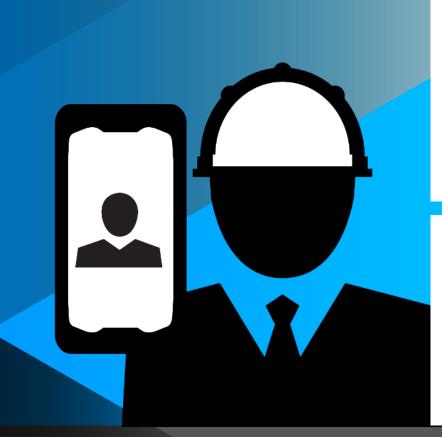
High-volume speaker

Advanced noise cancelling algorithms

THE RESULT? Excellent clarity on both ends of the call.

# Best-in-class

## Front-facing 5 MP Camera for Advanced App Support



# Video Calling

Give your customers a more personal touch with a video call

Give your technicians the ability to show remote experts the problem for faster issue resolution and better first-time fix rates

# **Advanced Locationing**

Provides support for emerging Visible Light Communications (VLC) locationing — a new technology that utilizes compatible overhead LED lighting infrastructure

## ULTRA-HIGH RESOLUTION PHOTOS AND VIDEOS

# **13**MP

color rear camera with flash

#### Easily capture...

PROOF OF CONDITION PROOF OF DELIVERY PROOF OF SERVICE PROOF OF COMPLIANCE

...and more

## T. ZEBRA

# Built to Last

Thursday, September 27

## **Rugged and Ready for Business**



## IP67 and IP65 sealing

Dust tight, works even when wet and survives accidental drops in water

#### Double drop-tested

Survives 8 ft./2.4 m drops to concrete at room temperature

Survives 6 ft./1.8 m drops to concrete across the full operating temperature range: -4° F to 122° F/ -20° C to 50° C ...all per MIL-STD 810G

#### Survives 2,000 3.2 ft./1.0 m tumbles

Our punishing tumble test simulates real-world tumbling that happens after a fall

...meets and exceeds MIL-STD 810G

Unibody design Provides extra impact protection Corning<sup>®</sup> Gorilla<sup>®</sup> Glass touch panel and imager window Fortifies one of the most vulnerable device elements with best-in-class scratch and shatter resistant glass

#### Tempered glass screen protector accessory Additional protection

for the touch screen

#### A NEW MOBILE COMPUTING PLATFORM FOR ZEBRA ANDROID DEVICES

Advanced Qualcomm<sup>®</sup> Snapdragon<sup>™</sup> 660 mobile processor with features for today and tomorrow

<b>Faster processing</b> <b>speeds</b> More responsive apps	<b>Faster charging</b> Up to 4X faster	Faster WiFi and cellular network downloads Up to 2X	Advanced WiFi feature support 2x2 MU-MIMO for longer range and faster speeds for less power	Advanced Bluetooth support Bluetooth 5.0 for 4X range and 2X speed for less power
Advanced audio Best Hi-Fi audio quality, advanced noise reduction and more on a mobile device	Support for longer device lifecycle Compatible with the newest memory interfaces and the next 2 releases of Android (P and Q)	Built-in support for contextual-aware applications Factor in the time, user location, presence of headphones, type of location and more into application behavior	Built-in support for Artificial intelligence (AI) Supports applications with advanced business logic that simplifies and error-proofs many business processes	Plus 10 years of support from Zebra – from security updates and patches to break/fix support

## **RICH LOCATIONING SUPPORT**

The TC72 and TC77 support it all – from established to emerging locationing technologies

#### WiFi

Leverage your existing access points to obtain 'meter-level' accuracy (approximately 2-4 meters)

#### Bluetooth 5.0/Bluetooth Low Energy (BLE)

Utilize beacon technology for increased accuracy (approximately 1 meter)

#### Zebra SmartLens Pinpoint locationing in a

ready-to-use solution with everything you need for fast deployment: sensors, a powerful analytics engine and ready to use applications

#### Zebra MotionWorks

A powerful

WiFi and

greater

combination of

Bluetooth for

locationing

(approximately

accuracy

1 meter)

Visible Light Communications (VLC)

Emerging locationing technology that leverages the new front facing camera in the TC72/TC77 and the store's existing compatible overhead LED lighting infrastructure You get the flexibility to choose the technology that best fits your business needs and your budget.

## Maximize Productivity with Enterprise-class Accessories

#### Improve user comfort.

Simplify device manageability.

And re-use all of your TC70x/TC75x accessories.

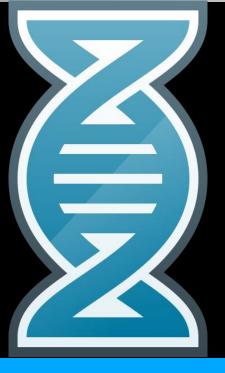
With full backward compatibility, you can cost-effectively upgrade to TC72/TC77 to leverage the very latest advancements in mobile computing technologies to boost workforce productivity.





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## **MOBILITY DNA** – Only from Zebra



#### HOW WILL YOU BENEFIT?

Reduce cycle times

Maximize mobile deployment ROI

Minimize complexity and risk

Streamline implementation and management

#### Know More, Do More, Control More with Mobility DNA.

For more information about Zebra's value add Mobility DNA solutions, visit www.zebra.com/mobilitydna

WHAT IS MOBILITY DNA?

Mobility DNA is the industry's most

You get...

comprehensive suite of mobility must-haves.

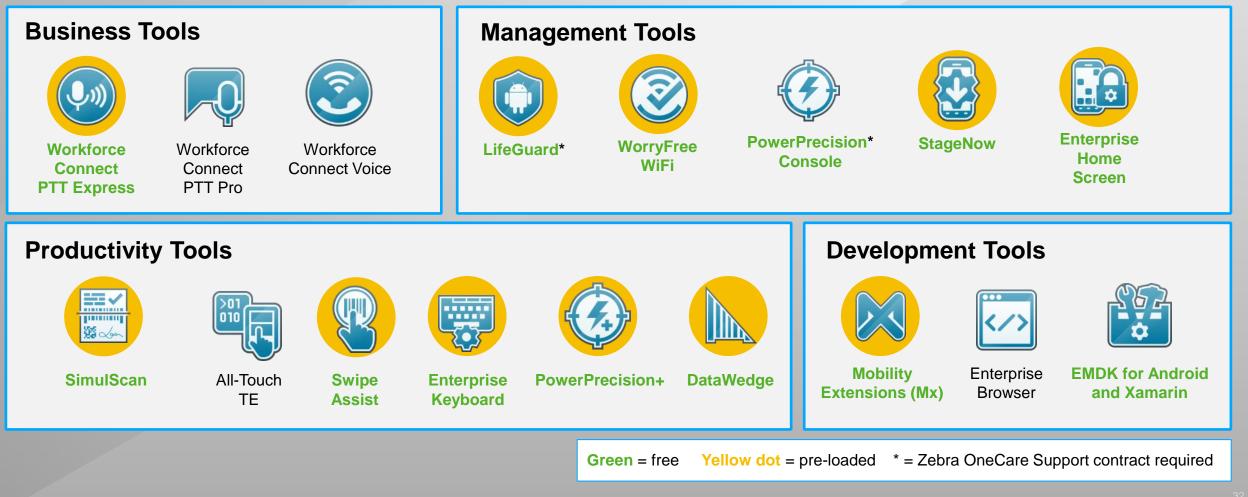
Innovative tools that boost collaboration and

staff productivity — and simplify application

development and device management.

## **17 Value-add Mobility DNA Tools**

#### 13 FREE TOOLS — 11 PRE-LOADED AND READY TO USE, RIGHT OUT OF THE BOX



## Mobility DNA: 3 Business Tools

#### **IMPROVE COLLABORATION WITH CO-WORKERS AND CUSTOMERS**

Workforce Connect PTT Express	Provides basic push-to-talk over WiFi with Zebra mobile devices, right out of the box — no additional infrastructure required	NO COST	INTEGRATED
Workforce Connect PTT PRO	Provides advanced push-to-talk over WiFi and cellular networks with Zebra mobile devices	Fee	Downloadable
Workforce Connect Voice	Turns your Zebra Android mobile devices into fully-featured PBX deskphones; fully customizable interface makes it easy for workers to use complex advanced telephony features	Fee	Downloadable

## Mobility DNA: 6 Productivity Tools

#### MAKE IT EASIER FOR YOUR WORKERS TO CAPTURE INFORMATION

SimulScan	Capture multiple barcodes on a label or data on a form.	NO COST	INTEGRATED
All-Touch TE	Automatically migrate your Terminal Emulation apps to Android quickly and easily — and when you're ready, migrate to a modern interactive HTML interface.	Fee	Downloadable
Swipe Assist	Let your users create and place a virtual omni-present button right on the screen of their Zebra mobile device to capture barcodes, documents or photos with a simple tap.	NO COST	INTEGRATED
Enterprise Keyboard	Provide your users with the Android soft keyboard they need to maximum data entry simplicity. Users can choose from 5 keyboard layouts with specially-sized keys for any size fingers, 4 methods for feedback, 4 auto-correct features, the ability to add your business vocabulary to a personal dictionary and more.	NO COST	INTEGRATED
PowerPrecision+	Better battery design: manufactured to rigorous standards for performance, reliability and safety — plus rich battery intelligence for better battery management.	NO COST	INTEGRATED
DataWedge	Automatically integrate the data you capture with your Zebra devices into your applications — from barcodes and photos to NFC and magnetic stripe data	NO COST	INTEGRATED

## Mobility DNA: 5 Management Tools

#### TAKE DEVICE MANAGEMENT SIMPLICITY TO A WHOLE NEW LEVEL

LifeGuard	A lifetime security guard for your Zebra Android mobile devices, providing security updates and patches for up to 10 years from purchase date. Includes powerful automated management of the OS update process.	NO COST*	INTEGRATED
WorryFree WiFi	Get the unmatched WiFi radio performance, issue analysis, troubleshooting and problem resolution you need to leverage your WiFi network to maximize productivity and customer service quality.	NO COST	INTEGRATED
PowerPrecision Console	Get the insights to identify and remove aging Zebra PowerPrecision+ mobile computer batteries from your battery pool before they impact productivity, device uptime and device return on investment.	NO COST	Downloadable
StageNow	Quickly and easily stage your Zebra Android mobile computers, including industry-first control over access to Google Mobile Services (GMS).	NO COST	INTEGRATED
Enterprise Home Screen	Make sure your Zebra Android devices will only be used for work by defining which apps and which device features are available.	NO COST	INTEGRATED

\*No cost with any Zebra OneCare Support contract

## Mobility DNA: 3 Development Tools

#### SIMPLIFY APP DEVELOPMENT AND FORTIFY CONSUMER ANDROID FOR THE ENTERPRISE

Mobility Extensions (Mx)	Provides a layer of features that lift standard consumer Android to a true enterprise-class operating system. And you're in charge — you choose which features you want to activate, and when.	NO COST	INTEGRATED
Enterprise Browser	This powerful, next generation industrial browser allows you to build feature-rich web applications that integrate seamlessly with the features in Zebra mobile computers and peripherals — including barcode scanning, signature capture and more.	Fee	Downloadable
EMDK for Android	Integrate all the features and functionality in Zebra Android mobile computers into your applications quickly and easily	NO COST	Downloadable

# What's NEW?

# NEW POWERFUL MOBILITY DNA MANAGEMENT TOOLS



#### **PowerPrecision Console**

Easily identify and remove unhealthy batteries before they reduce worker productivity



#### **StageNow**

New Restricted Mode for Google Mobile Services access control



New feature: end-to-end control of the OS security update process



WorryFree WiFi

Deliver dependably superior WiFi connectivity to boost workforce productivity



# PowerPrecision Console

PREVENT AGING BATTERIES FROM REDUCING WORKER PRODUCTIVITY

### Easy to deploy

Up and running in a day

500

Easy to use

No cost with any Zebra OneCare contract

### **STOPLIGHT-STYLE INDICATORS**

Intuitive dashboard with green, yellow and red indicators for three battery states: good, nearing EOL and EOL

#### CONFIGURABLE

You set the parameters for the states

### DASHBOARD VIEWS

At-a-glance overview or details on any specific battery

**CUSTOMIZED ALERTS** 

Direct end users to take action — and when

Supports all PowerPrecision+ batteries in the TC72/TC77 and your other Zebra mobile devices (\*Android M and above)



## **StageNow**

### NEW FEATURE!

**Restricted Mode** to easily control accessibility to Google Mobile Services (GMS)

#### INDUSTRY-FIRST COMPLETE APP CONTROL

Just click to deactivate the GMS system-level integrated services and apps you don't need today — and selectively reactivate the services you need, when you need them

### **PROTECTS PRODUCTIVITY**

Ensures workers only have access to the apps required for the job

### **INCREASES SECURITY**

Provides better control over device privacy and security

### SIMPLIFIES PURCHASING AND DEVICE MANAGEMENT

Allows you to standardize on one device and customize for different departments and workers



## Lifeguard<sup>™</sup> for Android<sup>™</sup>

#### Instantly see available updates

Get the information you need to determine which updates to deploy — and when

Automatically identify which devices need the updates

#### Remotely update devices over the air

Control when updates occur – set rules to define whether updates can take place over cellular or WiFi networks, what time an update occurs and more NEW FEATURE!

Now with revolutionary end-to-end control of the update process

LifeGuard is free with your Zebra OneCare support contract

# WorryFree WiFi

Delivering everything you need to leverage your WiFi network to increase workforce productivity and better serve your customers



2

3

The most advanced WiFi radio technology Enhancements that boost WiFi voice and

data performance into a class of its own, right out of the box

The best of both worlds: WiFi radios that are pre-configured and ready for business — yet easy to customize

Meets business needs right out of the box Pushbutton simple creation of complex custom configurations for specialized environments

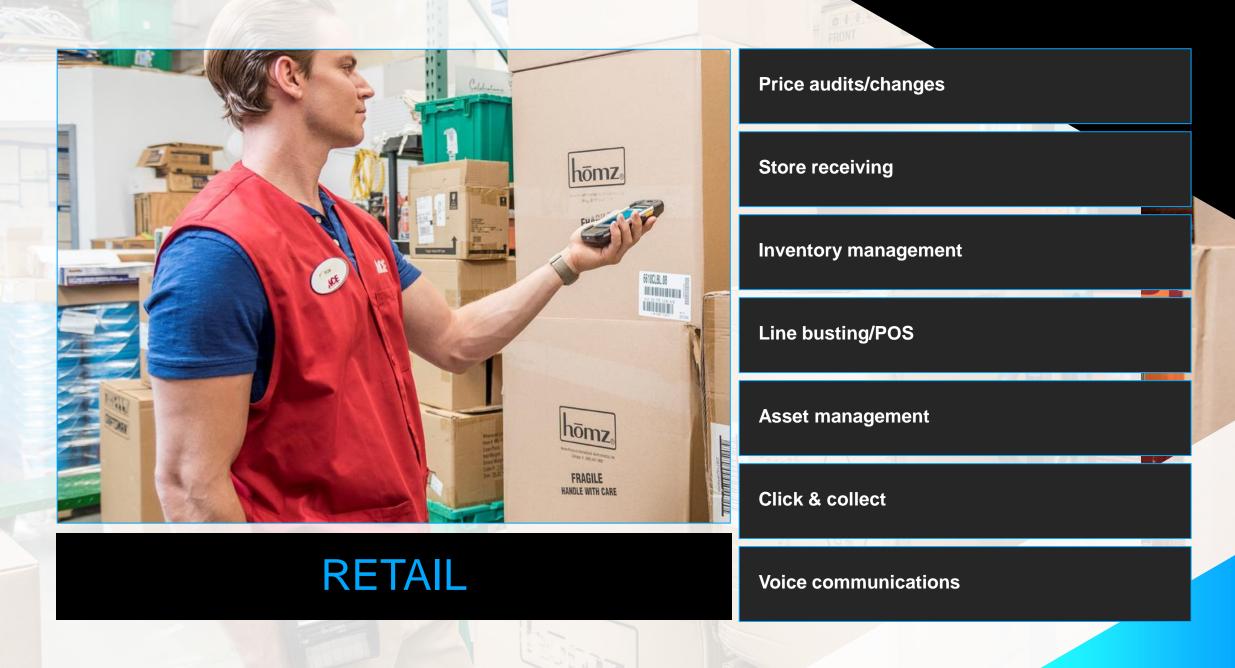
## The next evolution in easy WiFi radio troubleshooting

The most comprehensive single tool available for the fastest identification and resolution of WiFi issues.





**Markets and Applications** 





Picking/put-away

Warehouse management

**Returns processing** 

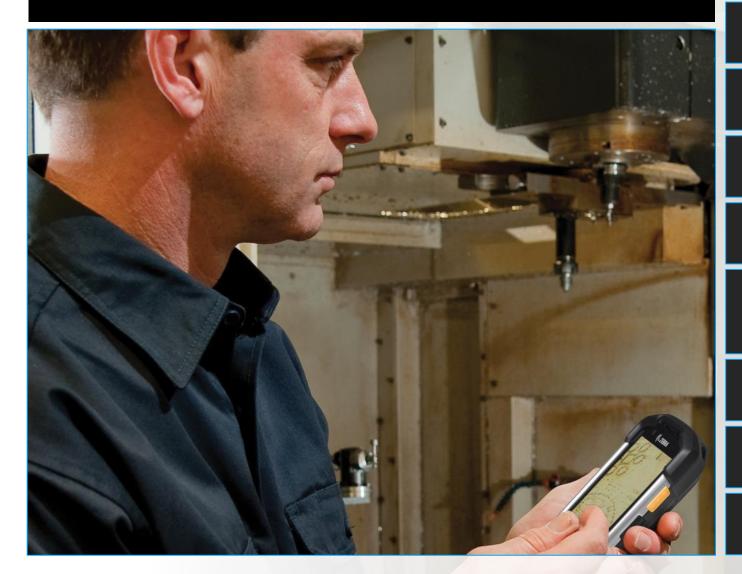
**EDI transactions** 

Voice communications



		Fleet management Payment collection
TRANSPORTATION & LOGISTICS	Package/pallet track and trace	Electronic driver logging
	Proof of delivery/pickup (Signature/photo)	In-cab Telematics monitoring
Last mile delivery	Route optimization	Voice communications

### MANUFACTURING



**Order/returns processing** 

**Proof of delivery** 

**Route optimization** 

Inventory management

Planogram compliance

Technical documentation (Schematics/training guides)

**Customer service** 

Work order management

**Voice communications** 



# **Optional Zebra OneCare Support Services**



You count on your mobile devices to take customer service to the next level. Ensure predictable performance, support for critical operations and improved business outcomes while eliminating unbudgeted repair expenses.

### **ESSENTIAL** Basic Assurance

- Comprehensive repair services
- 3-day repair turnaround time (TAT)
- 8x5 Live-Agent technical support
- 3-or 5-year coverage
- Access to software updates

### SELECT Maximum Protection

Zebra OneCare Essential features, plus:

- Advance device replacement
- 24x7 Live-Agent technical support
- 3-or 5-year coverage
- Spare pool management
- Device commissioning

### **BENEFITS**

- Enhanced support beyond standard warranty
- Genuine Zebra expertise and parts maximize device uptime – ensure your mobile computer is back to Zebra's manufacturing specifications
- Outstanding value eliminates unexpected repair costs with a planned support agreement
- Let Zebra handle support, while you focus on your strategic initiatives

## **Optional Zebra OneCare Visibility Services**

Predictive Insight that maximizes return on investment, performance and high availability

### ANSWER CRITICAL DEVICE QUESTIONS LIKE:

- Where are my devices?
- Are they ready to use?
- How many devices are in the repair depot?
- Which devices are being under-utilized?
- Are any devices missing?
- How many devices are out of contact?
- Are there problems with wireless connectivity?
- ...and much more.

### Optional Visibility Services to add to your Zebra OneCare Support contract

Asset Visibility Service (AVS): At-a-glance insight into basic asset visibility and health (no MDM required) **Operational Visibility Service (OVS):** See deep operational insight into your TC72/TC77 devices and other Zebra and non-Zebra devices



### ZEBRA ONECARE VISIBILITY SERVICES

### **ASSET VISIBILITY SERVICES (AVS)**

At-a-glance insight into asset inventory and health, without requiring an MDM.

- High-level visibility to enterprise asset inventory:
- Device quantity, location, proper allocation and status
- · User-defined asset tagging and naming
- Device health, actionable intelligence including recommended corrective actions, utilization, smart battery usage, and alerts for contract expiration
- Repair history and contract status
- Online dashboard from browser- or tablet-based application
- While no MDM is required, AVS is complementary to your MDM

OPERATIONAL VISIBILITY SERVICES (OVS) Integrated management platform delivering intelligence to improve business outcomes in conjunction with an MDM solution.

- Much more insight than an MDM alone
- Single pane of glass simplifies complexity of big data available from multiple source systems including the MDM
- Automates interpretation through reporting and visual alerts related to the identification, condition and location of critical business devices
- Easy to understand actionable information based on trending and historical data
- Customized thresholds and dashboard views
- Integrated management platform with an MDM (SOTI), or connects to your existing supported MDM via OVS Connect\*



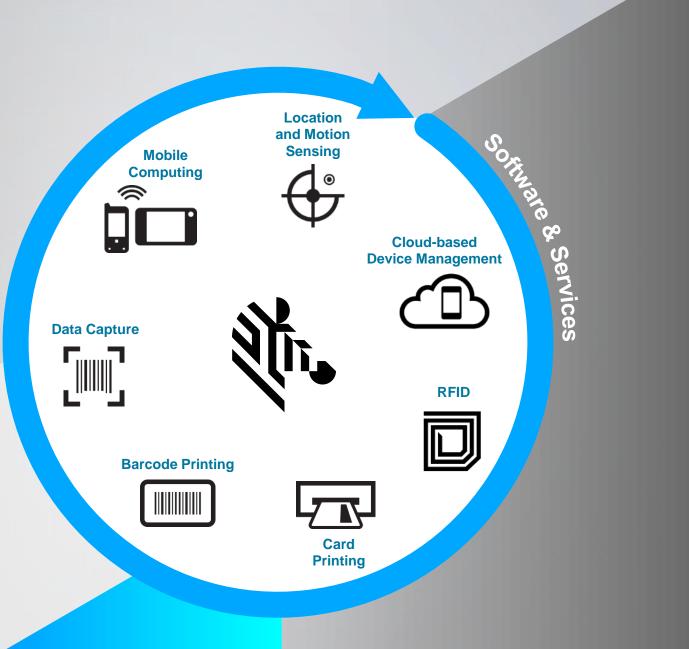
### Zebra — A True Mobility Partner

### Zebra FACTS

Channel partners in more than 100 countries Customers include more than 95 percent of all Fortune 500 companies

~7,000 employees worldwide **122+** offices across 81 countries **~\$13b** billion market cap (October 2019) **4,200+** US & international patents issued and pending

### **Key Technology Offerings**



### **Unmatched Breadth**

### EVERYTHING YOU NEED TO SIMPLIFY YOUR EVERYDAY PROCESS, ALL UNDER ONE ROOF – PRINTERS, MOBILE DEVICES, SCANNERS, RFID, SOFTWARE SOLUTIONS AND SERVICES



# Thank You



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