

A Mobile-First Approach to Field Service Operations

Rugged devices and rich-media applications are enabling a new generation of field service teams

The future of field service is here and with it, field organizations are facing growing pressure to accelerate service delivery, increase efficiency and productivity and lower operating costs. Teams must be agile, have the ability to coordinate geographically dispersed workforces, enable real-time collaboration, share information, and manage assets and resources effectively. It's no easy task.

Mobility is the answer. With increased speed from 4G networks, today's field service organizations are embracing new technologies, rugged mobile devices and innovative applications. Together, these solutions are giving frontline workers the levels of connectivity, information and resources needed to make more informed decisions, take more effective actions, ensure first-time fix rates and avoid costly repeat truck rolls.



SURVEY SAYS

According to Zebra's recent eye-opening study, "The Future of Field Operations Vision Study," 58% of industry leaders surveyed rated their investments in mobility as a top priority. The main reason: 83% agreed the key benefit is the positive impact mobility plays on employee productivity and efficiency. As such, more than 60% of companies report they are expanding investments in mobile technology to enterprise-wide use, which may reach 97% by 2023.

A POWERFUL COMBINATION

Zebra's portfolio of field service mobile devices includes tablets that feature ruggedized designs with large screens that make it easy to read detailed equipment schematics, delivery orders or task checklists in even the brightest sunlight. Zebra handheld mobile computers connect field crews to all the resources they need to keep workflows moving in a wide range of environments. And, now, Zebra is working with leading mobile application developers to add even greater functionality for field service organizations.

Worker Safety

and Compliance

PRIORITIES DRIVING INVESTMENTS IN MOBILE FIELD SERVICE SOLUTIONS

(% OF INDUSTRY LEADERS SURVEYED)

35%
Faster Response to Unexpected Events

34%
Better Field
Service Worker
Communications

34%
Increase
Efficiency
of Service
Deployment

30%

Real-Time View Into Issue Resolution 30% 27 Increase

Increase First Time Fix Rates and Reduce the Number of Visits



Promising Applications Lift Field Service to New Levels

In an always-connected world, it's more important than ever for organizations to leverage new mobility and edge technology-driven workflows to transform their field operations. Thanks to Zebra's partnerships with leading application developers, an extensive ecosystem of mobile applications has emerged and is quickly remaking the way day-to-day tasks are accomplished.

No longer hindered by paper-based systems, field workers have ever-increasing access to rugged handheld mobile computers and tablets with robust applications that enable automation, collaboration and transparency. With capabilities that range from scheduling and asset tracking to workforce management and reporting, the list of application partners will continue to grow as new IoT technologies evolve.



doForms

Enables the capture and transmission of field service information and seamlessly integrates data into ERP and CRM systems.

doforms.com



esri

Combines mapping and data analytics to deliver location intelligence.

esri.com



Help Lightning

Delivers a remote collaboration solution that uses merged reality to provide virtual interactive support.

helplightning.com



IFS

Manages work orders, parts and assets, contracts, warranty, invoicing and billing.

ifs.com



Liquid UI

Extends SAP GUI to mobile and portal environments without additional SAP software, kernel upgrade or touching of the back-end SAP software.

liquid-ui.com



MobiWork

Tracks people, assets and inventory, manages work orders, invoicing, scheduling, dispatch and contract management, provides electronic forms.

MobiWork.com



Moviynt

Processes service orders, records consumption of components, posts confirmations of operations, facilitates automatic time recording and posting to SAP.

moviynt.com



Neptune Software

Provides a fast, open, cost-effective and secure way to develop custom applications that shine in hybrid system landscapes.

neptune-software.com



TrackAbout

Tracks, manages, maintains and rents portable physical assets.

TrackAbout.com



Trimble

Connects people, places, vehicles and equipment with real-time data and analytics.

trimble.com



Workwave

Allows workers to easily estimate jobs, schedule and route mobile workers, and service and bill customers with ease.

workwave.com

Meeting Challenges at Today's Utilities

Many utilities are facing an aging workforce, tough customers, regulatory compliance issues, and a changing energy landscape. Increasingly, they are also facing pressure to implement new mobile solutions to improve operational efficiency, asset performance and service delivery. Utility field operations can meet their unique needs with state-of-the-art rugged mobile devices and innovative applications.

POWERING UP UTILITY CREWS



VEGETATION MANAGEMENT

Vegetation is a leading cause of outages.
Crews are using Zebra mobile devices loaded with powerful apps that enable them to collect vegetation data, take and send photos from the field and use GIS-based applications to coordinate with other crews and dispatchers in the office.



STORM RESPONSE

During storms and other events, crew leaders need the ability to locate and communicate with personnel, report damage location and information, and provide photos directly to utility office staff from their mobile handheld computers and tablets.



EQUIPMENT MAINTENANCE

Field crews need secure access to utility network data on their Zebra mobile devices for completing and reporting inspection and repair assignments.



LINE LOCATION

Underground utility lines must be protected from accidental damage during construction and excavation. Mobile apps loaded on enterprise-class Zebra devices can now leverage geo-location data to map, manage, track and share information about underground assets and provide field crews with real-time visibility to detailed project information.



INSPECTION REPORTS

Accessing convenient inspection apps on their enterprise-grade mobile devices, crew members easily capture, document and file inspections reports directly to the utility's asset management system.



CONSTRUCTION AND ENGINEERING

Utilities must juggle multiple equipment types—from bucket trucks to backhoes—and track and manage tools and materials. With new mobile apps, field crews can stay on top of changing needs and submit requests for tools and materials and access and verify information about equipment status.





Secure enough to handle the most sensitive information

With Zebra, you can be confident that security is at the core of our technology—from inception to the end of their lifecycle—our devices adhere to the highest security standards and are bolstered by Zebra's Mobility DNA.

Improving Performance at Oil and Gas Operations

In an increasingly competitive and heavily regulated environment, oil and gas companies must contain costs and optimize the performance of their assets. That means taking significant steps to eliminate costly downtime. Crew managers, derrick hands, geologists and other members of oil and gas field operations rely on mobile solutions to complete their fieldwork guickly and accurately.

ADDING EFFICIENCY TO THE PIPELINE



PREVENTIVE MAINTENANCE

Because protecting critical assets is a high priority for cutting costs and improving uptime at oil and gas operations, they need to implement regular preventive maintenance programs. Field crew members can use Zebra mobile devices and applications to input maintenance data and update the information to a central server on the go.



DRILLING AND PRODUCTION

Real-time information is critical for making decisions. Armed with rugged tablets, crews can access interactive maps to plan routes, identify well locations and monitor drilling operations from nearly any location. Frontline workers can also photograph, upload and transmit images of drilling operations, as well as data about incidents, progress reports, and more.



PIPELINE INSPECTIONS

Inspectors rely on real-time access to a myriad of data about pipelines, refinery equipment and other critical operations to do their jobs. With Zebra mobile computers

and tablets loaded with industry-specific applications, crews can record data about leaks, corrosion and structural failures, detail plans for repair and maintenance, file incident and job orders and collaborate with management and construction teams.



REGULATORY COMPLIANCE

Mobile apps loaded on Zebra mobile devices can simplify compliance reporting and management by enabling rapid data collection and streamlining reporting with customized forms.



TRACK AND TRACE

Managing assets of all types is now possible with new track and trace mobile applications that provide in-depth data about each asset—including last seen location, description, usage details and more. Field crews can access and update. Crew members can now quickly scan an asset and update data on a Zebra mobile handheld or tablet with the touch of a button.



Tough enough to withstand the harshest conditions

Available in a variety of form factors, with a choice of Android or Windows operating systems, Zebra devices comply with the most ruggedized standards for continuous operations in high temperatures and ice-cold conditions.



New Tools for Construction Crews

Construction and engineering organizations are no strangers to the need for effective management of crews and logistics operations to ensure the right people, right tools, and right materials are at the right location at the right time. Powerful devices and applications are streamlining processes, automating tasks, improving crew communications, collaboration and safety, and giving visibility to the location, status and condition of resources need to complete each project.

BUILDING BETTER WORKFLOWS



SAFETY COMPLIANCE

Using customized mobile apps on enterprise-grade tablets and mobile devices, crews can easily reference safety compliance initiatives with apps that include field safety auditing, accident inspection, OSHA reporting and safety checklists.



EQUIPMENT AND VEHICLE MANAGEMENT

Now, crew members can access real-time data about equipment location and receive alerts and updates about assignments and unauthorized equipment access—to improve productivity and minimize the risk of equipment loss.



PROJECT MANAGEMENT

Using new field management mobile apps, crew managers can bolster project management capabilities. They can make work assignments, access project documents and drawings, capture as-built information and more—all from any rugged Zebra mobile device.



DOCUMENT MANAGEMENT

Contractors can collaborate in real time with architects, engineers and subcontractors and maintain accurate and up-to-date project documentation on Zebra tablets that offer display sizes that suit any need.



CREW MANAGEMENT

New mobile time tracking applications can transform Zebra mobile handheld computers into virtual time clocks. Crew members can "punch in" and "punch out" from the site quickly and easily, replacing paper-based timesheets with accurate digital records.



Rugged design makes devices ideal for field service

Zebra devices are built to sustain drops to concrete, water intrusion and exposure to salt, fog and humidity and keep working long after others have failed.

The Future of Field Mobility

At Zebra, we are leading the development of intelligent, enterprise-level solutions that provide unparalleled visibility into what is happening in your environment and recommending the next best move or action. Our vision is to mobilize operational data from devices and applications, analyze it, and drive smarter, faster workflow decisions by users anywhere, anytime. Look to Zebra mobile devices — in combination with powerful application solutions from our distinguished ISV partners — to deliver the power you need.

With a choice of rugged tablets and handheld mobile computers on purpose-built mobile computing platforms, your field-service crews will be in touch and control in virtually every situation, challenge and environment.

To learn more about Zebra's field service solutions and our ISV partners, visit www.zebra.com/us/en/solutions/industry/energy-utilities.html



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



NA and Corporate Headquarters +1 800 423 0442 inquiry4@zebra.com Asia-Pacific Headquarters +65 6858 0722 contact.apac@zebra.com **EMEA Headquarters** zebra.com/locations contact.emea@zebra.com Latin America Headquarters +1 786 245 3934 la.contactme@zebra.com

