



Top U.S. Telco Operator Fully Mobilizes Network Development with Zebra* Technologies

Operational agility, single point of accountability delivers right level of ruggedness and reliability for mobile workforce long-term

As the Construction and Engineering (C&E) division for one of the most recognized telecommunications leaders in the United States, this customer is responsible for building the critical network resources required to deliver advanced communications services to more than 120 million customers nationwide, including 4G LTE wireless, Wi-Fi, IP-based business communications, and high-speed Internet, voice and television services.

Challenge

Telco needed mobile computing solution that would evolve with its workforce

In 2011, one of the largest telecommunications providers in the United States found worker productivity and operational efficiency rates unimpressive, primarily because of the limitations arising within its existing “mobile” workforce infrastructure. As a telecom leader long known for its own technology innovation and mobility, it seemed almost ironic that the company’s Construction and Engineering division did not have the right mobile technology tools available to the very workers building our nation’s highly-touted, next-generation mobile communications and data network.

The C&E team was still relying on a disparate lineup of portable notebooks and laptops that had been piecemealed together over the years. Even those with mobile computers were still struggling with unwieldy pen and paper documentation methods. Neither method was reliable. And none offered the multiple built-in USB ports required for managers’ multiple Metallic Line Tests peripherals. Their deployed devices only had one or two ports max.

With the data demands of its C&E workforce growing quickly, this telecom giant acknowledged the need to transition the entire team to a standard mobile platform – one that was more customized and rugged to fulfill the unique job stipulations of field technicians working in extreme environmental conditions, both urban and rural locales and often precarious positions high on a utility pole or underground splicing cables.



SUMMARY

Customer

Telco
United States

Industry

Telecommunications

Challenge

Telco needed mobile computing solution that would evolve with its workforce

Solution

Zebra’s fully rugged tablet PCs support worker, workflow diversification

Results

Voice of the customer defined right mobile platform for right mobile workflows

* Zebra acquired Xplore Technologies and all Xplore products in 2018.

SUCCESS STORY

TELCO

While a single vendor solution was going to prove ideal to achieving a consistent IT experience, this telecom provider also realized that the device deployed would have to wholly support the very different, yet critical, workflow requirements of the 6,000 cable splicing technicians and their managers responsible for building its nationwide copper and fiber networks.

These requirements were not going to be filled in totality with the off-the-shelf devices they had previously considered. All the mobile computing platforms they tested were lacking in either processing power, rugged survivability or true mobility – until Zebra Technologies' ultra-rugged tablet PC.

Solution

Zebra's fully rugged and ultra rugged tablets support worker, workflow diversification

After rigorous testing, the Zebra ultra-rugged tablet clearly emerged as the first mobility solution purpose-built for splicing technicians that frequently work in physically demanding and dust-ridden environments, such as manholes and construction sites, as well as managers responsible for heavy data input tasks in the field.

"The Zebra tablet that we originally deployed in 2011 was, environmentally, the strongest machine on the planet," explained the customer.

Not only did the tablet PC demonstrate its ultra-rugged strength after surviving submersion in a lake, a dishwasher cycle and drops from incredible heights, but Zebra as a company proved its strength in listening to customers' ideas and designing quality mobile solutions that address emerging needs. In fact, Zebra was the only technology provider willing to think "outside the box" to progress its mobile platform capabilities in concert with the customer's evolving work environment.

Given that the C&E division re-evaluates its mobile workforce technology every three years, the telecom leader was given a proactive voice in the development of Zebra's product roadmap and played an influential role in the design of today's next-generation fully rugged tablet.

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SUCCESS STORY

TELCO

In 2012 and 2013, the company pooled engineering and sales resources to conduct field testing and identify ways to improve tablet usability, and therefore increase tablet use and productivity, while in the field.

A new tablet criteria was defined to safeguard ruggedness levels while adding more processing power to satisfy heavier data loads in a smaller, lighter-weight, and lower-cost form factor equally appropriate for the field, vehicle and office.

In 2014 and 2015, the telecom operator replaced all of its ultra-rugged tablets with the newer-generation fully rugged tablet computer, to include screen protectors and vehicle docks.

While these were the only tablets on the market to guarantee IP6x ratings – and among the few rugged solutions to deliver mandatory True Serial Cable ports for Metallic Line Testing alongside an RJ-45 port and multiple USB ports – what drove the fast transition to the Zebra fully rugged tablet was its ability to satisfy emerging computational requirements and emulate a desktop work environment in the field.

The Zebra tablet employed Intel's® latest generation processor, which enabled long-term expansion of the telco's heavy data applications, including the CAD thick client app often used by managers.

Results

Voice of the customer defined right mobile platform for right mobile workflows

Zebra demonstrated through two generations of rugged mobility platforms that it could consistently deliver on every single criteria outlined by the customer. The telecom leader no longer had to pick and choose which features were most important; they now had them all in a single solution, with a single point of accountability, which would be relevant to both C&E technicians and managers for many years.

In fact, both C&E managers and technicians each realized at least 15 minutes daily of increased efficiencies once they began using the time reporting application alone on their Zebra tablets. They no longer had to wait their turn at the finite number of central garage kiosks at the end of their shift to unload equipment and perform daily time reporting. The full-time access they gained on the tablets to complete real-time job activities, including job closeouts, translated to more on-site efficiencies that allowed them to clock out on time.

“The Zebra XC5 tablet that we originally deployed in 2011 was, environmentally, the strongest machine on the planet.”



SUCCESS STORY

TELCO

Job accuracy levels also increased once C&E teams were able to electronically open and close work orders, track the spliced cable counts, order materials, geospatially locate facilities in a Wire Center, order Metallic Line Tests via the MLT System, access and edit work prints, access facility reports and order records, and access critical Wire Center data. The addition of the built-in camera improved real-time situational analysis and collaboration among workers and managers, and software enabling real-time reporting of field conditions also contributed to improved worker safety.

The combined mobility of these essential daily workflows with email and IM access from anywhere in the field ultimately drove a significant productivity increase among all workers and reinforced the telecom leader's business case for future Zebra tablet deployments.

Long-term, Zebra's constant innovation and operational agility would protect the customer's current IT infrastructure and future mobile investments through more than just a single cycle, translating into multi-millions of dollars in costs savings.

What's Next

Solidifying the future of workforce mobility today.

In early 2015, with Zebra's rugged platform firmly cemented in the telco's long-term growth plan, the C&E division expanded their footprint ordered an additional 3,450 fully rugged tablets and began to extend the reach of its mobile workflows to thousands of other workers across nine new states in the Southeastern U.S.

Even with the approximately 7,000 fully rugged tablet bundles currently used by the C&E division workers, this U.S. telco committed to deploying the next generation of Zebra's rugged tablet platform - the 10.1" XSLATE model - later that year in a move that maximized the lifespan of current mobile software and accessories and secure investment protection for several years to come.

For more information on Zebra Tablets,
visit www.zebra.com/tablets



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