BUSINESS BRIEF

Energy (Utilities)
Mobility and Collaboration

Transform Field Efficiency, Effectiveness, and Safety with Mobile Technology

Enabling mobile workflows that help service crews optimize operations and boost efficiency.

ROI
18 MONTHS OR LESS

7 out of 10 utility organizations satisfied with mobility investment[2]

From a workforce optimization perspective, investments in mobile computing and communications solutions that enable a more connected enterprise will help counter many of the workforce challenges confronting utilities today.[2]

Industry Strategic Challenges

Though economic prospects are rising in many sectors, growth in demand for electricity is not. In fact, the U.S. Energy Information Administration forecasts electricity demand in the United States will increase by only 0.9 percent per year on average through 2040,[1] challenging utilities to find new ways to stay competitive.

A key challenge is related to the workforce—in particular, the mobile utility workforce. At 2.2 million workers in 2014, predicted to grow to 3.0 million by 2018, it is the fastest growing segment.[2] But it is aging. Older operators tend to rely on sharing their knowledge verbally through on-the-job training. And the proliferation of new regulations does not help, creating a continually changing operating environment.

While delivering reliable service remains the highest priority for utility companies,[3] the pressure is on to also be more efficient, keeping productivity high and operational costs low. This is not easy with many companies still using manual, paper-based processes, with multiple handoffs of information and materials that require service crews to spend large amounts of time on non-billable tasks.

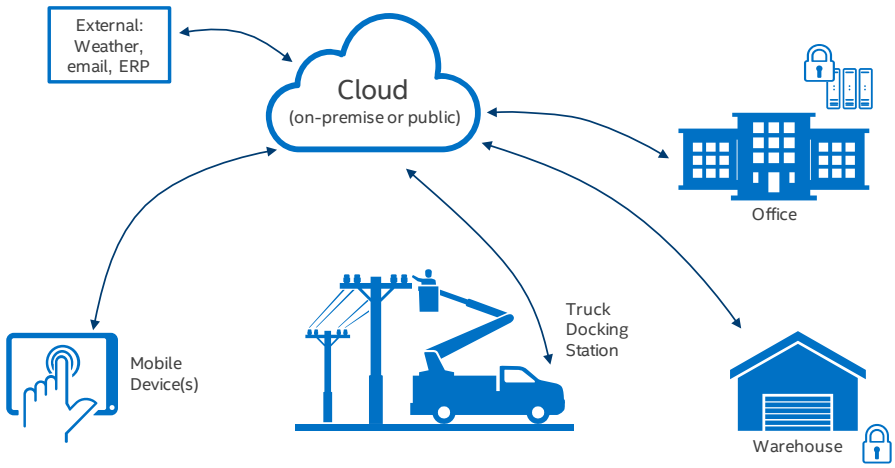
Utilities need to transition to mobile workflows and devices that reflect and enable the mobility of their workers. They need "a new generation of training, operations, and workflow management tools to capture and transfer knowledge while empowering personnel with real-time process and procedural support."[4] But any new technology must be adapted to the unique utility environment, where, for example, mobile workers work from trucks in all kinds of weather, often wearing gloves. At the same time, utilities need to make sure their IT teams are able to manage these new mobile devices, keep the business secure, and protect its data.

Technology holds much promise to help utilities meet these challenges. Today's mobile technology offers devices and software solutions that dramatically improve field-based asset management and maintenance and provide an easy, efficient way to record and pass on standard operating procedure knowledge and updates. Utilities recognize this and are investing in mobile solutions accordingly.

Business Drivers and Desired Outcomes

- Cut costs and modernize work methods without sacrificing service quality
- Improve efficiency and productivity of mobile workforce
- Make real-time data available to inform decisions in the field

Mobile Data Flow for Utilities



- Support fluctuating customer demand with scalability, agility, and quick provisioning
- Enable remote reporting
- Bridge the knowledge gap and guide on-the-job process training to increase effectiveness and safety
- Equip mobile workers with devices suited to their work conditions

Digital Transformation and Business Innovation

Today's mobile utility workers need powerful, flexible tools that allow them to work more productively and efficiently, without the waste of manual processes and paper. They need anytime, anywhere access to information so they can prepare for and carry out necessary tasks proficiently and safely. They need devices suited to their rugged and unpredictable work conditions. And they need easy-to-use applications that guide them through operational procedures and support on-the-job learning. These needs can be met with tablets offering the robustness, performance, and software systems mobile workers need to do their jobs, along with the manageability and security IT needs to do theirs. Utilities that equip their mobile workers with these tools will be positioned to cut costs, deliver better service, and thrive in an evolving marketplace.

Enabling Transformation

Implementing an end-to-end mobile workflow solution using tablets in the field enables utilities and their mobile workers to:

- Increase billable "wrench time"
- Enhance field info collection and accuracy
- Handle unexpected problems at job sites
- Accelerate resolution of new issues
- Reduce the number of trucks, crews, and overtime hours required for maintenance workload

Ruggedized tablets: powered by Intel® processors

Bartec AgileX*

- Extremely slim-line, rugged and highly flexible industrial tablet PC for rough environments.
- Intel® Core™ M processor

Panasonic Toughpad FZ-G1*

- Lightweight, fully rugged Windows* 8 tablet with 10.1" next-generation outdoor WUXGA display
- Intel® Core™ i5 vPro™ processor

Xplore XC6*

- Ultra-rugged Tablet PC
- Intel® Core™ i5 vPro™ processor

DT Research DT315BT*

- Slim, lightweight and durable tablet
- Intel® Celeron® Dual-Core processor

GammaTech Durabook R11*

- Ultra-thin and lightweight rugged mobility
- Intel® Core™ i5 / i7 processors

Ruggedized tablets: powered by a range of Intel® processors including Intel® Core™ vPro™ processors with Intel® Active Management Technology (Intel® AMT) and Intel® Trusted Execution Technology (Intel® TXT).

Intel Technology Foundation: Intel has pioneered mobile technologies, connectivity, and security solutions and powered mobile devices that are enabling the transformation of many industries and their mobile workforces.

Where to Get More Information:

To find the best solution for your organization, contact your Intel representative, register at **Intel IT Center** or visit **intel.com/energy**.

[1] Annual Energy Outlook 2015, http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf

[2] VDC Research Group report: The Changing Face of Utilities: Aligning Investments in Mobile IT to Put Customers First, 2014, https://www.xploretech.com/downloads/Proven_Results_Utilities/WP_Utilities_Changing_Face_VDC.pdf

[3] Black & Veatch, Energy Strategies Report, 9th annual Strategic Directions: U.S. Electric Industry, August 4, 2015 Report, http://bv.com/energy-strategies-report/august-2015-issue/critical-challenges-facing-electric-utilities-black-veatch-survey-shows

[4] Schneider Electric white paper: The Resilient Plant: The Truth about Building Capabilities for Workforce Enablement, 2014, http://software.schneider-electric.com/pdf/white-paper/the-resilient-plant-the-truth-about-building-capabilities-for-workforce-enablement/