

Field Force Transformation Utilities Industry

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Field Force Transformation

Field Operations: The Next Opportunity for Productivity Gains.

Across the utility industry, field operations continues to be one of the remaining untapped sources of value, where cost reductions and productivity improvements easily reach 20% to 30% of overall spend.

"Those utilities who are first to spot opportunities for business innovation in Transmission & Distribution are usually in the best position to reach their business objectives. By working to transform the field force and implementing leading work and asset management solutions, Accenture can help your utility become a high-performance business."

David Rouls
Accenture Managing Partner -
Utility Transmission and
Distribution Practice

Based on Accenture's Transmission and Distribution Team's experience working with electric, gas, and water utility distribution companies, we have found that most Utilities can gain from 60 to 90 minutes of additional time each day per field force employee and increase their productivity by 10 to 20 percent. For a utility company with 1,000 field workers, these savings would add an additional \$20 million annually to the bottom line.

Accenture's Field Force Transformation approach is unlike the typical technical solutions from other software product vendors. Accenture recognizes that technology is only one part of the overall solution that will make the field organization successful. Major challenges exist in terms of gaining hard-won acceptance from field workers, in changing the roles of supervisors, in leveraging the maximum value from existing

investments in enterprise systems, and in seamlessly integrating the new enabling technologies with your business processes. Accenture brings the skills and deep utility industry experience necessary to rapidly transform your business when it really matters, in six to nine months, not three to five years. Many times, Accenture will undertake Field Force Transformation work while sharing risk on a business-benefit-driven basis, where the achievement of the agreed upon business goals helps drive our reward.

Falling Short in the Field: Complex Obstacles, Ineffectual Solutions

At many electric, gas, and water utilities, field workers have not realized the benefits of their company's substantial investments in office-based IT systems for work and asset management, customer service and billing, geographic information systems, as well as mobile technologies or even e-mail. When mobile field workers do not have access to these systems, they continue to rely on systems that are paper-based or offline, accessing critical information only when they are at the service center or corporate yard. Without access to the information held in these systems, field workers and the business they support often face needless challenges, including:

Poor coordination and communication with the field: Field staff cannot access needed data and supervisors cannot easily coordinate their work and that of contractors. Trips back to the base or home office become necessary to collect work orders and documentation, and to return job completion details and time sheets.

Inefficient scheduling of work: Staff cannot respond quickly and efficiently to unplanned work or availability shortages.

Asset data problems: Data captured on paper in the field has to be retyped into office systems, and often fails validation.

Mobile Field Work Management (FWM) systems—using mobile computing devices, wireless networks, and new sophisticated scheduling algorithms—have long been regarded as the key to solving some of these problems. Even when well implemented, traditional FWM solutions have addressed some, but not all, of the problems faced by

mobile field workers. Realistically, FWM systems have continued to require high capital expense, relying on proprietary software and technology, delivering un-reliable mobile connectivity and access to critical information, and limited integration with critical back-office systems.

However, the landscape is now changing. Mobile laptops and hand-held device, and high speed network costs have plummeted, and we have seen substantial technological innovations. Across numerous utility projects, Accenture has found that the right mix of mobile computing and wireless technologies does deliver significant benefits, transforming business process and technically enabling the field force. With so many competing vendors, standards, technologies, and products, however, it is hard to get past the confusion and the hype. What strategic mobile platform should you bet on? Which vendors will be financially viable in 3-5 years? What technologies will be obsolete in a year's time? How can you quantify and guarantee the benefits that the investment should bring?

Field Force Transformation: The Convergence of People, Systems, and Communications

Accenture's Field Force Transformation services can drive improved productivity and efficiency across field operations by taking a distinctly "cross functional" business focus. We believe it is critical to align field force, supervisor, and scheduler behavior with the utility company's strategic goals. This leverages current investments in existing work management, asset management, GIS, and back office systems, while providing real-time access for the field worker. We also believe that gaining efficiencies will require enabling both field workers and

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contractors using the same systems and business processes. Field workers then become self-sufficient and empowered, removing reliance on paper and back office systems.

Based on our experience with electric, gas, and water utilities, Accenture's Field Force Transformation practice has developed a clear point of view on what is required to realize significant benefits across the organization. Our approach includes human performance engineering, as well as technical solutions. Critical aspects of our approach include:

Work is Work. To realize significant benefits, standard overall business processes need to be established across all types of short and long-cycle work, establishing consistency across the organization and efficiency in service management and delivery.

Work is Managed in One Place. Work is managed, scheduled, and

viewed wherever possible using one set of systems and processes across the organization, using a formal and centralized work and resource management organization.

Supervisors Move to the Field.

The role of the supervisor changes dramatically as mobile technologies and scheduling are automated, enabling the supervisor to manage and facilitate crews in the field, rather than schedule them in the service center.

Multi-Skilling and Empowerment.

Field workers are multi-skilled and processes require it. Crews can begin to handle all types of work, based on location, proximity, and skills rather than specific work types. More efficient processes that minimize handoffs are developed.

Work Management is Optimized.

Field and office workers have real time access to work schedules and information necessary to complete

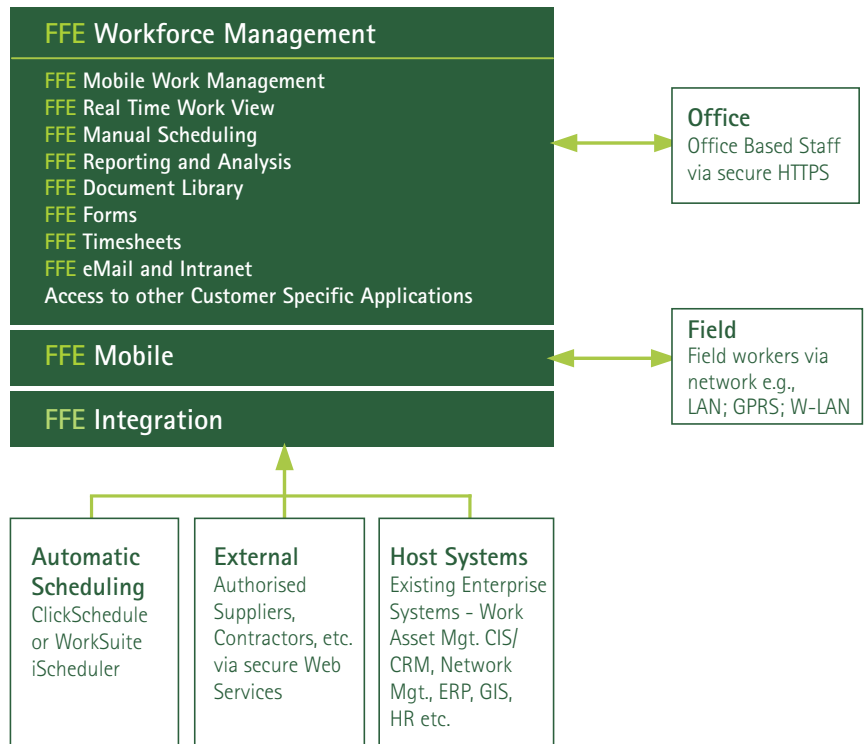
their jobs, whether they are accessing that information remotely through a wireless laptop in the truck or through a connected office based computer. Paper is eliminated wherever possible, and work scheduled and updated in real time.

Open Mobile and Wireless Architecture.

Field force enablement tools need to support both disconnected and connected operations for the field organization at all times. These capabilities will continue to expand as wireless networks and connectivity evolve, supporting devices and applications of all kinds, rather than proprietary tools.

Field Force Enablement: Tying Mobile Field Operations Together for the First Time

Through our work globally to deliver Field Force Transformation value to



our clients, we have seen that a strategic opportunity exists to improve crew productivity in ways not enabled by currently available niche work management and mobile applications. Through customer business transformational work at electric, gas, and water utilities, Accenture has invested in, and developed a new software offering called "Field Force Enablement," which ties mobile field operations together for the first time.

Accenture's Field Force Enablement (FFE) solution is more than just a device or technology. Field Force Enablement solution offers the technology to tie together your existing scheduling, work management, and asset management systems, as well as back office and mobile technologies. FFE can be up and operational in six to nine months, and FFE can be delivered in-house, run by your IT organization, or as a

outsourced managed service offering. In either case FFE delivers real-time, Web-based applications to both office and field personnel, while exchanging data with a company's existing enterprise systems.

FFE provides a single flexible application that can deliver all types of information to the field crew, supervisor, or office workers across the utility field organization. The FFE has:

- Flexibility to be configured to deliver the new processes and the presentation of information based on each client's requirements.
- Support and integration of both long and short-cycle work.
- Provision of in and out of network coverage without user intervention, delivering seamless roaming between networks and guaranteed messaging.
- Pre-integration capabilities with desktop products, as well as

industry leading mapping, scheduling, and mobile products.

- Included a re-usable mobile and integration infrastructure shared by all field, supervisor, office, and scheduling users, addressing all information needs, not just work orders.
- Based on scalable, open, web standards and forms for all application development and interfaces, using Microsoft BizTalk and .NET Web technologies.
- It allows "remote control" and remote data gathering from the devices, which reduces the cost of operations, and positions FFE to link with emerging RFID technologies.

Accenture, working together in a joint venture with Microsoft and Avande, has developed an advanced infrastructure to deliver Web-based applications to mobile devices. This infrastructure allows the applications to be used even when there is no



network coverage, and also helps solve the typical problems of wireless Web applications, such as security, speed and cost of delivery, and the integrity of business transactions.

Accenture's FFE service is built on Avanade's Connected Architecture, which forms a sort of communication "fabric" that is designed to enable transactional, business-quality communication between the field device and the office. It provides the "best-of-both-worlds" hybrid between the thin and thick client approaches on the mobile device, enabling FFE's self-maintaining, browser-based application to work in an intermittently connected network environment.

Accenture's FFE service also uses advanced Microsoft-based Enterprise

Application Integration (EAI) and Web services technologies to closely integrate with existing enterprise office systems, such as the latest Work/Asset Management, CRM/CIS, GIS, and ERP. The capabilities of these applications include scheduling and dispatch; appointments and resource management; asset data capture; real-time field work management; mobile access to geographic, map, and schematic data (GIS); and online access to operations procedures, manuals, and health and safety information.

Delivering Unparalleled Solutions: Innovative, Simple, Reliable, and Successful

Accenture has worked with more than 50 utilities in the Energy Delivery, transforming Work, Resource,

Asset Management and Field Services for some of the world's largest and most advanced mobile field work management projects. We have achieved substantial business outcomes in the Distribution & Transmission areas across more than 100,000 field workers globally. Similarly, Accenture led numerous projects to develop the field service management systems where we have demonstrated the ability to scale to large organizations, deploying thousands of real-time wireless tablet computers to the field. Benefits actually achieved include:

- Costs Reduced/Productivity Improved—increased crew productivity by 20 to 25%.
- Reduced dependence on contractors by 20% to 30%.
- Reduced back office support by 20% to 50%.



- Reduced designer overtime by 50%.
- Customer Service—increased commitments offered and delivered by 300%.
- 250% more time for Crew Supervisors to focus on safety and crew monitoring (from 10 hours/wk to 25 hours/wk).
- Increase customer commitments offered and met by 300%.
- Ability to increase targeted maintenance by 5% to 10% to improve reliability.

Accenture has a deep understanding of the business benefits case of mobile field work management, particularly in the demanding and specialized areas of electric, gas, and water utilities. This experience, combined with leveraging the latest Internet and wireless technologies, drives Accenture's Field Force Enablement solution. Accenture's

Field Force Enablement solution uses a system that involves low capital investment and is structured on a "pay-as-you-go" basis. We work with you, as we have with companies in other industries, to help quantify the business benefits and commit to delivering them.

Getting Started Is Easy

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Service Center Pilot. Low cost rapid demonstration of FFT benefits in a 4–6 week limited on-site demonstration of FFT with up to 5 crews.

Field Force Transformation

Diagnostic. In depth 4–6 week on-site review of current practice, baseline KPIs, and estimate of potential benefits across Operations organization and existing systems.

Managed Service Agreement.

Accenture manages IT and selected back office systems and staff with an implementation period of 6–12 months.

Full Scale Implementation.

Delivered by Accenture, operated by utility business and IT at customer site in 6–12 months, with a phased implementation approach.

Business Process Outsourcing.

Accenture Business Services manages and delivers all aspects of Back-Office Work Management, using on-shore, near-shore, and off-shore resources.

To learn more about transforming your business, please contact Accenture's leads for Field Force Transformation and Field Force Enablement.

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