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High performance. Delivered.

Achieving high performance with
Accenture's smart metering and
demand-management solutions for
utility customer operations

• Consulting • Technology • Outsourcing

Smart: What does it mean?

Whether in the form of planning, preparation or actual deployment, the world of smart grid and smart metering has become a reality for many utilities. However, the blanket term "smart" obscures another, more complex reality: that smart means different things to different utilities. There exists a wide array of possible combinations in terms of how to deploy smart technologies and how to use them once they are in place.

A utility's strategic approach to deployment and end-state decisions will be shaped by key drivers, such as regulatory mandates, infrastructure stability and operational efficiencies (see Figure 1). Within the boundaries of utility and customer operations, the business case will often hinge on reduced operating costs and improved customer service. At the operational level, however, there remains much choice and freedom around positioning and deployment:

- Do you opt for a literal interpretation of regulatory compliance at minimal cost?
- Do you seize the opportunity to branch out into a broader portfolio of consumer products?
- Or, do you embrace the full spectrum of customer services, which only the most comprehensive technology solution can support?

Once you have outlined a vision, there are further considerations:

- How do you get there without compromising or disrupting ongoing operations?
- How do you structure your deployment, and which functionalities do you want available at each phase?
- Do you run parallel call centers, perhaps even parallel customer information systems, or do you scale up existing capabilities?
- Do you train for a multiskilled workforce, or do you aim for smaller, more specialized groups as new skill sets become essential?

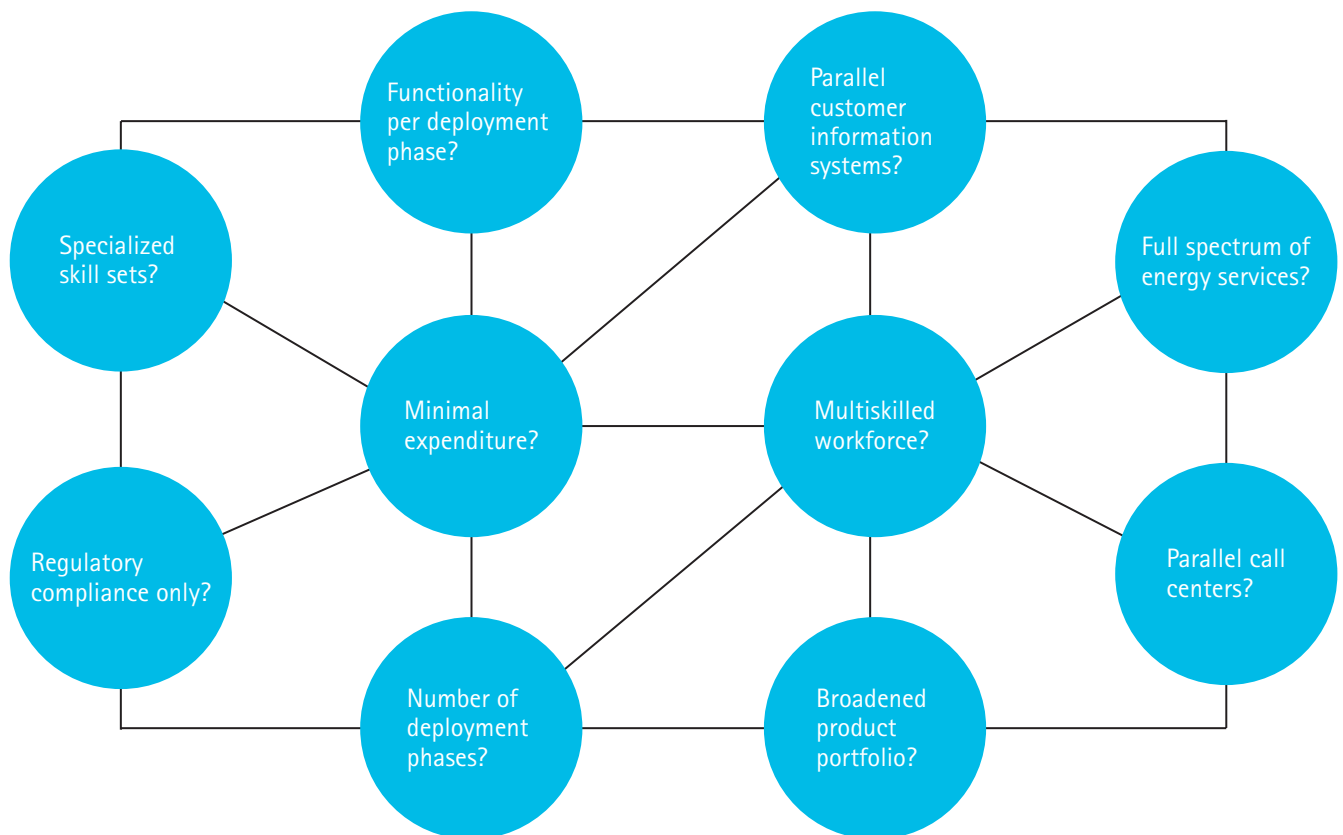
These are complex questions, and the stakes are high. How your utility positions itself in this new smart world will be a key determinant of future success and, ultimately, of achieving high performance. How you get there is equally critical, as disruptive deployment will be unacceptable to all stakeholders involved—from regulators to customers.

Did you know?

In the past 15 years, the telecommunications industry has undergone a transformation similar to the one currently faced by the utility industry by:

- Teaming up with other industries to support their product and services portfolios.
- Increasing responsiveness to market needs with faster product innovation cycles.
- Dealing with data security and privacy issues as network digitization increased the volume and complexity of data available.
- Redeploying parts of their field workforce due to network digitization.
- Addressing issues as billing systems could not keep pace with the ever-expanding complexity of their product and services portfolios.
- Leveraging knowledge from other industry experiences as they embarked on these transformations.

Figure 1. Considerations for smart metering deployment and end-state operations.



Accenture's approach for utility customer operations

In supporting utility and customer operations as they transition to a smarter world, Accenture starts with the end game in mind—helping our clients decide where they want to position themselves along the smart spectrum and then determining the roadmap that will help our clients get there (see Figure 2).

Accenture's High Performance Utility Model provides a strategic and tactical framework of leading practices that can help translate your vision into a comprehensive, integrated view of the capabilities required. For example, leveraging the model, utilities can develop new "beyond-the-meter" capabilities, such as providing support for in-home technologies. Our clients can also

reevaluate other existing capabilities, such as product portfolio and life-cycle management, which may be in need of transformation. This operational area traditionally has not been a core strength for utilities, so they will need a more disciplined approach that draws from the deep expertise of other industries, such as the product retail industry.

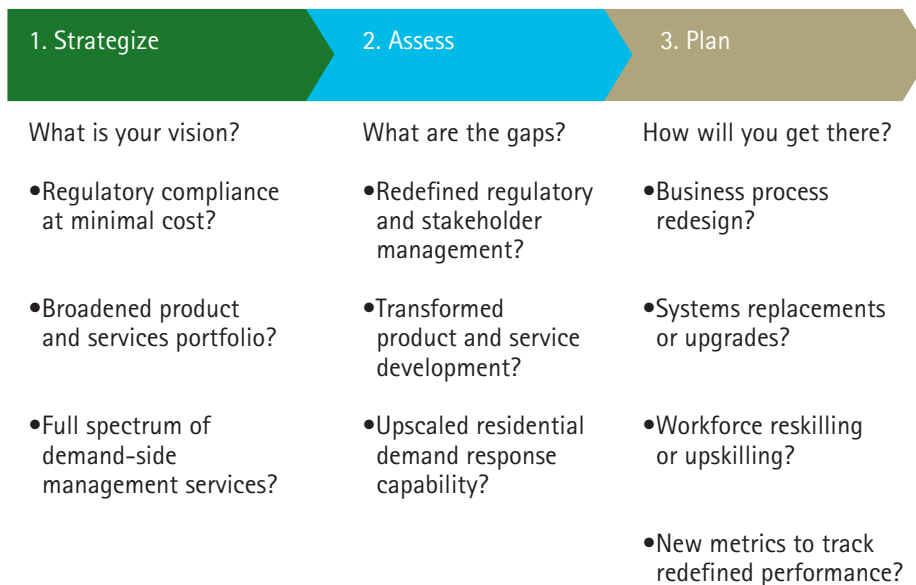
Regulatory and stakeholder management will take on new dimensions. In times of uncertainty and indecision around environmental mandates, utilities need to be more proactive in their engagement with the regulator. Beyond the regulator, the smart world entails a whole new set of stakeholders, ranging from electric vehicle car manufacturers to grassroots environmental and

customer advocacy groups. Strategy, marketing and communications will be held to new levels of scrutiny.

Demand response is another capability that will be required. While beginning to gain ground as a valid substitution for electricity generation, demand response will need to be broadened to include not just traditional commercial and industrial participants, but also the residential customer base.

Meter data management will need to account for the dramatic increases in data complexity and volume. Effective knowledge management will be essential for customer service agents as they address questions about a far broader range of products, pricing and services.

Figure 2. Establishing a roadmap for smart metering.



The journey toward smart-enabled operations

Following the design of business process models, Accenture helps utilities examine the key components of the operating model (such as systems, processes, people and metrics) to ensure they will support the required capability framework.

For example, utilities will need to adopt a comprehensive change management approach (fully supported by the executive leadership) to guide the organization through the transition to a smarter world. You will need to develop the right mix of talent and skills in your people and implement an optimal organizational structure.

The full journey toward smart-enabled operations will occur in the medium to long term. You may need to consider running parallel infrastructures without disrupting ongoing operations or otherwise tarnishing the customer experience. Quality and performance will also need to be carefully managed as you embark on transformational change. In fact, you may need to adapt the definition of performance (along with the operational metrics that reflect it) and constantly align with the requirements of the newly defined service model.

Above all, Accenture recognizes that there is no single answer to any of the questions involved. Each utility's situation is unique, with varying geographic, market structure and regulatory considerations—especially for a transformation of such complexity and size. Nevertheless, in this rapidly evolving context, we leverage leading practices and lessons already learned from working with utilities across the globe facing similar transformations. We bring insights from working with clients in other industries that have experienced similar fundamental shifts in their businesses, which may provide a glimpse in the future of utilities.

Building a transition roadmap

Some of Accenture's key assets, tools and accelerators to help utilities achieve high performance with smart-enabled operations include:

AMI meter read and bill comparison tool

Accenture's advanced metering infrastructure (AMI) meter read and bill comparison tool is an asset that validates the quality of data produced by the back-office systems. Legacy billing and meter reading systems are compared with the new smart metering systems.

Accenture's business transformation approach

Accenture takes a business-driven approach to different smart metering transformation issues, backed with an analytical rigor that, together, create a faster way of providing executives with deeper insights and a higher degree of decision-making confidence. Our approach links strategy and execution by translating direction, goals and priorities into high-velocity change roadmaps, which include the actions, capability requirements and operating plans needed to achieve a smart metering business strategy. The approach enables fundamental, enterprisewide change that can lead to substantial and sustained performance improvements for utilities. Our proven assets, tools, execution models, leading practices and strong industry acumen accelerate the value realization for clients.

Accenture customer and advisory services

Accenture's customer and advisory services provides inbound/outbound sales and service capabilities for energy conservation campaigns and billing support services. This outsourcing solution can be quickly mobilized to take or place calls on behalf of clients, and advanced customization is available for optimal relevance to utility customer programs.

Smart grid and metering financial modeler

This robust and flexible capability-based tool quantifies the total impact of smart technology deployment by assessing the benefits and costs for implementation based on the current utility state. The total impact is broken down into various components, including labor and nonlabor reduction, working capital, system loss, revenue protection, capital deferral, operational and capital expenditures. Unlike other business cases, Accenture's financial modeler is capability-driven rather than technology-driven. This focus permits utilities to determine the optimal design solution for the deployment of smart technologies by testing different capabilities and associated technology solutions to maximize the return for different stakeholders.

We help our clients decide where they want to position themselves along the smart spectrum and then determine the roadmap that will help them get there.

Client example: A large utility forges its "smart" path

Accenture is supporting a large utility, which provides services to 5 million customers, as it deploys a smart meter infrastructure across the majority of its service territory. With a vision of improving service reliability, achieving greater customer satisfaction and enabling demand-side management capabilities, Accenture is helping to design and implement the deployment roadmap and supporting technology solutions for both pilot and full-scale deployments. Having sourced

and fully trained the deployment team (entirely from within the utility's existing workforce), the first wave of meters, field and back-end technologies have been successfully deployed and integrated. The result was a meter-read accuracy of 99.5 percent. As the billing functionality comes online for meters installed in this first phase, the meter deployment program continues to run parallel with a target of setting up 150,000 customers for the full pilot.

We know what it takes to make your customer operations achieve success with smart metering and demand management.

What can you expect when you team with Accenture?

You work with professionals who understand the unique challenges of the utilities industry. We see the world as you do and can help your company differentiate itself to achieve high performance. Our understanding of key business issues and trends, and applicable technologies and business solutions enables us to deliver innovative yet practical solutions tailored to each client. We bring a breadth of skills, capabilities and assets to help utilities address our clients' business challenges, including:

Utilities industry experience

Accenture's utilities industry group has more than 30 years experience working with electric, gas and water utilities worldwide. Our group includes 7,500 utility industry people working with approximately 275 clients in 40 countries. We serve 74 percent of the utilities on the 2009 Global Fortune 500 list using our deep, global industry knowledge, people and assets to help clients develop the strategies and adopt solutions to improve performance in the dynamic utility market.

Client-ready utilities assets

Accenture has developed many utilities assets, including the High Performance Utility Model, based upon our extensive consulting, systems integration and outsourcing

experience. This model helps utilities assess their performance against industry leaders, jump-start business improvement projects and accelerate program delivery.

Accenture Utilities BPO Services

Accenture not only has leading consulting capabilities, but we also have a deep operational understanding based on our business process outsourcing (BPO) services for utilities. Accenture Utilities BPO Services provides solutions to 14 clients and 15 million customers in North America, Europe and Asia Pacific.

Contact us

Accenture's approach to smart metering and demand-management solutions is designed to help utilities' retail and customer operations navigate through today's difficult environment. We work with companies to chart a successful course to improve the way they plan and execute the transformation to the "smart" world—and to build the high-performance businesses that can compete and win in a changing environment. We would like to hear about your needs and discuss how we can work together to help your organization advance toward high performance.

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About Accenture

Accenture is a global management consulting, technology services and outsourcing company.

Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. With more than 176,000 people serving clients in more than 120 countries, the company generated net revenues of US\$21.58 billion for the fiscal year ended Aug. 31, 2009. Its home page is www.accenture.com.

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