IS IT TIME FOR A NEW UTILITY BUSINESS MODEL?

BECOME A MORE AGILE AND EFFECTIVE UTILITY IN AN INCREASINGLY UNCERTAIN ENVIRONMENT

Utilities are grappling with so many risks and uncertainties that even the most confident and optimistic executives can find themselves second-guessing their decisions.

The CEO’s job is complicated by environmental policy changes, supply constraints, the emergence of distributed generation, aging infrastructure, and so many other challenges. Virtually any move a utility makes is fraught with risk and open to review by regulators, customers, and shareholders.

Most of us in the industry recognize that the traditional, franchised, regulated distribution utility model must evolve. But what will replace it is not yet clear. Rather than commit to a single, long-term course that bets on a specific fuel source or asset class, utility executives would do well to create a corporate strategy that preserves options for as long as possible. The speed and degree of change in the shift from the tried-and-true utility business model to a new model is likely to be a function of the national energy policy, national and local regulatory penalties or incentives, technology, and market forces.
Utilities in the UK and, particularly, Germany have experienced rapid and significant structural change, resulting in the need for profound changes to their business models. North American utilities have been moving at different speeds due to regulatory and economic drivers that vary from state to state. Utilities in states such as Hawaii, California, and Arizona are moving quickly to adapt to a rapidly changing environment, while those in the Southeast and Midwest can afford to be a bit more deliberate as their local markets evolve more slowly. In fact, many of the utilities in transitioning markets will need interim operating models that increase their agility and effectiveness as the market evolves and changes. The interim models should position them for the dictates of the future state operating models.

The objective is not to avoid all risk and lose the upside potential. Rather it is to manage risk to reduce surprises and capture opportunities as they emerge.

THE CHALLENGES ARE WELL DEFINED

Utility chief executives have been addressing many of the current challenges for years. It’s the interrelationships among these issues that make running today’s utility so complex, particularly as the impacts of distributed generation and technology emerge.

Each utility has its own blend of issues and assets. Where one utility has positioned itself to profit from an industry challenge, another is likely to suffer without bold strategic action. A utility might be able to improve its positioning with some adjustments to its business model or by acquiring other utilities or assets that enhance its capabilities or portfolio of assets.

During periods of stability, an effective utility corporate strategy needs only minor course corrections. However, in a period with significant structural change, such as today’s environment, executives should consider beginning a new planning cycle to either validate the existing strategy, or change direction. Even if the core strategy is fully validated, the review can enhance the utility’s ability to execute its strategy. An offensive game plan, one that is designed for growth through innovation, requires the utility to draw on its infrastructure, its relationships with regulators, and its customers to create more value for all of its stakeholders.

For example, a utility might choose to enhance its role as an energy advisor to its customers. The utility can do so by integrating its operational technology in the grid with customer analytics to provide greater operational transparency and enhanced customer interactions. This can only happen if the utility changes the risk-averse principles and siloed management styles that often slow down decision making and decrease operational efficiency.

Utilities that defend the status quo are almost assuredly going to miss emerging opportunities, delaying their evolution to operating models that serve changing markets. You can’t reverse macroeconomic trends or shifts in market demand. Competing with the new breed of energy service providers that are armed with rapidly advancing technology requires increased flexibility in operations, simplified workflows, investment in the IT foundation, increased accountability in the organization, and a hard-nosed, competitive approach to the market.
POSITIONING FOR SUCCESS

In most instances, utilities have already taken multiple actions during the past few years to address one challenge or another. As these issues evolve, complacency about the adequacy of past efforts is not a strategy for success. Given recent structural and market changes in utility distribution environments across the world, we recommend utility executives take fresh, comprehensive views of their strategies.

Review or recast your corporate strategy. If you have not undertaken a comprehensive review of your corporate strategy in the last two or three years, it is long overdue. Too many fundamental changes have occurred in the industry to rely on a 2012 vintage strategy.

Align your operating model to the corporate strategy. An updated strategy often requires new ways of working and a new operating model (or an interim model).

Build your future capabilities today. The revised operating model might expose gaps in capabilities. Fill the gaps by hiring, training, and grooming the next generation of utility leaders. Many utilities have not hired significant numbers of young workers in several decades, despite a looming wave of retirements. Executives must make utility opportunities interesting enough to attract the best and brightest of the next wave of employees, while protecting the best elements of the corporate culture to retain the most experienced people.

Manage risk more effectively. Utility executives will have to make some big bets in the next few years. Now is the time put the right level of risk management in place to mitigate, allocate, or accept the risks you are prepared to manage.

Simplify, simplify, simplify. Examine all aspects of the business including technology and key operational and support processes. Streamline and simplify the work, outsourcing non-core activities and eliminating or automating low-value tasks. This will allow your employees to focus on higher-value work. Often extra steps in key processes were required for regulatory compliance or temporary needs, but the process never evolved after the issues were resolved. Enormous latent value is locked in highly manual and overly complex processes.

Harden the infrastructure. Improve utility infrastructure with investments that increase security, reliability, flexibility, and speed, while also reducing future maintenance costs. Information is the backbone of the utility today, and increasingly so in the future. Yesterday’s pattern was to invest primarily in wires and pipes. The future will require significant investment in the bits and bytes required to increase operational responsiveness to changing market needs.

Focus on the core strategic assets. Build on areas of historic strength and eliminate investment of time and attention in geographies or functions that are not core to the corporate strategy. Divesting assets and operations that are not core to the new corporate strategy will permit increased investment in new capabilities and functions that position the company for success.

Increase accountability. Manage performance and hold your team accountable for delivering the key metrics. Holding people accountable for results, while positioning them for success, is critical to increasing employee morale.

By developing enterprise-wide strategies for change, utilities can strengthen their core businesses, build the speed and agility needed to pursue new opportunities, engage with customers to build channels for new products and services, and increase the ability to respond to challenges. The executives that broaden the view of the business they are in (serving customers’ energy needs vs. franchised regulated distribution), and refine their strategies accordingly, will improve both performance and shareholder value.
### Exhibit 1: US Utility Industry Issues

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>DESCRIPTION</th>
<th>RECENT TREND</th>
<th>THE DATA</th>
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<tbody>
<tr>
<td>Regulatory uncertainty</td>
<td>• Utilities face uncertainty regarding environmental regulation of water, emissions, and incentives for renewables.</td>
<td>• Pending and proposed water and carbon dioxide regulations are increasing the cost to operate steam generation plants.</td>
<td>• Federal regulations are expected to drive retirement of more than 60 GW of coal generation capacity by 2020.</td>
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<td>Electricity demand</td>
<td>• The economic downturn and better energy efficiency have cut industrial and commercial demand for electricity.</td>
<td>• Electricity demand is flat or falling and likely to grow slowly in the future.</td>
<td>• Low annual growth (weather adjusted) of 0.8 percent is expected through 2020.</td>
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<td>Distributed generation</td>
<td>• The cost of solar panels is falling. Renewables incentives and third-party financing and operation have emerged. Some costs are shifting to non-users.</td>
<td>• Distributed generation is rapidly increasing. This causes peak demand served by power providers to erode.</td>
<td>• Distributed generation could represent 2 percent of generation by 2016.</td>
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<td>Aging workforce</td>
<td>• The average age of a utility employee is 47, as hiring has been limited in the last two decades.</td>
<td>• Utilities are outsourcing, simplifying and automating processes, and reinvigorating recruiting.</td>
<td>• In less than five years, 30 percent of industry employees will be eligible to retire.</td>
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<td>Rising operating costs</td>
<td>• Low fuel prices have masked rising costs in recent years. As trends reverse, customers may be more engaged politically.</td>
<td>• Retail prices are rising due to a convergence of environmental, regulatory, and infrastructure needs.</td>
<td>• Residential rates are projected to see a compound average growth rate of 3 to 5 percent in some jurisdictions through 2017.</td>
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<tr>
<td>Aging infrastructure</td>
<td>• Infrastructure is aging due to deferred investment in generation, grid, and IT equipment.</td>
<td>• Utilities are making large-scale investments to modernize the grid and enhance their operational control.</td>
<td>• Modernizing gas and electric distribution is projected to require $2 trillion of investment by 2030.</td>
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<td>Renewable energy mandates</td>
<td>• Renewable portfolio standard regulatory mandates in many states have significant near-term milestones.</td>
<td>• RPS requirements and qualification rules are increasing.</td>
<td>• RPS targets will require 164 GW of new renewable generation by 2020.</td>
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<td>Utility earnings growth</td>
<td>• The North American utility sector has delivered strong, high-quality earnings and dividend growth.</td>
<td>• Most utilities are meeting targets by spending capital on infrastructure and building rate base.</td>
<td>• Utilities are likely to struggle to deliver the 4 to 6 percent CAGR earnings growth that Wall Street requires.</td>
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<td>Low natural gas prices</td>
<td>• Shale gas has transformed the energy sector. We expect a prolonged period of low natural gas prices and high supply availability.</td>
<td>• Despite regional spikes, gas prices have fallen.</td>
<td>• Gas prices should remain in the $4 to $6/MBTU range for the foreseeable future.</td>
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<tr>
<td>Emerging competitors</td>
<td>• Innovations in technology and battles for home control in telecom/cable/internet wars make energy management an attractive service.</td>
<td>• Google bought NEST for $3.2 billion. AT&amp;T, Comcast, Verizon, ADT, and others are offering energy management services as they pursue the $400 billion retail energy market.</td>
<td>• It is uncertain whether utilities are positioned in the long-run to win in energy management.</td>
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</tbody>
</table>

*Source: Oliver Wyman analysis, EIA, BLS, SNL, DSIRE, analyst reports*
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For more information about this report, please contact:

MICHAEL BRITT
Partner
Michael.Britt@oliverwyman.com

www.oliverwyman.com

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