Flip the switch on
Re-energizing the workforce
to power the digital utility

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Just as the advent of electricity rendered lamplighters obsolete, forces like digital disruption, market-based pricing and renewable energy alternatives are challenging the traditional utility operating model. Utilities have a choice: Either enjoy the ride until the road runs out, or concurrently start paving the way for a new future.

When the current model expires, what will the new utility look like? Accenture has identified three emerging “power plays” that can help utilities generate future growth by redefining themselves as low-carbon energy producers, distribution platform optimizers, and energy solution integrators.¹ No matter how utilities decide to leverage and combine these digitally-enabled power plays, future success will depend upon different talent. This is where the aging utilities workforce actually becomes an advantage rather than a liability. As the baby boomers retire, utilities have an unprecedented opportunity to rethink how work gets done and the capabilities needed to power the utility of the future.

Transforming an established enterprise with a new operating model and a blended workforce of new and traditional skills is a daunting task. Utilities can start today by embracing digital technologies to reshape how work gets done, defining a new talent strategy and developing an employee value proposition that attracts and engages the utilities workforce of the future.
Digital can amplify people’s productivity—if the culture allows it

Faced with cost pressures, increased scrutiny from regulators, and customers wanting to manage their own energy consumption and production, utilities are looking for ways to work faster and smarter. This is where digital technologies play a large role, streamlining and enhancing human efforts, reducing costs, and changing the skills profile.

• Field operations personnel are moving from paper work orders to mobile scheduling and real-time digital assistance in the field.
• Asset managers are able to assess an individual piece of equipment’s performance and maintenance needs based on real-time data, rather than relying on historical schedules.

But, while integrating digital solutions into current operating models is a good place to start, it is a dangerous place to stop and rest.

Utilities typically view workforce savings with skepticism. Now, by acting ahead of planned retirements, there is a once-in-a-generation opportunity to reinvent the skills and talent profile of the workforce and reinvest in emerging digital capabilities. This approach is valid across every function of the utility—from engineering to operations to asset management to customer care, to corporate functions such as finance and supply chain.

How ready are utilities to embrace the digital transformation and up-end their workforce model, which is already experiencing churn? Accenture Strategy’s analysis of 250 major change initiatives at more than 150 organizations shows that utilities are able to sustain less than half of all their change journeys. These are not failures of vision and communication. Rather, over time, the confidence in leadership declines as the status quo sets in. To drive different outcomes, leaders must act boldly, take chances and hold individuals and teams responsible for achieving outcomes. These behaviors challenge the current culture that tends to reward stability, experience and group consensus over experimentation, analysis and accountability.

Accenture Strategy analysis shows that utilities are able to sustain less than half of all their change journeys.
Market-driven, digitally-powered business models require workforces structured differently and leveraging different talents. [See page 5.] As technology automates or augments routine, dangerous or remote tasks, fewer people need to be on hand to run processes—or even facilities. With the creation of Rio Tinto’s Operations Centre, the mining company has helped to advance the human-machine recombination work practice. The Operations Centre is exactly what it sounds like: a facility where equipment operators sit in a command center that may be hundreds or even thousands of miles away from the mine, but are still capable of controlling powerful machinery and equipment at mining sites. Utilities could be doing the same with their generating assets—especially if strategies include investments in low carbon, remote, distributed solutions such as solar, wind or wave.

With new business models, the skills profile shifts. Whereas today’s utilities manager spends significant time coordinating and controlling resources, tomorrow’s will need to assess data, encourage innovation, and drive decision making to the edges of the organization. Many utilities will have a gap in needed analytical and collaborative skills, highlighted by recent data that shows that only 37 percent of utilities managers currently identify ‘analyzing and sharing information’ as one of their top five daily tasks, as opposed to 45 percent of managers in other industries. Finding the right skills is not the extent of the talent sourcing challenges for utilities. In 2015, Accenture Strategy asked the university graduating class of 2015 “What are your top industries or sector choices for work?” Only two percent of respondents in the United Kingdom chose utilities; in the United States just one percent. Utilities need to think differently about how to source the talent they need—moving from a dedicated workforce to an extended workforce that can flex according to business needs. Campus recruitment remains important, but is no longer enough. Utilities must tap into specialized skill sets through partnerships with start-ups and other non-traditional companies. “As a service” vendors, like Grid One Solutions for asset inspections, or IronNet for cyber security, provide utilities with yet another opportunity to expand their talent pool.

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The changing workforce for the digital utility of the future

As utilities fully embrace the ability of digital to change how work gets done, employees will need new types of skills. Some of these skills will be common across operations, including data analysis and visualization, security management and digital business acumen. Other skills will be specialized, based on specific business activities. All are smart investments in the utilities workforce of the future.

Scenario: Distribution asset investment planning

From traditional utilities workforce

- Asset planner
  - Annual capital budget
  - Historical maintenance schedules

To utilities workforce of the future

- Smart grid scientist
- Drone inspection service provider
  - Predictive risk identification
- Market optimization engineer
  - Dynamic market conditions
  - Real-time analysis
- Asset engineer | Asset planner
  - Asset health + market forecast

Invest in specialized skills for distribution asset investment planning

- Supply / demand modeling and forecasting
- System design and engineering
- Strategic risk management

Scenario: Marketing a new utility service

From traditional utilities workforce

- Marketing
  - Static customer insights
  - Annual campaigns
- Customer service representatives
  - Inbound customer inquiries
  - Services upsell

To utilities workforce of the future

- Crowdsourcing facilitator
  - Real-time customer insights
- Digital marketing
  - Dynamic campaigns
  - Digital channels
  - Cloud-based programming
- Customer service representatives
  - Complex customer interactions
- Cognitive agents
  - Seamless promotions
  - Inbound and outbound interactions

Invest in specialized skills for marketing a new utility service

- Digital campaign design / channel management and marketing
- Human interaction and experience design
- Digital media cognition
The traditional utilities employee value proposition—a non-renewable resource

Bringing in a new crop of employees with relevant skills requires another shift for utilities—around the employee value proposition. The utility industry’s focus on stability, lifetime employment and good pay does not align well in a job marketplace where 69 percent of recent college graduates say they prioritize work environment over salary. Additionally, the traditional employee value proposition creates a financial challenge, with high fixed labor costs that do not leave much for investing in the needed culture change.

As utilities shift their business models, addressing the employee value proposition early in the transformation process is essential. A worst case scenario would be a utility expending time and effort to recruit digitally-minded people, only to have those people leave quickly because the utility’s traditional value proposition does not reflect the employee experience they value.

To resonate with a digitally-savvy workforce, utilities will need to foster a work environment that enables flexibility in how and where work gets done, values diversity and enables collaborative networks. Next generation employees are looking for flat, team-based structures, and opportunities to grow through skill development and be rewarded for innovation.

Several elements essential to the new employee value proposition are antithetical to the current prevailing one. Finding a balanced approach that can attract new employees without alienating existing high performers will require thoughtful collaboration between leadership and human resources.

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Re-energizing the utilities workforce

To ensure a bright future, utilities leaders will need to build a new utilities workforce of the future that is digitally savvy, equipped with the right skills, mindsets and behaviors to fuel growth, and able to flex to meet demand. Preparation needs to start now, and it needs to start at the top.

**Build workforce into your strategy**

Digital can help shape the business, but only with the right skills driven into all areas of the operation. That is why any strategic exercise needs to include a forward-thinking workforce strategy at its core. For example, do utilities continue to invest in cyber security expertise in-house or do they partner with rapidly emerging third-party specialists that bring advanced intelligence technology and analytics experience? With a thoughtful approach, utilities executives will find opportunities to redirect savings gained through a smaller workforce and a more dynamic value proposition into continuous innovation from digital technologies and capabilities.

**Re-skill from the top**

The crisis of the aging workforce in utilities often focuses on line workers, asset managers or engineers. Equally important to future growth, however, is having the leadership to be able to create and sustain significant organizational change. For example is your leadership team ready to empower crews to make decisions about work given information generated from a machine? Effectively running a re-envisioned utility means leaders must get better at working across internal and external siloes. They need to develop effective partnerships with service providers in other industries, and find ways to connect with employees and new stakeholders as well as old. Successful leaders will be dynamic, creative, collaborative, and capable of seeing the transformation through.

**Power up a new employee experience**

If a utility’s workforce strategy is at the heart of the business strategy, then the employee value proposition should be at the heart of the workforce strategy. For example, will new hires be given access to digital gamification learning technologies they have come to expect or will they be forced to fit into the existing utility mold? From recruiting and training to promotion and retention, every aspect of the employee experience should be considered and aligned to the priorities of the shifting workforce. This may require rethinking the mission and skillsets of the HR department as they make the needed shift from back office compliance to a proactive business partner.
Organizations in all industries talk about the workforce of the future. In utilities, the future is unfolding now. With strong leadership and a solid strategy for leveraging digital capabilities—both human and technology—utilities have a great opportunity to build an agile organization ready to ride the continuous current of change.
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Notes:
2 These initiatives included restructurings, acquisitions, technology implementations, cost reductions, downsizings, and new product entries. The organizations studied were across a wide range, spanning 50 industries and 25 countries.
3 "Recombination at Rio Tinto: Mining at the push of a button," by Robert J. Thomas, Alex Kass and Ladan Davarzani, Accenture, 2014.