The Aging Utility Workforce
Business Impacts, Technologies, and Material Strategies
to Address the Challenges

Kim Gaddy
Senior Analyst
Utility Analytics Institute

Mechele Herres
Solutions Marketing Manager, Utilities
Interactive Intelligence, Inc.
Contents
Introduction ........................................................................................................................................ 3
No urgency to replenish the labor force ......................................................................................... 4
New technologies are the bigger hurdle ......................................................................................... 4
Utilities must manage corporate knowledge better ........................................................................ 4
Difficult questions are forthcoming... and soon ............................................................................. 5
Q&A with the Experts ..................................................................................................................... 6
1. What are the major impacts of an aging workforce? ................................................................. 6
2. Do existing human resource policies need to change? ............................................................ 7
3. How can technology help bridge the gap? .................................................................................. 9
4. Is your organization experiencing a rapidly changing workforce first-hand? .................... 10
5. What are the business process implications? ......................................................................... 10
6. What obstacles have you encountered? ................................................................................... 11
7. What are your immediate and long-term plans to address the loss of critical players? ........ 12
8. What approaches can utilities adopt to appeal to the next generation of workers? ............. 13
9. What best practices advice would you share? ....................................................................... 14
The Authors .................................................................................................................................... 15
Our Panel of Contributors .............................................................................................................. 15

Copyright © 2013 Interactive Intelligence, Inc. All rights reserved.
Brand, product, and service names referred to in this document are the trademarks or registered trademarks of their respective companies.
Introduction

Fact: The utility industry’s workforce is aging, and according to industry analysts at Ovum, it’s a growing concern to utilities worldwide.¹ The concern — and risk — is “brain drain,” and utilities are witnessing it at an increasing pace as long tenured employees begin to retire. These are people who’ve amassed years of experience and who have a deep-seated understanding of the industry, and their departure is leaving a void of knowledge.

Compounding the issue is that the utility industry in general has failed to recruit new talent to replace this aging pool of expertise. Over the last 20 years in particular, utility companies in the US have failed to look ahead and now employ a much higher percentage of workers aged 45-64 than all other US industries combined (Figure 1). Look ahead 10 years, and workers in this age group will be exiting the workforce with very few experienced employees to step in and replace them.

![Figure 1. More than half of the US utilities workforce are aged 45 or older (source: BLS Population Survey 2010, Ovum report #OI00139-044)](image)

A similar situation has emerged in utility sectors globally. In findings comparing the European utilities industry to all others in that part of the world (Figure 2), for example, nearly 30 percent of the utilities workforce is between the ages of 50 and 59. Of this group, 32 percent will retire in the next 10-15 years. While workers in this age range are currently leading the global utilities industry knowledge brigade, they’re also set to contribute most heavily to the brain drain problem.

---

¹ 2013 Trends to Watch: Utilities Technology (IT002000242), Ovum, Oct 2012
No urgency to replenish the labor force

There are a number of reasons why utilities companies have failed to replenish their labor force with younger workers, both in the US and worldwide. But a leading cause is the common industry practice of “jobs for life,” in which specialized, nontransferable skills in engineering have led to lengthy employee tenure and low staff attrition. Succession planning therefore has remained a minimal priority for most utility companies, and any planning for recruiting, onboarding, and training new employees has largely been inadequate.

New technologies are the bigger hurdle

At the same time, the utilities industry has been slower than other sectors to adapt new technologies like mobile communications and business process automation to make operations more efficient. This trend is changing as some utility organizations are finally turning to these kinds of tools, although older generation workers generally remain hesitant to warm up to them. Of course, not all employees of an older generation are averse to new technologies. Some workers in this age group have adapted quite well to new electronic and mobile technologies, and use them to their advantage every day. But more often, older employees find technology to be intimidating when they aren’t familiar with it. Beyond email and the telephone on their desk, these employees are less inclined to learn about and use technologies like smart metering or a content management system because they view them as being complex.

Utilities must manage corporate knowledge better

Ovum’s 2013 report on utilities trends and technology points out that while the industry’s aging workforce has “disparate effects on utilities,” the issue also impacts technology companies that cater to the industry. Most important for these vendors, Ovum says, is understanding the requirement utilities organizations have to improve how they manage corporate knowledge. This requirement has set the stage for
technologies like business process automation (BPA), content management and other similar solutions within the utilities sector. Moreover, BPA and knowledge management can help utilities mitigate the effects of retiring workers, in that technology provides the bridge to managing knowledge moving forward. In fact, utilities organizations that have implemented BPA and knowledge and content management systems, and that are capturing information and knowledge more effectively by using solutions such as workforce management (WFM) systems, are finding technology to be an effective and sustainable alternative for halting brain drain.

Yet as Ovum also warns, with thousands of experienced employees still expected to leave the industry over the next decade, implementing knowledge management technology alone may not suffice. It is urgent, then, that utilities organizations automate the business processes most at risk from employee retirements, a risk that’s most prominent on the operations side of the business.

Difficult questions are forthcoming... and soon
The average age of workers in the utilities industry has been trending upwards for the past two decades, and while economic conditions have delayed their retirement plans, the day is coming that many knowledgeable, specialized employees will finally walk away. As an industry, are we prepared?

Utilities organizations worldwide must address several key issues soon, and do so in an expedient manner. Tops among them:

- Steps to take to avoid the loss of valuable institutional memory
- Effectively backfilling critical positions, those with the highest retirement rates
- The industry itself attracting and retaining a new generation of workers
- Improving internal collaboration among disparate business units, and within the utility culture

Finding solutions to these and similar issues will demand a comprehensive approach. Some solutions will come in the form of innovative new human resources policies. Other solutions may stem from best practices adopted by other industries dealing with similar concerns. But ironically, many solutions for reversing the aging employee trend could circle back to technology. Consider, for instance, that new knowledge and document management systems can help protect against brain drain, with business process automation playing a major role. Utilities are beginning to use data and process automation tools to trigger, prioritize, and route tasks and to drive needed communications to employees and customers. Business process automation: 1) simplifies the human technology interface for those less comfortable with newer technologies, 2) reduces the risk of errors or delays and guides new employees lacking in experience to take the correct actions in a timely fashion, and 3) increases overall operational efficiency, minimizing the number of employees that will need to be replaced. To these distinct extents, process automation tools offer solutions to many facets of the aging workforce challenge.
Q&A with the Experts
Offering their perspectives on the aging utility workforce are utility industry human resources professionals, Angelique Keavney of Idaho Power and Dawn Miller of Sacramento Municipal Utility District. Also on our panel are Joel Gallagher, a contact center manager at Citizens Energy Group and Roberta J. Fox, chairman and Chief Innovation Officer of FOX GROUP Technology. Here are the panel’s responses to industry issues now considered to be most pressing.

1. What are the major impacts of an aging workforce? What aspects are you most concerned about?

Keavney: The impacts I envision can be divided into three categories:

1) *Replacing the knowledge.* We anticipate a significant exodus over the next five years. Nearly half of our workforce will be retirement eligible by 2018. Beyond backfilling vacancies, these employees have 30-40 years of knowledge that we need to capture.

2) *Turnover.* If we were to lose 40-50 percent of our workforce, the cost to hire and train new employees would be substantial.

3) *The ability of employees to perform physical work as they age.* Many positions are physically demanding. We’re experiencing an increase in injuries and health costs.

Miller: My biggest concern is losing scarce knowledge. We have a lot of legacy equipment and plants and rely heavily on homegrown knowledge. While I’m confident that we can keep up with new technology and grow new skills, running the business still requires legacy system expertise. I’m also concerned about the loss of specialized skills that may reside only in one or two people.

Gallagher: Early retirements are my major concern. We’re losing many senior subject matter experts who understand the business. The aging workforce doesn’t deal well with change, changes to technology or with technology in general. These employees tend to make a rather quick exit largely because they are unable to cope with change and the stress level. We often don’t get the chance to convince them to stay or offer more training. They decide to quit or retire and seven days later they’re gone.

Fox: The utility sector is a highly educated, high-knowledge-required sector. Some of the major impacts that I see include:

1) A shortage of people resources with the required education and experience

2) A shortage of sector knowledge tied to processes and procedures, and

3) Public safety risks related to poor business process documentation practices.
Utilities have an expensive and skilled workforce and that is true even for junior roles. Most utilities have a high percentage of engineers, project managers, and licensed trades. I was a field engineer in my younger days and had to obtain safety and knowledge certifications annually. It takes time and money to build and maintain that expertise. The job only gets harder as experienced employees exit, and I understand the challenges. The youngest employee at FOX GROUP is 42, and the oldest has been working for 45 years. It takes 10-15 years to develop the knowledge required. It takes 1,000 hours to train someone with 20 years of telecom experience to become a consultant.

2. **Do existing human resource policies need to change to address the realities of an aging workforce and if so how (for example, teleworkers, flex time, part time)?**

   **Keavney:** *To retain our aging workforce, we need to be more flexible. We’re receiving more requests for leave of absences and changes in the type of work performed though we haven’t yet received many requests for job share or part-time opportunities. We are viewing how we can develop career paths for aging employees in physically demanding jobs. We’ve considered flex time and telecommuting and found that our company is not built for teleworkers. Our jobs require collaboration, and it’s important for employees to be at work for meetings, to work on projects, and to be here for our customers. Plus, some aging employees struggle with the technology required for teleworking, so it hasn’t been as successful as we hoped.*

   *To attract and retain a new generation, we’re evaluating which policies may make us less attractive. Millennials value flexibility, don’t want 10-hour work days, want the opportunity to telecommute and want a collaborative work environment. We’re implementing the new technologies that Millennials believe necessary to perform their work. A good work-life balance is incredibly important to them so we’re asking, are we too rigid in our core working hours to attract and retain the best-qualified candidates?*

   What new hires expect is different from what existing employees want, even in benefits packages. We’re working hard to maintain our status as an employer of choice for both groups.

   **Miller:** *We have a good policy structure in place to start from. Part-time opportunities and job rotation exist in some places across our business. Flex time is role-specific (for example, employees in our power system operations work different shifts given the 24/7 operation). Our call center has a contingent of remote workers equipped to work from home in the event of an emergency. I see these types of things continuing and extending as appropriate. Not every job lends itself to any or all of these choices.*
The new generation is radically different. They want to work for something they believe in and expect a say in their career destiny. Electric utilities have not had to address these issues before, and some are not equipped to deal with these new expectations. We’re no longer hiring people who want to get into a job that is secure for the next 30 years so we will need to adapt and make strategic policy changes to attract these workers.

**Gallagher:** We offer flex time and are looking at telecommuting and other options for our younger folks and the general population. Members of our aging workforce are more apt to say that these types of changes are “just too much for me.” The major issue for our aging workforce and for us is training. Stress management training, training on how to deal with change and longer training periods when technology changes or when we expose them to something new. It’s really on us to embrace them and help them embrace the change. We need to get ahead of the curve from a training standpoint versus dealing with it after the fact.

**Fox:** Utilities seem to be more rigid in sticking with traditional employment practices. My observation is that some utilities have not kept current and still rely on management and employment policies more characteristic of the 1950s, perhaps up to 1970s.

The telecommunications sector is starting to bring back engineers who’ve retired to work part time. Some may assume that a $100,000 engineer will expect a $100,000 per hour equivalent though that’s not necessarily the case. They may come back at much lower rate because that’s better and more fun than working part-time someplace for minimum wage. Utilities need to ask the question, why can’t they do the same?

I’m a former director of the Canadian Telework Association and have been a teleworker for almost 30 years. That’s one reason FOX GROUP is run as a telework-enabled virtual firm. It’s been interesting to develop the required processes, policies, and procedures. It has been an evolutionary process to develop the structure to support the fact that an employee may work 10 months of the year and then be gone for two months as a snowbird. The only way FOX GROUP has been able to attract its exceptional staff is because we offer part-time, flex-time, and telework opportunities.

Industries, like financial services, have adopted more progressive policies. From my vantage point, the utility industry is probably lagging the farthest behind. Our experience has been that when you encourage telework, part time, flex time or letting retirees come back in contract roles some utilities say, “We can’t do it; the unions won’t let us.” We work with the government and education sectors that are just as unionized and yet seem to be able to change. Other unionized sectors have adopted more flexible work policies, so why not utilities?
3. **How can technology help bridge the gap? Do you see business process automation, content management and knowledge management helping in particular?**

**Keavney:** We’re beginning to use technology to automate processes, potentially reducing staffing needs. To change an employee’s address or withholdings was once a manual, paper-based process. Employees now make these changes online. Ten years ago, linemen worked off of paper orders. Today, everything is tracked in a mobile workforce system that identifies the location of an outage or a meter change-out. Whenever a lineman leaves a job, they enter notes about how that job was handled and who performed what work. The next lineman picking up that work has access to that information. We’ve also implemented a tool that provides employees access to best practices documentation. Automation has come to workforce planning and we can forecast when an employee is likely to retire. Customers are also seeing the benefits as most transactions can now be accomplished online.

**Miller:** As employees retire or change jobs, we conduct in-depth interviews and use technology to capture that legacy information. Our learning development group is moving to “just-in-time” learning with the goal of delivering information when and where needed via the web, smartphones, or even YouTube videos. We are extending the use of the mobile data terminals in our trucks to enable field resources to access learning modules and content as needed.

**Gallagher:** Technology can definitely help. For example, we have a site that our associates use to look for the information that they need to do their jobs. This system was sufficient when we were just a gas utility. With the addition of a water and wastewater utility, we’ve recognized that the system is not returning the specific data they seek. We’re moving to a new platform that will enable them to locate the data they need in an instantaneous fashion. We hope to relieve some of the stress and frustration they feel when a customer is on the phone and they are unable to find the wanted information. We also constantly ask them to watch their call time, so streamlining customer interactions by putting needed information at their fingertips will make a world of difference.

**Fox:** Technology solutions can help bridge the gap. Laptops, high-speed Internet, tablets and smartphones are everywhere. Portable technology, web-based applications, and the ability to have remote knowledge workers as part of a managed and measured job role is a game-changer. The business models of some companies like the FOX GROUP and some industries like the airlines are founded on a distributed and mobile workforce. Everyone from engineers to customer service representatives can work from home, securely log on and access the systems they need to do their jobs. Business process automation, content management, knowledge management, and other technology solutions make it possible to extend the careers of current employees and attract and enable the effectiveness of new employees.
4. Is your organization experiencing a rapidly changing workforce first-hand? In what area of your company do you foresee the most impact?

Keavney: Yes, our workforce is changing overnight. Because of the retirement-based exodus, our culture has changed dramatically. We’ve hired one quarter of our workforce in the last five years. It’s incredibly difficult to replace an experienced engineer. Our cross-training program requires engineering leaders to work in another area for up to a year — a planning engineer may go work in transmission or construction. Entry-level engineers must do at least three cross trainings in other areas — on a line or stations crew, in accounting, planning, and so on to progress in their careers.

The goal is to ensure that we have broad-based entry-level engineers with a holistic view of the enterprise to replace the experienced engineers that we lose.

Miller: The economy has stymied the significant departure I expected, but it will pick up. About half of our employees will be retirement eligible in the next three years. Some levels and groups are impacted more than others. One group we’re watching is our IT group as the technology portfolio is changing radically and employees supporting our legacy systems are retiring.

Another population meriting close attention is our Power Supply and Grid Operations group. Workers are being courted to move between our utility and surrounding utilities and organizations like the California ISO and Western Area Power Administration. There’s limited expertise and much demand for that expertise.

Gallagher: Yes, and we’ve got two different age groups in our workforce today. We have the aging workforce, and the younger workforce. We are struggling with how we as managers merge these two groups to create a team that is going to be successful. These two groups have grown up in two different eras. We have some younger employees coming in with piercings and tattoos, and that may be off-putting to some of our long-standing employees. How do we get to a happy medium?

5. What are the business process implications and how will business processes need to change?

Keavney: New technology is driving process changes. Implementing new processes hasn’t been as challenging as gaining buy-in from our existing workforce on using and becoming proficient with the new tools. We are spending more time training aging employees. For example, newer customer service representatives are easily adapting to our new Customer Information System (CIS) while more experienced employees have struggled some.
When a longtime employee leaves, we document critical processes so that someone else can pick up and proficiently perform the work. We are also attempting to capture “water-cooler knowledge.” Long-term substation technicians know which boxes at which substations require a key and which have a keypad. New station technicians need that information. Almost every department now has a process documentation goal.

**Miller:** We’re using more bucket trucks to reduce climbing given safety concerns. Also motivated by safety, we decided to contract out vegetation management. We’re looking to streamline business processes, and we look for the outcomes to help us address aging workforce challenges and adapt to new technology.

**Gallagher:** For those employees who struggle with technology change, the simpler we can make things and the more training we can provide the better. We have a training scheduled today, and we’ve done much training over the last two years. Even so, perhaps we should have provided longer training periods for some of our folks, especially for those persons who left the business. Had we done it differently and provided one month of training instead of two weeks or provided more hands-on and side-by-side training, the outcome might have been different. We have lost many good people over the last two years due to change and the stress that it has created.

6. **What obstacles have you encountered while trying to deal with aging workforce challenges (financial, regulatory, union, and so on)?**

**Keavney:** Cost is the major issue. If I knew that someone in a critical position was retiring, I would replace that person six months early to enable cross training. However, there’s tremendous pressure from regulators to reduce costs. Our customers are struggling, and we are watching every penny. It’s an incredible balancing act as we attempt to replace critical resources. We must be careful to avoid any perception that we spend excessively on rich benefit or employee compensation programs. Simultaneously, we need to be an attractive employer, and we’ve got to keep on the lights.

The other thing is uncertainty. We don’t know when employees will actually leave. The struggling economy has affected employees’ decisions. We anticipate that the exodus might happen all at once as the economy recovers.

**Miller:** The bad economy and lower-than-projected turnover have slowed progress. I’ve been here almost 10 years and remember projecting that half of the workforce would be gone in five years, and they’re largely still here. We only have single-digit turnover, though this rate should increase as the economy improves. This will enable us to try even more new things from a process perspective. We may find it easier to hire and train new employees than retraining existing employees to adopt new technologies at their careers’ end.
We recently negotiated new contracts with our two unions, and everyone seems satisfied with the set of work rules adopted as they don’t appear to inhibit any of the changes that we need to make. We have great relationships focused on mutual success.

**Gallagher:** Primarily, it is getting the business support and the funding we need to provide the training and the tools that our folks require to be successful.

7. **What are your immediate and long-term plans to address the loss of critical players?**

**Keavney:** **Immediate:** Every day my team looks for opportunities to fill our pipeline with the most qualified candidates. It’s a timing issue as jobs aren’t always readily available. We spend time in K-12 programs and meet with students as early as sixth grade to discuss energy careers. As a community partner, we see it as our job to encourage students to take science, technology, engineering, and math (STEM) classes and to pursue technical trade or four-year degree programs.

We also have a strong paid internship program. Many students view the utility industry as dangerous, dirty, and dull. We want students to understand that technology changes are making this an exciting and fast-paced industry. Maybe these interns will choose to work for us and maybe they won’t. Our hope is that they’ll tell their friends how great our company is and how terrific the industry can be. We also have a cross-training program to introduce our bright, career-minded employees to jobs across our company.

**Long-term:** We’re putting processes in place to ensure that leaders are thoughtful about whether to backfill and with what skill set each time someone leaves. Utilities face a huge skills gap in the next 5-10 years. If we don’t do a good job building our pipeline, it will be difficult to keep on the lights. We need to ensure that: 1) we’re an attractive employer of choice 2) qualified graduates are ready to join us, and 3) current employees have the skills to fill critical and leadership vacancies as they occur. All three of these things are absolutely imperative.

**Miller:** **Immediate:** An individual on my staff is dedicated to pipeline development and coordinates efforts across the organization. This person works with the educational community (high schools, trade schools, and colleges) to influence the curriculum and develop the needed skills. The lack of STEM education creates a pipeline gap for us. We want to cultivate relationships with facilities and students and change the perception that working for a utility means climbing a pole.

**Long-term:** Our goal is to expand successful programs implemented to even more districts across our service territory. We are also evaluating our practices for replacing critical players. Fortunately, we hired skilled employees when the supply was more plentiful. Going forward, I see growing needs and fewer candidates. The scarcity of power engineers is concerning. The demand from California utilities and related entities is forecast at four to five times the number of graduates in California each year. So, I want to work on us being more comfortable hiring those new graduates and building their skills internally rather than hiring them ready-baked.
Another focus is finding people who naturally gravitate to fields that require flexibility, appropriate risk taking, and adaptability to constant change. Many engineering graduates are comfortable with the black and white and less so with the now constant shifts in our industry.

**Gallagher: Immediate:** We are constantly recruiting for new faces. We don’t have trouble finding candidates partly because of Citizens Energy Group’s reputation in the community, though it is hard to identify those persons who are truly interested in a contact center role versus just a path into the organization. I need someone who is passionate about customer service and technically savvy. We seek individuals with a broad skill set who want to help our low-income, senior citizen, and environmentally conscious customers.

Citizens’ core values are important to us, and we stress them to new employees. It’s not just a matter of finding a qualified candidate. We ask specific questions in the recruiting process to identify specific individuals who meet our core values. We do multiple phone screens and phone interviews. We rely on agencies to conduct behavioral interviews and have found those interviews to be most beneficial. Once we find a good candidate, it’s my goal for that candidate to become a long-term contact center employee. We devote as much training as needed to get new employees where they need to be. In the short term, the focus will be on providing new hires with the training and tools they need.

**Long-term:** Our entire business needs to embrace the culture change. Baby boomers are nearing retirement. If we want to retain and keep our subject matter experts engaged, our entire company needs to be thinking about how to make that happen — whether that is more training, giving individuals special opportunities, and so forth.

8. **What approaches can utilities adopt to appeal to the next generation of workers?**

**Fox:** There’s a misperception that the only jobs are being a lineman or working in a nuclear plant. There are all kinds of funky and cool utility jobs. The industry needs to do a better job of education. There are a wide variety of roles, and the vast majority of them do not involve dealing with high voltage or climbing a pole even though that may be the perception of many.

Millennials are all about flexibility: location-flexibility, hours-flexibility, and job flexibility. They are intrigued by the chance to use cool, next-generation technologies. The best thought leadership folks in my company came after me. We work remotely and offer flexible employment options. We provide a test lab and video capabilities and give employees the opportunity to play with the latest tools.
9. What best practices advice would you share?

Fox: Utilities should consider:

- **Job shadowing**, offering new hires the chance to work with an experienced employee. This type of mentoring would appeal to many younger employees.
- **Cross-training and job rotation**, at one time a standard practice in the telecom industry.
- **Job reassignment**, to speak to the flexibility expectations and short attention spans and desire for job changes every year or so that characterize Millennials and to address the needs of aging workers. For example, my brother-in-law was a hydro lineman and installed large ducts and vents in a nuclear factory. As his job became more difficult with age, he pursued, secured, and excelled in a purchasing and procurement role.
- **Every opportunity to leverage technology**, to capture the invaluable institutional memory and experience residing in the aging workforce, automate business processes and support the training of both new and aging employees.

Knowledge must be transferred to the next generation of workers. Another part of the equation is that many critical processes and procedures haven’t been documented. While it will require investment to resolve this issue, it is essential to ensure that the knowledge is not lost forever.

Management needs to work with unions and sell alternative work styles. I asked my brother-in-law, a former union steward, whether he would have considered going back to work after his retirement. He said, “Absolutely, in a heartbeat, as long as I could sit behind my computer and work half days or maybe 8-10 months a year.” And he’s confident that he could have sold the idea to fellow union members; but, no one ever asked. In his purchasing role, he was responsible for specialized steam fitter and HVAC components. The utility ran into problems after his departure. Errors were discovered, and he was asked to return for a couple of weeks to correct the mistakes. Those mistakes and associated downstream impacts resulted in negative financial repercussions for the utility. If the utility’s employment practices had been more flexible, those errors could have been avoided, and his 30 years of experience could have been retained.

Don’t benchmark against other utilities; instead, look to other sectors requiring specialized knowledge like telecom or finance. You may be surprised and uncover something unexpected that will pay significant dividends. Learn how JetBlue has built a flexible and adaptable workforce and has achieved the lowest cost of distribution and the highest customer and employee satisfaction in the airline industry. They have used all kinds of tools, applications, and technologies to achieve their success. To find innovative new ideas, look to other industries that share similar characteristics and face similar challenges.
The Authors

Kim Gaddy is an analyst supporting several research initiatives at the Utility Analytics Institute. Previously, she was senior director, client solutions for Vertex Business Services. Kim has expertise in advanced analytics, demand side management, and customer management services, plus more than 20 years of experience in the utilities and telecom sectors. Earlier in her career, Kim held leadership positions at AT&T in product management, regulatory affairs, and sales. She holds a BBA from Texas Tech University and an MBA from St. Edward's University.

Mechele Herres is focused on the utilities vertical as a Marketing Solutions Manager at Interactive Intelligence, a role she has held since November 2011. Her experience in the utilities industry also includes previous positions at Columbia Gas and Time Warner Cable Business Class. With additional time at IBM and Cardinal Health, Mechele’s career has spanned roles in marketing, sales, sales training, and product development and management.

Our Panel of Contributors

Roberta J. Fox
Chairman and Chief Innovation Officer
FOX GROUP Technology

As a senior technology management consultant, Roberta has worked with a number of utilities, enterprise organizations, manufacturers, and service providers throughout Canada. She helps these companies develop technology strategies and services for next generation voice, data, VoIP, unified communications, contact center, and other IT and telecom solutions. She also is actively involved in several leading professional associations geared to advancing the use of telecommunications technologies for Canadian organizations, and participates regularly in telecom industry analyst and consultant advisory councils where she provides guidance on emerging technologies and trends throughout North America.

In addition to her current role at FOX GROUP, Roberta’s 30-year career includes having held director and senior level positions at AT&T Solutions, Deloitte Consulting, EDS Canada, Hewlett Packard, and Citibank Canada. As an accomplished author, she has written or commented in hundreds of articles in business and technology publications throughout Canada, the US, and internationally. Her new book, 101 Telework Tips – How to succeed in the virtual world, is set to be released in early 2014.
Angelique Keavney  
*Human Resources Leader*  
Idaho Power

Angelique joined Idaho Power Company in 2006 as a Human Resources Leader, where her primary responsibilities currently include talent acquisition, diversity and K-12 outreach, workforce planning, and on-boarding. Prior to joining the Idaho Power team, she spent six years in the staffing industry with a focus on recruiting and workforce planning. Angelique sits on several education advisory boards including the Governor’s Science and Technology Roundtable, Meridian School District’s Technology Advisory Committee, Skills USA, and I-Stem.

Dawn Miller  
*Manager of Organization and Workforce Development*  
Sacramento Municipal Utility District (SMUD)

Dawn is Manager of Organization and Workforce Development for SMUD, and leads a team chartered to help envision and create the SMUD organization “of the future” while also providing tactics to develop the current workforce. She joined SMUD in 2004 as a Change Management Specialist, within SMUD’s Business Technology Unit. Prior to SMUD, Dawn served as Director of Human Resources Development for Longs Drug Stores, a California-based retail chain, where she led training and internal communications functions and created the chain’s Organization Development practice. Dawn is a graduate of Pepperdine University, with a Masters of Science in Organization Development.

Joel Gallagher  
*Manager of Contact Center*  
Citizens Energy Group

Joel is the Manager of the Residential Contact Center with Citizens Energy Group. She has 24 years of experience in the customer service and client relationships fields, focusing on the utility industry’s diverse group of opportunities. Joel began her career with the City of Indianapolis, Department of Public Works, where she built a foundation in customer service, billing, and revenue assurance for the wastewater utility. She then spent a good part of her career with Indianapolis Water, working for the nation’s largest public-private partnership involving a water utility. Joel has been with Citizens Energy Group since August 2011.