# Staying ahead in an era of game-changing customer transformation





## The roundtable

Top executives and experts from different parts of the power & utilities sector gathered in May 2014 in Washington DC, US for PwC's roundtable on the customer transformation challenges facing the industry. The moderators and speakers were:

Jim Curtin	US Customer Transformation Lead, PwC
Laurie Giammona	Vice President – Customer Service, Pacific Gas and Electric Company
Ryan Hyman	Chief Information Officer of The Laclede Group
Michael A. Innocenzo	Senior Vice President and Chief Operating Officer, PECO
Dustin Johnson	US Digital Change and Social Business Managing Director, PwC
Michael T. Jones	Chief Technology Advocate, Google
Alex Laskey	President and Founder, OPower
Gregg E. Lawry	Vice President – Customer Service, Alliant Energy
Andy McKenna	US Customer Experience Managing Director, PwC
Steve Mullins	Smart Energy Global Leader, PwC
Indran Ratnathicam	Director of Marketing, First Fuel
Samudra Sen	Vice President, Performance Excellence, TXU Energy
Norbert Schwieters	Global Power & Utilities Leader, PwC
Jose Antonio T. Valdez	VP and Head of Marketing and Customer Service, Meralco
Hirokazu Yamaguchi	Senior Manager of Corporate Management Reform Division, TEPCO

### Introduction

The world is using more and more electricity but many power utility companies face a huge challenge to their traditional business model. Introducing the roundtable event, Norbert Schwieters, PwC's Global Power & Utilities Leader, observed, "Several factors – new renewable technologies, IT solutions, customer demand, and government carbon and renewable policies – have created a perfect storm for utilities, putting pressure on traditional business models, decentralised investment decision-making and revenue-generating activities."

A sensible mantra might be "in a storm, hold onto your customer." But customers are at the heart of the storm. In fully liberalised markets, they've always been able to switch utility providers, causing major churn problems for companies unable to hang onto customers. But now they can begin to leave the utility provider behind, generating their own power and saying goodbye, in part at least, to the grid.

We're seeing a new generation of 'prosumers' - customers who are both consumers and producers. It's a doublewhammy for utility companies, as they buy less power but cost more to serve due to increased complexity. And the new grid volatility that comes from renewables means companies need to engage with customers more to get them to buy into demand management programmes.

The challenges that this dynamic brings is set to spread. Schwieters pointed out: "Although this new development in customer behavior is currently limited to a number of more mature markets, it is plausible to assume that this trend will spread to other developing markets."

The transformation that is taking place in the industry is intensifying the importance of power utility companies getting their customer management strategies onto the very best footing. We focus our summary of the roundtable discussion on:

- · looking ahead to what the 2025 customer relationship will look like p4
- the changing expectations of customers p6
- engaging with change how can utility companies respond? p8

#### **PwC** viewpoint: Developing the right engagement strategy

"Change is happening and utilities have to take a clear view on how they are going to be part of it or, even better, get ahead of it. Understanding the customer base, meeting their expectations in this new environment and tailoring the message to individual customers are priorities that can deliver disproportionate value for customers and utilities."

# Looking ahead to the 2025 customer relationship

Much of the discussion at the roundtable focused on what the future holds for customer relations in a transformed power utilities environment.

Maintaining and growing the customer relationship is going to be all important if companies are to navigate the changes ahead. "Utilities have to create a sticky relationship with their customers today to stay relevant tomorrow," observed Alex Laskey, President and Founder of OPower.

OPower describes itself as "the global leader in cloud-based software for the utility industry," using a combination of "a cloud-based platform, big data, and behavioural science to help utilities around the world reduce energy consumption and improve their relationship with their customers." Its growth is an example of the change taking place in the industry. It partnered with its first utility client in 2007 from a rented desk in San Francisco. It now works with 93 utility partners, including 28 of the 50 largest US electric utilities, reaching more than 52 million households and businesses across nine countries.

#### A new industry landscape

The emergence of a new name in the power industry arena reminds us that the right to be a name in any industry landscape always has to be earnt. Sears Roebuck, Kodak and Blockbuster are past big names that dominated their sectors but didn't stay relevant to their customers. "They are examples of companies at the top of their game that crashed," Laskey pointed out. "They had the assets in place to succeed but didn't take the risk to move forward."

So is the 2025 power utility customer going to be taking their business to quite a different set of industry names? Quite possibly if recent press reports are to be believed. "The battleground over the next five years in electricity will be at the house," David Crane, CEO of NRG Energy, told Bloomberg Business Week. "When we think of who our competitors or partners will be, it will be the Googles, Comcasts, AT&Ts who are already inside the meter. We aren't worried about the utilities, because they have no clue how to get beyond the meter, to be inside the house."

NRG Energy is running a trial in Pennsylvania that adds electricity to the traditional cable, phone, and internet triple-play package in collaboration with Comcast. The wider cross-selling potential is enormous. Comcast had a total of 26.8 million customer relationships in the first quarter of 2014 which is a big customer base to exploit.

"You're not going to be able to exploit opportunities without the customer in the middle."

"All electronic devices will talk about their power needs to an aggregator and you can have an auction for the power for each one."

#### Google and the power of information flows

The roundtable heard directly from another 'new name' interested in the utilities arena. Google has committed over US\$1bn to wind and solar energy projects. Some of this is used to power its own activities. It reports that it is using renewable energy to power over 34% of its operations. But Google's main business proposition is as "a global technology leader, focused on improving ways people connect with information." And it is through this lens that it is building its position in the energy arena.

Addressing the roundtable, Google's Chief Technology Advocate Michael T. Jones described the internet as "machines talking to machines. It can develop in all sorts of ways whether it is components on a 747 or your roof tile sending an SMS saying 'replace me, I'm starting to leak'." Moving on to the world of power, he observed: "All electronic devices will talk about their power needs to an aggregator and you can have an auction for the power for each one. All you need is someone to identify what the rates are."

Google already holds a wholesale power license in the US. Its January 2014 acquisition of Nest Labs for US\$3.2bn also gives it a position in home automation with ownership of a company that has built a position selling thermostats and smoke alarms for the home. At the time of the acquisition, Tony Fadell, CEO of Nest, said: "Nest will be even better placed to build simple, thoughtful devices that make life easier at home."

#### Existing utility strength

So how should power utility companies view the Googles, Comcasts and AT&Ts of this world? Clearly there are partnering as well as competitive opportunities as companies get to grips with the era of smart homes, smart grids and smart cities. OPower's Alex Laskey reminded roundtable participants that utility companies should be able to play from a position of strength. "Look at their assets," Laskey pointed out. "There are five core assets to take advantage of infrastructure, data, channels to market, brand awareness and customers."

All of these assets provide utility companies with considerable opportunities to make themselves relevant to customers. But to really capitalise on them, companies have to engage better with the customer. We report in more detail on how roundtable participants think this can be achieved in the following sections.

#### **PwC** viewpoint: Getting ahead of customer needs

"Utilities have important questions to address in the current market? What are the best market propositions? How can they best transform business process to better align with where they need to be? How can they become great at managing customer data and being right at the forefront of customer needs?"

Jim Curtin, US Power and Utilities Customer Practice Leader, PwC

## The changing expectations of customers

"The age of the customer has finally arrived for utilities. It's a digital era where old habits have gone. There's a real need to personalise the service and anticipate what the customer wants," observed Samudra Sen, Vice President, Performance Excellence, TXU Energy as he addressed the roundtable.

> TXU Energy is the market leader in the retail electric industry where more than 50 companies compete for the right to provide electric services to households and businesses in Texas. "We had to figure out how to stand out," said Sam Sen, TXU Energy's VP of Performance Excellence. The result has been a series of innovations - and firsts - for TXU Energy's customers including a web-enabled thermostat (Brighten iThermostat), a true time-based product that offers free electricity (TXU Energy Free Nights) and a mobile app that gives consumers 24/7 access to their online account which allows them to monitor usage and make payments on the go.

## PwC viewpoint: Think smart about customers

"Two way communication lies at the heart of smart grid technology. Its effectiveness, though, relies on such communication translating into behaviour change. Even with smart grid technology in place, customers have to be won over and there are many trust and other barriers to overcome along the way. Customer's smart experiences have to be motivating experiences for smart grid investments to deliver the best returns."

Steve Mullins Smart Grid Leader PwC

#### Raised service expectations

Mike Innocenzo is the Chief Operating Officer of PECO, part of Exelon and one of the oldest and largest utility companies in the US, serving customers in the Greater Philadelphia area. "We're finding that our customers want more information from us – but only when they want it and in ways that reflect how they want to receive it," said Innocenzo.

He observed that customer expectations of utilities are being driven by their wider consumer experiences, "In today's world our customers are having advanced customer service experiences with many other companies – they can order almost anything online and have it delivered practically the next day, they can receive call backs when someone is ready to assist them rather than waiting on hold, and they can text their order to a restaurant before they even arrive. They're expecting the same level of service from their utility."

It's a viewpoint that was reinforced by Ryan Hyman, Chief Information Officer of The Laclede Group, "Customers are changing and expecting to interact with us like they can with Amazon. We have to respond and move with that." Hyman stressed the importance of community involvement and IT transformation. Like other companies, both Laclede Gas and PECO are investing significantly in customer relations. PECO's Innocenzo said, "A great deal of effort is underway to establish what we are calling a 'customer preference center' so customers can tell us what information they want to receive and how they want to receive it - text, phone, e-mail, etc."

#### "We realised that we needed to communicate to customers not to market to them."

#### **Testing times**

Outages are times that really put customer communications to the test. PECO's Innocenzo pointed out: "On most days our customers don't think of us - they flick the switch and lights go on, they turn the knob and the gas flows. But, when those two things don't happen, not only are we their first thought, but they usually are not very happy."

If the cause is very severe weather, customers don't necessarily blame the utility company, fully appreciating the weather conditions. But they do expect realistic and reliable information about when service is likely to be restored so that they can plan accordingly. It is not always easy for utilities to know this early enough to satisfy customer expectations.

In PECO's case a recent winter storm has led them to reevaluate how they manage customer information in such situations. "After the February ice storm, we are spending a lot of time working with others in the industry to determine how to provide even more accurate information to customers when they are without service," said Innocenzo.

#### The ultimate test

The customer relations challenge facing Japanese TEPCO is of the very highest order following the emergency at the Fukushima nuclear power plant. "We suddenly became a villain," recalled Hirokazu Yamaguchi, TEPCO's Senior Manager of Corporate Management Reform Division. "The number of people who trusted TEPCO went down from 90% to less than 10%. And that number has not improved in the three years after the earthquake."

"Restoring trust and strengthening customer engagement is our first priority," said Yamaguchi. The clock is ticking away for TEPCO to do that. As part of the post-earthquake energy reform plans announced by the Japanese government, he explained the residential market will be open to competition from 2016: "Other utilities intend to compete in the Tokyo area and we expect telecom companies and gas companies to enter the market." TEPCO is embarking on a range of changes to improve its offer to customers. Hitherto, Japanese gas and electricity retailing were separate but TEPCO is to start retailing gas alongside electricity.

Much of the strategy of Yamaguchi and his colleagues is geared towards being a partner to customers in managing their home energy: "We will be recommending household appliances such as energy efficient heat-pumps, induction heating cooking heaters, roof-top PV and even help customers renovate their homes." TEPCO is also teaming up with OPower to boost its customer relationship work. "I am pretty confident that by working with OPower we will be able to communicate with each customer better and start regaining trust," said Yamaguchi.

#### Rebuilding trust

In California, Pacific Gas and Electric Company (PG&E) is also focused on re-earning customer trust following a tragic accident. The San Bruno gas pipeline explosion and resulting fire in 2010 killed eight people and injured 58. The accident destroyed 38 homes.

PG&E's very publicly stated goal is to transform the 100-plus-year-old system into the "safest and most reliable natural gas system in the country." To achieve this goal, the company has been investing in a multi-billion-dollar infrastructure modernisation programme. Equally important to the company's success in re-earning trust is that customers are aware of the company's efforts.

To this end, PG&E has also invested in a communications programme that has improved the clarity of the company's message and the frequency with which customers hear it. PG&E's proactive programme includes television, radio, print, direct mail, digital and other channels. The company is also using social media channels to encourage two-way dialogue with customers. "Our focus is on transparent and authentic communication," Laurie Giammona, PG&E's Vice President - Customer Service, told the roundtable.

The efforts appear to be working. Key metrics that the company uses to assess customer satisfaction, brand favourability and trust are all back at pre-accident levels as the company approaches the fourth anniversary of the event.

"Customer expectations of utilities are being driven by their wider consumer experiences."

# Engaging with change – how can utility companies respond?

There was consensus among roundtable participants that a big challenge for utility companies is to become more relevant to customers. And that means looking for opportunities to provide them with services they want in ways that they want. Much of the discussion was on the importance of personalising the customer relationship.

Mobile communications offer important opportunities for such personalisation as the example of Meralco in the Philippines demonstrated. "Despite low incomes, Manila is the text capital of the world, with innovative telcos. The youth are internet savvy. For these customers translating the mobile prepaid experience to power is a no brainer," explained Jose Antonio T. Valdez, Meralco's VP and Head of Marketing and Customer Service.

#### Mobile apps

With over five million customers, Meralco is the largest electric distribution utility in the Philippines. At the beginning of 2014, the company began piloting what Valdez says is "probably the world's first prepaid electricity service integrated with the mobile network." The 'MeralcO Virtual Engine' is an app suite with six apps giving round-the-clock access to Meralco's services through smart phones or tablets.

Meralco is also taking the first step to developing a smart grid backbone. "This is a game-changing transformation of the business and operating model," said Valdez. "With tightening targets there is a need to leapfrog efficiencies by automation. Based on our research we think customers will want an intelligent meter. In the information explosion era, customers demand real-time information on their consumption, outage locations and estimated time of restoration. At a time when everything is an app the customer experience needs to be seamless."

## Shifting into positive engagement

OPower's Alex Laskey observed that one problem is that "most typical utility customers today interact at moments when they feel discontent. Engaged customers, on the other hand, actively participate in utility innovation." Moving the customer relationship into positive engagement territory involves personalising the relationship. "Customers need to be empowered, with personal insights and consistent feedback so that they perceive their utilities as providers of trustworthy information interested in helping them save money," said Laskey.

Energy efficiency (EE) and demand response (DR) programmes are one opportunity to shift the customer relationship. An example is OPower's work with Baltimore Gas and Electric Company (BGE). BGE operates energy saving programmes designed to manage electricity use during summer peak hours when energy use is high. The emphasis is on easy, low- and no-cost tips to help customers save energy and money. Text messages are one part of a range of customer interactions designed to engage in a personalised way with customers.

Laskey also sees distributed generation as a "huge opportunity for utilities to gain a competitive edge. The solar companies do not have the data, brand or channels that utility companies have and they have to spend a lot of money on customer acquisition. But utility companies can't afford to wait or the battle will be too intense."

## Personalising the relationship

"Tomorrow is a peak event. As a reminder, you can save during these times. Last time there was a peak event, you earned \$10 and you can earn \$12 tomorrow."

Always, there is a follow up communication about how much was saved and a thank you for participating.

(Example of OPower text messaging to customers)

#### Helping customers save money

Much of the roundtable discussion centred on how companies can help customers save money and, in that way, engender loyalty. FirstFuel is a US-based company that takes its name from the proposition that energy efficiency is the 'first fuel' any customer should be using. First Fuel's software platform seeks to make energy efficiency easier for business customers. It uses thousands of data points about a building's energy usage, its physical dimensions and the weather in its location to calculate where and how the structure can cut its energy use.

The company's director of marketing Indran Ratnathicam explained that their focus is on business customers and much of their work is in partnership with utility companies: "We help utilities drive savings through the commercial portfolio and across the efficiency lifecycle. We're taking the meter data from our utility customers and using advanced analytics to help them engage with their customers, creating customer intelligence and outcomes that drive more effective customer programmes."

#### The importance of IT

Whether it is mobile connectivity, web-based tools or better use of data, companies need to have strong IT foundations in place. Many are struggling with outdated systems. The roundtable heard from Alliant Energy, a company which is part-way through a major overhaul of its customer information systems.

Alliant Energy is the result of a three-way merger in 1998 and after the merger, two of the three existing customer systems and business processes remained in place. Alliant Energy's vice president customer service, Gregg E. Lawry, outlined the extent of the change now taking place, "Our current customer systems are mainframe based and don't provide the capabilities to communicate with or engage customers as they would like (e.g. email and text). For some of our larger and complex customers we rely on manual billing and the use of spreadsheets. As well as the two end-of-life customer information systems, we have around 100 individual systems that have been added over the years to support customer needs."

Alliant Energy's MCIS Project is designed to standardise, consolidate, modernise and improve the way it serves its customers. "As we look to the future we want to have a consistent, common platform for how we provide customer service while engaging with our customers in their own individual way," Lawry explained to roundtable participants.

Implementing this change successfully is much more than technology, it's a cultural transformation. "It's important to focus on the people aspect and change management side of it," emphasised Lawry. "We need to help our employees work through that both the business processes and tools they use will change. Our employees are proud of how they used these old systems and the workarounds they've put in place to serve our customers." One aspect of changing internal culture is to ensure the change is rooted in customer preferences, "Customer research is key in helping our staff understand what our customer's preferences are and why we need to change."



A: It's about always realising that the customer is why we are here and making sure they are in our thoughts, vision and strategy for everything we try to do. Every decision starts with the customer. For example, if there was a customer sitting in the back of the room listening to us, would they agree with what we were doing?

A: Every manager must listen to calls. You can't be in the customer service business and not be in touch with the customers.

A: Innovative companies, like Mint are a good source so that consumers can see everything all on one app.

A: We need better apps for power outages. You can track a pushpin from here to China – surely we can do the same with energy delivery. Knowing the time of restoration sways customers' options. There's going to be some disruptive technology and our customers are going to demand that we can use that.

A: Well I am concerned about that. Will the platforms and foundations that we are hanging our hat on today be able to provide us the platform to move forward in 10-20 years?

A: Service oriented architecture allows you to plug in additional software. There's always going to be another disruptive technology that comes in like Facebook or Twitter and it will be up to us to leverage that for our customers.

#### **PwC** contacts

#### **Norbert Schwieters**

Global Power & Utilities Leader Telephone: +49 211 981 2153

Email: norbert.schwieters@de.pwc.com

#### **David Etheridge**

Global Power & Utilities Advisory Leader

Telephone: +1 415 498 7168

Email: david.etheridge@us.pwc.com

#### Jim Curtin

Customer Transformation Lead, US Telephone: +1 713 356 5188 Email: james.m.curtin@us.pwc.com

#### **Steve Mullins**

Smart Energy Global Leader Telephone: +44 753 205 8626 Email: steve.mullins@uk.pwc.com

#### Andy McKenna

Customer Experience Managing Director, US

Telephone: +1 978 846 1810 Email: andy.mckenna@us.pwc.com

#### **Dustin Johnson**

Digital Change and Social Business Managing Director, US

Telephone: +1 206 398 3857 Email: dustin.johnson@us.pwc.com

#### For further information

#### Olesya Hatop

Global Power & Utilities Marketing Director

Telephone: +49 211 981 4602 Email: olesya.hatop@de.pwc.com



© June 2014 PwC. All rights reserved. Not for further distribution without the permission of PwC. "PwC" refers to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL), or, as the context requires, individual member firms of the PwC network. Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way.