

ABSTRACT EXECUTIVE SUMMARY

Investor-owned utilities (IOUs), particularly electric utilities, operate in an environment today that is far different from the past, and the only certainty is more change is on the way. A myriad of factors are shaping the industry today - declining demand projections, evolving environmental policies, aging infrastructure challenges and, importantly, the evolving nature of consumers as they adopt new technologies and an increasingly digital lifestyle. Utilities must now evolve as well. IOUs need to guickly embrace adaptability, transform their offerings and tailor the value they provide to better fit changing customer expectations within the changing energy landscape. The key to surviving - or better yet, thriving - amidst the threats to the traditional, vertically integrated model lies in building strategic, collaborative partnerships with service providers that strengthen utility value proposition and fortify a position as a 'trusted advisor' to their residential customers. Utilities have lagged behind the Amazons and Ubers of the world in providing innovative avenues to improve customer satisfaction and convenience available with new technologies. Now, as a multitude of external issues and challenges reshape the landscape IOUs once considered familiar, progressive utilities are joining with innovative partners to bolster the suite of services offered to customers as a means of navigating the future successfully.

THE CHALLENGE & OPPORTUNITY OF OUR EVOLVING LANDSCAPES

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A number of factors affecting the utility industry over the last decade, both individually and collectively, have contributed to creating a difficult marketplace for IOUs to grow from a business perspective. While some of these obstacles are better observed from a macro level, the issues they pose challenge IOUs nonetheless, affecting their ability to serve and retain all customer classes, especially their residential customers.

One of the major issues electric utilities are facing is stagnant load growth - a problem

by 35% cited of utility executives as one of the top three pressing challenges facing their business, according to a recent survey¹ by Utility Dive. This dampened load growth is likely the result of significant societal and technological changes such as energy consuming hurting utilities becoming appliances more efficient. homeowners installing alternative energy sources such as solar panels, industrial demand falling sharply throughout the country and homeowners generally looking to save on their energy costs. A survey² recently released by HomeServe USA found that nearly two-thirds of Americans plan to take steps to make their homes energy efficient in the next year - with 86% of them citing cost savings as their biggest motivator.

With the recent surge in the availability, affordability and subsequent adoption of renewable energy sources, the U.S. saw the number of homes tapping into solar installations grow from 15,500 to 600,0003 from 2004 to 2014, with the average price of an installed residential solar system dropping by more than 60% over the course of the decade, largely driven by government subsidies. At the Bloomberg New Energy Finance Summit in April 2016, Michael Liebreich, founder and chairman of its Advisory Board, mentioned⁴ the amount of solar power being generated to power homes or offices has doubled seven times in the past fifteen years, with wind power doubling four times.

The drive to evolve from old to new goes beyond energy sources, with aging infrastructure being another area of significant concern for IOUs - especially as customers seek more reliability that requires grid modernization and the support of new technologies, including so called smart meters. Furthermore, the American Society of Civil Engineers gave U.S. energy infrastructure a D+ grade in 2013⁵ and a majority of utility executives named the aging infrastructure among one of their three biggest challenges¹.

If power utilities plan to successfully pursue a future in which their business thrives, it is absolutely vital that their value proposition to customers is reassessed and reinvigorated. Utilities must be prepared to

> treat their overall service offerings as continually evolving and constantly improving to better serve customers. Effectively achieving this change and transforming the dynamic of customer relationships can help position IOUs as invaluable to customers, as trusted advisors on the energy-related issues affecting them. For some IOUs, a path to achieving that goal means innovating through powerful, strategic partnerships that add value

- and truly meet the demands of tomorrow's energy consumers by collaborating and staying in step with-or ahead of their needs and expectations.

A PATH TO BECOME A TRUSTED ADVISOR

Above-Average

Return on Equity.

It is imperative that IOUs are proactive in seeking to address areas that enhance customer satisfaction. In so doing, it is often useful to flip the conversation and review the primary factors that negatively impact satisfaction and develop a plan to address and eliminate them. For utility customers, those factors largely revolve around cost and reliability. Utilities should regularly examine customer expectations, and identify opportunities to not only address these expectations, but go beyond them. What customers expect is fundamentally changing as other service providers raise the bar by leveraging technologies and service delivery innovations. People expect to have information immediately available on their smartphone, have the convenience of Uber, or the deliverability of Amazon in other aspects of their lives. As a result, utilities must adapt and incorporate ways to meet or exceed these greater consumer expectations into their plaving field. While it may seem counterintuitive to invest time and resources towards increasing satisfaction in a regulated **Electric Utilities** industry, the landscape has changed and research with Above-Average proves satisfaction is a valuable investment that Satisfaction Have

pays off. A December 2015⁶ report from J.D. Power found that increases in customer satisfaction are associated with increases in return on equity, identifying the measurable link between satisfaction

and a key financial metric for IOUs. In fact,

that research found that electric utilities in the top quartile of customer satisfaction typically report profits 3% to 4% higher than utilities in the three lower quartiles.

Keeping satisfaction in mind, utilities can win in this customer cost equation by providing solutions or even advice to promote consumption efficiency. Such programs go a long way in enhancing customer satisfaction, regardless of rate inflation. For example, smart meter technologies have now created tools for utilities to empower customers, equipping them with the ability to understand and control their own energy use. While most customers don't have a desire to understand the nuance behind how rates are set, providing resources to reduce and/or monitor consumption and thus costs, presents an opportunity for utilities to enhance their perception among customers—to become that trusted advisor that is looking out for their interests. Perhaps equally as important as cost to both the customer and the utility, is reliability of service. The increase in residential on-site backup generator installations, in many areas of the country, serves as a testament that homeowners are willing to pay for increased reliability. Reliability has also proven to have a direct correlation on negotiations between utilities and regulators, particularly in review of a rate increase proposal. Per a study by PWC⁷, "Customer satisfaction levels often

> receive higher attention from regulators in the aftermath of widespread reliability issues, such as following major storms, or when customer satisfaction is consistently low or has recently declined. In such contexts, utilities can expect heightened regulatory scrutiny of their customer-service performance."

In order for IOUs to achieve new, heightened standards in customer satisfaction and subsequently see the rewards they yield from a business standpoint, IOUs must seek to break new ground in the way they serve residential customers. IOUs have to identify key areas where they can offer valuable support to their customers, enhancing reliability and justifying cost. These expansions into services – from online tools and energy management resources to home repair solutions – go beyond the ongoing investment in core utility service. However, given resource constraints, the ability for utilities ddress increasing customer expectations with new.

to address increasing customer expectations with new, home-grown solutions and execute them internally is often not feasible. But IOUs should not see this as a dead end – instead they should approach that barrier by partnering with best-in-class product and service providers to offer solutions that extend enhanced value to their customer base. Integration with partners can be efficiently streamlined to minimize impact of internal resources. Utilities can benefit from the external partner's scale and singular focus, as well as leverage their marketing, finance and legal support to deliver quality solutions quickly and affordably to utility customers.

In the face of a multitude of challenges facing utilities, expanding into "non-traditional" services strengthens the core customer relationships and creates additional value for the business.

THREE PARTNERSHIPS THAT DELIVER

As IOUs look to assemble and deploy a robust suite of consumer services that complement the utility's own offerings, increase customer interaction and enhance customer perception of the company, the following services rely on the focus and scale of the partners to execute the service and thus require minimal utility resources to support them. As more technology companies seek to insert themselves between the energy distribution company and the customer – such as Nest or Google, a suite of convenience-based, service-focused offerings like the following can help to rectly engage customers and defend ownership of the customer.

Customer Energy Engagement:

A customer energy engagement platform can deliver proactive, digital communications that raise customer satisfaction, manage energy demand and lower service costs. Such programs provide home energy reporting to empower participating customers with tools and data to better understand their energy usage and compare their usage to that New Mover Programs: New mover programs help customers facilitate moving. They offer customers a free, one-stop resource to receive personalized assistance with the selection and purchase of home services, including satellite or cable TV, Internet, phone and security systems. In many instances, customers who call to transfer or establish service have the opportunity to speak with home service advisors from the program provider, to review the numerous home service options specifically available at their new address. After discussing the plans, promotions and bundles available, the advisor then takes the order and schedules installation, providing end-to-end service.

> Home Repair Solutions: Repairs to household systems, such as electrical wiring or HVAC equipment, can be costly for homeowners, are not maintained as part of normal utility services and are not typically covered by basic homeowners insurance. Home solutions repair providers can present utility customers with an affordable and convenient solution. With HomeServe, for example, more than 2 million customers have signed up for one or more repair service plans across the U.S. and

Canada. This is a natural extension for utilities to go "behind the meter" to provide more value, offer more services, be more transparent and anticipate ever-changing customer needs and expectations.

of their neighbors. Customer energy engagement platforms give customers a set of online tools to help them learn more about their energy use and help build their own energy-saving plans. Personalized messaging and information about energy use enhances the experience and creates additional value for the customer. Just as importantly, the system can match up with an IOU's need to, for example, manage peak demand reduction. Almost as important as developing a deep portfolio of service offerings is the strategic way in which these offerings are communicated to consumers. The conversation with customers about the issues they face, and the solutions being offered to meet those issues are imperative to the goal of building a stronger relationship. Communication is key so that customers understand why the utility is offering the services. Through these strategic partner relationships, utilities may allow the provider to communicate directly (or jointly with the utility) with customers to let customers know that their needs have been recognized and that the utility and its partner are working together closely to provide them with solutions. Communications should work to educate customers on key areas such as what's being offered, how it saves money, and where the utility's responsibilities end and the consumers' begin. After all, these services are being offered to address customer needs and evolving expectations, so a close alignment between the utility and its partner is imperative, or the positive efforts may go unappreciated and not contribute to improvements in customer satisfaction.



A suite of convenience-based, service-focused offerings... can directly engage customers... **How To Get Started:** Assess your customer base and evaluate the various needs and concerns of residential customers, both within the scope of what the utility provides and other areas concerning matters of the home.

Take into consideration broader trends and consumer lifestyles being reshaped by new technologies, online tools and an increasingly digital world, to work towards defining value-adding solutions that occupy a sweet spot between meeting customer needs of tomorrow and enhancing convenience and satisfaction for customers today.

Once you have identified leading providers behind solutions that could serve as strong components with the utility's suite of offerings for customers, pursue mutually beneficial partnerships with the services and companies that are best-fit to collaborate and serve your customer base.

Tips For Utilities That Want To Take This Approach But Not Sure Where To Start Any strategy must always be focused around customers, with solutions that augment the utility's value to its customers.

Use customer survey tools to gather information, identify concerns and gauge interest in various service options. This knowledge can be compiled and leveraged to determine which programs can be most important to customers.

How Did The Program Evolve And Expand Over Time? Innovation tends to breed innovation. As programs are implemented and utilized by residential customers, constantly monitor and manage the response, feedback and insights to steadily create a road map to other value-added services that could be beneficial.

BUSINESS BENEFITS

As IOUs improve communications, enhance their service offerings and break new ground in creating and sustaining customer value, the benefits to those they serve are reciprocated through customer satisfaction in their business and the opportunity for improved financial performance.

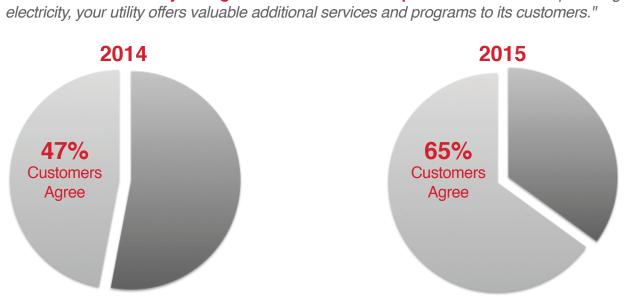
- . The evidence supporting the favorable results of strong customer communication is robust. Last year, the J.D. Power 2015 Electric Utility Residential Customer Satisfaction Study⁸ found that proactive communication from utilities especially during outages - contributed to overall increases in satisfaction.
- · And according to another J.D. Power study9, increases in customer satisfaction are linked with increases in return on equity for regulated utilities. This supports the case for not only regular customer communication, but also continued focus on delivering on the utility's core services and offering additional services that help improve customer outcomes.
- In 2014, a large midwestern electric company surveyed residential customers to gauge the impact of additional program offerings and found that 73% of those surveyed were more satisfied with their overall service as a result of being enrolled in a value - added program. In addition, the survey found that overall satisfaction was

"notably higher" if respondents were simply aware of one of the programs offered and satisfaction generally increased as awareness levels increased.

• 12 months after the implementation of programs through its partnership with HomeServe, the same electric company surveyed customers again in 2015 and found a "significant increase" in satisfaction. Almost twothirds of respondents (65%) felt the utility offered valuable services and programs compared to 47% in the 2014 survey. Additionally, 62% of customers enrolled in a HomeServe program were more satisfied with the utility as a result of the program – with none less satisfied. Finally, the survey also found that educating customers on three key dimensions measured, services offered, save money, and personal responsibilities, all saw significant increases in awareness over

2014 survey results.

Such findings go to show the value in IOUs offering additional services and engaging in innovative partnerships to meet consumer expectations. At the same time, consistently communicating with customers every step of the way is essential for success.



How One Electric Utility's Program Satisfaction has Improved: "In addition to providing

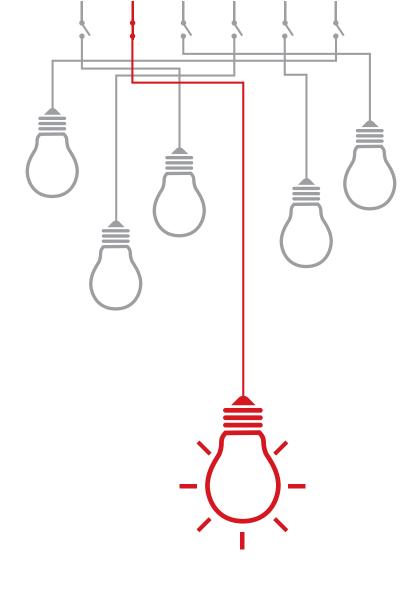
SUMMARY: THRIVING TODAY

The pressure for IOUs to address new and evolving threats to their customer base continues to build. Stagnant load growth due in part from the rise of renewable energy options, mandated energy efficiency, along with aging infrastructure and other challenges, are all leading to falling revenue and shrinking profitability. Technology has expanded the universe of competitive utility offerings, while also elevating consumer expectations. The challenges aren't going away, they are only intensifying, so IOUs should reassess and reinvigorate their value proposition beyond core services, instituting programs that empower customers with information, personalization and convenience.

Increasing customer interaction can directly enhance perception, loyalty and retention. Developing strategic partnerships provides increased convenience, allows consumers to better understand and control energy use, and save money, thereby transforming the utility/customer relationship to position the IOU as an invaluable, trusted advisor for issues affecting the home. That enriched customer relationship then allows IOUs to overcome many of the challenges they face in this rapidly evolving energy landscape. Complacency can be a costly option, as customer expectations are fundamentally changing. To remain competitive, IOUs must deliver unparalleled service commitment to customers, providing resources and value to every household.

^{1.} "State of the Electric Utility," Utility Dive. February 2016. (http://app.assetdl.com/landingpage/state-of-the-utility-survey-2016/)

- ² "HomeServe Biannual State of the Home Survey Winter 2016 Edition," HomeServe USA. March 3, 2016. (https://www.homeserveusa.com/news/ details/biannual-state-home-survey-winter-2016)
- ^{3.} "Solar Energy in the United States: A Decade of Record Growth," Solar Energy Industries Association. May 18, 2015. (https://www.youtube.com/ watch?v=wFMkL2QIduY)
- ^{4.} "Liebreich State of the Industry Keynote BNEF Summit 2016," Bloomberg New Energy Finance. April 5, 2016. (http://about.bnef.com/presentations/ liebreich-state-of-the-industry-keynote-bnef-summit-2016/)
- ^{5.} "2013 Report Card for America's Infrastructure," American Society of Civil Engineers. March 2013. (http://www.infrastructurereportcard.org/a/#p/energy/conditions-and-capacity)
- ^{6.} "How Customer Satisfaction Drives Return On Equity (ROE) for Regulated Utilities," J.D. Power. December 11, 2015. (http://www.jdpower.com/resource/how-customer-satisfaction-drives-roe-regulated-utilities#sthash.caCbLjba.dpuf)
- ^{7.} "Beyond the hype What is the value of customer satisfaction to a regulated utility?" PricewaterhouseCoopers. April 2015. (http://www.pwc.com/us/ en/power-and-utilities/publications/regulated-utility-customer-satisfaction.html)
- ^{8.} "Communicating with Customers and Higher Price Satisfaction Increase Overall Satisfaction for Residential Electric Utilities," J.D. Power. July 15, 2015. (http://www.jdpower.com/press-releases/2015-electric-utility-residential-customer-satisfaction-study#sthash.eaJvOHsR.dpuf)
- 9. "How Customer Satisfaction Drives Return On Equity (ROE) for Regulated Utilities," J.D. Power. December 11, 2015. (http://www.jdpower.com/resource/how-customer-satisfaction-drives-roe-regulated-utilities#sthash.caCbLjba.dpuf)





Mr. Thomas is the former chairman of the Pennsylvania Utility Commission (PUC) where he oversaw the restructuring of Pennsylvania's electricity, natural gas, and local telephone markets. Before his appointment to the PUC, Mr. Thomas served as Deputy Director of Governor Ridge's Policy Office, where he advised the Governor on energy and environmental issues. In addition, Mr. Thomas was appointed by California Governor Arnold Schwarzenegger to serve on the Governor's transition team for energy related issues in 2003. Mr. Thomas is also a former partner at the law firm of Blank Rome.