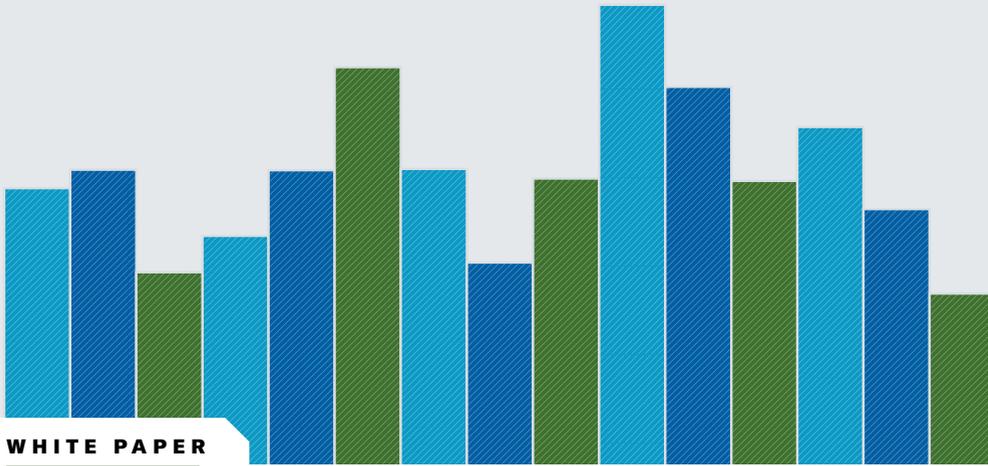




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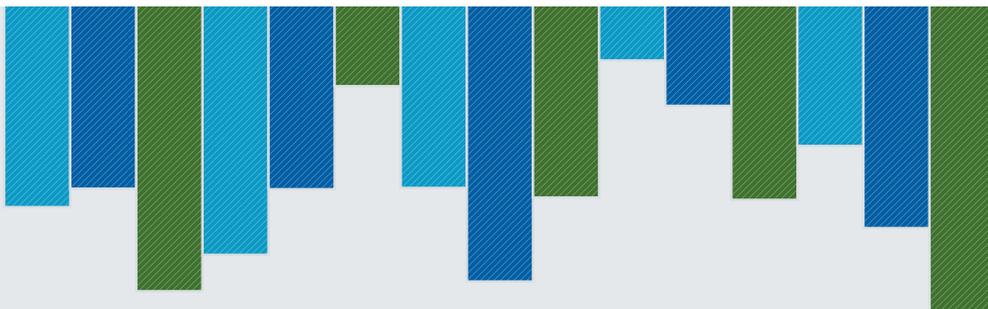
ANALYTIC SERVICES



WHITE PAPER

Improving the Customer Experience in the Utilities Industry

Customers Expect More from Utilities,
Which Requires a Better Approach to Data



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Since smart meters and internet of things (IoT) devices kicked off the utility data revolution, power and utility companies have worked to use this data to change the nature of customer relationships. With an early emphasis on usage control and conservation, most utilities have steadily shifted to a more customer-centric model over the past decade. The pace of change has continued to accelerate with the rapid global rise of mobile devices, 5G, and IoT; awareness and action on climate change; distributed energy resources ... and a pandemic.

One thing utilities have always done well is rise to a challenge.

Customers are more engaged than ever with their energy and energy choices. They are asking more sophisticated questions and are seeking sustainable options. Savvy utilities are moving right along with them, asking harder and smarter questions of their data.

With this engagement comes a new kind of power (pun intended). The industry's vision of a "prosumer" partnership is being realized—in which customers are educated producers and consumers of energy in harmony with the utility. Utilities are responding to major market upheavals—including deregulation, climate change, the pandemic, and the acceleration of digital commerce—by centering on the humans in the customer relationship and what it means to truly provide customer value.

As a company whose cloud technology exists to create more meaningful customer relationships, Salesforce wanted to understand more about where both utilities and the industry stand today in this journey. We commissioned this Harvard Business Review Analytic Services report to provide a snapshot of the customer experience (CX) evolution in the electric, gas, and water utility industries.

Inside you'll find results from a global survey that break out the technology investments and challenges to utility customer operations, and insights from industry experts and our partner organizations that are working with utilities on the leading edge of customer innovation in the sector.

The picture is heartening. Utilities are prioritizing investment in data, digital, and design strategies. You will see excellent examples of utilities creating experiences that make their customers feel seen and known, and designing offerings that match customer needs and desires.

I remain incredibly optimistic about the future of utility CX because, for most utilities, it's not just about technology. It's about organizing around relationships and strategies that create shared value with their customers, employees, partners, and community and global stakeholders. That's where lasting change can happen, and that's where I hope this report may inspire you in your own work.

Download [Charting a Path for Utility Digital Transformation](#) to learn how to create the right strategy to evolve your CX and drive customer growth.



Kelly James

**Vice President and General
Manager, Energy and Utilities
Salesforce**

Improving the Customer Experience in the Utilities Industry

Customers Expect More from Utilities, Which Requires a Better Approach to Data

Providers of water, electricity, and gas have long lagged behind other industries in delighting customers, owing largely to monopolistic roots, cultures, and processes that did not need to focus on offering a compelling customer experience (CX). However, increasing competitive, regulatory, and stakeholder pressures and rising customer expectations are changing these traditional models, leading utilities to prioritize CX in ways they never have before.

While a customer-centric approach is becoming critical across all industries, utilities find their traditional siloed operating structure to be particularly out of step in a digital age. Changing customer demands and expectations, intensified by a forced migration to digital experiences and remote work because of the Covid-19 pandemic, are making that discrepancy even more apparent.

“One of the barriers to providing good customer service is achieving a 360-degree view of customers,” says Geoff Plese, a principal in PwC’s advisory practice with a focus on the power and utilities sector. “Providing information to your customers and employees through technology allows utilities to service their customers in a proactive way and creates a better customer experience.”

Rising to the challenge of new customer expectations by providing a great CX requires all parts of the organization to harvest more customer data and to use it more strategically with tools that distill insights and analytics that can drive business success. Granular-usage data, smart-metering data, and new thinking about customer needs by each department are driving the industry’s newly customer-centric culture.

HIGHLIGHTS

Improving the customer experience (CX) will be utilities’ **top business priority** in the year ahead.

Utilities find their **traditional siloed operating structure to be particularly out of step** in a digital age.

A utility’s brands, **shaped to a great extent by the CX**, determine whether customers see it as the provider of choice.

Improving CX will be utilities' top business priority in the year ahead, a new survey of 73 utilities executives from Harvard Business Review Analytic Services finds. **FIGURE 1**

"Utilities provide a service rather than just a physical product," says Wytse Kaastra, a managing director who leads Accenture's utilities business in Europe and its energy retail practice globally. "When you purchase from a utility, you don't go to a store. The call center is the main channel for customers, although online and mobile channels are becoming the main points of contact for the more advanced utilities. As a result, the service and sales experiences are very important. Customers are expecting utilities to have the same customer-experience capabilities as banks and telecommunication providers, and ultimately to provide a true digital experience, like content streaming services and ride-hailing companies offer."



"Customers are frustrated because they know the utilities have their data, but the utilities don't use the data in ways that improve the customer experience," says Roberta Bigliani at IDC.

Searching for More Value in Data

CX depends heavily on data. The proliferation of smart metering systems gives utilities extremely granular information about usage patterns, which the companies connect to customer-preference data, third-party customer-behavioral data, internet of things (IoT) data, and other emerging information sources.

"A lot of utilities have not scratched the surface of using that data," says Jim Thomson, vice chairman, U.S. power, utilities and renewables practice leader, Deloitte Consulting.

"They realize they have all this data they've never had before about millions of customers, and they want to get more value from it."

Trying to increase the value of customer data is not limited to North American utilities. European countries—a decade ahead of the U.S. in liberalizing their utilities markets—still face challenges in using their data. Roberta Bigliani, group vice president at IDC, ranks utilities at the middle of the pack among sectors in their maturity of learning to use customer data. "Many are still trying to understand what to do with metering data," she says.

As a result, utilities around the world are routinely falling down in delivering a compelling CX. "One of the typical complaints that customers have is that their utility doesn't know them," Bigliani says. "Customers are frustrated because they know the utilities have their data, but the utilities don't use the data in ways that improve the customer experience."

Customers are eager for utilities to provide personalized information about their usage so they can adjust it for monetary and environmental savings. Customers want utilities to guide them in reducing their carbon footprint with personalized offers that reflect a deep understanding of the customers' energy habits.

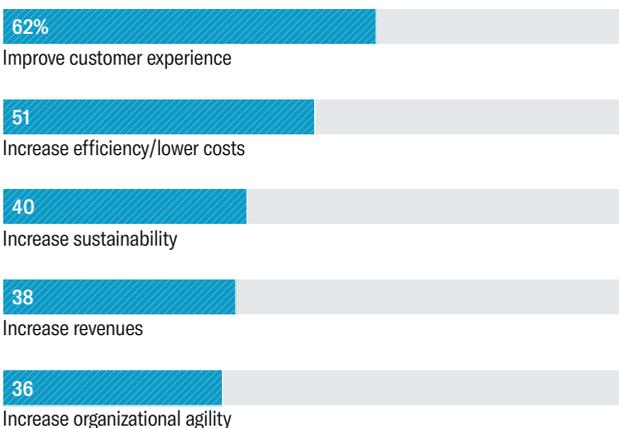
Utilities are also falling short in basic areas. Bigliani cites one European energy utility that offered prospects a special introductory price for six months—only to discover that many who accepted were already their customers (and therefore ineligible). "The customer becomes even more frustrated because the utility spent 10 minutes getting them interested in an offer they aren't eligible for," Bigliani says. "The call center has no visibility into the customer data."

These types of disconnects—various utility departments not sharing customer data effectively—are common throughout the utility ecosystem. "If a customer makes an appointment for a field technician to clear out a sewer blockage, they often can't go to a website later to make a

FIGURE 1

Customer Experience Is a Top Priority for Utilities

Which of the following business priorities are among your organization's top five for the year ahead?



Source: Harvard Business Review Analytic Services Survey, December 2020



A survey by PwC found four top issues utilities encounter in improving the CX: changing internal culture and behaviors, funding/budget, technology, and changing customer expectations.

change in the time if they need a different appointment,” says Marc Tritschler, a utilities expert at PA Consulting in London. “They have to call the utility provider on the phone again and repeat a lot of information because the agent may not have access to the detailed case and appointment data. By modern standards, that’s not good enough.”

Tritschler cites one recent example of poor data impairing CX: When a friend moved into a new house and received a £400 water bill for the first month—an obvious error—the utility’s customer service agent could not sort the situation out and instead recommended the customer pay the full bill, which the utility would eventually refund.

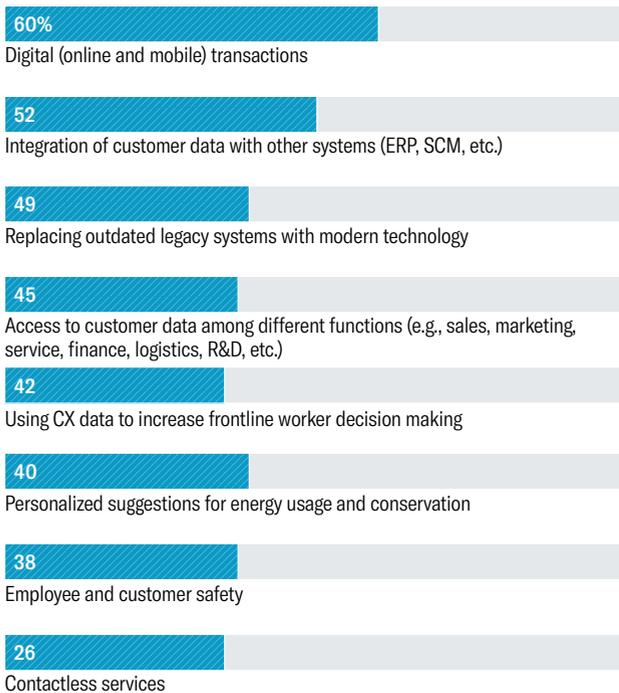
“For a utility to think it’s acceptable for a call agent to say something like that to a customer is beyond belief,” Tritschler says. “However, the utility was so constrained by its current processes that this was the only approach the agent felt that they could offer the customer. That is definitely not being customer-centric. In some places, utilities still feel they need to make customers conform to their processes, instead of understanding what the customer wants and shaping the processes around the customer expectations.”

Recognizing such issues, many utilities plan to support their CX strategies by investing in digital transactions, integrating customer data with other systems, allowing more departments to access data, and increasing decision making for frontline workers, the Harvard Business Review Analytic Services survey revealed. **FIGURE 2**

FIGURE 2

Digital Gets the Dollars

Which of the following are utilities likely to invest in the next two years to support their customer-experience strategy?



Source: Harvard Business Review Analytic Services Survey, December 2020

Improving Culture and Internal Behaviors

Utilities are facing a number of interlinked issues in providing the CX customers demand. A survey by PwC found four top issues utilities encounter in improving the CX: changing internal culture and behaviors, funding/budget, technology, and changing customer expectations. **FIGURE 3**

Utilities have an added layer of complexity: intense regulatory oversight. Casey Herman, U.S. leader for PwC’s power and utilities sector, recalls an egregious example of regulatory red tape.

Gas field workers for one investor-owned regulated utility, Herman says, were frustrated that they could often identify the cause of a potential gas leak at a customer’s home, but state regulatory rules prohibited them from offering “behind the meter services” to fix the issue for the customer. A service rep who could see an issue caused by a faulty gasket on the furnace—a fairly easy repair to handle—would be prohibited from fixing it. Instead, the service rep could only disconnect the home’s gas supply until the customer arranged for and paid a plumber to fix it, at which point the utility would come back to the residence to reconnect the gas.

Seeing the mounting frustration from customers, the utility successfully petitioned state regulators to be allowed to make certain common repairs safely, such as the one involving the gasket on the furnace. This change increased customer satisfaction and saved the customer money—as well as the utility, which no longer needed to send a repair truck to restart the gas service.

“It seems obvious that a service technician should be allowed to correct a problem they were qualified to correct, but it took the utility a year to get regulatory permission,” Herman says. “This shows how multifaceted the customer experience is. You have to attack it through the better use of data, and through service-staff training, and through working with regulators.”

Embracing CX Metrics

The starting point for utilities to improve CX is a commitment to making CX central to operations—and an understanding of the consequences of not doing so.

The industry has long focused on metrics around safety, efficiency, and customer satisfaction. Satisfaction is typically denoted by such factors as power quality and reliability, price, billing and payment, and customer service. Elements of customer satisfaction affect CX, but the two are not synonymous.

“There is a dichotomy between customer satisfaction and the customer experience,” says Laura Schauer, vice president of ILLUME Advising, a consultancy and research firm in Madison, Wisc. “The focus of utilities has been to measure customer satisfaction. ‘Satisfaction’ is a check-the-box item that often reflects the transactional elements of the relationship with the customer. The customer experience is much more nuanced and reflects every aspect of the long-term relationship a utility has with its customers.”

IDC analyzed utilities’ Net Promoter Score (NPS), which determines how likely people are to recommend a utility—a standard approach for gauging CX. Worldwide, utilities had an NPS score of -4, which reflects a disinclination to recommend a utility. In Europe, where customers have a growing number of utilities to choose from, the NPS is -8.5, but in the U.S., where customers are still largely captive to a particular utility, the NPS rating is slightly positive.

“The more you can choose, the more demanding you become,” Bigliani says. “If you have no one else you can buy from, you’re fine with your choice. If you have multiple options, you become very demanding.”

Even in monopolistic utility markets, common in the U.S., choice is growing. A consumer who might once have been locked into using one utility can now bypass it by using a provider of solar or wind energy. “As a result, CX is an absolute must for every single utility,” Bigliani says.

Stakeholders around the world are seeing that a growing number of options for customers heightens the need for better CX. In the various regions of the U.K., customers cannot choose their household water service; one geographic monopoly provides the water. This arrangement might pose the risk of the monopoly water provider giving short shrift to CX because customers have no other options.

But even here, providers are getting motivated to focus on CX. “Regulators are driving hard for water companies to improve the customer experience,” Tritschler says. The British water regulator recently reinforced its CX metrics to have a significant impact on financial rewards—or penalties—to which the companies will be subject. “They cannot recover these penalties through customer charges, so there is real money at stake,” he says.

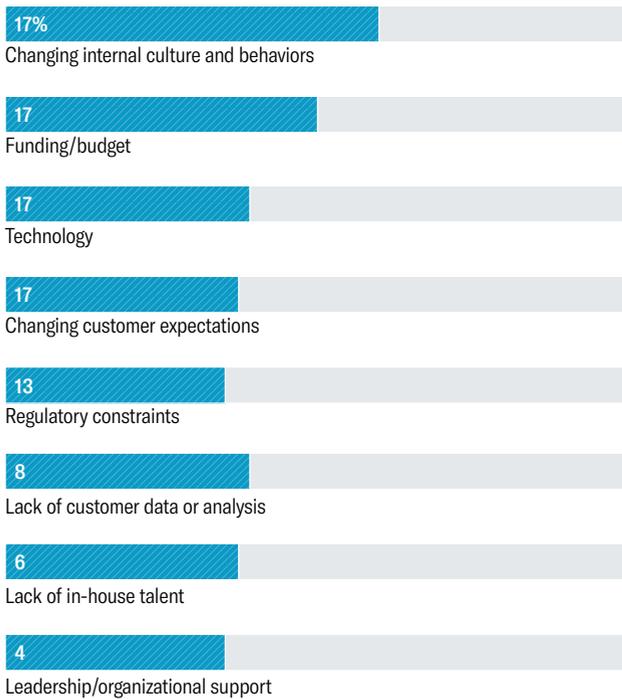
Pressure from Sustainability, Digital Natives

Solar and wind power dovetail with sustainability, which is another key factor driving the need for enhanced CX. Utilities are moving from simply being providers of energy and gas, Kaastra at Accenture says; they also want to sell electric vehicle-related products and services (such as electric-powered drive trains), solar panels, batteries, and energy-efficiency programs.

FIGURE 3

Customer Experience Challenges Are Numerous

What are the challenges you face when it comes to improving your customer experience?



Source: PwC Utilities of the Future Survey, 2019

“In Europe, the energy transition is one of the key agenda points in politics,” Kaastra says. “The electrification and decarbonization of society requires utilities to have a meaningful and purpose-driven brand. If you are perceived as a boring, dull, and unsustainable company, the first startup that comes along with green credentials and a purposeful brand focused on positive change will win the market.”

A utility’s brand, shaped to a great extent by CX, determines whether customers see it as the provider of choice for new types of energy. “If you want to play in those markets, you have to be a trusted brand,” Kaastra says. “Branding gives you the right to play. Seamless execution gives you the right to win. Both need to be implemented in the right way.”

Even in low-income urban areas, utilities are starting to examine how access to green options can be provided. Customers might be able to lease solar panels in the same way they lease smartphones. One innovative program for the peer-to-peer energy market allows homeowners to sell surplus solar power generated by their own rooftop panels to others in their community.

“Utilities have been in a very comfortable position for 50 years,” Kaastra says. “They have not had a lot of competition or innovation. Suddenly, they find themselves in an environment where their competition is not just other utilities, but also startups and automotive companies. Responding to that requires agility and innovation. If you are only focusing on the commodities end of the business, you may be closing your business in five to 10 years.”

This scenario is especially true in the U.S., where utilities face new competition even as they maintain aspects of their monopoly heritage. “The services that customers expect, and can take advantage of in getting their energy, will continue to evolve,” says Thomson of Deloitte. “Over the next few years, if the utilities don’t take advantage of those opportunities, someone else will.”

Those new entrants into the utility market are typically digital natives that focus on CX in every aspect of their operations. Appreciating this rising competition, some utilities are conducting pilots with technology to boost CX. Many are using home-automation systems, which allow consumers to simply ask a digital assistant how their electric bill for the month is trending—and get an immediate answer—so they can adjust their usage if necessary.

Rather than just meeting customers’ needs, leading utilities are anticipating them. They are analyzing usage patterns to identify customers who might be interested in distributed energy resources, such as wind-generating units, biomass generators, and batteries in electric vehicles that can export power back to the grid.

One utility in the U.S. Midwest offers an online portal that lets a customer inquire about installing solar panels on a house. The tool uses a geospatial application that analyzes



A utility’s brand, shaped to a great extent by CX, determines whether customers see it as the provider of choice for new types of energy.

the orientation of the house to determine solar exposure and the number of panels needed. The utility can then connect the customer with a vetted solar-panel provider.

“They want to make sure they keep up with the competition in other industries,” Thomson says. “The biggest threat to utilities is not being able to match new entrants into the marketplace who will provide those kinds of services to residential customers.”

Getting the Basics Right First

Utilities can fortify their position in the evolving energy landscape in three stages, PwC’s Plese says. Each stage involves CX and the savvy use of data.

First, utilities must provide the basics, such as letting customers report outages or stop or start service via a website or mobile device. At this stage of CX, the customer can accomplish any task on any channel without becoming frustrated and needing to contact the call center.

“The utilities that are doing this well realize that customer service isn’t simply a function of the customer service department,” Plese says. “When a customer makes a request that requires a field service visit to their business or residence, they don’t see operations or field service as a function that is distinct from customer service. The utilities that excel at getting the basics right are stitching those experiences across traditional organizational silos.”

The second stage is personalization. Providing targeted offers and solutions depends on more granular data and a deeper understanding of customers’ needs and behaviors. “If you can’t get the basics right, you can’t personalize the experience,” Plese says. “If you try to get a task done online and become so frustrated you have to call customer service, why would you trust that utility to give you personalized energy advice or provide a recommendation on a rate plan or payment plan that better meets your needs?”



“You can democratize data to the customer, but they won’t use the data if you don’t take the customer experience into account,” says Marc Tritschler, a utilities expert at PA Consulting.

The third stage is providing those value-added products and services. “Many utilities are creating energy marketplaces, which in and of themselves are a great idea. However, if your fulfillment from the marketplace is good, but you aren’t aware of the products provided to the customer and can’t service them, you are just going to have unhappy customers—and you won’t have them for long.”

Steps Toward a Customer-Centric Culture

Utilities must take a number of steps to develop a customer-centric culture.

Investigate silos. One utility hired ILLUME Advising to review every department that touched the customer, including customer service, marketing, and legal, and analyze how their cross-departmental efforts affected CX.

“Utilities are investing a lot in trying to understand their customers better,” ILLUME’s Schauer says. “Even though they are beholden to regulators, they are pushing the envelope and trying to innovate. They keep saying, ‘We want the customer to trust us.’ But they realize they have to understand the customer better and focus on making a more personal connection.”

FIGURE 4

A Connected Experience

In which of the following digital initiatives are you investing or planning to invest in the next 12 months?

- 1 Predictive grid/network operations and maintenance
- 2 Distributed energy management
- 3 Network integrity (e.g., leak detection)
- 4 Orchestrated-demand response
- 5 360-degree-connected customer service
- 6 Personalization

Source: IDC European Tech and Industry Pulse Survey, 2020

Indeed, utilities will continue to invest in initiatives supporting a 360-degree view of their customers, helping them move past chronically siloed and inconsistent customer profiles, an IDC study found. **FIGURE 4**

Empower change. Many utilities have begun appointing chief customer officers—and successful utilities give those officers authority over all functions that affect CX, Plese says. “The operations functions still need metrics around efficiency and safety, but they also need to have a set of customer metrics instilled in that group,” he says. “The chief customer officer needs the authority to drive change in every part of the organization.”

Reorganize processes. “Traditionally, utilities have been organized by internal processes, which is not a good way to deliver a good customer experience,” Bigliani says. “You have to understand where you are not delivering well along the customer journey and organize your internal processes so you are delivering what matters to the customer.”

Improve digital channels. Worldwide, 47% of customers say the digital channels of utilities are inadequate, according to the IDC Utilities Consumer Survey, July 2020. That figure leaps to 62% among Millennials and 72% among Gen X. “That is a missed opportunity,” Bigliani says. “Millennials are interested in buying new products and services from utilities. So by not delivering a compelling experience, utilities are missing out on revenue.”

Bake CX into everything. CX is complex and nuanced. Tritschler sees the ability of utilities to provide information back to the customers as a fine line: People want insights and valuable advice, but they don’t necessarily want to wade through every piece of data about their energy usage.

Even as utilities introduce smart-metering information in the U.K., Tritschler says, “The information has to be packaged in such a way that people will want to engage with it.” Customers may be able to access their data from a display on a device in their home, but if that data is not viewable on a mobile device or offered as a download, there may be less take-up and, critically, less behavior change as a result.

“It’s not just about provisioning the data to the customer,” he says. “You can democratize data to the customer, but they



[Utilities] must understand customers' needs and desires, even before the customers do themselves, and then present compelling services and products while connecting the customers to partners who will facilitate their entry into greener, more sustainable options.

won't use the data if you don't take the customer experience into account.”

Conclusion

Like organizations in many industries, utilities find themselves grappling with customers who expect data and digitization efforts that meet their needs and remove friction from interactions. However, utilities, more than most industries, must battle long-standing processes and cultures that have been indifferent to CX.

“For 100 to 150 years, utilities have focused on resiliency and keeping the power on,” Thomson says. “Utilities have been laser-focused on safety and basic customer-satisfaction metrics. That has put a harness on the industry, because it measures different things than customers are asking for. The need for a better customer experience is being driven by customers and stakeholders who are focused on decarbonization, digitalization, and decentralization.”

The Covid-19 pandemic has exposed even more inadequacies in CX. During the pandemic, Bigliani found that customers, who were spending more time at home, would get unexpectedly high heating or cooling bills. A high-bill alert, which warns of spikes in usage, should be a simple, automated process, akin to what many customers already receive from their telecommunications providers. “It should be a normal process, but it's not. The little things like this matter a lot.”

As new entrants and digital natives enter the space, and as energy choices become more varied and complex, utilities can no longer delay marshaling one of their greatest assets—their data—to provide a compelling CX that will position them to customers as trusted advisors.

With the energy landscape rapidly changing, utilities must act now with an eye to becoming a central and coordinating force. They must understand customers' needs and desires, even before the customers do themselves, and then present compelling services and products while connecting the customers to partners who will facilitate their entry into greener, more sustainable options.

We live in a time of disruption. And there is no one better to lead change than the utilities that have served their customers' families for generations. This leadership will require utilities not only to fortify those relationships but also to reimagine them by looking at every aspect of their operation from a customer-centric point of view.



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