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The New Energy Consumer Architecting for the Future

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## Foreword

Around the world, the energy industry is facing unprecedented, fundamental change. Rapid advancements and widespread adoption of distributed generation, smart technologies and connected home products and services are just a few of the game changers affecting energy providers and consumers.

In some markets, distributed generation adoption has already tipped due to falling technology costs and increasing commodity prices. In others, the pace of adoption is increasing at exponential rates as consumers look to alternative energy solutions. At the same time, digital consumer technologies are rapidly breaking down barriers and creating new opportunities for utilities and nontraditional players.

As the fast-moving world becomes increasingly social and connected, more consumers are seeking added value, personal relevance and societal meaning-all of which extend beyond simply selling energy. In short, energy is increasingly becoming a foundation on which innovative value propositions and new products and services can be sold. "Business as usual" is giving way to "business unusual."

It is difficult to predict the path of the colliding, nascent markets for electric vehicle charging, the connected home and energy management. What is certain: the market is experiencing a tectonic shift with more changes to come. Utilities are at a crossroads, and the time to architect for the future is now. They can either remain service and commodity providers, or move beyond the commodity and become energy providers.

While technology may attract new players and value propositions, our New Energy Consumer research program has shown that, ultimately, it will be consumer preferences that change the energy landscape and not technology alone. Disruptive technology should be seen as an enabler-a piece of the puzzleas energy providers look to address distinctive consumer needs.

To thrive in the next-generation energy ecosystem, energy providers need to move forward with increasing cadence to build new capabilities that enable them to scale quickly, seize new opportunities, tap into unconventional markets and architect a future-proof foundation of simplicity and flexibility. These new capabilities include:

- · Addressing a spectrum of energy perspectives—driving simplified, agile customer solutions as consumer preferences run the gamut from "energy agnostic" to "energy literate."
- Enabling interconnection and shortcycle innovation-demonstrating innovation in energy diversity through multiproduct value, partnerships and brand extension.
- Delivering seamless experiences leveraging digital technologies to enable a social-centric yet individualized customer experience for the "always-on" customer.
- Reinventing customer operations rethinking and creatively addressing the preferences and behaviors of the current and future new energy consumer.

In addition to presenting a forwardlooking view of the energy consumer, this report highlights some of the opportunities awaiting providers that proactively construct nextgeneration strategies. It looks at business models and approaches to effectively engage consumers, reduce costs, increase revenue and deliver on demand-management objectives.

At Accenture, we are continually developing an ecosystem of accelerators, strategies and capabilities to help energy providers increase agility and speed to market. No matter how the market unfolds, we remain committed to understanding how the energy consumer will shape the journey ahead and helping providers architect for the future.



Greg Guthridge

Greg Guthridge **Executive sponsor** New Energy Consumer research program

# 2 Envisioning the Energy Marketplace

In a complex world of dynamic energy markets, disruptive technologies, industry convergence and the digital revolution, what will be the enduring and prevailing characteristics of the future energy consumer?





Around the world, utilities are facing fundamental changes that require new approaches to strategic and operational capabilities. The provision of energy has become only a small piece of a large, complex puzzle, and the traditional value chain is giving way to one with bidirectional flows of energy, information and revenue. Energy is now viewed as more than a commodity—it has become a product, a lifestyle and a service enabler.

Accenture's New Energy Consumer research program highlights providers' complex, and sometimes contradictory, priorities. The New Energy Consumer Handbook explores how energy providers can navigate the effects of critical trends in product innovation, consumer interaction paradigms and new partnerships, as well as the changing role of data in consumers' daily lives. Providers have growing opportunities to achieve targeted outcomes by personalizing energy for consumers. However, as nontraditional players enter the energy marketplace, providers will need to find new avenues to create value for themselves and for consumers.

Amid continued market change is the quickening pace of the digital consumer technology revolution—a profound force creating challenges and opportunities. The changes are accelerating the pace of market convergence, reducing barriers for new market entrants and driving down the cost of product innovation. Smart technologies, mobile applications and consumer data-driven products and services are evolving quickly. And while the pace of change and scale of disruption seem to continuously increase, the energy industry is not unique. As other industries experience the effects of the digital revolution and industry convergence, they too are looking to new industries, such as energy, to create new value propositions. These market confluences are not only disrupting the energy marketplace, but also increasing the need to change.

As energy marketplace boundaries continue to blur, traditional value chains and levers are at risk. More than ever, utilities are challenged not just to redefine their market and business models but also to execute with increasing tempo. Every energy provider is at a pivotal point in determining the pace at which it will transform its business and stake its claim in the digital-driven new energy ecosystem. To succeed, energy providers should start thinking of themselves as a new type of engineer: master architects to address the new energy consumer.

To develop a blueprint for the future, energy providers must embed the characteristics of the new energy consumer into their strategies. Based on key findings from five years of end-consumer research. Accenture has identified nine consumer characteristics that will shape how providers address and serve the consumer of the future.

#### The characteristics of the new energy consumer

- 1. Energy Perspective—addressing a spectrum of consumer mindsets, from energy literate to agnostic
- 2. Omnipresent—supporting seamless virtual interaction anytime, anywhere
- 3. Individualized—personalizing the energy experience to address unique needs and preferences
- 4. Social Centric—creating a gathering place for ideas, conversations and collaboration
- 5. Prosumer—buying and selling energy via a variety of business partners
- 6. Tech Savvy-providing set-andforget technologies that deliver financial savings, convenience and individual control

- 7. Interconnected—developing bundled solutions that combine energy with other products and services for the home, business and automobile
- 8. Pay It Forward—offering a range of prepaid energy solutions to meet a variety of lifestyle needs
- 9. Energy Diverse—adopting a range of nontraditional energy options, including distributed generation, net metering and microgrids

Providers can approach these characteristics not as individual traits but as a mosaic of the energy consumer of the future. While consumers will continue to evolve, these characteristics will remain at the core of the preferences and behaviors of next-generation consumers.

Successful energy providers will be those that understand how and why the new energy consumer requires much more than the traditional utility service model. They will also recognize that strategies for interaction, new products and services, or in-home technologies should be integrated. Incorporating all nine of the consumer characteristics into next-generation strategies will influence how a provider identifies and approaches new market opportunities, sources of value and, ultimately, determines its business model.



# 3 Defining the Prevailing **Consumer Characteristics**

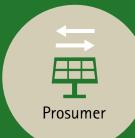
The new energy consumers of the future will continue to evolve and exhibit a set of core attitudes, preferences and behaviors that coalesce to form a vision of the next generation.















# 3.1 Energy Perspective



New energy consumers exhibit a range of knowledge and needs-from those who are informed and active to those who view energy as a basic commodity.

Today's energy consumers seem to want it all: competitive pricing, value for money, new products and services, and consistent service—there is no longer a one-size-fits-all approach to consumers. With the growing complexity of the energy marketplace, consumer values have also become more sophisticated and nuanced. To understand and address consumers' prioritization of energy preferences, energy providers should consider both ends of the spectrum. On one end is the growing minority; these consumers are knowledgeable and opinionated about the source, mix and environmental impact of energy options.

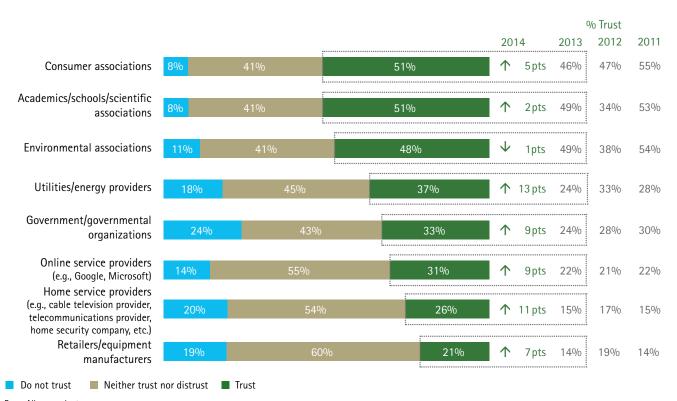
We define these consumers as energy literate. At the other end is a large but shrinking group that views energy as a commodity, something that is simply "there." We define consumers at this end of the spectrum as energy agnostic. All consumers fall somewhere on the spectrum between these two end points.

#### The energy literate

Vocal, energy-literate consumers represent a growing portion of consumers—one gravitating to more active engagement with their providers. These consumers have a perspective on

energy that extends beyond price and they are increasingly aware of where their energy comes from. They are generally influenced by energy management programs, energy mix, new technology and distributed generation. In fact, according to our New Energy Consumer Handbook, many consumers (76 percent) say they are more likely to buy from a business certified "green" by an energy provider; some would even pay a premium for their products and services. As energy awareness and literacy increase, so do expectations of the energy provider. Over the next decade, more consumers will

Figure 1. Consumers' trust in utilities has increased, while trust of third parties is also gaining momentum.



Base: All respondents.

Source: Accenture New Energy Consumer research, 2011 - 2014, www.accenture.com.

become energy literate and will play a more dominant and pivotal role in the new energy ecosystem.

Accenture has tracked and observed the dynamics of consumer trust. Our research shows that energy providers maintain a marginal trust advantage over nontraditional market players—and that overall trust has reached a high (see Figure 1). While results vary from country to country, overall, in 2014, more than one-third of consumers reported trusting energy providers to inform them of actions they can take to optimize their usage—a 13-point increase and a significant rebound from a 9-point loss in 2013. Even with alternative providers (such as home service and online providers) also experiencing a marked increase in trust, energy providers have a window of opportunity to engage the energy literate.

Our research illustrates the diverse values of energy-literate consumers. We have often seen the themes of energy independence and environmental impact as key drivers for the nextgeneration consumer. In 2011, we found

Mentioned in top three

that many consumers perceive value in attributes unrelated to price, including a decrease in personal environmental impact. Further, our survey showed that nearly 70 percent of consumers are driven by personal environmental impact when it comes to adoption of an electricity management program.

When looking into beyond-the-meter value, in one instance we found that only 38 percent of the decision to enroll in an electricity management program is based on impact to the electricity bill. The remaining 62 percent is based on other factors: how much control the energy provider has over the consumer's home usage, how much impact the consumer has on the environment and how much effort the consumer must make. While the relative importance of energy bill impact can fluctuate, these results underscore the importance of consumer education and beyond-the-bill engagement.

More recently, we found that energy independence, financial incentives and environmental impact are key motivators for consumers to purchase solar energy products. Given these preferences—and increasing energy literacy—consumers

are drawn to technologies such as onpremise solar as their understanding of the value proposition increases.

As consumers become more energy literate, utilities need to continue tapping into new value levers and targeting specific consumers with appropriate value-added products and services. They will also need to address key questions around how to engage consumers as energy providers scale their smart meter programs. Insights gleaned through our research point to potentially effective approaches. For example, 93 percent of consumers reported that they would like to learn more about smart meter functionalities. In addition, they are keen to learn how a smart meter will affect their bill, how it will work and whether or not it will require additional installation and maintenance costs.

Once consumers have a smart meter. they expect more—including personalized advice to help reduce energy bills and early notifications when bills might be higher than normal (see Figure 2). Both point to the growing demand for energy information and education.

Figure 2. Consumers expect additional products and services along with a smart meter.

#### Personalized advice on actions I could take to reduce my bill (e.g., suggested actions based on the appliances I have or the times at which I use energy) Personalized advice on products and services that I could purchase to help me reduce my bill (e.g., simple improvements to my home, products to automate my energy management) Early notifications when my bill might be higher than normal (e.g., higher than last month, higher than the same month in the year before, etc.) Automated home energy management products (e.g., programmable appliances) Microgeneration products to generate energy at my home (e.g., solar, wind, etc.) Increased functionality on Web and mobile channels (e.g., ability to view my usage in real time) Enhanced customer service (e.g., expanded call center hours of operation) Social games to compete with friends and neighbors on decreasing energy consumption

Base: All respondents.

Source: Delivering the New Energy Consumer Experience, Accenture, 2013.

I would not expect additional products or services

if I had a smart meter

To move from education to engagement, providers will need to build and nurture meaningful relationships in a manner that is proactive, individualized and personalized. That requires a foundation of consumer trust and the ability to support and cater to a diverse set of preferences and behaviors.

#### The energy agnostic

At the opposite end of the spectrum are the energy agnostics. With these consumers, price has maintained a dominant role. These consumers seek simple, basic options that will allow them to reduce their costs. As many as 53 percent of consumers would take simple actions to decrease their energy usage. They want predictable pricing that is easy to understand. Moreover, while this group is largely loyal to their

utilities, they do not typically view them as "trusted advisors." Consequently, they tend to be skeptical of energy provider programs and offerings. In particular, Accenture believes they tend to be more sensitive to data privacy and less comfortable with technology than their more energy-literate counterparts.

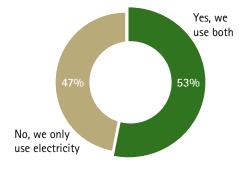
As price signals remain a pivotal factor in driving adoption of energy-related programs and services, utilities will need to continue addressing the preferences of the energy agnostic. Price has continued to play an essential role in consumer decisions around commodities and new products and services, as well as energy efficiency. While a portion of consumers will always be motivated by price alone, it is important to note that many consumers can be motivated, in some manner, by a larger collection of value propositions beyond price.

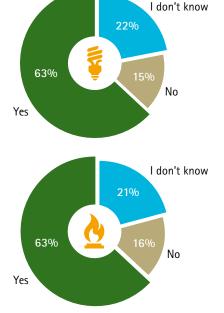
Around the world we see price sensitivity across many consumer types. In 2014, 71 percent of consumers expect their energy provider to do more to help reduce their energy bill. In addition, this year's research revealed significant room for improvement in terms of informing consumers about price changes. While the majority of consumers say they experienced a price increase over the past year (63 percent), more than half (54 percent) were not comfortable with the reasons given by their energy provider for the price increase. Surprisingly, one-quarter stated that they were not informed about the reasons for the increase (see Figure 3).

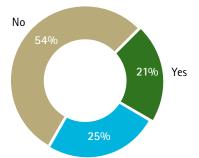
Figure 3. There is significant room for improvement to better inform consumers about price changes.

Does your household use both electricity and natural gas?

Has your energy provider increased its electricity/gas prices over the past year? Were you comfortable with the reasons provided by your energy provider for such increase?







You have not been informed about the reasons for the increase

Base: All respondents.

Actionable Insights for the New Energy Consumer showed that when it comes to energy, consumers are also interested in discounted prices with fewer traditional service options. More than three-quarters of consumers have some level of interest in agreeing to limited customer service in exchange for a discount (see Figure 4).

For low-involvement purchases such as standard commodity-based products, it can be a challenge to differentiate in the eyes of consumers. More than ever, if given the option, consumers will switch providers if they do not find what they want. Accenture's research shows that price continues to be the driving motivator when considering switching providers. Following deregulation, incumbent retailers have lost consumers to competitors-and once consumers realize they have choice, they tend to become increasingly demanding of their providers. Consumers' rising price sensitivity, along

with their ability to switch online with limited cost and effort, continues to fuel volatile retail energy markets.

#### Simplifying for market agility

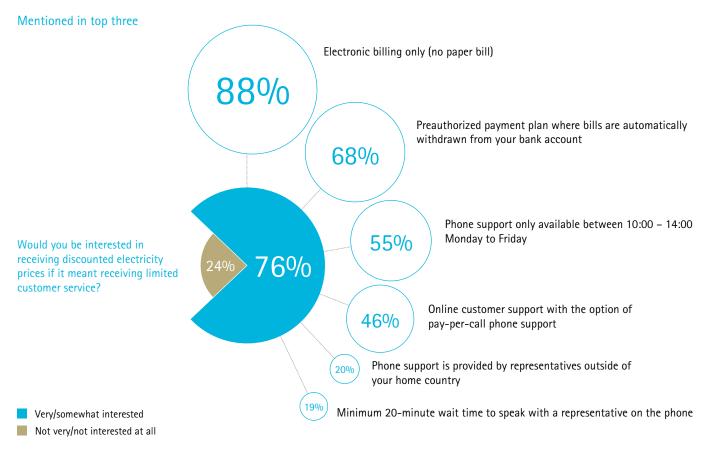
Whether an energy provider is competing on price in retail markets, managing operational costs in a regulated market or looking to provide a greater number of products and services, simplifying for market agility will remain a critical component in addressing a spectrum of consumer mindsets. And that means across markets, managing costs will continue to be a strategic imperative in the future.

To address energy agnostics with a standard energy experience, providers need to reduce operating costs and complexity so they can support customer service needs via simpler, more streamlined interactions. For the energy

literates, simplifying for market agility will allow providers to quickly deploy dynamic interactions and cost-effectively build a platform for engaging and empowering consumers through greater transparency and control over energy usage. Developing this agile approach is an important shift—one that can be the foundation of a consumer-focused mindset throughout the organization. That, in turn, inevitably reduces barriers of entry for more innovative product and service offerings.

However, utilities are frequently encumbered by layers of complicated regulations and processes. Successful energy providers will be those that relentlessly focus on what Accenture calls the "economics of dissatisfaction"—a mindset of continuous improvement, automation and process excellence. Getting the basics right is essential and the foundation for enhanced consumer interaction and profitable growth.

Figure 4. The majority of consumers are interested in discount electricity with limited customer service options.



Base: All respondents.

# 3.2 Omnipresent



For the next generation of consumers, digital is more than a channel—it has become a way of life with consumers. They expect anytime, anywhere interaction—and a seamless, easy and convenient experience.

The era of the traditional call center and paper bill experience is coming to an end. Innovative channels, devices and interaction types are forging a new landscape for energy providers. For their part, consumers welcome these changes, as evidenced by widespread adoption of virtual and self-service interactions. Consumers have become "omnipresent," the notion that they are always available and online and move between the Web, telephony, social media, and messaging. These trends are largely driven by the increasing capability of mobile devices, the maturity of the social Web and the ever-increasing "Internet of Things."

In wrestling with changing consumer technologies, experiences and expectations, many energy providers have already begun to place the consumer at the center of their organizations. At the same time, they have a case to create an entirely different interaction model, one that reflects the proliferation of devices and communication types. By becoming oriented around virtual interaction, energy providers can not only deliver on changing consumer preferences but also increase customer satisfaction and address a range of operational and efficiency goals—what Accenture calls "unlocking digital dividends."

With consumer centricity as a critical component of success, providing a seamless customer experience will be pivotal to extending the value proposition in the new energy marketplace. Today's energy consumers already expect a seamless experience across products, services and touch points.

The aggregation of digital and traditional channels to establish a seamless approach is what Accenture calls "omnipresence." In an era in which consumers increasingly use multiple channels and devices-even at the same time-energy providers will need to bring omnipresence to the forefront of aspirational and operational strategies.

In other words, it is not enough to maintain a strong presence in each channel. In the age of new products and services, true consumer centricity requires a fully connected, cohesive experience—one with seamless transitions across channels and touch points. Failure to provide such an experience will endanger strategies around energy efficiency, new products and services, and smart meter capabilities.

The cornerstone of omnipresence is enabling an interaction platform at scale. Thus, building and maintaining the technologies, processes and talent that provide cohesive integration across digital channels and other points of interaction are critical to success.

Disruptive technologies, soaring consumer expectations and proliferating channels have made the ever-evolving landscape of consumer interaction increasingly difficult to navigate. Many utilities are being challenged to constantly redefine channel strategies and capabilities. Rapid development and diversification of interaction options are presenting very real challenges around which channels to use, when to use them and how to seamlessly integrate interactions for a consistent, tailored customer experience.

To understand customer perceptions and values when it comes to traditional and digital interaction, Accenture has studied the opportunities and challenges around remaining relevant to consumers. Above all, our findings have shown that utilities cannot simply master the mechanics of interaction—they have to also address the changing expectations and preferences of consumers who are increasingly social, mobile and connected.

#### **Next-generation** virtual interaction

The changing nature of consumer interaction is creating a case for an entirely new interaction model. To begin the journey, the basis for reinventing consumer interaction should be a "dual-consumer relationship." This approach to customer interaction focuses on delivering excellence across a few channels—balancing effective self-service for basic transactions with higher-touch, more personal channels for high-value interactions.

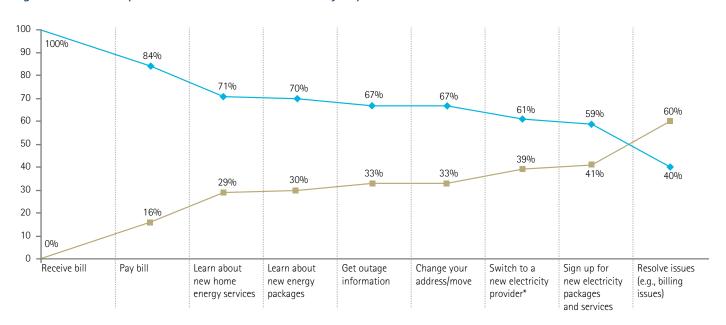
Our research shows that consumers' preferences and behaviors are fundamentally changing the way they want to interact with their energy providers. Over the past five years, our research has illustrated the following:

Low-touch interaction. Half of consumers prefer low-touch channels across seven of nine primary interaction types (see Figure 5).

Self-service. For 70 percent of interactions, consumers prefer a do-it-yourself approach.

Social engagement. 30 percent of consumers want to use social media for two-way interactions with their energy provider.

Figure 5. Consumers prefer low-touch channels for the majority of interactions.



👇 Low-touch channels (e-mail, portal, social media, mobile applications, paper, SMS) 🛛 — High-touch channels (in-person, telephone, online chat)

\*Only in competitive markets.

Base: All respondents.

Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

Our latest research leaves no doubt that consumers' preference for Webenabled channels has increased since 2012 (see Figure 6).

Historically, many utilities have appraised self-service initiatives based primarily on cost-reduction goals. However, with the rise in consumers' desire to proactively manage their own transactions, self-service becomes much more than a tool for trimming cost to serve. Self-service now represents a key determinant of satisfaction and loyalty—and a primary enabler when developing and maintaining relationships.

#### Unlocking digital dividends

With digital channel users indicating greater satisfaction with their energy providers, our latest research affirms new interaction imperatives. We found that 67 percent of consumers who are digital channel users (via online portal/ website and/or mobile application) are satisfied with their energy provider.

By contrast, 58 percent of consumers who use nondigital channels are satisfied with their energy provider.

Despite growing consumer interest and adoption, more than half of consumers have never tried to complete a majority of interactions with their energy provider via a virtual channel. In 2014, we identified significant opportunity to increase consumer adoption of these channels (see Figure 7).

Consumers demand the convenience of 24/7 service that matches their lifestyle and, therefore, expect consistent service delivered through virtual channels. Rapid adoption of social media and mobility, together with continued expansion of deeper usage insights and energy management solutions, is creating an expectation that energy providers will always be available. The desire for increased speed and convenience is driving consumer adoption of virtual channels and also represents a key value of today's younger generation.

In terms of satisfaction, however, younger consumers are generally less satisfied with the digital experience offered by their energy provider. In this case, energy providers may not be effectively targeting even the basic needs of this audience. As energy consumers become increasingly connected through social and mobile channels, they will expect energy providers to be at least on par with the experience delivered by other service providers. In fact, nearly one-third of consumers, especially the younger generation, expect more from their energy provider's experience when compared to other service providers (see Figure 8).

Figure 6. Consumer interest for Web-enabled channels has increased.

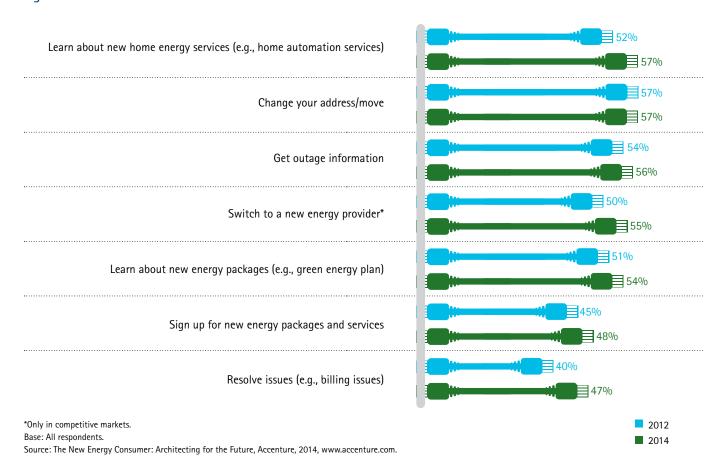
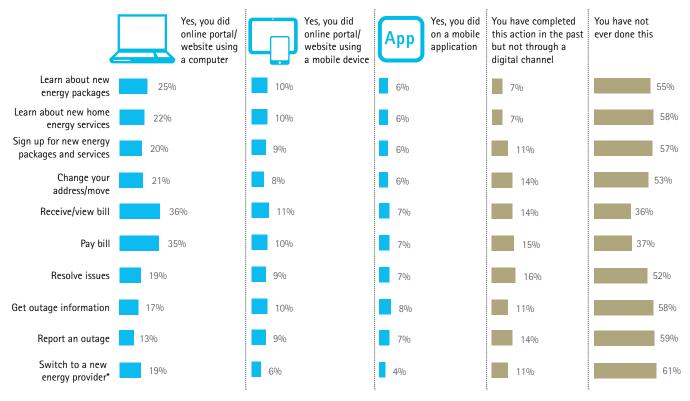


Figure 7. There is a significant opportunity to increase consumer adoption of digital channels.

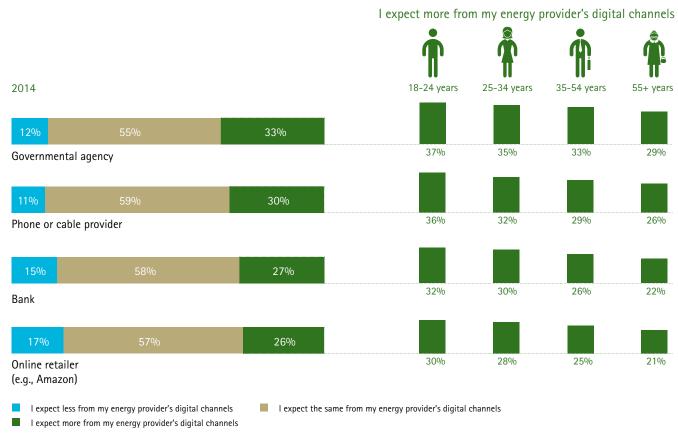


<sup>\*</sup>Only in competitive markets.

Base: All respondents.

Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Figure 8. Consumers' digital service expectations of energy providers are high when compared to other providers.



Base: All respondents.

With expectations high but overall adoption low, it is no surprise that our latest research found that only 45 percent of consumers have been able to successfully complete their request online every time. When diving deeper into the root cause of the issue, we recommend that energy providers address a wide range of dissatisfiers-from navigation and convenience to interface and functionality (see Figure 9).

To remain relevant in the "alwayson" world, energy providers must transform their service models and embrace consumers' adoption behaviors and preferences.

#### The shift to digital

The future will be increasingly dependent on digital capabilities—and as the pace of change accelerates, there is a growing urgency to take action. Widespread consumer adoption of virtual channels presents utilities with the opportunity to dramatically shift customer interaction from traditional high-cost channels to optimized self-service capabilities.

Furthermore, the digital shift provides multiple layers of opportunity as it will enable energy providers to unlock value within their current customer base. It also enables new products and services to increase revenue and meet energy-efficiency goals.

Despite challenges in adoption and usage of digital channels, the opportunity to fundamentally shift the interaction paradigm is now. It may not be easy, given that utilities are often held back

by a fractured channel landscape and siloed analytics. With an expanding mix of channels spanning the organization, many energy providers are facing the challenge of breaking down these silos and creating new and integrated crossorganization governance and processes.

With the shift toward delivering on omnipresence, getting the basics right is the vital first step. A key consideration is reducing channel complexity which, in turn, will reduce organizational challenges in creating a seamless customer experience.

Successful, visionary energy providers will be those that understand that the digital revolution is an opportunity to completely reinvent their interaction model-from self-service through to high-value interactions.

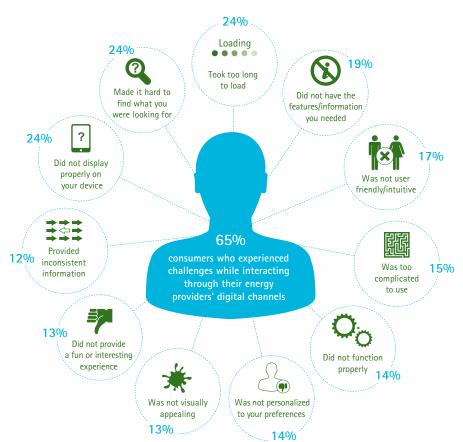
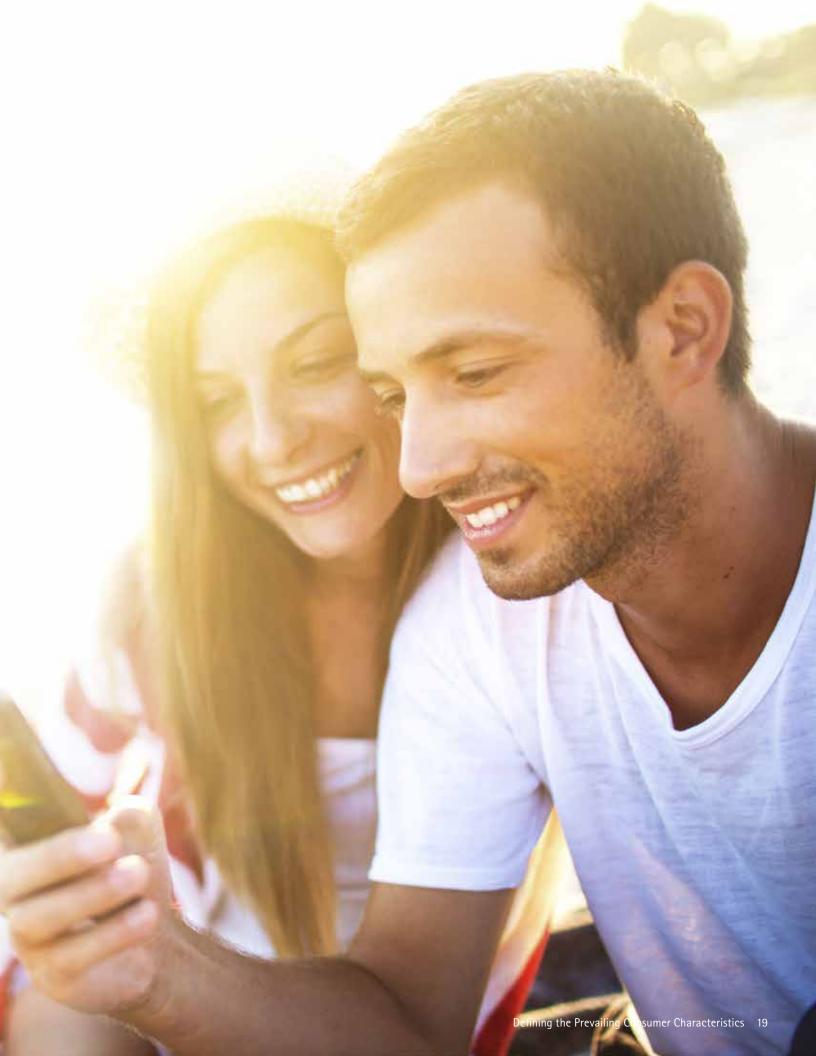


Figure 9. There is a wide range of digital dissatisfiers that needs to be addressed.

Base: All respondents.



## 3.3 Individualized



As energy providers embrace the diversity of energy consumers, they must still find ways to personalize the energy experience—defining "segments of one" and meeting consumers on their terms.

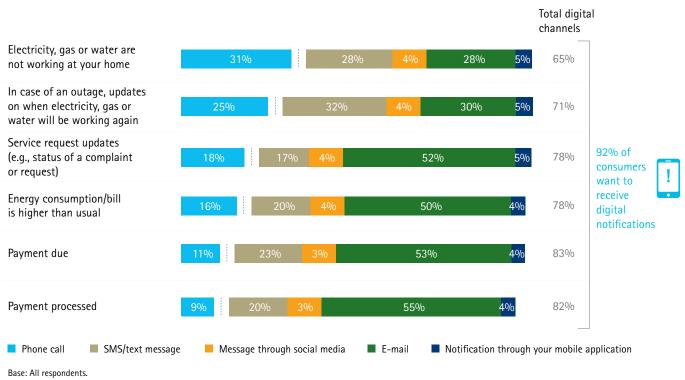
In the new energy ecosystem, options abound—from new customer interactions and new products and services to advanced home energy management and connected energy experiences. The composition of customer segments is not the only thing that has changedthere also has been a shift away from traditional segmentation toward a more dynamic, personalized approach. Energy providers are not alone; across industries, service providers are working quickly to offer an experience so specific as to be a "segment of one."

As energy becomes more top of mind for consumers, utilities have begun investing more into the consumer insight and technology necessary for more personalized experiences. The results? Providers are gaining more data and insights into consumer energy usage, needs and preferences. They are also tackling more advanced billing, analytics and customer relationship management (CRM) applications, which enable better targeting across marketing, sales and customer service.

And yet, a challenge remains in terms of maximizing the power of new analytics tools and technologies to provide an individualized energy experience across touch points, programs, products and services. To be successful, energy providers should address two critical, intertwined facets of individualization: choice and personalization.

As other industries strive for greater personalization, consumers are becoming accustomed to more choice in terms of solutions, services and methods of interaction. Generally, consumers like

Figure 10. Digitally enabled notifications have emerged as a significant means of communication.



options, when they create a sense of ownership, control and satisfaction. And as utilities begin deploying more advanced interaction capabilities, offering variety and consumer control will likely play a significant role in successful adoption.

Recent storms and resulting mass outages have shown that virtual interaction is not only an option for routine communications; it is also a critical channel during and after disasters. When searching for the latest news, consumers increasingly turn to their mobile devices and social networks. In fact, our research found that digitally enabled notifications have emerged as a significant means of communication. Outages are one of the most sensitive times for energy consumers, and our results have shown that most (71 percent) would opt for digital notifications about service restoration (see Figure 10).

Choice has emerged as a key driver of consumer satisfaction and a powerful lever to create a personalized experience. With energy viewed as a commodityand a traditional, call center-focused service model-providers have typically struggled to provide choice and execute

more personalized approaches. As rates, channels, technologies, and products and services evolve; however, energy providers can enable new opportunities to provide consumers with a selection of options. That's true even in regulated energy markets.

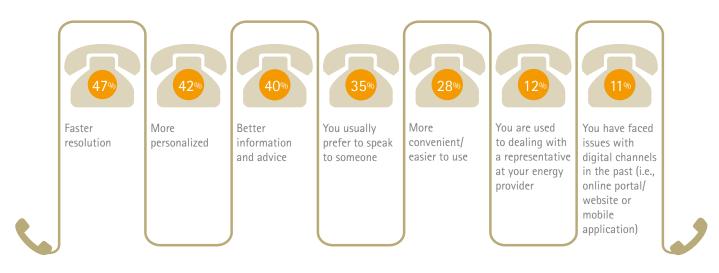
Our research into interaction preferences found that of the 20 percent of consumers who interacted with their energy provider multiple times a month in the past year, the contact was across all available customer touch points (over the phone, online, in person and social media). This result highlights the importance of understanding not only channel preference, but also a seamless experience as consumers move between channels. However, consumers with higher rates of interaction were nearly twice as likely to interact via traditional channels versus virtual channels, ultimately driving increased costs. Seeking to further understand traditional channel preferences, we found that faster resolution, better personalization and information/advice are key reasons for preferring to speak with a representative rather than using self-service channels (see Figure 11).

#### Building insight to individualize

Traditional customer segmentation groupings can be useful in driving overall policy and strategic decisioning. But in the future, differentiated sales and service capabilities will require a much more granular and dynamic view of the individual. Consequently, traditional views of segmentation are giving way to one that is far more diverse—and more focused on the individual consumer experience.

When it comes to driving adoption of virtual interaction and engaging consumers beyond the meter, it will be critical for energy providers to understand and act upon the nuances of customer choice and personalization. It will be almost impossible to achieve that level of understanding via vague segments and high-level personas. Successful energy providers will take segmentation to a new level—using analytics to dive deeper into specific consumers' values, preferences and behaviors.

Figure 11. Faster resolution, better personalization and information/advice are key reasons for preferring to speak with a representative than using digital channels.



Base: All respondents.

## 3.4 Social Centric



Social media is no longer just a forum for sharing ideas and information; it is now an extended ecosystem for marketing, selling and serving a variety of "socially" designed products and services.

Over the past five years, we have cataloged the changing nature of social media interaction. These interactions started with a highly vocal subset of consumers taking part in the online conversation. Over time, social media has become a tool for energy providers to offer up-to-the-minute information during critical periods—building trust while reducing call-center volume. Now social media has become a core marketing, sales and service tool—one ideally suited to influencing consumer behavior, increasing customer satisfaction and driving revenue in competitive markets.

Of course, energy providers cannot expect to control the information consumers receive regarding energy products and services. Through social media, consumers can collect and verify information from formal and social sources. In many regards, social media propagates the notion of the "irrational consumer"—with consumers increasingly receiving and acting on anonymous tips before verifying the source or validity.

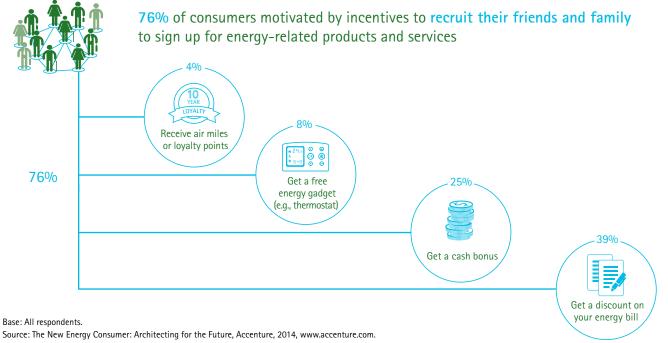
Even so, forward-looking energy providers will actively engage in the social energy dialogue. Successful providers will move beyond simply participating in social media to drive a social-centric approach across a variety of facets of the organization.

Most importantly, successful providers will address the next generation of social-centric consumers.

Utilities face a fundamental shift from company-to-consumer to consumer-to-consumer dialogue. Our research showed that monitoring social media is no longer enough. Nearly one-third of consumers are interested in following and interacting directly with their providers. When asked what would encourage them to engage providers via social media, half cited quick, convenient service as the most important factor.

Our latest research shows not only that most consumers are social, but also that a significant proportion would share personal

Figure 12. Three-quarters of consumers can be motivated to recruit their friends and family to sign up for energy-related products and services.



information in exchange for lower bills. Further, half are comfortable sharing information about themselves and their families in order to get more personalized services—findings that point to a consumer preference toward a close, trusted relationship with their energy provider.

Accenture's research also found significant consumer interest in socially oriented, multilevel marketing initiatives. Threequarters said they would be motivated by incentives to recruit family and friends to sign up for energy-related products and services (see Figure 12).

#### The anytime, anywhere generation

With seamless interaction across channels becoming the norm, Accenture's research has identified a number of characteristics that define the next generation of energy consumers. We found that younger consumers are more interested in convenience via a seamless digital experience, with nearly 50 percent of 18- to 34-year-olds open to using social media credentials to log in to their energy provider's portal. Also, we found that younger consumers are more willing to share their personal information and show a greater propensity for using social media for interaction and service; nearly half of 18- to 34-year-olds expressed interest in engaging with their energy providers through this channel. Younger consumers are also more likely to be encouraged to engage through social media—particularly if providers offer access to exclusive offers or fast, convenient service.

Similarly, *Actionable Insights for the New* Energy Consumer shows that social levers including recommendations from friends and family or online reviews—play a larger role in increasing younger consumers' interest in energy-related products and services (see Figure 13).

Our multiyear findings suggest that younger consumers have increased demands around social centricity. Even as they expect more, they are also willing to provide more in exchange for convenience and value. The challenge for energy providers is developing cost-effective strategies for creating targeted experiences and engaging this next generation.

#### #engagingconsumers

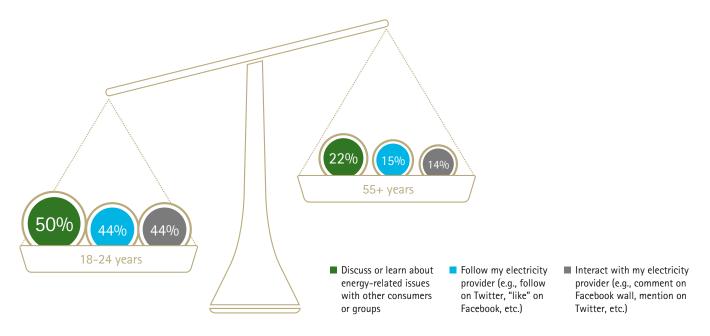
Many utilities have made excellent progress in using social media as an effective tool for monitoring sentiment and broadcasting emergency information.

However, long-term success will require open information, as trust is critical to creating social-centric value. When energy consumers share information, they expect something in return—whether tailored engagement, targeted offerings or simply an enriching experience.

Given the characteristics of the next generation, providers should make social media core to customer operations. They need to integrate social media with traditional channels as part of a holistic, omnipresence strategy and build disciplined processes and tools for managing it. Furthermore, utilities will need ways of continuously monitoring social media, responding to queries and scaling up during emergencies.

Successful energy providers will engage consumers with original and curated content. They will become more sophisticated in using different social channels for different uses and customer segments. In competitive markets, providers will embrace the marketing and brand-building opportunities of paid social advertising and other innovative brandbuilding approaches.

Figure 13. Younger consumers are more interested in learning about energy or engaging with their providers through social media.



Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

# 3.5 Tech Savvy



Across demographics, more consumers are technology savvy—increasing the appeal of set-and-forget solutions that deliver financial savings, convenience and control.

As smart meter rollouts and new capabilities gain momentum around the world, adoption of connected devices is also growing exponentially. More consumers are filling their homes with these devices and, in some cases, may not even realize it. Kitchen appliances, televisions, thermostats, lights, locks, phones and computers are all becoming "smarter"—with energy remaining the great connector. Virtually all consumers utilize some type of smart device in their daily lives.

Indeed, energy has become the underlying foundation for a range of new value propositions in an increasingly connected world. Amid these new value propositions, energy will continue to deliver against long-held consumer values and preferences, such as sustainability, convenience, control and cost savings. But while providers used to view techsavvy consumers as a distinct segment with distinct values and behaviors, interconnected mobile and home solutions have made technology savviness an almost universal attribute.

The ever-present nature of technology is enabling new value propositions around home and energy management solutions. Some consumers will leverage technology for convenience (making them ideal candidates for set-and-forget home automation services) while others will want to be more hands on (making them targets for an active energy management program with remote home energy management via Web portal or smartphone).

Figure 14. Despite low overall knowledge about connected home products and services, there is a significant opportunity for energy providers to offer such products and services to consumers.

How knowledgeable do you feel you are about the following connected home-related products and services?



Connected media and entertainment such as audio, video, gaming and personal media



Monitoring and control such as energy management, proactive health care and home security

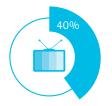


Connected communications and productivity such as voice, messaging and video telephony



Connected home services such as installation, management, monitoring, financing, insurance and warranty

If your energy provider were to offer connected home products and services, how likely would you be to purchase or sign up for any of the following types of products and services with your energy provider?



Connected media and entertainment such as audio, video, gaming and personal media



Monitoring and control such as energy management, proactive health care and home security



Connected communications and productivity such as voice, messaging and video telephony



Connected home services such as installation, management, monitoring, financing, insurance and warranty

<sup>\*</sup>Consumers who would be likely

<sup>\*</sup>Knowledgeable (You know a lot about it).

Base: All respondents.

Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Energy providers can capitalize on consumer values of convenience and simplicity by offering products and programs that help automate home energy management.

#### The race for the connected home

Over the past five years, we have observed a race into the home-and the pace is quickening. Similar trends are being observed in other markets, such as telecommunications companies offering smart home devices and security companies offering energy management solutions. While no single provider currently owns the entire connected home value chain, industries are colliding as technologies converge.

Service providers are seeking to stake out territory by extending current product offerings and introducing additional interconnected devices and services. Recognizing potential synergies between their products and home automation, telecommunications and cable providers have entered the market with a mix of extended home services and offerings.

As technology continues to change consumer behavior and interaction, energy providers can seize new opportunities in the connected home.

Accenture has observed a number of trends in consumer interest in energy management programs and smart inhome products and services. In our latest survey, we studied consumer interest in connected home technology beyond energy management. More specifically, we sought to gauge consumers' increasing interest in purchasing connected home products and services.

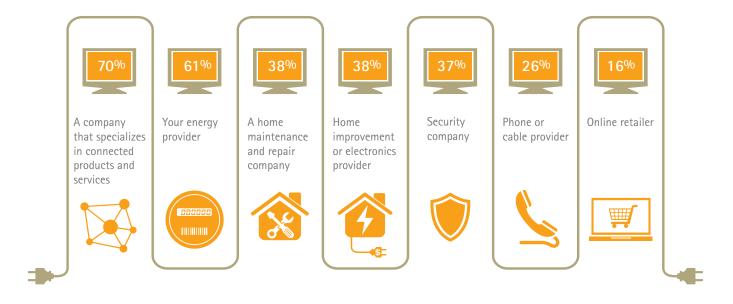
We define the connected home as a residence that allows consumers to link a number of devices through one centrally controlled system-enabling convenient, remote home management. Despite market entry by a variety of major manufacturers, retailers and home service providers, overall consumer knowledge about connected home products and services remains low. Across the categories of media and entertainment, communications and productivity, monitoring and control, and services, the

majority of consumers expressed limited knowledge of connected home products and services (see Figure 14).

However, as the technology further matures, demand appears to be building. Though current adoption is less than 10 percent of households, more than half of consumers (57 percent) stated that they would be interested in purchasing or signing up for a connected home product or service within five years.

The opportunity for energy providers: they are among consumers' most preferred providers for monitoring and control products and services. These include energy management services and home security and even extend to proactive health monitoring. In fact, after specialized companies, energy providers are the most preferred, with 61 percent of consumers interested in receiving monitoring and control products and services from energy providers (see Figure 15).

Figure 15. Energy providers are, after specialized companies, the most preferred providers to get monitoring and control products and services from.



Base: All respondents.

As the connected home market matures and expands, consumers also indicate a strong preference for energy providers as a preferred option across a range of products and services. For example, a large proportion of consumers (40 percent) would be interested in connected media and entertainment from their energy provider.

In addition to placing energy providers among the most preferred for connected home products and services, consumers also highlight two major touch points during which they would be most interested in signing up for or purchasing new monitoring and control products and services. Of the top four most preferred moments of contact, energy providers have direct oversight and influence into two: 44 percent of consumers would be interested when moving to a new home and 41 percent would be interested when their bill is higher than usual.

With new connections, customer move in/ move out and high-bill inquiries driving most customer contacts, energy providers already have a stake in the connected home market.

#### The connected, convenient home

Accenture has observed that technology adoption depends on much more than merely providing devices. Overwhelmingly, our research has shown that consumers do not want just an advisor; they want a provider that can help manage and simplify their lives. *Revealing the Values* demonstrated that nearly half of all consumers would be willing to exchange savings on their energy bill in order to have the convenience of using energy when it best suits their lifestyle.

With many consumers perceiving active energy management participation as time consuming, they gravitate toward a mindset of set-and-forget convenience. Our 2012 study revealed that 60 percent of consumers would be interested in technology that can completely automate the management of their electricity.

In our latest round of research, we see this trend continuing as in-home technology matures to include the broader scope of the connected home. When considering connected monitoring and control solutions for their home, set-and-forget functionalities seem to appeal to consumers. A majority selected automated functionality as one of their top-two criteria for inclusion in a monitoring and control package (see Figure 16).

Early adopters may be willing to pay for the latest technology and invest in more expensive smart thermostats and energy-efficient upgrades. For adoption to reach a tipping point, providers must address the financial aspects. In our latest research, consumers reaffirmed that savings, convenience and set-and-forget features are key motivators for purchasing monitoring and control products and services (see Figure 17).

While consumers seek more convenience and automation in connected home products and services, their purchasing experience appears to provide just the opposite. These new in-home technologies are complicated, and consumer understanding is currently low. Revealing the Values showed that

Figure 16. When considering a connected home solution, set-and-forget functionalities seem to appeal to consumers.



Base: All respondents.

63 percent of consumers would prefer to purchase a set-and-forget program from a salesperson either in a store or at home.

As consumers gain greater access to and control over their energy usage, related products and services will make electricity and gas much more personal products. The findings of the program point to greater opportunity for energy providers to engage consumers around the convenience of set-and-forget services.

#### Making life easier

While energy providers are one of the most preferred providers, other service providers are aggressively moving into the market and gaining consumer mind and share. Energy providers have a window of opportunity to establish themselves as enablers by leveraging smart technology, existing consumer relationships and nextgeneration customer insight.

With capabilities centered on customer interaction, segmentation and smart meter usage data, energy providers can be uniquely positioned to support the connected home via a growing array of products and services.

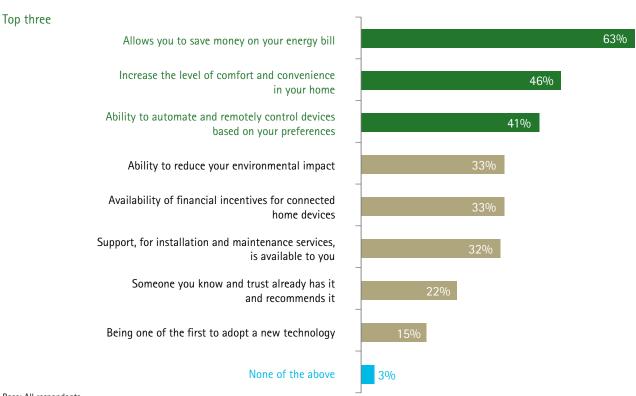
As connected devices become commonplace, energy providers should keep a keen eye on the marketplace to ensure they are not "outsmarted" by the technology. In fact, Accenture sees two strategies evolving: the first is acting as an advisor and offering an open platform to connect devices with the aim of helping consumers conserve energy and increasing customer satisfaction. The second is creating differentiated value propositions through connected devices (alone or with partners).

Providers offering set-and-forget value propositions are likely to see more success. Though some of these options are already emerging, the most successful value propositions will be those combining online and mobile visualization with set-and-forget energy and home management services.

To create a truly effortless energy experience, providers should consider technology solutions that leverage the convergence of social, mobile, analytics and cloud-based interaction methods. Just as important is promoting shortcycle innovation. Despite strong, creative progress in energy visualization and related areas, utilities still lag in offering simple, intuitive energy visualization and connected services across a broad spectrum of interaction types. Given the rapid pace of change in the connected home market, innovation and investment cycles need to be measured in months, not years.

Finally, providers should consider embedding tools into internal processes in order to provide consumers with immediate solutions and services. Identifying and resolving issues in real time helps in managing automated services, preempting negative customer experiences and preserving operating margins.

Figure 17. Savings, convenience and set-and-forget features are key motivators for consumers to purchase monitoring and control products and services.



Base: All respondents.

## 3.6 Prosumer



Active buying and selling of energy through various business partners is making relationships more complex—and deeper insight more important.

Historically, utilities have had one-way relationships with bill payers. Today, environmental awareness, rising energy costs and declining costs of microgeneration technology such as solar panels, small-scale wind turbines and energy storage are driving governments and citizens to increase interest in a variety of distributed energy sources.

With growing adoption of residential solar and other forms of distributed generation, providers are facing a new dynamic. Consumers are becoming "prosumers" who are creating their own energy and, in some cases, selling it back into the grid. Meanwhile, electric

vehicles are enabling a new breed of roaming consumers who are using energy services in various places—further creating even more complex consumer relationships that emphasize greater personalization and connectedness.

As consumers move away from traditional one-way relationships, these forces are driving more complex, interactive relationships both with individuals and with certain communities of consumers. What will ultimately emerge are more active, multi-way relationships—necessitating an entirely different, and more complex, set of customer insights.

Accenture expects buyer-supplier convergence, especially in developing markets with recurring electricity shortages and in developed markets with high energy costs or financial incentives. In some markets, solar is emerging as one of the first technologies to become a cost-effective micro-generation solution for residential and commercial consumers. With the cost of producing solar panels falling exponentially in recent years, certain geographies have already reached grid parity.

Figure 18. Despite low overall knowledge about solar energy products and services, there is a significant opportunity for energy providers to offer such products and services to consumers.



Base: All respondents.

In our latest survey, we sought to understand consumer trends and behaviors around the prosumer specifically, the increasing market for solar-related generation options. Overall knowledge of solar energy products and services is low, with only about onethird of customers knowledgeable about rooftop solar products and even fewer claiming knowledge of community solar projects or solar services (see Figure 18).

Although only a handful of respondents (9 percent) have solar products, 55 percent say they are considering purchasing or signing up in the next five years. Given rising interest and adoption, we continue to observe a variety of innovative companies entering the market. We also see a growing array of solar home solutions and community solar projects, as well as a host of supporting services—from automated support to financing instruments.

With an eye toward protecting margins, strengthening customer engagement or both, many energy providers have already entered the solar market. While new energy consumers' top choice may be specialized providers (74 percent),

energy providers are a very close second at 71 percent. And despite aggressive entrance into the home energy market, home improvement and phone or cable companies rank much lower (see Figure 19).

Further reinforcing these trends are consumers' "moments of truth" when making decisions to sign up for solar products and services. With 46 percent saying they would engage in a discussion when their energy bill is higher than expected, energy providers already have a significant opportunity to leverage realtime analytics in order to connect with consumers in a more meaningful manner.

#### Nurturing multifaceted relationships

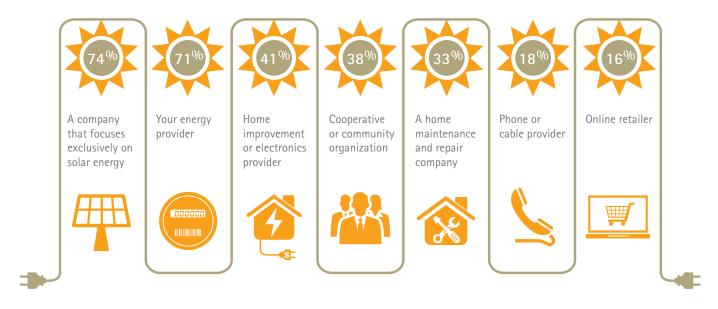
Distributed generation and technologies like rooftop solar are here to stay. Further fueling this trend are maturing disruptive technologies, such as fuel cells and onsite battery storage. Together with the continued deployment of smart grid infrastructure, energy generation is poised for further democratization.

Consequently, a growing number of utilities' consumers should be viewed as business partners—which introduces a host of complexities around billing, customer support and field maintenance. Prosumers represent a large component of the market upheaval many energy providers are already facing. Successful energy providers will be those currently building a prosumer-centric approach: a new platform for growth.

Insight-driven decisioning based on advanced analytics and data management will be at the core. Despite some progress, and even with smart meter usage data, energy providers currently lack the system and data integration needed for a true wealth of data. The crux of a platform approach is the ability to take an enterprise view of data, build in new data sources, enable retail-oriented data collection capabilities, and support outcome-based decision and experience modeling.

Above all, redefining consumer relationships further reinforces the absolute necessity of utilizing a variety of interaction and behavioral analytics.

Figure 19. Energy providers are the second most preferred provider of solar energy products and services, after specialized companies.



Base: All respondents.

## 3.7 Interconnected



With consumers seeking a convenient solution for home products and services, energy providers are finding ways to build interconnected offerings that address more aspects of consumers' daily lives.

Product and service bundles have become more popular among energy providers and consumers. Consumers welcome the convenience of receiving multiple services from a single provider. Consumers are interested in bundles that fit their lifestyle, whether it is around saving the planet, saving time or saving money bundles have become part of the fabric of consumers' services.

Extending beyond traditional commoditybased value propositions, energy bundles now include connected home services, technologies and plans, financing, insurance and other services-from

security to cable and phone. Other possibilities include distributed generation products and support, as well as emerging options for in-home and remote-based electric vehicle charging.

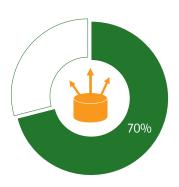
At the same time, telecommunications and other providers have begun bundling energy with their core offerings. But with many consumers rating energy providers as a top choice for energy-related bundles, there are significant opportunities.

In 2012, half of consumers expressed interest in receiving additional energyand nonenergy-related products and services from electricity providers. The following year, nearly half were planning to spend money on energyrelated products and services over the next 12-month period. Consumers not planning to spend are held back primarily by cost or the belief that they will not see significant savings. Through financing plans and consumer education, providers can overcome these barriers—creating opportunities to influence consumer behavior and capture new revenue.

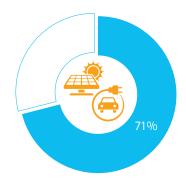
Figure 20. A large segment of consumers prefers a single provider for bundled solutions, and an energy provider for select services and solutions.

When considering monitoring and control products and services (energy management, proactive health care, and home security), would you prefer a single provider or multiple providers?

When considering making a purchase for solar products, monitoring and control solutions as well as electric vehicles, which provider would you select?



70% of consumers would prefer a bundled solution from a **single** provider



71% of respondents have selected energy provider among their top three preferred providers for solar products, monitoring and control solutions as well as electric vehicles

Base: All respondents.

More recently, overwhelmingly, consumers indicate interest in bundles from a single provider-especially when it comes to the connected home. A majority (70 percent) would prefer a single provider for a bundled solution of monitoring and control products and services, while just 30 percent would be interested in working with a mix of specialized providers (see Figure 20).

What is driving adoption of bundled energy packages? In our research, consumers cite potential savings, ease of use and convenience as the main factors (see Figure 21).

Consumers are open to receiving a variety of nonenergy-related services from electricity and gas providers. The key: offering the right mix of products and services.

Loyalty programs provide one example. In competitive markets, energy providers are identifying partners with such programs to attract and retain consumers. By bundling in loyalty programs, providers can create opportunities to reward certain behaviors-from selfservice and electronic billing to

energy conservation. We found that a majority of consumers (69 percent) indicated that they would be motivated to stay with their current provider if it offered a loyalty points program.

With clear customer demand for bundling from a single provider offering a diverse set of products and services, the central question becomes: Who will consumers turn to for support? The good news for energy providers is that consumers are likely to come to them. Our 2014 research showed us that nearly threequarters of consumers would turn to their energy provider for solar products and monitoring and control solutions, as well electric vehicle services.

Energy providers are at an important inflection point in their relationship with consumers. With bundling as a key element of success, by proactively advancing operations today, providers can address the needs of the next-generation consumer.

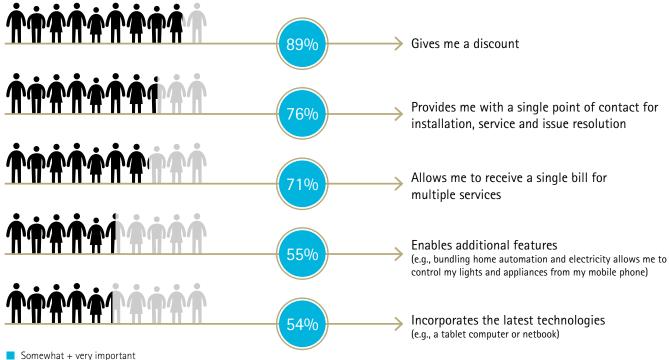
#### Becoming more interconnected

Deeper data analytics and other disruptive technologies are providing a gateway to the connected, mobile energy consumer giving energy providers a unique vantage point for capturing additional consumer value. While smart meters can act as an accelerator in this environment, waiting for deployments may cause providers to miss out on the potential of extending the value proposition.

Becoming a multi-product and service organization is a significant shift for many utilities—one requiring new approaches to successfully manage a growing range of products and services. Bundling is not without challenges or risks. Experience in other industries suggests that when not managed properly, bundling can lead to lower margins that ultimately drain value.

Still, the potential benefits of bundling are compelling. Whether energy providers decide to move into additional products and services or establish strategic partnerships, the most successful will be those that provide open, accessible platforms. These platforms must have the capability for driving customer insights and managing events across diverse offerings.

Figure 21. Potential savings, ease of use and convenience are the main drivers for bundling.



Base: All respondents

Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

# 3.8 Pay It Forward



Creative, convenient payment channels are helping energy providers deliver energy solutions that meet a variety of lifestyle needs.

Smart metering, connected homes, electric vehicles and other technologies are giving consumers more control over their energy usage and increasing the prevalence of point-of-use billing. At the same time, convenience and cause-and-effect options are becoming more popular. In short, energy providers are at the cusp of a payment transformation where more consumers will select prepayment channels.

The payment changes bring benefits to consumers and providers. Technology change and rising energy rates have driven energy consumers to seek new means of reducing their energy bill. For energy providers, innovative payment

options can help meet two goals: reducing bad debt and differentiating products and services. Not surprisingly, many energy providers have already begun implementing a variety of prepaid solutions, as well as other types of electronic payment options.

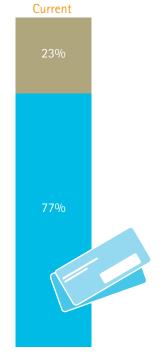
As a concept, prepayment or pay-ahead is widely understood and accepted by many consumers around the world. Traditionally, utilities have offered prepaid electric services in developing markets, to lower-income households and transient premises, enabling customers to enjoy greater flexibility and control over energy spending.

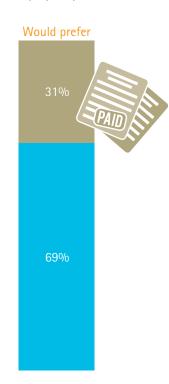
For the next-generation energy consumer, prepayment may become the rule rather than the exception. Changes from other service providers, such as telecommunications companies, have laid the groundwork for a pay-as-yougo mindset. For example, markets with mature smart meter deployments have already seen several smart-meter-related innovations, including new kinds of rates, prepaid bundle options, prepayment meters and a greater number of energy management technologies and services.

Figure 22. While postpaid plans are currently preferred, a segment of consumers would prefer prepaid plans.

Prepaid plan: you pay in advance for your energy consumption. This allows you to have control over your cost, minimize interactions with your energy provider and manage your energy consumption better







Base: All respondents.

Even if an energy provider opts not to participate in this space, other players in the consumer market will more than likely facilitate point-of-use energy sales. In fact, nonenergy service providers are already partnering to create solutions that enable electric vehicle owners to securely and conveniently pay for charging fees through a mobile application.

Successful energy providers will be those that offer a variety of dynamic billing and payment options-thereby providing the most value to energy consumers.

In some geographies, there remains a stigma around prepaid meters as being focused on credit protection rather than a value-add service. However, there are also segments of consumers who recognize the benefits and would opt in to pay-as-you-go functionality for traditional energy services.

Nearly one-quarter of consumers (23 percent) indicated that they are currently enrolled in a prepaid plan (see Figure 22). Not surprisingly, lower-income

consumers are overrepresented in this group. Interestingly, when asked if they would prefer prepaid over postpaid plans, over one-third of consumers (31 percent) preferred prepaid. Compared to older generations and lower-income respondents, younger energy consumers were the ones overrepresented in expressing interest in prepaid. We expect this trend to accelerate, as younger consumers look for solutions more tailored to their digital, interconnected lifestyles and more aligned with their desire to reduce environmental impact.

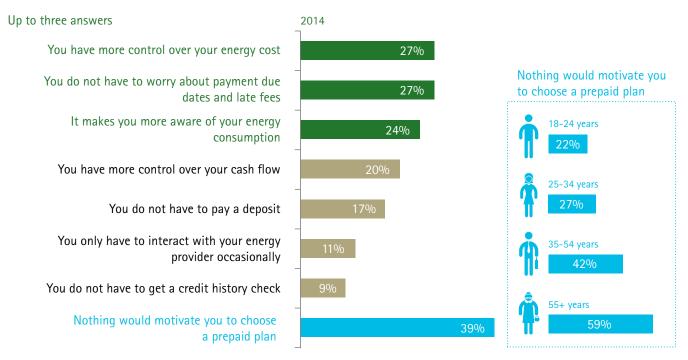
This is further reinforced by consumers' responses to what would motivate them to adopt a prepaid energy plan. Topping the list: energy cost management, payment convenience and consumption awareness (see Figure 23). Fewer younger consumers were among those stating that nothing would motivate them to choose a prepaid plan. As younger consumers mature, prepaid energy plans will become more common, potentially overtaking postpaid plans in the near future.

#### Paving the way for prepaid

Although infrastructure changes required for enabling prepayment to the mass market are significant, incremental costs to implement this capability are reduced following smart meter deployment. In offering prepaid, many energy providers have already realized benefits around bad-debt reductions and lower operating and generation costs.

To win in a prepaid world, providers will need to engage consumers around the potential benefits of prepayment targeting this option to those most interested in having greater control over their energy costs.

Figure 23. Energy cost management, payment convenience and consumption awareness are the main motivators to choose a prepaid plan.



Base: All respondents.

# 3.9 Energy Diverse



As consumer-provider relationships become more multifaceted, so too are the availability and range of products and services that energy providers can offer.

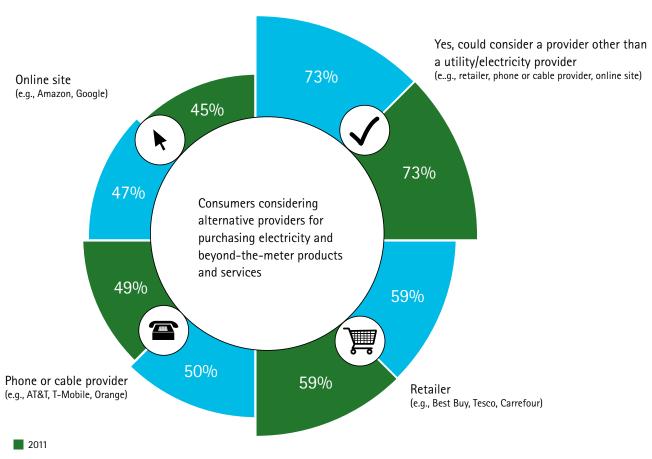
As energy becomes the foundation for a range of value-added products and services, the traditional energy provider faces both opportunities and challenges. However, this is not unique to energy providers. Our research has demonstrated that consumers remain open to receiving and acquiring various electricity-related products and services from new market players. 73 percent of consumers

indicated they would consider purchasing electricity or energy-efficient products and services from alternative providers (see Figure 24).

Further, many beyond-the-meter competitors currently operate with a high degree of consumer centricity. Telecommunications companies and product retailers, for example, have long

placed the consumer at the center of their businesses. Even if an energy provider opts out of the beyond-the-meter market, it will still face changing consumer preferences and behaviors driven by energy diversity—and the continued upheaval of the traditional market model.

Figure 24. Consumers continue to show significant interest in alternative providers.



Note that local examples of retailers, phone or cable providers were provided in each country Base: All respondents

\*2013 scope = 2011 + Norway, Poland, and Turkey

Source: Delivering the New Energy Consumer Experience, Accenture, 2013.

2013\*

We found that interest in in-home and other disruptive energy technologies and services is on the rise—perhaps attracting other product and service providers to the new energy marketplace. Compared to observations in 2012, our 2014 research revealed an increase in consumer interest in signing up for a wide range of products and services. Of particular interest are energyefficient home improvements, home energy audits, home energy devices and bundled energy sources (see Figure 25).

Recently we explored rising interest in electric vehicles and consumer preferences around related products and services. While electric vehicle adoption is growing steadily, forecasts call for demand to increase sharply over the next five to 10 years. Though specific growth

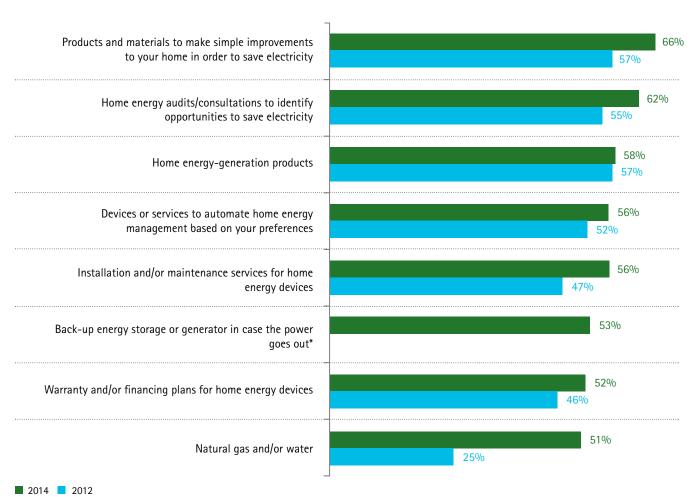
forecasts vary, electric vehicles clearly represent promising opportunities for energy providers to increase revenues and to engage consumers. In fact, our research shows that more than half of consumers are considering an electric vehicle for their next car purchase, with greatest interest coming from 18- to 34-year-olds (see Figure 26).

When considering the rising interest in connected home technology and microgeneration, the electric vehicle may be considered the unifying technologyproviding a true solution for daily energy engagement. The opportunity to deliver such a solution is not limited to energy providers; third parties and other stakeholders across the energy value chain also have an opportunity to scale their solutions in this space.

Energy providers currently have an edge. Our research confirmed that energy providers remain among the preferred providers for charging services. While the majority of consumers (81 percent) prefer to purchase charging services from their energy providers, they are also interested in purchasing from traditional gas/petrol retail stations and other retailers.

Interestingly, we observed a decline in preferences toward traditional service stations and an increase in interest around nontraditional providers, such as Internet service companies. These shifts may highlight the importance of the connected home as it relates to the electric vehicle platform.

Figure 25. There is steady interest in signing up for a wide range of additional products and services.



\*No results for 2012. Base: All respondents.

#### Building an energy-diverse portfolio

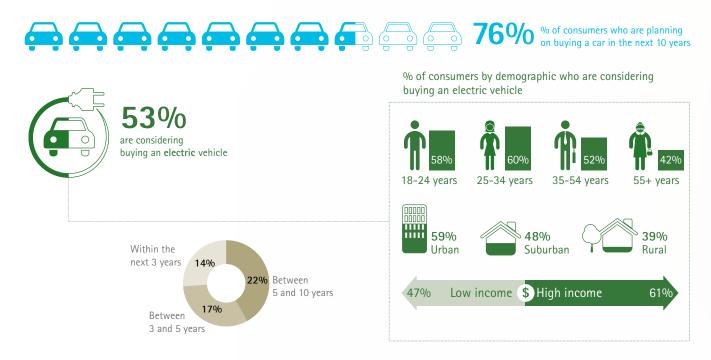
As the traditional utility market gives way to an energy ecosystem, consumers are taking a more holistic view of energy and energy-related products and services. Meanwhile, consumers' preferences, characteristics and perceptions of an energy provider will shape how much of the beyondthe-meter market it can capture.

As energy providers consider their role in the beyond-the-meter space, they must examine the business model or models to address the new energy consumer. Our findings point to a number of viable business models for providing new products and services with consumer sentiment spread evenly across the models. Only 21 percent of consumers are interested in a traditional utility experience (that is, no additional products and services), with most interested in further products and

services. About one-third (31 percent) are looking for a provider that offers electricity, gas and/or water along with a full range of products and services. Interestingly, the younger generation expressed more interest in specialized and full-service providers; by contrast, a higher share of consumers aged 55 and older prefer a standard provider.

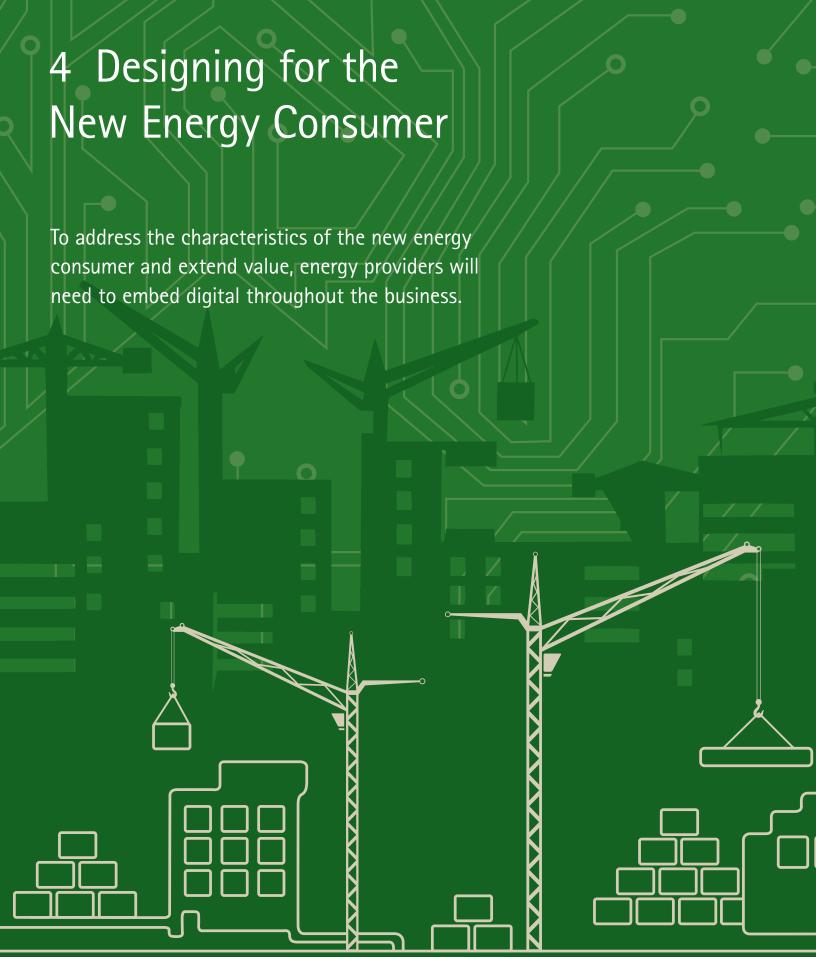
Thus, it has never been more important for energy providers to develop deep consumer understanding. Every energy provider needs to find a way to segment and analyze its base and determine the consumer appetite and value proposition for additional products and services. Successful energy providers will engage partners to deliver a fluid energy system with a variety of value propositions.

Figure 26. More than half of consumers are considering an electric vehicle for their next car purchase.



Base: All respondents.







While virtual interaction is not a new concept for energy providers, Accenture's New Energy Consumer research program has highlighted its broadening impact. With digital now central to all facets of the business, energy providers can no longer consider it as simply one aspect of customer interaction. Digital has become an enterprise imperative—one that requires energy providers to consider different mindsets for bringing new capabilities and competencies to market.

In 2013's New Energy Consumer Handbook, we profiled four core competencies that we have identified as central for success in the future (see Figure 27). While many utilities have implemented elements of these competencies, they can drive even better results by applying a digital view across the four competencies.

## 1. Delivering operational excellence

An energy provider may already be deploying new channels, providing additional consumer products and services or exploring new inhome service offerings. While these investments begin to address the new energy consumer views and preferences, they often add unnecessary complexity—increasing operational expenses and total cost of ownership.

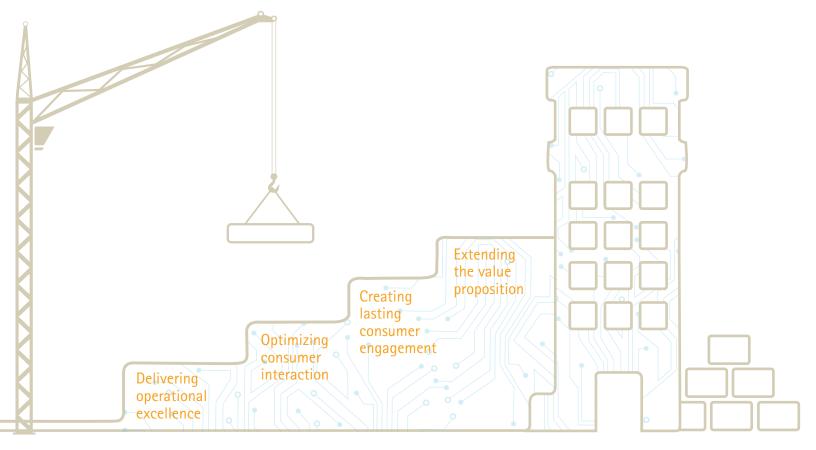
Even as interaction and product complexity increases, providers should not forget the basics: consistently delivering optimal quality and performance at the lowest possible cost. To that end, energy providers need to examine both base processes and technologies to streamline governance and increase discipline with continuous improvement. Over time, these investments can simplify operations and further enhance business agility amid market fluctuations.

By modernizing customer support capabilities, streamlining processes and simplifying policies and procedures, providers can reduce controllable customer support costs by up to 30 percent. In addition to reducing costs, shifting the operational mindset can also enable operations to be more nimble, more flexible and better suited to the new energy marketplace.

When reinventing customer operations, a resilient technology platform is a key factor moving forward. Information strategies, master data management practices and governance for realtime smart infrastructures, emerging energy solutions and customer-powered innovation will continue to be important.

By adopting a new mindset, energy providers' information technology teams can verify that systems go beyond traditional requirements and that design specifications are targeted toward dynamic, accessible

Figure 27. The four core competencies of the next-generation energy provider.



and continuous systems. Ultimately, an information technology mantra of "architecting for resilience" will carry through to the business. Resilient system design should support a modular, hub-and-spoke approach that caters to interconnectedness and embeds next-generation analytics. These capabilities allow for greater scalability, as well as more automated, localized decision making based on qualified operational measurements.

In strengthening digital capabilities, providers must support "alwayson" processes and services. After all, unreliable or poorly designed solutions could actually compound dissatisfiers of customer service. The most successful providers will look beyond the value potential of deflecting transactions to low-cost channels and shifting to automated processes. Leading energy providers will also focus and orient their workforce around complex interactions while adapting to the new demands emerging from technology and operational processes.

## 2. Optimizing consumer interaction

An ever-expanding set of connected personal and home devices have changed the traditional interaction paradigm. In retail markets, nimble energy providers have already introduced innovative digital and interaction capabilities. Many of these providers are leveraging new technologies in ways that are driving consumers to expect more. As such, larger retail incumbents and regulated energy providers are now pushing toward enhanced digital capabilities.

To their credit, many energy providers have achieved profound shifts in the range of choice and self-service capabilities they offer consumers. Even so, they should take it a step further: revisiting primary interactions to design self-service capabilities via consistent, easy-to-use channels while providing a cost-effective mix for consumer interactions. Interestingly, our research has revealed paradoxical preferences around interactions. Consumers want not only convenient self-service but also hightouch, value-added interactions. Given those demands, energy providers must be able to pinpoint the right interactions across the right channels at the right time.

Today, many utilities are often challenged by a fractured channel landscape analytics that deliver a siloed view of the customer and pockets of insight that are neither automated nor immediately actionable. Providers need an integrated interaction management foundation to create a single view of the customer and drive self-service.

## 3. Creating lasting consumer engagement

In the past, customer engagement resulted largely from outages, high bills or other negative triggers. To capture value in the new energy marketplace, providers should shift to high-value interactions and relationships. With the introduction of roaming consumers, beyond-thepremise engagement has become essential to delivering services without boundaries while educating and building trust with consumers. At the same time, more complex products and services are renewing the need for tailored, in-person education and sales interactions.

In many ways, the traditional, linear customer experience journey has given way to a "nonstop" customer experience. Changing behaviors have shifted how consumers relate to their service providers—making customer journeys more:

Dynamic. Enabled by technology, consumers now control their own journeys. Ways of getting information and service are no longer linear; in fact, consumers often cross channels when obtaining information or support.

Accessible. As technology amplifies and empowers the "voice or noise of others"; it is increasingly easy for consumers to compare promise versus reality.

Continuous. "Always-on" consumers expect the same of their utilities—and are willing to engage for added value.

Whether targeting conservation goals, new revenue opportunities or improved customer satisfaction, energy providers are challenged to deliver more tailored experiences that contribute to sustained engagement and loyalty.

Even effective self-service and virtual channel capabilities often lead to an increasingly fractured customer experience that may actually drive up costs and negate the desired effects. When different operating units own various channels and touch points, it can be difficult to deliver a consistent yet tailored experience to the consumer.

Providers must give new energy consumers an omni-experience-a seamless, consistent, end-to-end customer experience achieved through a holistic customer view that aligns business units, talent and priorities. Omnipresence also accelerates education and ideation by empowering consumers as marketers and co-creators.

To build the omni-experience, providers need to look beyond typical customer information. Consumer data is everywhere-from data about consumers' homes and businesses, channel preferences and past interactions to their social connections. Smart meters promise even more vast amounts of information about consumers' energy usage. The value of these data assets cannot be overstated. Yet, many energy providers have been challenged to architect their data in a manner that supports actionable data use. This digital information has become, and will remain, a vital currency and critical enabler of consumer engagement.

Vague segments and high-level personas are no longer sufficient for driving actionable consumer insights. The journey to a true omni-experience will always start with analytics that improve customer-centric decision making and business effectiveness in real time. As these trends progress, the key to success will be creating digital and enterprise platforms for managing market and interaction convergence at scale.

Further, these insights into consumers can enable new products and services or allow for new modes of engagement. With digital platforms offering endto-end views of the energy provider's value chain, data can be a true source of competitive advantage. In the hunt for value and shifting market models, the skill with which an energy provider creates, manages and analyzes data-about its operations and its consumers—will be one of the factors that determine success or failure.

## 4. Extending the value proposition

The convergence of disruptive technologies and industries is redefining energy as a consumer product alongside a range of other value-added products and services. Energy has become the foundation for realizing new, more diverse types of value. In many regards, energy can now be viewed as a core component of any truly connected, "smart" home solution. As our research has illustrated, energy providers have a profound opportunity to enter new markets-paving the way for enhanced revenue and engagement opportunities supported through compelling consumer value propositions.

Extending the value proposition will require energy providers to develop a new mindset of innovation and agility. The first step involves a shift from traditional one-way consumer relationships to a view of consumers as business partners. As balancing supply and demand becomes less predictable and more dynamic, energy providers should develop deeper analytics to better understand the levers of consumer adoption and ultimately derive consumer value. By increasing understanding of consumer patterns and incenting behavior change, utilities can build optimal propositions that create value for both consumer and provider.

Next, in advancing toward extended value propositions, energy providers must build or strengthen an innovation competency. With new products, services and technologies breaking through traditional boundaries, providers can seize opportunities to strengthen consumer engagement and, in some cases, capture new revenue streams. But that is possible only if they are able to quickly launch new products-and just as quickly decommission old ones. With the nonstop consumer becoming even more interconnected through smart home technologies, providers have little time to play catch-up. Extending value requires a culture of short-cycle innovation focused on product development and consumer value propositions that are both tailored and easy to understand.

Finally, despite growing consumer expectations around new energy value propositions, tailored products and personalized services, many utilities must build the capabilities required to meet consumer demands. At the same time, the energy ecosystem is expanding to encompass a broader range of organizations—some with new products and services and others looking to influence energy usage behavior in the name of conservation. Although utilities remain at the heart of the energy marketplace, they need to innovate and transform to maintain this coveted position.

The increasing complexity of modern-day products and customer service has led many organizations to refocus on core strengths and leverage partnerships to fill capability gaps or offer entirely new value propositions. While collaboration is an established trend, "coopetition" is another approach that is gaining momentum. In uncertain, highly integrated, complex competitive environments, we are observing collaborative partnerships in which direct competitors team up

to create new markets or redefine cost structures on noncore capabilities. As energy providers consider new digital capabilities and market models-alongside cost-to-serve and other ever-present imperatives—the importance of tapping into the power of partnerships is no longer an option. It is now an operational reality.

Even as digital reshapes the landscape, operational excellence, consumer interaction, consumer engagement and extended value propositions remain the building blocks of enduring success. Developing these competencies will not be fast or easy. For many providers, they will require organizational transformation and significant upheaval to the status quo. But they are critical to surviving amid constant change, seizing new opportunities and thriving in the new energy marketplace.

## 5 Shaping the Future-forward Strategy

Digital technologies and interconnectedness continue to accelerate the pace of change in the new energy marketplace. Energy providers should now prepare to make decisions and investments that will define their core competencies to address the new energy consumer.

Our New Energy Consumer research has illustrated that consumers fall across a spectrum from energy literate to energy agnostic. As they engage consumers, the most successful providers will be those who identify and address clear targets for the two ends of that spectrum. For the "always-online" consumer, providers need to deliver a seamless, individualized experience. In the face of growing social centricity, providers must also consider the mechanics of how to gather information and ideas, as well as how to engage larger groups of consumers with socially designed programs. As other consumers become more tech savvy, they will encounter energy alternatives, challenging energy providers to offer bundles of products and services that go beyond the meter and address a variety of lifestyles and preferences. At the same time, industry and digital convergence will continue accelerating change—and intensifying competition.

Despite continued uncertainty and disruption, providers should act now to architect a roadmap for the future. To deliver on the promise of a new era of customer operations, providers must answer these questions:

Reinvention. What steps should we take to reinvent core customer operations? How can we modernize customer support capabilities, streamline processes and simplify policies and procedures?

Future proof. How resilient is our technology architecture? How will the architecture be able to support real-time smart infrastructures, emerging energy solutions and customer-powered innovation?

Digitally driven. How are we deploying digital customer technologies? How are we proactively addressing consumers' needs through optimized self-service interactions?

**Analytics.** How do we maximize the value of data to support decision making? How are we using real-time actionable insights to build business effectiveness?

**Customer centricity.** How are we developing a view of the omniexperience? How are we aligning business units, talent and priorities in order to deliver a seamless, consistent, end-to-end customer experience?

Product based. Is innovation a core competency? Are we launching products and services at speed—embracing social and mobile channels that empower consumers as marketers and co-creators?

Market maker. How are we positioned in the market? How are we accelerating value creation by partnering with other providers and forming unconventional alliances?

Success will require that providers prepare for both success and failure when they bring to market new capabilities, products and services—and to accept the risk inherent in entering new markets. The key will be sustaining the innovation engine as a provider architects its business and orchestrates its new energy consumer propositions.

For more information on the new energy consumer and Accenture's complete point of view of the currents of change and core competencies of the future, please refer to the New Energy Consumer Handbook on www.accenture.com.

# 6 The New Energy Consumer Research Program

Accenture undertook the multiyear New Energy Consumer research program to help gas, electricity and water utilities understand emerging consumer needs and preferences, to identify new challenges and opportunities and to bring focus to the critical competencies required to succeed in the evolving energy marketplace.

Collecting consumer insights from interviews with more than 50,000 end consumers around the world, the initiative has explored a range of topics.

### 2010

**Understanding Consumer Preferences** in Energy Efficiency offers a consumer view to support the increasing industry focus on smart metering and demand management. This first study produced valuable insights into consumer preferences in energy efficiency, awareness, readiness and willingness to take action.

#### 2011

Revealing the Values of the New Energy Consumer explores the emergence of a new energy marketplace through a worldwide end-consumer survey looking at preferences, opinions and priorities in beyond-the-meter products and services offered by utilities or other providers.

#### 2012

Actionable Insights for the New Energy Consumer focuses on developing actionable insights and tactical implications for the emerging energy marketplace. This study explores consumer choice, connection and loyalty, and provides a fresh view of how consumers want to interact with their energy providers, the products they value and what drives their purchasing and loyalty behavior.

#### 2013

**Delivering the New Energy Consumer** Experience looks to the path ahead for energy providers addressing key consumer "dissatisfiers" and offers views to help deliver on the diverse expectations and needs of residential consumers and small and medium businesses (SMBs).

#### 2014

The New Energy Consumer -**Architecting for the Future** explores new opportunities in virtual customer interaction, the connected consumer, distributed energy, and new products and services. It also offers Accenture's view of the energy consumer of the future.

All data points and figures in Architecting for the Future have been sourced from these five years of research, and are available on www.accenture.com.

## The New Energy Consumer research methodology and sample

Accenture's five years of global research surveys are based on questionnaireled interviews with end consumers. Surveys were conducted online in native languages for Accenture by Harris Interactive. The selected countries represent a range of regulated and competitive markets.

For residential consumers, the survey sample was statistically representative of the general population in each country, with the exceptions of Argentina, Brazil, Chile, China, Indonesia, Philippines, South Africa, and Thailand, where the sample was representative of the urban populations. For countries with large and/or diverse populations, participants were selected from a broad spectrum of locations. The surveys included attitudinal, behavioral and demographic questions.

In 2010, 2011 and 2012, the survey also presented choice-based questions about various combinations of elements of energy management programs and value-added products and services. The information was evaluated using a conjoint analysis to understand how consumers weigh different components when considering energy packages or energy management and to segment them according to their preferences.

In 2013, more than 2,000 small and medium businesses were surveyed in nine countries. Respondents were responsible for or contributed to electricity- and/or gas-related decisions at their place of business.

#### In 2014, more than 13,000 residential consumers were surveyed across 26 countries.

# Interviews	<b>%</b>	# Interviews 🦠	
Argentina*	500	Netherlands	500
Australia	500	Norway	500
Belgium	500	Philippines*	500
Brazil*	500	Poland	500
Canada	500	Singapore	500
Chile*	500	South Africa*	500
China*	500	South Korea	500
Denmark	500	Spain	500
France	500	Sweden	500
Germany	500	Thailand*	500
Indonesia*	500	Turkey	500
Italy	500	United Kingdom	652
Japan	516	United States	1,052

donesia*	500	Turkey	500	Low (bottom 25% in every country)	26%
aly	500	United Kingdom	652	Medium	49%
pan	516	United States	1,052	High (top 25 % in every country)	25%

Gender  $\P$ 

Age Trans 18-24 years

25-34 years

35-54 years

>55 years

Income 👸

Men

Women

49%

51%

18%

25%

34% 23%

<sup>\*</sup>Sample representative of the urban population.

Countries included in the multiyear research program, with number of consumer participants.

Country	2014 residential consumer research	2013 residential consumer research	2012 residential consumer research	2011 residential consumer research	2010 residential consumer research
Argentina	500	-	-	-	-
Australia	500	500	500	500	500
Belgium	500	500	500	512	-
Brazil	500	500	500	510	518
Canada	500	500	500	500	500
Chile	500	-	-	-	-
China	500	500	500	502	500
Denmark	500	500	514	505	500
France	500	500	500	514	500
Germany	500	500	500	500	513
Indonesia	500	-	-	-	-
Italy	500	500	500	548	527
Japan	516	500	500	530	530
Netherlands	500	500	500	544	500
Norway	500	500	500	-	-
Philippines	500	-	-	-	-
Poland	500	500	-	-	-
Singapore	500	500	505	510	501
South Africa	500	500	512	500	500
South Korea	500	500	500	537	500
Spain	500	500	500	550	500
Sweden	500	500	500	511	514
Thailand	500	-	-	-	-
Turkey	500	500	-	-	-
United Kingdom	652	634	627	724	500
United States	1,052	1,020	1,000	1,202	1,005
Total survey sample	13,720	11,154	10,158	10,199	9,108



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## About Accenture Energy Consumer Services

Accenture Energy Consumer Services delivers energy provider customer solutions for both competitive and regulated markets globally. We help our clients achieve three key business imperatives: cost effectiveness, revenue assurance and extension, and customer satisfaction. Guided by New Energy Consumer insights, our electricity, gas and water clients realize higher value through industry-specific strategy, digital, technology and operations capabilities and world-class expertise, assets, tools and accelerators.

## About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 289,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.

