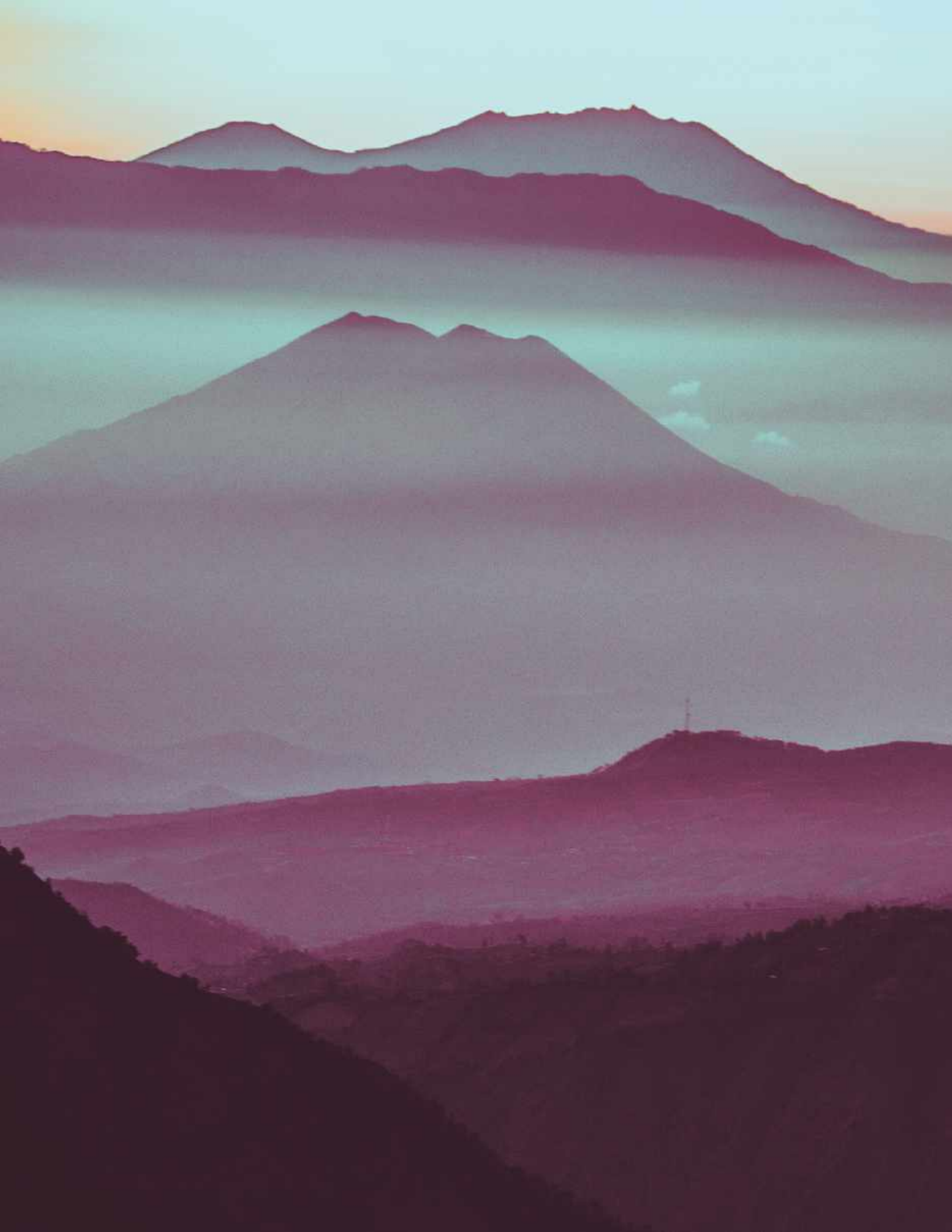


ILLUME



OPPORTUNITY IN DISRUPTION

2 0 1 8





WHAT'S INSIDE

Over the past five years, ILLUME has exceeded the expectations of its founders. Launched September 3, 2013, ILLUME sought to intervene in the energy industry by marrying the competencies of design, implementation, and evaluation with human-centric research to support our clients through an ever-evolving energy industry. By delivering research-driven strategy consulting across industry silos, ILLUME has grown from the vision of two women to a thriving consultancy of 30 dedicated professionals.

This magazine is our way of leveraging what we've learned in the past five years and applying it to the challenges of the next five. In these pages, we take on topics that keep us energized about our work as well as those that have cost us a few nights' sleep. We hope you'll come away with a seed of inspiration or renewed resolve to face our industry's headwinds. There is no doubt that the next five years offer many unknowns. But, if you are like us, navigating this uncertainty is a challenge we are eager to take on.

Catch Up with the Founders.....	1
Are You Blockbuster in the Age of Netflix?.....	8
Innovation Break Down.....	11
Georgia Power is Leading by Their Customers' Example.....	15
Stay Calm and Rate Reform On.....	23
Who We Are.....	25
Choosing the Right Tools For Your Ascent.....	31
So, You Want to be the Amazon of Energy?.....	33
Generation Z is Coming!.....	42
Research Your (Un)Knowns to Innovate.....	43
Delivering a Smart Home Offering from the Customer Up.....	47
How to Deal with DERs.....	51
Teaching the Old Evaluation Dog New Tricks.....	53
Energy Burden.....	57
Your Customers are Woke, Are You?.....	59



ANNE DOUGHERTY
Founder & Co-Owner

CATCH UP WITH

I. As you reflect on the past five years, what are you most proud of?

Sara: Two things come to mind. The first is that Anne and I have been able to stick to our original vision of creating a boutique consulting firm that does forward-thinking and inspiring work in an industry we love and that allows our team to flourish professionally while growing their passions outside of work. The second thing I am proud of is how ILLUME has become so much bigger than just Anne and myself. When we started the company, we never intended it to be the “Anne and Sara show.” We always wanted ILLUME to stand on the talent and dedication of our team. Today, we have that—ILLUME is so much more than any one of us.

Anne: I want to echo Sara. We wanted to intervene by changing the mindset that research is evaluation only, so that our clients could benefit from it throughout their business. I think we have achieved that. But more than anything, I am so proud of our team! We often joke at ILLUME that we have the world’s most motivated and engaged team when the entire company volunteers to support our various initiatives. Everyone is earnestly invested in producing high-quality, smart, and effective work. And, our team is comprised of wonderful, creative, and thoughtful human beings. I trust the intentions and values of everyone we have. That sounds like table stakes, but I don’t think all founders can say as much. It’s more than I could have hoped for.

Sara: When Anne and I started ILLUME, we believed that we could realize our vision, but we also knew it would take commitment, a lot of hard work, long weekends, occasional tears, a lot of laughter, and a bit of stubbornness to get there. Looking back now, all those things were true, and it has been worth every moment of it!

THE FOUNDERS

2. ILLUME leads from its values. Why is that so important to you as a leader?

Sara: I think that to be a successful organization you have to lead from your values. As we embarked on our journey, we were cognizant of living and modeling these values day in and day out to make them real. They had to be more than words on paper; they had to drive the business, our decisions, our priorities, our strategy, and our actions. By placing our values front and center, by actively living them, we provide our team a common language, something to believe in beyond the work.

Anne: Our values fuel our team and by extension, our company. I can't tell you how many times I've heard unethical behavior justified with statements like "It's just business." I don't buy it. We spend the most lucid hours of our lives at work. For this reason alone, it feels disingenuous to me to behave one way in my personal life and then adopt an entirely different set of ethics in my work life. Integrity, inclusivity, kindness, decency, and earnestly trying to create a better life for ourselves and society — these are values I teach my kid and they have a firm and uncompromising place in business.

3. You've put a heavy emphasis on developing ILLUME's talent. What are your hopes for the team going forward?

Anne: In consulting, talent is our only asset. It is what we offer our clients. Our clients receive the best work if our team aligns their talents with their interests. As we develop people, we are always looking for the intersection of these two qualities. We practice intentional communication with our clients and the industry in general to ensure that we all grow in step with one another. It takes so much effort, but the result is fulfilled ILLUME team members and happy clients.



SARA CONZEMIUS
Founder & Co-Owner

Sara: We are investing in our talent and creating an environment where people can grow, flourish, and become industry leaders in their own right. By focusing on individuals and the needs of industry, we are creating an enduring company with a deep bench of passionate leaders who will take ILLUME and the industry into the future.

4. In ILLUME's initiatives, you've focused heavily on the customer. Why should the industry continue to place its focus there in the next five years?

Sara: Today, customers want a more informed relationship with their energy provider whether that be their utility or the alternate power providers emerging on the market. Consumers call the shots. To stay relevant and grow revenue, traditional utilities must figure out how to navigate a new, reciprocal relationship with their customers. To continue to successfully reach energy efficiency goals, utilities have to figure out how to reach a broader and more diverse set of customers.

Anne: Exactly. The customer is the only asset a utility has. Community choice aggregators in California are making that very clear. Direct-to-consumer energy transactions are happening now. Our largest energy markets are in moments of disruption. It would be

naive to believe that these trends won't spread to other parts of the U.S.

Sara: Having worked in this space for almost 20 years, I still find it astounding that utilities have so much data on their customers and know so little about them. Over the next five years, utilities will have to go well beyond five segment buckets to engage with a customer base that is not used to seeing them as a provider of anything other than a monthly bill. As customers have more choice, as they come to expect more control, as they are offered more products and services from their utility, it will take more than speed dating to connect with and get loyalty from customers. Utilities can't count on a completely captive audience, so they will need to figure out how to be relevant to each customer.

Anne: Right. So, how does a utility remain relevant? Through engagement. Through better, smarter services that are on par with truly competitive markets. Through listening to customers and finding the intersection of their business needs and the customers' needs. This is not a top-down, business-to-consumer process. It is a conversation. It has to look and feel like co-creation to transform these moments of disruption into business opportunities. To have this conversation, utilities need to use new tools that unify qualitative research like ethnography



with complex data analysis such as machine learning and sentiment analysis.

5. What do you view as the energy industry's greatest challenge?

Anne: Time. Utilities move slowly for a number of reasons, despite the talent and efforts of their teams. Regulation, deeply siloed departments, and misaligned incentives create environments that are not conducive to responsiveness and innovation. And, I am going to say it: post hoc evaluation methods, and their limits, play too large a role in determining how we design offerings. If utilities can figure out how to create environments for quick, iterative design innovation and embed learning throughout, then I think we can see real changes in the way customers relate to energy services. Making sure-footed, effective, and timely decisions is critical to surviving in a rapidly changing marketplace.

Sara: I think that's absolutely true, and involves a number of issues that are interconnected but also worth calling out. The convergence of energy efficiency, demand response, and distributed energy resources (DERs) gives customers greater control and independence and forces utilities into new relationship with their customers. Greater integration of renewable sources will require utilities to adapt their

business models. With the growth of the Internet of Things, smart homes, and artificial intelligence technologies like Amazon's Alexa, utilities will have to find their place in these markets. The traditional utility business model is also at greater risk of policy shifts towards alternative sources as renewables, electric vehicles, battery storage, and non-traditional power aggregators become more competitive. As customers have more lower cost and cleaner options, there is also a risk that investors decide to shift away from conventional energy companies to more sustainable alternatives. Anne is exactly right – timely decisions will be critical for utilities to survive these swift market changes.

“ I hope to see this industry broaden so that there are new faces, ideas, backgrounds, and experiences influencing and informing our future. ”



6. How do you think research can help the industry continue to evolve?

Sara: In the past, the energy industry has not been particularly focused on the customer side of the meter. Research was primarily focused on program impact and process, far less on understanding customers' drivers, wants, and needs. As utility energy efficiency goals grow and the usual suspect customers have been reached, it is critical to gain a better understanding of who customers are, what different customer segments need, and what drives and motivates them. Propensity modeling and traditional rote segmentation schemes that aren't informed by qualitative research will continue to point programs to the same subsets of customers who have already participated.

Anne: Research is a tool for strategy and problem-solving. Research — when done well with the right methods and at the right phase in product and service delivery — is the foundation for strategic decision-making and adaptation to the market. For this reason, research should be along for the ride throughout the cycle of product and service delivery. The same can be said for evaluation. Too often our industry invests in research only after products and services go to market. If you bring research in this late,

you've failed. It means you've launched a product or service based on the thinking of your team alone. You've invested in an echo chamber. Embedding research and evaluation carefully throughout your work ensures that your investments remain sound.

Sara: Yes. Understanding what customers need and want before developing programs or launching new products, making sure they are developed to work, and using nuanced messaging and outreach strategies that speak to all customers and each customer is critical to competing successfully. We know loyalty is limited. Markets no one would have thought would be disrupted five years ago are seeing devastating effects from not evolving to meet customers' needs. Brick and mortar retail, the hotel and taxi industries — cornerstones of customer service, who believed that they would sustain because customers had little other choice — are all scrambling to keep up with unexpected competition. By investing in understanding what customers need, utilities can better design programs and services that meet those needs and will be better positioned to compete in a new and changing market.



7. Finally, what are your hopes for ILLUME in the next five years?

Sara: My hopes for the next five years are built off the last five and our original vision. I hope to continue to work with Anne to lead and grow from our values. I want to further our commitment to our company culture and the well-being and personal and professional growth of our staff. And I want to see our team recognized as leaders in the industry. I hope to

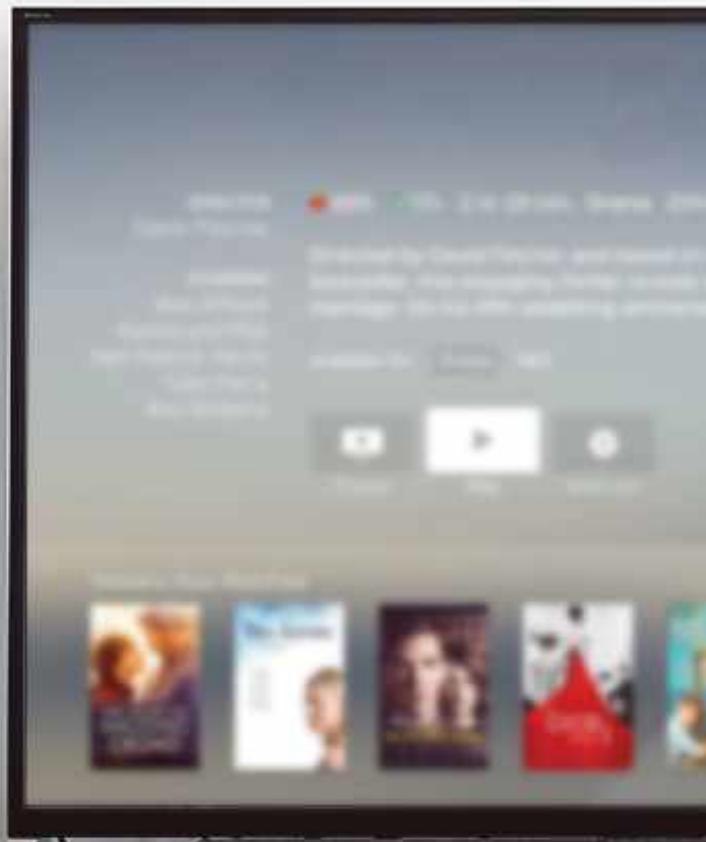
“ I am often in awe at how this adventure has turned out, how it has twisted and turned in the most unexpected ways but how, at the core, we have stayed true to the original dream. ”

see this industry broaden so that there are new faces, ideas, backgrounds, and experiences influencing and informing our future.

Anne: My hopes for ILLUME are simple, but ambitious. I want our clients to see this company that Sara and I built as the go-to team for innovation and problem-solving. I want our staff to remain engaged and excited. And I want to show up to work feeling confident that we are working to do exactly what we sought to do when we launched: align the dreams and aspirations of customers with the business needs of the energy industry to build a bold, thriving, and clean energy future.

Sara: Before Anne and I started ILLUME, we spent a day at my parents' house, sitting in the sun room strategizing, visioning, and planning for what this yet-to-be-named dream would be. We painted a picture of what this would look like in five years. Today, as we hit that mark, I am often in awe at how this adventure has turned out, how it has twisted and turned in the most unexpected ways but how, at the core, we have stayed true to the original dream. We made it faster than we thought, and that is due to the good fortune of being joined by — hands down — the most amazing team in the industry. As we head into the next five years, it's their dream now too, and I cannot wait to see where we go together. ■







Are you Blockbuster in the Age of Netflix?

The utility industry will transform. The important question is not how, or when, but *who* do utilities want to be to their customers in five years? In ten? What will customers accept? What will they expect?

Netflix is an entertainment company. But they did not start out that way. Netflix launched in the face of a transformation — the move from VHS to DVD technology. With this newer, lighter, and more portable product, Netflix devised a subscription service that brought DVDs to consumers' doors. Netflix soared in this time of industry disruption. Then, almost as fast as it took off, Netflix was on the verge of failure when customers began to stream content instead of renting DVDs. Rather than panic, Netflix pivoted quickly with the market, leveraging its website to offer streaming. And, as consumers clamored for more on-demand content, Netflix all but invented binge-watching. They also started creating the most captivating new entertainment, recently eclipsing HBO in Emmy Award nominations for the first time.¹ How did this organization grow from Blockbuster's biggest rival to competing against big cable and the world's largest media companies? Netflix defined its core value and delivered it, irrespective of the technologies that enabled it. By focusing on entertainment and not DVDs, Netflix created its own niche and redefined the home entertainment market.²

What does Netflix have to do with utilities? Now, more than ever, it is critical for you to define your irreplaceable value to consumers. Emerging energy companies are changing how consumers access, pay for, and use electricity.³ As your customers become prosumers — active participants who produce and consume their own electricity — you have to reassess who and what you want to be to them.

As blockchain technology becomes more prevalent, pilots on transactive energy and blockchain-enabled companies are looking to provide direct-to-consumer and consumer-to-consumer power trading.⁴ These companies are defining their value — offering access to lower energy prices and cleaner power by cutting out brokers and providing the technologies necessary for consumers to play in the energy markets themselves.

TRANSACTIONAL ENERGY PILOT

The pilot uses energy management systems in volunteers' homes and businesses paired with a two-way subscription tariff. This provides customers with predictable, fixed monthly bills and real-time price signals that pay them for saving energy and charge them extra for above-average use.

The pilot explores how the technology works and how customers interpret and react to the true cost of power.

The problem? Customers don't easily understand the concept of transactive energy or the hyper-technical terms used to describe it.

Disruptive technology is great, but if you can't speak to customers on their terms, it's dead on arrival.

We developed uniquely tailored marketing tactics to reach the ideal customers. We paired that with a compelling script and visual branding guide that customers could understand.

By getting the designers to think like a customer, we helped them get the go-to-market strategy right.

Consumer demand is pushing you to innovate, whether you realize it or not. While many suggest

that we are light years away from these prosumer models at scale, we need only look at California to see how rapidly energy markets can change under consumer demand. Unlike Netflix, utilities were caught off guard by demand for cheap, renewable power. Since 2010, community choice aggregators (CCAs) have rapidly taken over key customer-facing relationships from the state's investor-owned utilities (IOUs) with the promise to deliver on these demands. Now, CCAs are expected to serve 85% of the state's customers by 2025.⁵ Similar legislation establishing CCAs has been passed in New York, Massachusetts, Illinois, New Jersey, New York, Ohio, and Rhode Island.⁶

Consumer choice does not always equal equity and reliability. Currently, CCAs receive many of

the benefits of California's electric grid without sharing the risks or cost of its development and maintenance. Furthermore, CCA's desire for clean power, absent careful regulation, has made access deeply inequitable. Unsurprisingly, CCAs have sprung up in communities that have the political,

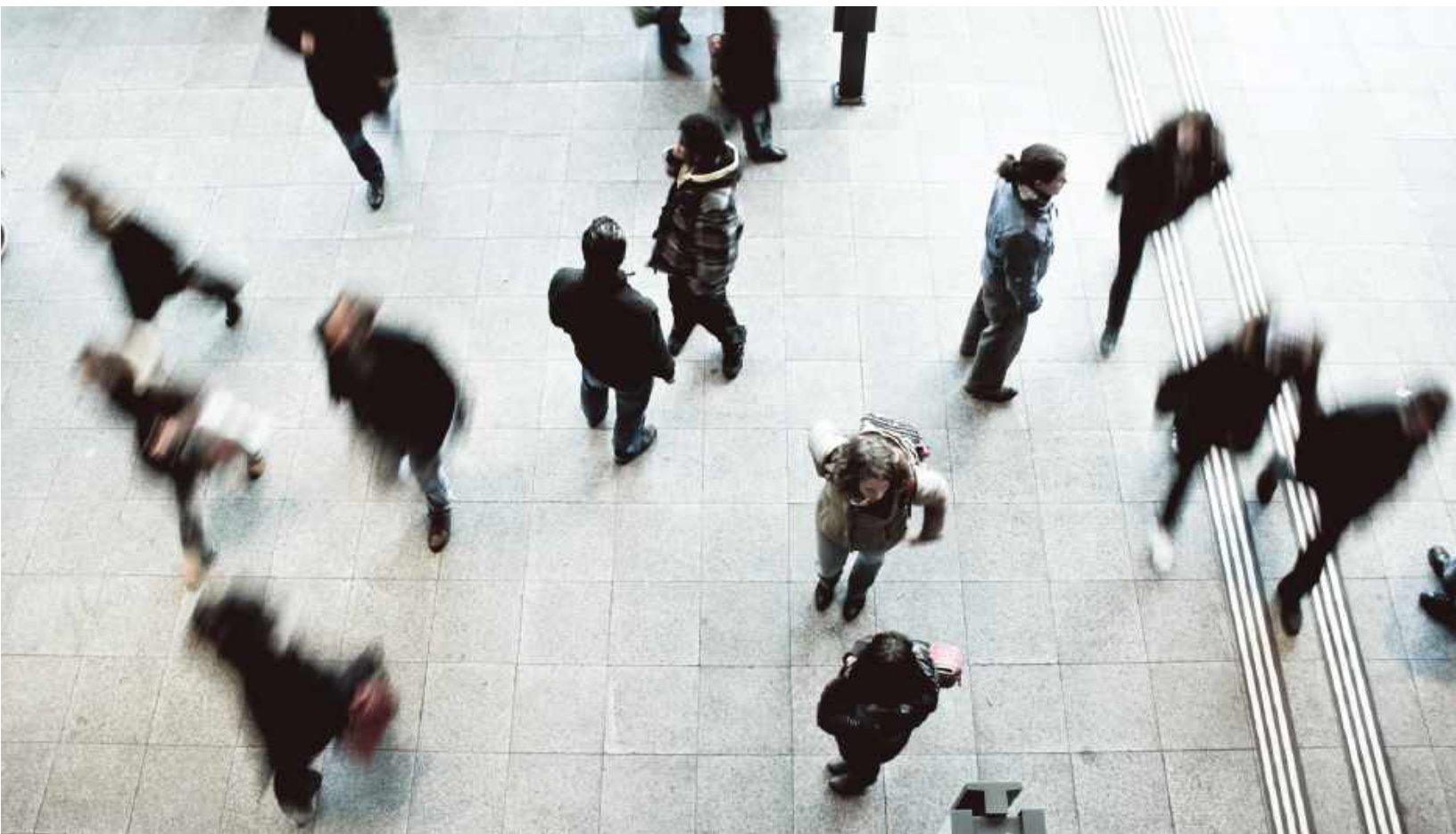
economic, and social capital to legislate such demands. As one utility leader put it, the expansion of CCAs looks like a contagion map spreading among the wealthy coastal communities and slowly moving inland. If this trend continues as expected, the state's IOUs will be left serving the hottest and most expensive regions in the state that are also the most economically disadvantaged. As a result, economically and politically disenfranchised communities are shouldering the cost of the choices made by wealthy, coastal communities as they pay for infrastructure maintenance and policy-making that enabled CCAs in the first place.

We need you to innovate so you can stay the same. Unlike Netflix, the California IOUs provide an infrastructure and service that is vital to the well-being of the public. The metaphorical equivalent would be if Netflix scouted talent, built content, retailed it, and owned the internet technology and fiber required to deliver it. This difference is critical to the long-term stability of our energy resources. You have to continue being the stable, reliable, and conservative system planners we need to avoid service interruption and protect the grid from all manner of threats. In this moment of disruption

— from CCAs to transactive energy to direct-to-consumer brokering — how can you innovate to continue playing the role we all need you to play?

Your only asset is your customer relationships—how can you maintain them? You should get clear on your unique value and offerings to stay on course with customers. How can our heavily regulated industry follow the lead of nimble companies like Netflix to transform your images, brands, and relationships to not only sustain revenue, but to thrive in a prosumer future?

Throughout this magazine, we attempt to answer this question by providing insight into where the market is going and the research-driven approaches that can help you identify your unique value and innovate while safeguarding your core role. We discuss the design-thinking process ([page 11](#)), how to identify what you don't know you don't know ([page 43](#)), and ways to capitalize on your existing customer relationships ([page 33](#)). But, of course, these pages cannot contain the multitude of ideas and talents of our team ([page 25](#)) — for that, we hope to work with you one-on-one and help you move forward.



INNOVATION

BREAK
DOWN

How do we find opportunities?

Marco, the kitchen manager of a local diner, turns on cooking equipment and the exhaust fans each morning when he arrives to start prepping for the breakfast service. Everything stays on until the diner closes at 11 p.m., even though there are times throughout the day when the diner is quiet. Marco is not alone: many small commercial kitchens leave exhaust fans on even when no one is cooking. This is one of many largely untapped energy saving opportunities among small and medium businesses (SMBs).

In 2015, the Minnesota Commerce Department, Division of Energy Resources recognized the important role of SMBs in reaching their energy saving targets and commissioned the ILLUME and Seventhwave team to conduct a Statewide Commercial Behavioral Segmentation and Potential Study. Our results showed that SMBs have opportunities to achieve 245 million kWh and 7.8 million therms of energy savings in Minnesota.

We've identified opportunities, now what?

Meetings, planning, budgeting, forecasting, benefit-cost calculations, and more meetings. These are just a few of the prerequisites to launching new solutions. New offerings are often variations on established, proven approaches or built from well-worn assumptions. While this tactic often results in solid, dependable programs, it does not encourage innovation and risks missing opportunities. In a moment when savings are increasingly difficult to achieve, how can we identify new opportunities to engage customers in smarter energy use and management?

ILLUME is actively supporting many large IOUs in rethinking how to design new solutions that leverage approaches derived from design thinking. The Stanford Design Thinking process offers a model for innovation that incorporates deep understanding of the challenges and a clear definition of the problem to

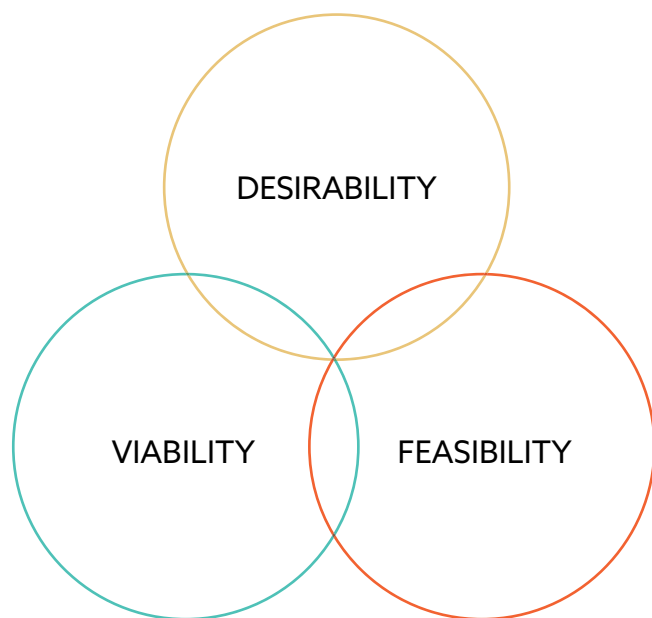
solve. After brainstorming and identifying a solution, developers prototype and test to get it right.

Applying this process to product and services design requires new approaches that can be difficult in regulatory environments with rigid cost-effectiveness parameters, penalties for not meeting goals, and hesitancy around experimental approaches.

However, there are smart ways to innovate even in this environment. Here are a few we recommend:

Exploratory research: What's happening in those kitchens?

Exploratory research is a great first step to understand a need or define a problem. It is relatively quick and inexpensive and, while it includes reviewing secondary data and reports, it centers on direct conversation with the people who have the need.



Innovation requires three key elements: desirability, feasibility, and viability. In energy innovation, we often leave out research focusing on customer desirability and that can undermine our success when bringing new technologies to market.

This means talking to target customers, businesses, and trade allies — a small number of interviews helps us understand wants and needs and define the solution. For example, before launching a rebate for exhaust fan controls, we need to understand why Marco’s diner doesn’t already have one. Expense? Disruption to install? Concern about newer technology? Competing priorities? We also need to understand why Marco leaves the fan on all day. Habit? Belief that it is best for his kitchen? To mask other disruptive noises?

Asking and answering these questions might suggest new approaches to help restaurants save energy that are not based primarily on rebates. Incorporating

testing over writing and planning, and uses a five-step process. 1) Define the problem: Meet with stakeholders to identify the problem and possible solutions based on exploratory research. 2) Prototype: Build a minimal version of the solution. 3) Review: Have stakeholders and targeted users engage the prototype in context. 4) Refine: Update the prototype based on feedback. 5) Iterate: Use several reviewing and refining cycles to finalize.

This approach enables us to try out new services, receive feedback, and refine them at very low cost even before the pilot stage. Let’s face it, once you have a pilot in place, your sunk costs will keep you from going back to the drawing board. For commercial



existing kitchen processes, leveraging social interactions, and partnering with existing restaurant sustainability programs may provide low-cost ways to modify energy use behaviors. But they need to be tested.

Rapid prototyping: How do you get an idea out fast?

Rapid prototyping is a low-cost and effective method for testing the potential of a new service, product, or message. While more common in the tech world (e.g., Google glass was prototyped in a day, the first Blackberry phone was prototyped using a wooden block) rapid prototyping is gaining traction in social services. Rapid prototyping favors building and

kitchens, this could mean prototyping new open/close protocols with reminders and prompts, restaurant community-oriented competitions, or new financing models to lower the cost of installing controls. Rapid prototyping would get mock-ups of materials and procedures into the hands of stakeholders and customers for early feedback on feasibility and usefulness.

Pilots: Why run offerings at scale when you can run field trials?

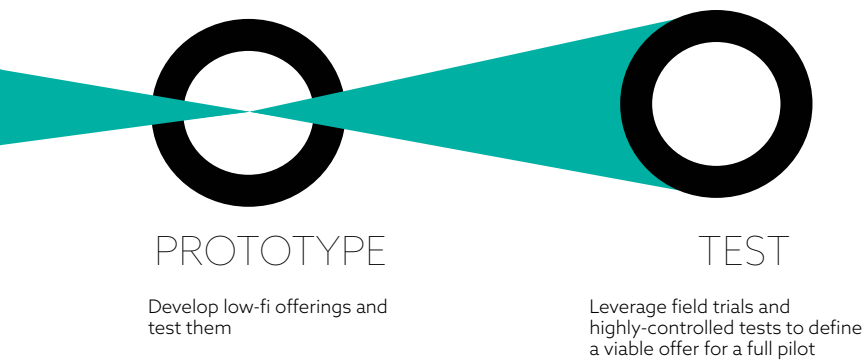
In our industry, we often run offerings and call them “pilots,” but they use models that have already been vetted elsewhere. Too often, pilots go to field as mini versions of a full-scale service, and are assessed via a

slow, standard evaluation approach. When they do not succeed, we can't disentangle what prevented success. Was it the marketing? The product? The target population? However, when smartly designed, field trials or true pilots provide an opportunity to learn in a controlled environment.

For new technologies with nascent markets, the unknowns loom large. For example, there may be insufficient information on what customers want and how much they will pay for it. A good strategy for early field trials to address those unknowns is to test different versions of the offering by sampling customers and using different products, price points, and delivery mechanisms.

ILLUME, our team has pinpointed opportunities for our clients to the building-level. Not only do we help leverage field trials to build a viable and scalable product, we can help identify which customers will help bring it to scale through predictive and propensity modeling techniques.

We face many challenges in our energy future. Whether it's Marco, who needs to run a diner on slim margins, or major utilities that are grappling with system constraints and new utility models, we will need solutions beyond the tried-and-true of the past. Finding those innovative approaches will require exploratory research, prototyping, and field trials. But mostly, it will require supporting new ideas and creating avenues for design-oriented thinking. ■



We recommend gathering customer feedback at several phases and tracking if/when customers stop participating. The key is that the pilot is not a fully-developed, static offer that will either succeed or fail as is. Rather, it is used to learn what the market will accept, to design an offering worthy of scaling. Like rapid prototyping, these field trials can be iterative.

Size the market as you go: why make assumptions?

We have the data at our fingertips and smart experimentation can give us the inputs needed to examine how many customers are likely to adopt, at what price point, and through which channels. At

A MODEL FOR SUCCESS?

Our upcoming partnership with CLEAResult will push innovation for a Midwest electric utility company. Our client has earmarked \$13.3 million per year for its Emerging Technology (ET) Program, making it one of the largest in the nation. Leveraging this funding, they are creating a best-in-class, nationally recognized ET Program.

Our client is rethinking the typical utility energy program pilot model by testing more ideas, faster, and implementing key learnings in real time, rather than at the end of the pilot.

Our unique team brings together thought leaders, innovators, and experts in ET Program design, technology development, and customer experience from the energy, technology, utility, university, and community advocacy sectors. As a key part of this team, ILLUME is helping select the technologies and process improvements that will futureproof the portfolio.

Our team is designing technology-enhanced review processes so experts from across the U.S. can quickly review ET pilot ideas. We are also assessing evaluability and implementation readiness to provide continual feedback that helps the electric utility meet their "fast to start, fast to fail" goal for pilots.

Georgia Power is Leading by Their Customers' Example

When you think about where innovation is happening in demand-side management, California or Massachusetts probably spring to mind. Rarely are our utility friends in the South recognized. So, it may surprise you to learn that some of the deepest and most forward-thinking customer research in the industry is happening in the heart of the Southeast—at Georgia Power.

"ILLUME was the perfect team to bring in for this work.

We knew through our past work with ILLUME that they would bring state of the art research along with exceptional management practices.

They have given us truly actionable findings to take our programs into the future."

*-Jeff Smith,
Georgia Power Energy Efficiency Strategy
and Implementation Manager*

Georgia Power is making a significant commitment to learning from their customers and exploring how they engage with energy in their daily lives. As Georgia Power's long-term research team, we have the privilege of being in close conversation with residential and commercial customers to examine and elevate their needs.

Our Model

Beginning with the End in Mind; Long-term Planning Drives Success

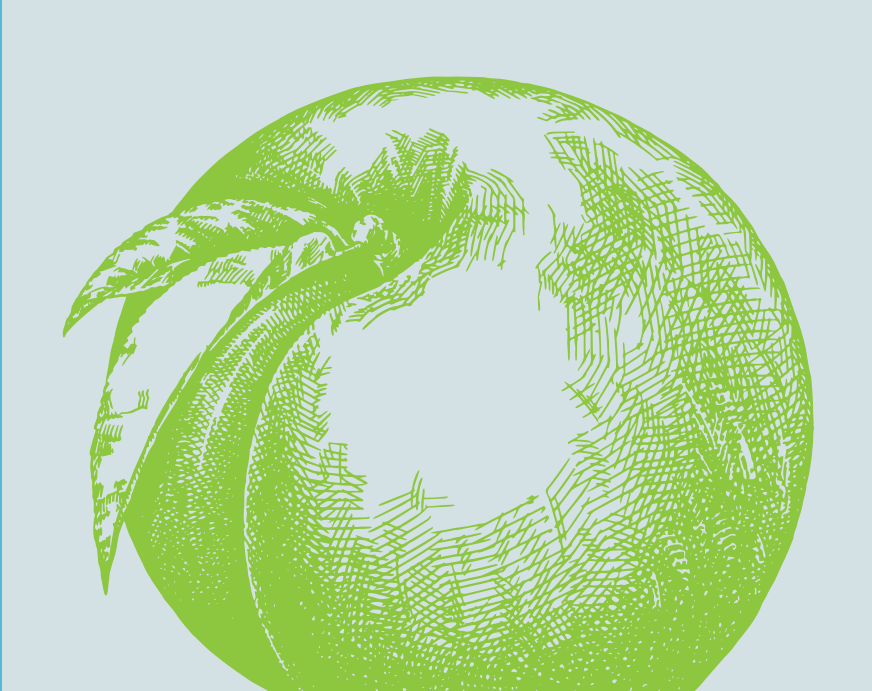
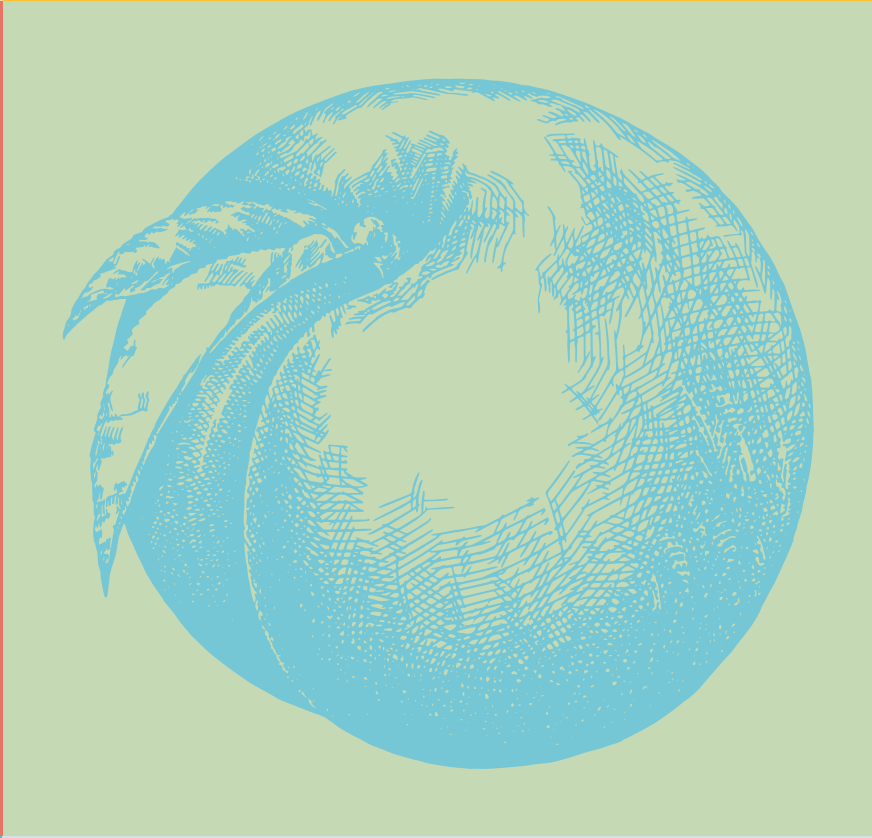
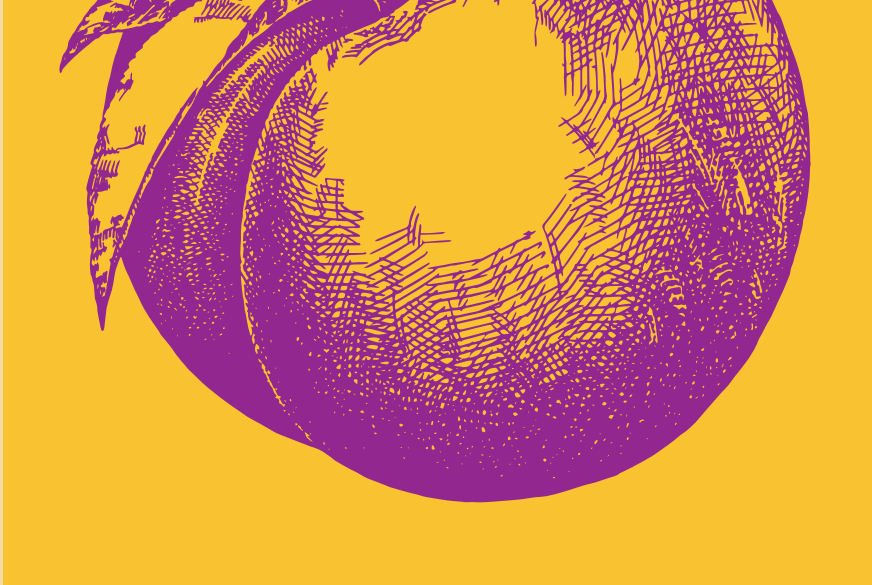
ILLUME's work began with a full-day workshop where we helped the Georgia Power energy efficiency team, along with their implementer ICF, create a vision for their customer relationship of the future.

Building from that first step, we developed a three-year research strategy to fill gaps in customer knowledge. Taking a long-term approach has allowed our team to create generative insight.

Exploratory, Story-based Research Unearths the Unknowns

Our research approach follows best practices in design by starting with discovery-oriented storytelling and evolving into detailed programmatic investigation. Employing this method, we are helping Georgia Power identify specific and compelling ways to communicate and develop richer relationships with customers.

To build a foundation of understanding, we used in-home and in-business ethnographic research to explore how social and local culture impacts residents' perceptions of energy, efficiency, light, home, and comfort. We explored how specific language does or does not connect to the things that matter in customers' lives.



We used this insight to help the implementation team understand the barriers that hold customers back from participating in Georgia Power's programs and how better messaging can help them tie into customers' core values.

Residential Customers Speak

Our team toured the state of Georgia, conducting in-depth interviews with Georgians in their homes – tasting every Southern culinary delight we could find – and focusing on their perceptions of community, safety, and family in the context of energy, and decision-making channels in the context of home and household. When talking to Georgians about lighting, we found that most people described the home atmosphere – they thought about it in aesthetic terms – not only the financial cost of a bulb or the electricity bill. We also found that family dynamics impacted lighting choices; as with everything in the home, choices about energy and energy efficiency were made in the context of the whole household, with harmony as a key driver. Program messaging needs to match the language customers use – a desire for radiant and bright spaces – and explain how the program can support them in creating their home the way they like and as it fits their family.

A Commitment to Inclusivity

A common thread throughout all the research we've done with Georgia Power is their dedication to reaching and serving their diverse and multicultural customer base. Through a focused study, we helped Georgia Power better understand how – and in what language – to engage the Korean and Vietnamese communities in Atlanta metro that have been expanding their roots for the better part of two decades.

This research found that, while younger generations tended to be bilingual, almost 30% of participants aged 18-34 and nearly 50% of those aged 35-54 still prefer to communicate with their utility in their native language. All generations identified a high affinity and value for outreach and engagement in Korean or Vietnamese. Speaking your customers' language – literally and figuratively – is a key way to build trust, increase engagement, and most importantly, *meet your customer where they are on their journey.*



"I just let Grandma go with whatever. I'm cold natured, so I will always have a jacket on or something like that. I'll go outside to get some heat, because she'll be like, 'You cold?' 'Mmm-mmm. No. I'm good,' because you gotta let her do what she wants to do."

– Kayla, 35, Columbus

"I speak Vietnamese among my community and the neighborhood, because then I understand 100% of what I'm saying and what I'm hearing, and it makes me feel more confident."

– Dac Kien, 56, Atlanta

Defining the Customer Journey

Built on this foundation of exploratory research, we are creating custom personas focused on segment-specific drivers, barriers, and decision-making. We are helping Georgia Power optimize impact through product, program, and service usability and experience testing. ILLUME has been working as a team with Georgia Power and ICF to weave these findings into their holistic approaches to engagement and implementation to strengthen the utility-customer relationship. For example, Georgia Power and ICF used learnings from the residential ethnography work, which highlighted existing misconceptions and education gaps about household lighting, to develop innovative and compelling educational materials about LEDs.



Residential Insights, and How to Use Them

Women are key decision-makers. Women often manage budgets, influence upgrades, and decide how spaces in the home are used. Women expressed frustration that this role was not always acknowledged and that they were not taken seriously by contractors or technicians because of their gender.

Program outreach strategies, messaging, and trade ally trainings needs to better engage women to build trust and respect, gain access, and ensure success.

Non-English-speaking communities are an untapped market. We discovered that Atlanta's Korean- and Vietnamese-speaking communities tend to have similar or higher rates of homeownership, income, and education compared to the general population, and yet have limited options to communicate with their utilities in a language other than English.

A relatively inexpensive translation of program materials can include communities that have been unable to connect with their utilities in a meaningful way.

Energy efficiency is a family value, even if most people don't explicitly think about it that way. Across cultures and generations, people we spoke with talked about how they use energy and efficiency as tools to translate and pass down their ethics to their children. People use their energy bills to engage their children in contributing to the success of the family and understanding budgets. Others ask their child to turn off the lights to teach them responsibility. The primary purpose of these conversations isn't energy use, but the broader idea of limiting waste and being a good steward for your family and community.

Terms like "energy efficiency" fail to connect with many audiences. We can better engage customers using the language they are already speaking: the language of family connection.

Small Business Insights, and How to Use Them

“Home” has an implicit meaning, and marketing often misses the mark. Many energy efficiency programs use messages of comfort and safety to sell the need for efficient upgrades. However, our research showed people already feel comfortable in their homes; even if a room is drafty, it doesn't affect the overall perception of comfort and safety people get from walking in their front door.

Instead of using terms like “comfort,” call out more specific temperature cues or attributes of an inefficient home to better illustrate what can be addressed through energy efficiency and ensure that your messages resonate with homeowners.

Timelines of homeownership don't always line up with program years. People we spoke to described taking months or even years to make home upgrades because life gets in the way. Replacing water heaters, appliances, or lighting is no different. By continuing to be a source of information and support, customers can reach out when the time is right for that new HVAC system.

Treating the energy efficiency journey as a relationship, not a transaction, is the most effective at connecting deeply with customers, and that means being there when they are ready to take action.

Customers want - and need - a reliable source of information on home maintenance and upgrades.

Replacing equipment is a major investment for homeowners, and people often don't know who to trust. Contractors may be able to provide the right information, but homeowners are wary of getting duped or oversold. Not only that, HVAC and water heating systems are complex, and not something most customers can learn enough about on their own, which leaves people swimming in uncertainty.

Energy efficiency programs have an opportunity to become that trusted source of information and guidance.


Small businesses look to their community to help make decisions. Small businesses are very engaged with one another, and often rely on community members for recommendations or input on decisions. This was especially common when the business owners needed reassurance that high cost decisions would be worthwhile.

Recognizing that small businesses are often deeply embedded in their networks, outreach to local chambers of commerce or referral programs can provide the reassurance they need to take action.

Small businesses are looking for proof.

We found that small business owners are meticulous decision-makers, balancing their businesses' costs and needs. Tight financial landscapes dictate small margins of error for investments; they want proof that their purchase will be worthwhile in terms of quality, aesthetics, and savings. For energy efficiency programs, the burden of proof is on the implementer. Providing the ability to see the products before committing is crucial to the decision-making process and can alleviate the burden of proof that falls on the salesperson or implementer.

Models of try-before-you-buy, sample materials, or seeing products installed in another space can provide proof that other, similar small businesses have participated and achieved success.



"The lighting in my shop is part of our brand. I have carefully placed each light, picked the color of the bulb, and situated our product to create an ambiance...People come to see things in person; I need to provide them with the experience of sitting on their new couch."

-Suzanne, 64, Alpharetta

Small Businesses Speak

We followed our residential work with a similar study on small commercial customers. We conducted ride-alongs with implementation contractors and led focus groups and on-site interviews with program participants and those who had an energy assessment but did not pursue upgrades.

We found that drivers and barriers to efficiency services often have little to do with energy or money and can be highly individualized by business type, customer experience, or logistics. For example, monthly material expenses — not savings on the electric bill — are often a catalyst for participation.

The largest drivers were the quality of materials and, in turn, the frequency of replacement. Using these findings, we created participation decision trees to provide Georgia Power and ICF the insight needed to update and customize their outreach.

Small business owners are skeptical. Some small businesses were particularly wary of scams and looked for signals like professional contractors before participating. Several said that based only on the description, the program sounded, "too good to be true."

In addition to ensuring that implementation teams are equipped with utility-branded materials and credentials, early outreach to customers to alert them that technicians or contractors will be in their area can boost the perception of program validity.

Small businesses have complex and tight timelines to complete upgrades. Customers described how important it was for outside actors to work within their timeframe. For example, one business owner was in the middle of lease negotiations when they received their lighting audit. Despite wanting to participate, they were unable to at that time. Ultimately, when upgrading, business owners need energy efficiency programs to fit within their broader business needs.

Flexible scheduling and ensuring that customers can reach back out to the implementation team can ensure that interested customers can participate, even if they couldn't when initially approached.

WHAT'S NEXT

As we move forward with this work in 2018 and 2019, the ILLUME team will build on our ethnographic and language needs studies to complete program-level journey maps, to dig deeper into the needs and drivers within diverse communities, and to expand our understanding of how changing markets will affect programs into the future. We are excited to continue serving as Georgia Power's ally in industry-leading research that uplifts programs using insight from customer voices.

Georgia Power is a leader in exploring what's next

Since 2017, ILLUME has worked with Georgia Power to evaluate pilots and test everything from behavioral feedback to DR-enabled water heaters. Through the application of key research design principles and upfront consideration of evaluability, ILLUME is maximizing what Georgia Power learns and can apply to optimize future program design.

Water Heater DR - This pilot is exploring whether water heaters are the next low-hanging fruit for residential DR. We are evaluating their impact on peak load and designing surveys to understand customer interest, acceptance, and experience with the transformation in this ubiquitous home appliance.

Bring Your Own Thermostat DR - Our study design is enabling Georgia Power to understand the variation and persistence of behavior and the peak load impact of calling DR events through customer-purchased, connected thermostats.

Connected Homes - In an increasingly digital world, this pilot is determining what role Georgia Power should play. Our survey design is targeting and tracking customer motivations, experience, and expectations with home automation, and our analysis of energy consumption is quantifying program impacts.

Low-income Multifamily - Our experimental design is allowing Georgia Power to understand the impacts achieved through the direct installation of advanced power strips and learning thermostats in this hard-to-reach customer segment.

Behavioral - Three pilots are testing report-based energy use feedback hypothesized to generate small savings across large numbers of customers. Using our in-depth customer screening, sample stratification, and experimental design, we are ensuring balanced, equivalent groups for statistically unbiased impact evaluations. ■



STAY CALM AND RATE REFORM ON

With greater adoption of smart meters and increasing instability, many utilities are turning to rate reform to manage peak loads, engage customers, and create a more responsive grid. ILLUME has supported multiple utilities in the Mid-Atlantic, Midwest, West Coast, and Southeast regions in rate communications strategy, design, and evaluation.

We know this process can be an operational and regulatory nightmare and we understand the night terrors induced by the specter of plummeting J.D. Power scores. Stuck between competing priorities such as kW savings, customer satisfaction, equity, and hardship, our clients often find themselves beginning with a well-designed rate to only see it whittled down to a relatively modest departure from their standard rate structures. In the end, the customer is left with a confusing rate change and little clarity on how the rate will impact them and their families.

To help your customers and your company, we're sharing a few insights that we have gained over the past five years. Most of these are about your customers. But the first is entirely about you:

Find your why. Yes, we know this is overused and a touch existential, but it always comes back to this: why are you engaging in rate reform? Is it to teach your customers to respond to changing prices? Is it to alleviate grid constraints? Is it to generate more

benefits for your customers? As leaders, you must turn away from the kitchen sink temptation. You simply can't do it all. But you can innovate around a single objective, communicate it clearly, and create the behavioral levers to meet your goal. And once you write down your why on sticky notes and tack them on every surface (including your bathroom mirror), use these insights as guides when considering strategies:

Your average residential customer does not know the difference between their electric and gas appliances and often confuse the two. Be specific.

You have likely heard this time and again, but what are the implications for rate reform? It's pretty simple. The success of an electric company's rate reform is predicated on your customers' ability to identify which pieces of equipment in their home use electricity. However, dual-fuel customers often get it wrong. For this reason, when you are communicating updates, it is not enough to say, "your electricity costs are changing." Customers think in end uses, not in energy, so speak to customers in these terms. Saying "the cost of running your AC is changing" will provide greater clarity to your customers. Along these lines, it is also important to remember:

Your customers don't care about your infrastructure, your grid, or your changing business demands.

Customers don't think about the infrastructure needed to power their AC until something goes

wrong; and, if it does, they don't understand how their choices affected stability. You must frame these changes in terms of the benefits to them, such as enabling more household choices in products, appliances, and services, through the benefits of a smarter, more adaptive electric grid.

Your customers believe that you have control over their costs, not them. Refrain from using this message, as tempting as it is. Our ethnographic research suggests that customers know they have to work within the limits of your business; so instead, communicate about options, connect them to products and services that will make managing their electricity easier for them. In the end, your customers are looking for more agency within the constraints you place on them. Your customers want you to provide options, not to tell them that they have control.

Customers do not have time or patience for your education and information campaign. No, we are not trying to throw out years of great work to keep your customers informed. But there is a fine line between being informative and being pedantic. The truth is, most customers just want you to tell it like it is and provide clear and concise information on how your rate reform will impact their home or business. More importantly, this information must be tailored to their specific home or business and delivered at the right time.

You need to communicate about rate reform close to the times when customers will see an impact. Let's take time-of-use rates, specifically. You will waste your money informing customers in the shoulder months about costs and savings they will see in the summer or winter. Use these months to signal that change is coming but be sure to provide specific recommendations and tailored support no more than four to six weeks before you expect major changes in customers' bills.

Your customers budget month-to-month, but you're asking them to think about annualized costs and savings, so tread carefully. We all think, budget, and react on a bill-by-bill basis. Even if your customer will save money across the year, they will be judging you and your rate on a month-to-month basis. For this

reason, it is critical that you carefully manage how and when you communicate cost savings to your customers. The timing of your communication is everything.

Your customers say "money talks," but that thinking sends the wrong message. It is important to remember that, in most cases, your average customer will not see a huge impact per bill (unless you managed to get aggressive time varying rates through your regulatory process). Over-communicating a weak rate — a rate that has small bill impacts — can have deleterious effects. If you tell your customers to reduce their AC to save money, and they suffer through a sweaty football game only to save five bucks, they are not going to be happy with you. Be real, be specific. Be careful when using cost savings to justify actions; the economics are often "not worth it."

They may get frustrated, but they will get over it. Most of your customers will accept a cost increase to their bill if it keeps things easy and comfortable. Keep them happy by continuing to serve as a partner in making their homes more comfortable and providing solutions that take one more thing off their list (like responding to peak windows).

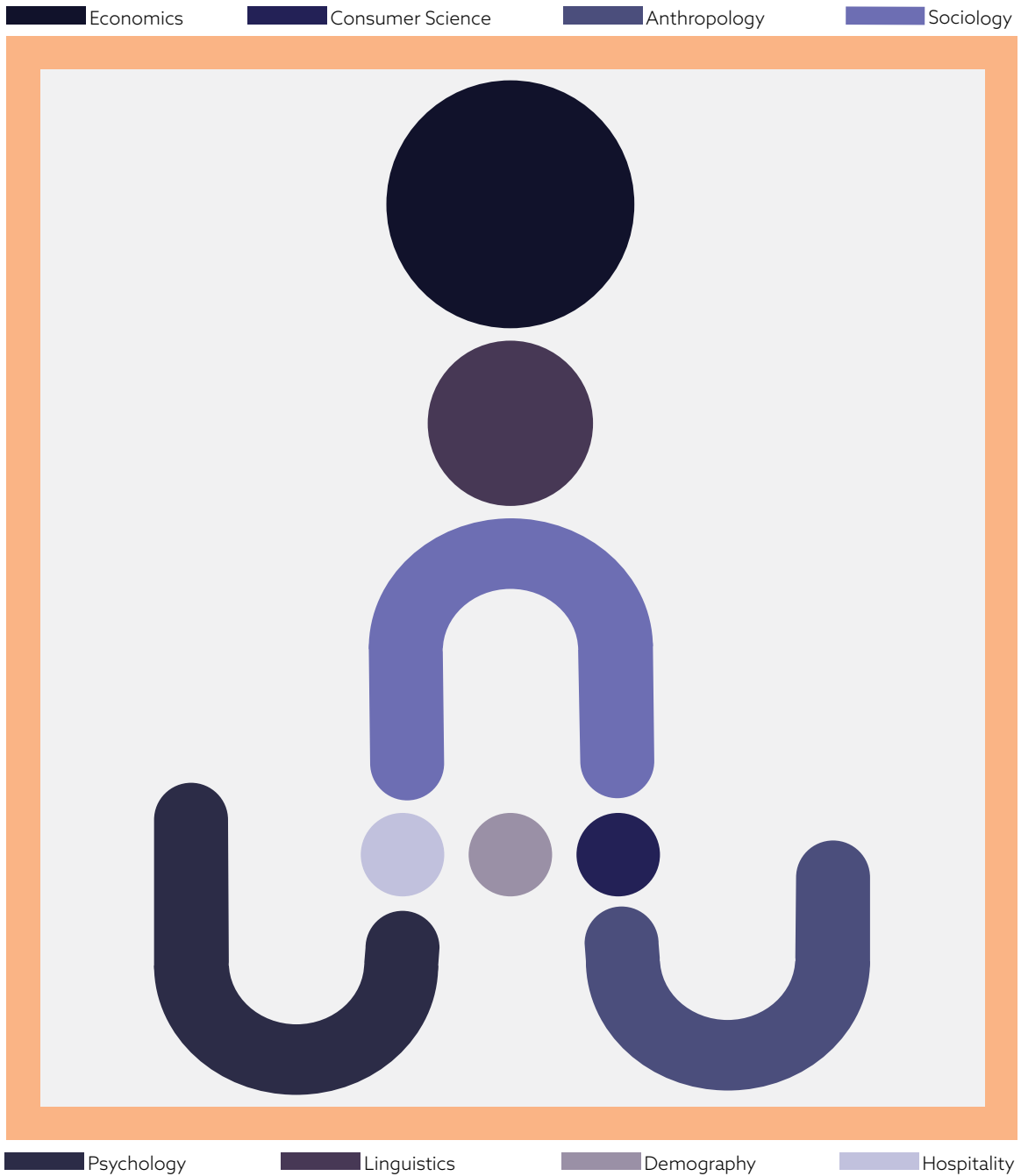
Remember, you're in it for the long haul. This is just one of many, many changes that are going to reshape your relationship with your customers. Take advantage by talking to them more, providing better solutions, and ushering them through the shifts that will inevitably face them in the next 5 to 10 years. As you've heard many times, your customers just want cold beers and hot showers.

Take a breath. Don't let your anxiety about rate reform cause you to act in a heavy-handed way — take time to make a strategy, and, ideally, test it. Map out a thoughtful communication and product strategy that will engage your customers as co-creators of your evolving business model and your energy future. ■

WHO

WE

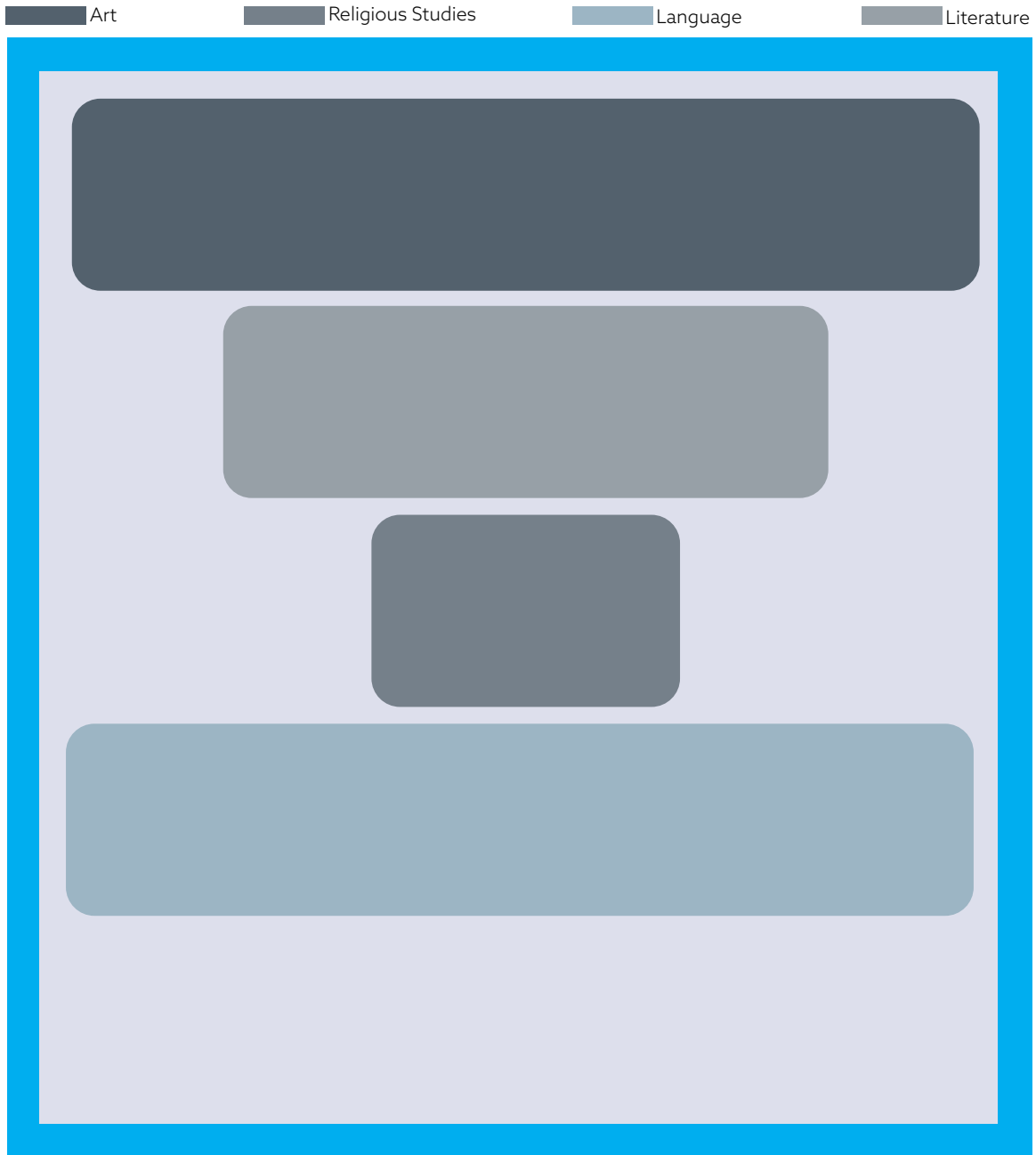
ARE



Data visualization should not be limited to charts and icons. Data visualizations can be technical and art-forward – drawing the reader in to explore information more fully. In these next three pages, we show our team’s degrees in the fields of social science, STEM, and art and literature as an example. Each color block represents the proportion of our team who hold that degree relative to the others.



We intentionally blend social science training with STEM and arts and literature training to help our clients



develop strategy and solutions with a full picture of the market, their opportunities, and their customers.

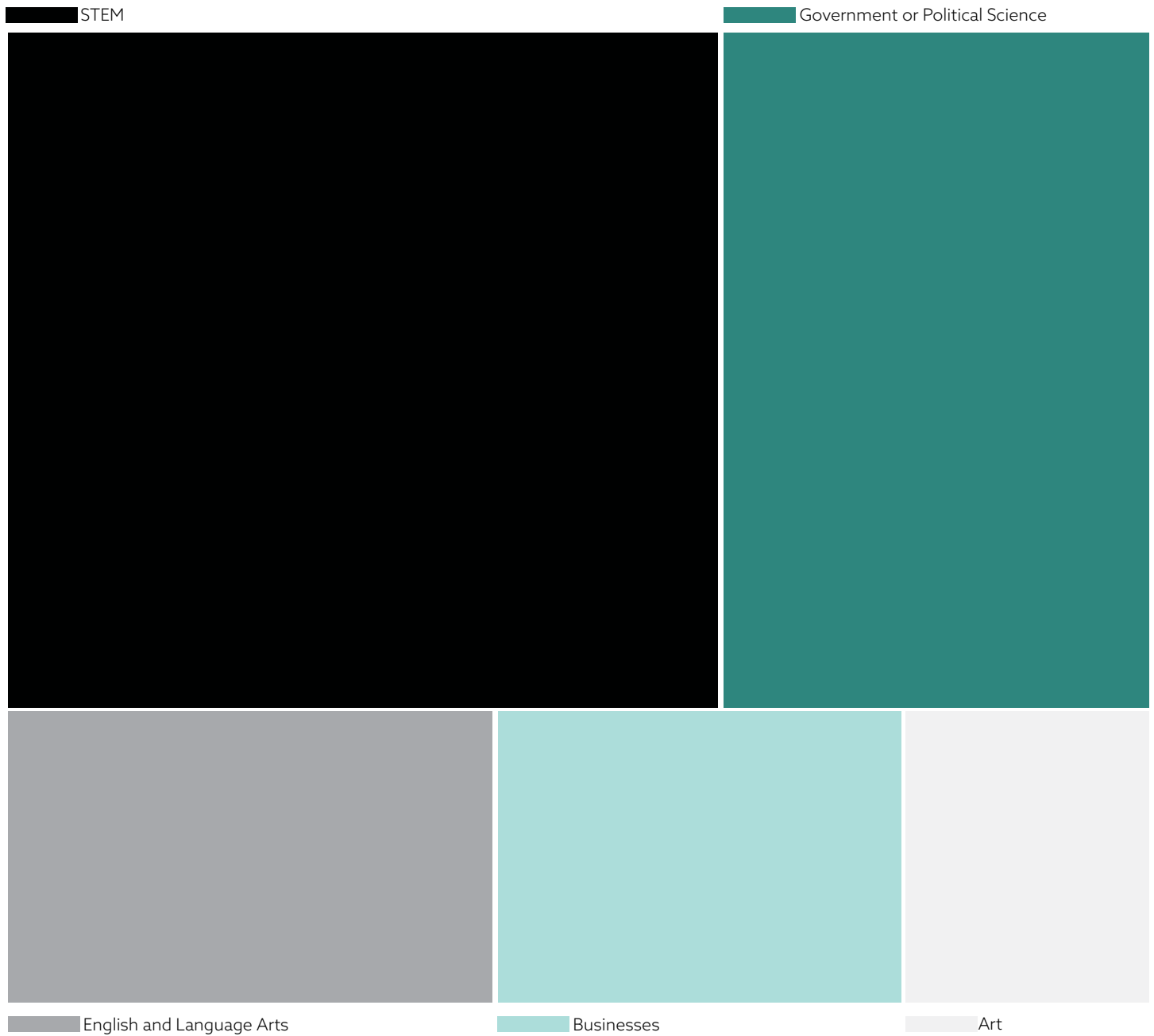
THE WHOLE

Social Sciences

A commitment to multidisciplinary, integrated, and thoughtful research is the unifying characteristic of the ILLUME team. Our team is well-balanced between STEM and social sciences to bring our clients insights from data-driven, highly quantitative research and substantive, incisive qualitative research. We layer these approaches for continuous insight and improvement, often using data-driven hypotheses to inform qualitative methods or using qualitative findings to improve quantitative methods like survey instruments or modeling approaches.

At ILLUME, we value diversity in perspectives and knowledge and we believe that bringing people together from different research backgrounds produces better work. What do you get when you put a data scientist in the room with an engineer, an anthropologist, a cognitive psychologist, and a physicist? Incredible, generative insight. This is what we strive for as a company and how our team works – drawing on the skills and expertise of one another to solve problems. ■

PICTURE



POLICY

EVALUATE

Each step in your journey requires a different tool. ILLUME supports your path to market.

SET VISION

- Facilitated Workshops
- Competitive Analysis
- Market Assessments
- Baseline Studies
- Potential Studies

DISCOVER

- Ethnographic Interviews
- Observational Research
- Segmentation Studies
- Data Mining
- Propensity and Predictive Modeling
- Customer Journey Mapping
- Choice Experiments

DESIGN

- Design Thinking Research
- Focus Groups and Triads
- Experimental Design
- Data Mining
- Evaluability Design
- Developmental Evaluation

TEST

- Usability Testing
- Message Testing
- Field Trials
- Field Trial Oversight



CHOOSING THE RIGHT TOOLS FOR YOUR ASCENT

PILOT

User Experience Research
Market Adoption Research
Impact Analysis

CALIBRATE

Facilitated Workshops
(Re)design Research Support

SCALE

Embedded Evaluation
Longitudinal Monitoring
Impact Monitoring

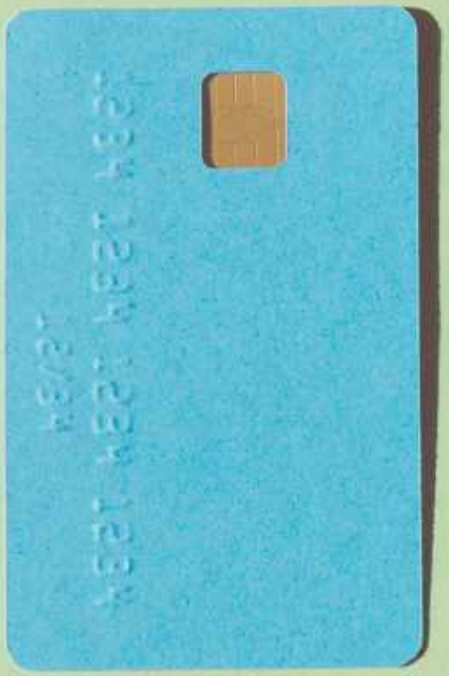
ACHIEVE

Retrospective Process
Evaluation
Post Hoc Impact
Evaluation

So, you want to be the Amazon of Energy?

As public utilities search for new revenue streams in the face of declining energy sales and increasing competition for their customers' attention and wallets, we've heard more than a few utilities say they want to become "the Amazon of energy."

But what does that mean, really? And is it attainable?



A growing number of utility-driven marketplaces across the country show promise for expanding revenue streams. Several turnkey vendors are making it easier for utilities to build and support e-commerce or marketplace platforms.

Here, we'll provide an overview of the current options and share what your customers expect from you in these engagements. This will ensure that you build your marketplace for success and avoid the pitfall of turning it into just another channel for fulfillment.



What's the potential?

We agree that expanding products and solutions through e-commerce or a marketplace is an attractive option for generating revenue and deepening customer engagement. The question today is not whether it's possible, but how can you meet the high — and growing — customer expectations for fulfillment, communications, and service required to make this a relationship-building opportunity? After decades of investment in brand equity, strong J.D. Power scores, and the trust of many long-term customers, it is critical that you embark on these efforts carefully to protect and build on already strong relationships.

While customer engagement is, in and of itself, a worthwhile goal, developing an online engagement platform can deliver value immediately and in the future. In uncertain times, these platforms can not only be used as an avenue for selling traditional energy efficiency products, they can open lines of communication with customers to promote a wide-range of services such as rate options, DR programs, and subscription services. As you explore your options, think through their emerging business models. By focusing on long-term competitive and customer needs, you can develop these platforms proactively, rather than reactively, to ensure that what you build lasts for years to come.

What's out there?

There are two main models for today's marketplace platforms: electronic (e-) commerce or online marketplace. While terminology for the two is frequently interchanged, these are different offerings with different capabilities, customer experiences, and back-of-the-house operations.

Several providers offer solutions for utility-branded e-commerce and marketplace offerings ranging from turnkey solutions to platforms where you can select relevant offerings. There are also digital marketing agencies specializing in e-commerce starting to dip their toe into the energy market. You have options and will need to match the provider to your goals.

E-COMMERCE PLATFORM

Business-to-consumer sites that enable online commercial transactions (e.g., Home Depot)

MARKETPLACE

A type of e-commerce solution that provides product information and processes transactions but third-parties handle delivery and fulfillment (e.g., Etsy).

What are the new products and services available through e-commerce sites and marketplaces?

Traditional energy efficiency products:

DTE Energy, Georgia Power, Pacific Gas & Electric (PG&E), Sacramento Municipal Utility District (SMUD), Xcel Energy and other utilities offer efficient products such as smart thermostats and LED bulbs that customers can purchase directly with an instant rebate.¹

Products beyond energy efficiency:

Baltimore Gas and Electric (BGE), SMUD, and Southern Maryland Electric Cooperative (SMECO) offer products such as connected home devices (e.g., smart locks, sensors, and smoke and CO detectors).²

EV services:

FirstEnergy offers EV charger leases.³ Con Edison provides customers with information to compare and shop for EV chargers.⁴

Solar planning services:

Con Edison and National Grid facilitate bids for customers interested in PV by compiling customer information and usage data to estimate bill savings in partnership with solar aggregators.⁵

Partner-fulfilled service and protection plans for a monthly fee:

CenterPoint Energy offers appliance maintenance and repair coverage.⁶ Duke Energy Florida offers 24/7 emergency services for HVAC or water heating.⁷ FirstEnergy and Georgia Power offer surge protection services.⁸

Third-party home services (aggregator model):

Orange & Rockland Utilities connect customers with trade allies for home services ranging from HVAC tune-ups to home audits.⁹ SMUD offers home services like flooring through contractors in partnership with HomeAdvisor.¹⁰

Monitoring and information services:

Central Hudson provides enhanced tips and features for a monthly fee.¹¹ DTE Energy offers energy monitoring through a free app.¹²



What do customers expect?

The opportunity is large, but the stakes of meeting customer expectations are high. We are firmly in the era of customer-centric product development and customer experience management — there is no going back. Gaining customers through a marketplace or e-commerce platform will require that you and your providers (a) uphold your brands and customer relationships, (b) meet e-commerce standards set in other industries, and (c) give customers a reason to choose you over other online providers.

The data privacy and security you deliver best:

You have a leg up because you know the rules of the road when it comes to privacy laws and are already protective of your customers' information. In a moment of data and privacy insecurity, you stand far above the competition in your ability to secure customer information. Brag about it. You are uniquely positioned to help customers make the most of connected devices and new services.

Upholding your brand and relationships:

Despite the complaints flowing in through your call centers, customers generally trust you and brand perceptions are strong. From our research on the smart home, compared to some national brands in retail and consumer products (e.g., Amazon, Nest, Samsung SmartThings, Xfinity), utilities are seen as reliable, accessible, trusted, and local. Customers feel that if something goes wrong or they need help, you will be there. This is the brand promise you have created through excellent storm and outage responses. But how do you capitalize on it?



Be ruthless in your standards

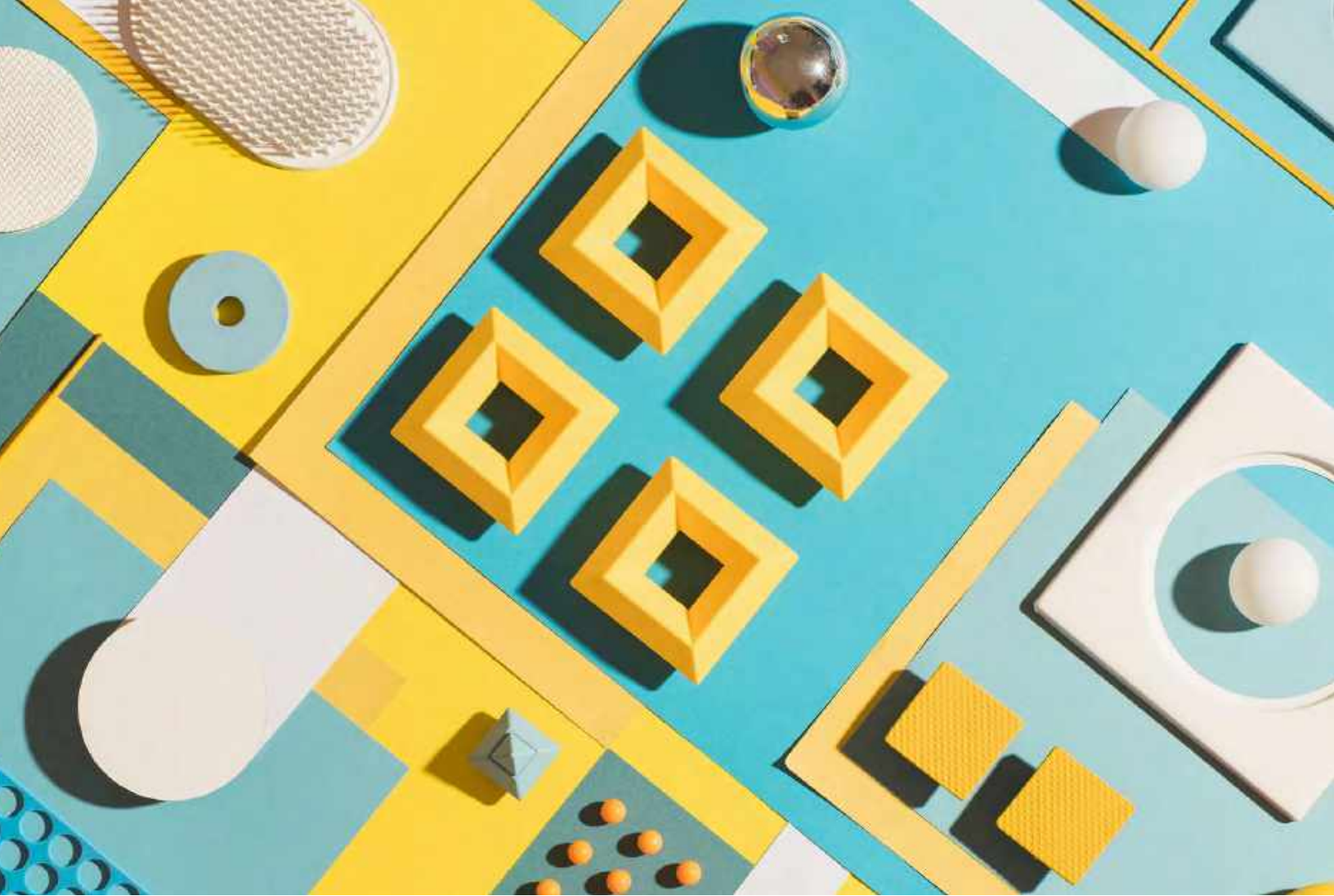


In the early days of a new technology, having access to reliable support may matter more to your core customers than having the latest, shiniest product. Let's face it, early adopters will chase shiny products and may not be looking to utilities to deliver them. We say, let them! You can democratize new technologies by making them accessible to a broader audience. You have a huge opportunity to package, market, and deliver products or services to markets not proactively seeking them out. Your mid-market customers will be more receptive to new opportunities and more trusting of emerging products and services if they are backed by a reliable provider — you.

What does it take to uphold these expectations?

Offer superior customer service and technical support:

Uphold your hard-earned brand reputation for any products or services offered and fulfilled. Be ruthless in your standards so that processes are in place to support the customer through decision-making, ordering, shipping/fulfillment, installation, and ongoing use or maintenance.



This is particularly important for any fee-based models where customers expect accessible customer service. If you can't provide top-tier service, consider stepping aside for a partner or vendor to enter.

Cultivate and manage partnerships that truly enhance your brand: Energy efficiency programs are pros at working with partners, vendors, and trade allies. This gives you a huge advantage in managing partner-based models for online platform providers as well as on-the-ground service providers. You already know what makes a good customer experience, and how to measure performance and drive continuous improvement. Now you need to apply these skills to a new competitive landscape. Leverage new models, like pay-for-performance, to get what you need and create and enforce metrics of customer satisfaction and process excellence.

Make relationships transparent: In a true marketplace model, you may be providing a sales platform for vendors that you don't control. Where you are not in control, be transparent about it. Make it clear who customers are working with and put your partners' brands on the hook as well. The same marketplace may promote existing programs side-by-side with less regulated vendors. Spread the risk by clearly displaying and defining the utility-provider relationship so that customers understand who is responsible for service.

Market and design like the pros: Customers expect complete and transparent information, easy comparisons, intuitive searches and filters, personalized recommendations, timely communications in the right channel, and fast and personal service. Though it's understandable, you probably lag behind major retailers and e-commerce players in customization. However, you can catch up and beat them at their own game. At this point, your competitors have set expectations for you.

Here are some guidelines for what customers expect:

- 1.** As a utility offering products, you are probably late to the game! Brand preferences among passionate early adopters may be entrenched and hard to shift. However, you are in luck. Many of your long-term customers see you as a trusted and reliable brand and provider. Our research suggests that customers just dipping a toe in this technology may want an easy research and selection process coupled with guidance from a trusted partner. This brand power is valuable, and you have it.
- 2.** Market the capabilities — what a household or business can achieve — rather than the products. Customers can find the same products on Amazon, Best Buy, Home Depot, or manufacturer websites, but few sellers are really showing customers how products come together to enhance their lives. Creating this vision is incredibly important for emerging technologies like the smart home, renewables, and EVs. The landscape for these technologies is increasingly complex and customers are looking for a guide. Your typical customer is unlikely to research technical specifications and find their own way. Mid-market adopters are more likely to act if decision-making is streamlined, for example, in personalized or bundled offerings. If you make it compelling and easy, they will follow.
- 3.** You are in a unique position to provide personalized, Netflix-style recommendations based not only on energy usage, but on past transactional and engagement data like billing and rate preferences, home energy audits, and rebates.

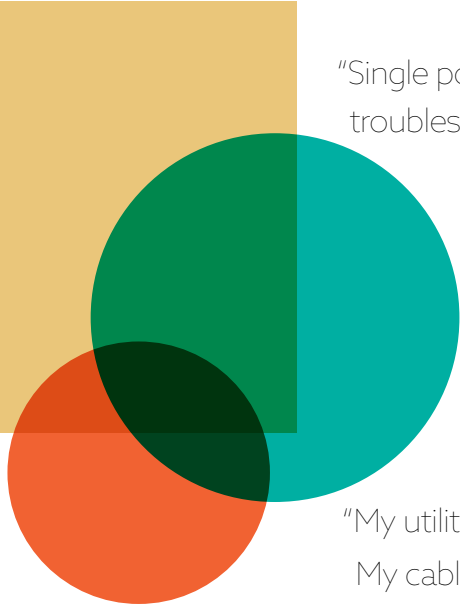
This data is invaluable for moving a customer along their journey. You have everything you need to acknowledge your customers. You know where they are on their path to a modern home or business and how you can help them take the next step. Leverage best practices in data management, digital marketing, and behavioral science to build from your competitive edge.

- 4.** Customers want one bill. This means on-bill charges, if possible, and instant rebates to make your customers' lives easier. Yes, we know it is a total pain. But it is also a unique service and a core value only you can offer.
- 5.** Use energy consumption metrics to show personalized savings and payback estimates to market renewables or energy-saving products. This is a differentiator: your competitors can't tie in energy information — use it!
- 6.** Customers will shop where it's easy to find and compare products, see transparent pricing, review technical specifications, and see customer reviews. Create the same shopping and transaction functionality as the leading sites and make sure your team is actively managing these online interfaces with personalized, highly-responsive outreach.

Will they or won't they?

Customers speak about buying smart home devices from their utility

When comparing their utility to mass market players, we heard customers' reservations and high expectations based on the services utilities already provide:



"Single point of contact for troubleshooting."

"Reliable company that can come out and provide service if needed."

"My utility has always been honest with me. My cable / internet provider borders on criminal. I would rather go with someone I trust."

"If it is backed up with my utility's assistance, I would like it."

"Reputable and reliable company."

My sense is that my utility would conduct thorough research prior to selecting products to include in a smart home package and would stand behind their functionality and service."

Expectations for the products themselves were mixed. Many customers felt that the utility's offerings couldn't compete with the name brands, though some expected more from their utility:


"May not be as expert as the other companies."


"I would expect them to be top of the line products that would focus on energy efficiency."

"They do not develop the technology themselves."

"Possibility of lesser advancements than a national/international brand."

"Wonder if it is the 'latest' in technology. Samsung and other brands are known for being on the cutting edge in technology..."





Who do you want to be for your customer?

A key decision you face is whether to control the product or experience end-to-end or host an open model where partners and vendors play a larger role. There are pros and cons for each option. It may be tempting to take a turnkey approach in the name of customer experience management, but most utilities are not logistics companies, and lack the infrastructure to make good on the customer promises implicit in every new product or service. It also may put you in a position where you are competing against your own customers, retailers, and providers offering or selling the same products and services. Working with the market can help address this, but partners and vendors that fail to deliver the level of service that customers expect may impact your reputation.

Ultimately, each organization needs to decide how to manage customer expectations and uphold trust. It is not enough to take the stock model of your vendors and say it is “good enough for now” because you risk losing the interest, faith, and engagement of your customers. To ensure success, get clear on who you want to be and build your platform to accommodate a long-term vision. ■

GENERATION

Your much fussed-over Millennial customers are now comfortably in their 30s going to *Mommy and Me Yoga* and sporting dad bods. Have you started thinking about their younger brothers and sisters?

Generation Z, those born in 1995 or later, make up the largest percentage of the U.S. population — about 25%.

They are already contributing \$44 billion to the economy and will account for one-third of the population by 2020.¹

IS COMING

These teenagers and early 20-somethings differ from Millennials in key ways; don't say we didn't warn you!

- 1 Gen Z is less brand-conscious and less brand loyal.**² You will have to work even harder to win and keep their business than Millennial customers.
- 2 Gen Z are social justice warriors.** Don't think this woke moment is a trend: keep being thoughtful about your messaging because the younger generation prides themselves on being socially conscious.³
- 3 Gen Z was born online.** Gen Z has never known a world without technology in their pocket, so they want intuitive, mobile technology, and they expect it to be seamless.⁴
- 4 Gen Z is frugal.**⁵ Coming of age in the Great Recession and seeing their Millennial friends struggle and largely fail to achieve their parents' standard of living, this younger generation is very cost sensitive. This trait combined with their internet research savviness means you will need to provide accessible and meaningful information on rates and charges.
- 5 Gen Z is diverse.** This next generation is the most diverse in U.S. history, so you will need to work to keep up with inclusive messages and initiatives.⁶
- 6 Gen Z is sophisticated.** Being exposed to more information means this generation is more mature at a younger age; don't talk down to them!⁷ ■

Research your **(UN)KNOWN** to **INNOVATE**

Whether it's DERs, AMI, the Internet of Things, or smart home devices, the energy industry is being forced to adapt and find ways to innovate within increasingly outdated frameworks.

For example, successful integration of DERs into the generation mix relies on reducing uncertainty and better understanding consumer choices. Knowing how consumers use and interact with new technologies, such as EVs, solar, and batteries, will be critical to developing solutions such as locational value methodologies and time- and location-dependent resource planning.

Reducing uncertainty requires that you begin with a clear head. Maximizing efficiency requires that you leverage the assets and investments you have already made. At ILLUME, we believe that innovation starts with knowledge generation. However, you have to know what knowledge you have, what you need, and what are your black boxes. But how?

The Rumsfeld Typology to Inquiry

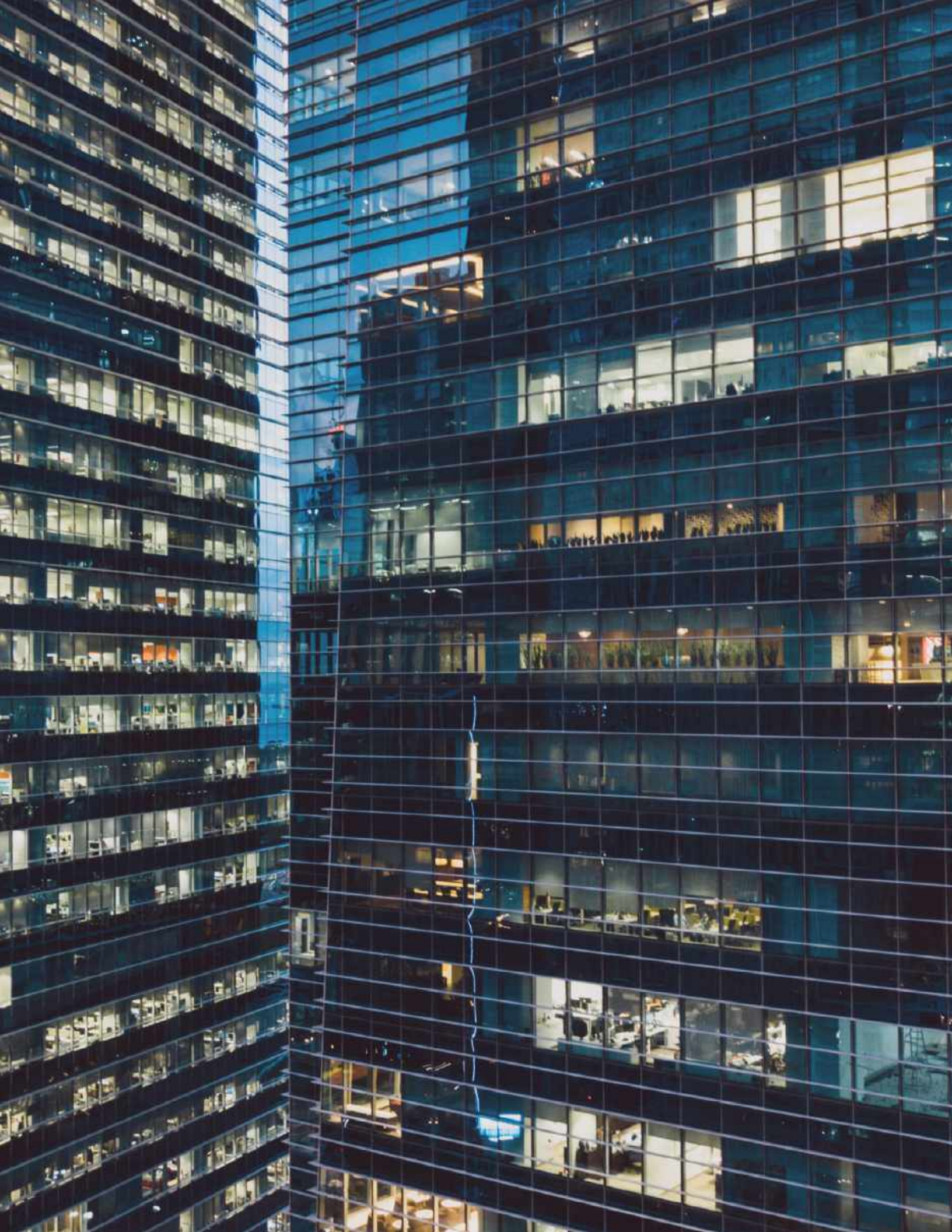
To quote twice former U.S. Secretary of Defense Donald Rumsfeld (yes, you read that right), "There are known knowns. These are things we know that we know. There are known unknowns. That is to say,

there are things that we know we don't know. But there are also unknown unknowns. There are things we don't know we don't know." When you begin any innovation process, it is critical to know what you're working with. You need to identify your known knowns, your known unknowns, and unknown unknowns.

Here, we explore the best research approaches for moving forward no matter where you are on the spectrum of knowledge generation. These techniques are especially helpful in navigating the market entrance or expansion of nascent technologies like DERs.

“There are known knowns. These are things we know that we know.”

As we become even more digitized, utilities have access to an increasing amount of customer data, but it often exists across silos. Marketing departments have demographic data, program staff have participation data, and billing data is in yet another location. Integrating data across these silos can provide utilities profound insight into customer behavior and choice.





This is no easy feat. Most of our clients do not have in-house Data Scientists who can merge, clean, and mine disparate databases into a single, queryable database. Further, many vendors claiming to do this are startups who don't know or understand utility data. How do you, for example, roll-up interval meter data in meaningful ways for planning? What transactive data represent predictive behavioral patterns and what is noise? How can past research investments, such as saturation studies, be appended to this data to better size the market?

ILLUME's Data Scientists have supported multiple IOUs in doing just this. Gather existing data in a single place to truly assess what you know, so that you know you know it. From this vantage point, you can assess gaps in your knowledge to outline a strategy to learn and gather information to augment your known unknowns.

“There are known unknowns. That is to say, there are things that we know we don't know.”

As researchers, we find that most of our clients assume they have known unknowns, that is, a set of specific, targetable questions that will help them arrive at strategic solutions to their business objectives. For the average utility business questions, they know what they need to know about 80% of the time.

In these moments, surveys, data modeling, and other quantitative techniques are perfect for

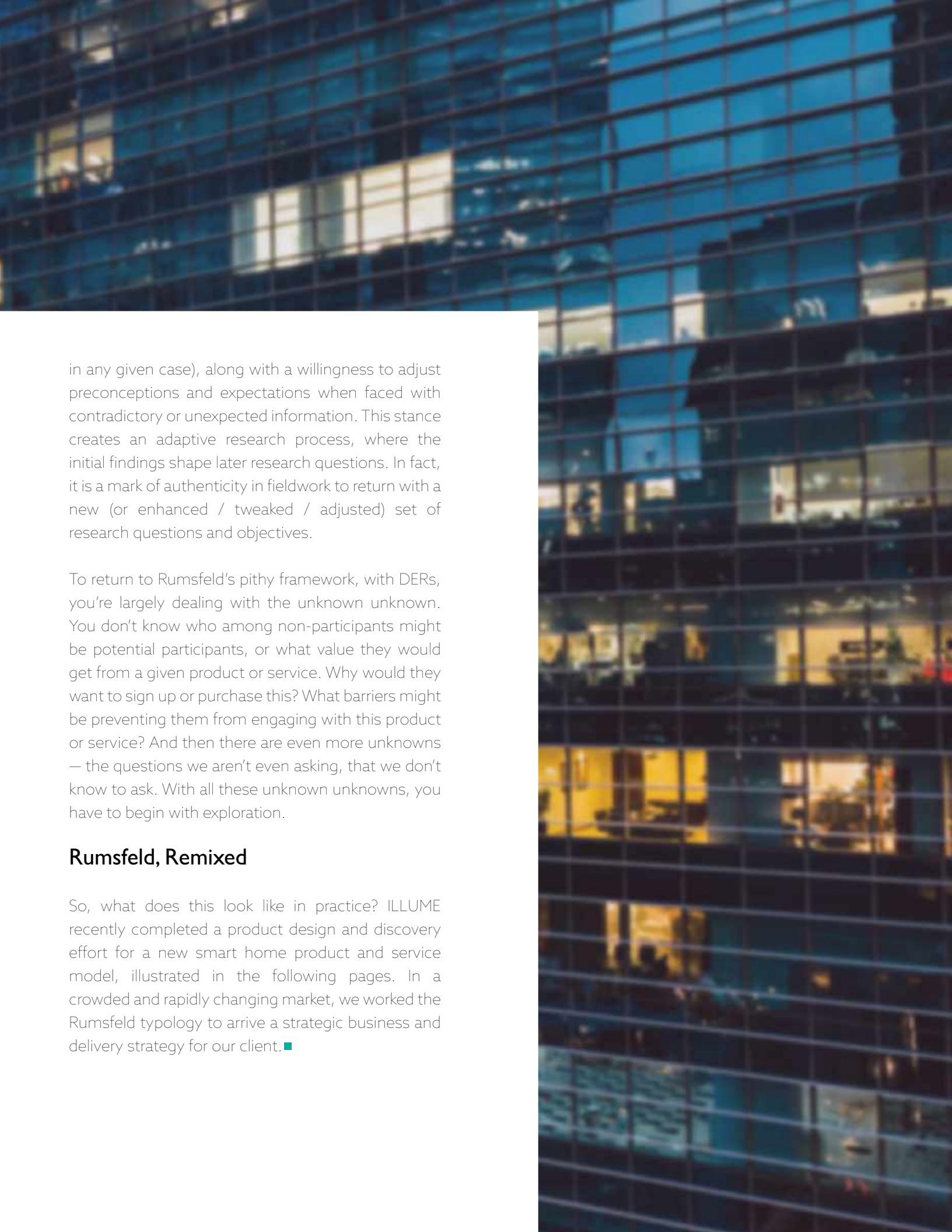
augmenting our knowledge. Propensity modeling, for example, uses integrated data to predict how customers will act in order to optimize new business solutions. This type of predictive modeling allows us to create tailored solutions for customers. However, in the 20% of cases where you don't know what you need to know, new research methods are required.

“But there are also unknown unknowns. There are things we don't know we don't know.”

In the case of customer choice and engagement with DERs, there may be few prior use cases or precedents for customer behavior, making it challenging to predict how customers will respond. As EVs, rooftop PV, or other DERs gain traction in a broader segment of the market, the characteristics of early adopters may not usefully predict characteristics of more mainstream adoption. In these cases, how do you know what to research and what to measure when you don't know what you don't know?

ILLUME's answer: cast a wide net — you don't yet know what's relevant and what's not, so it's crucial to orient your research with a broad scope.

ILLUME includes Anthropologists whose work is identifying the unknown unknowns through open-ended and exploratory research. Ethnography, the method of cultural Anthropology, relies on a flexible orientation that demands both an openness to what data is relevant (and what constitutes “data”



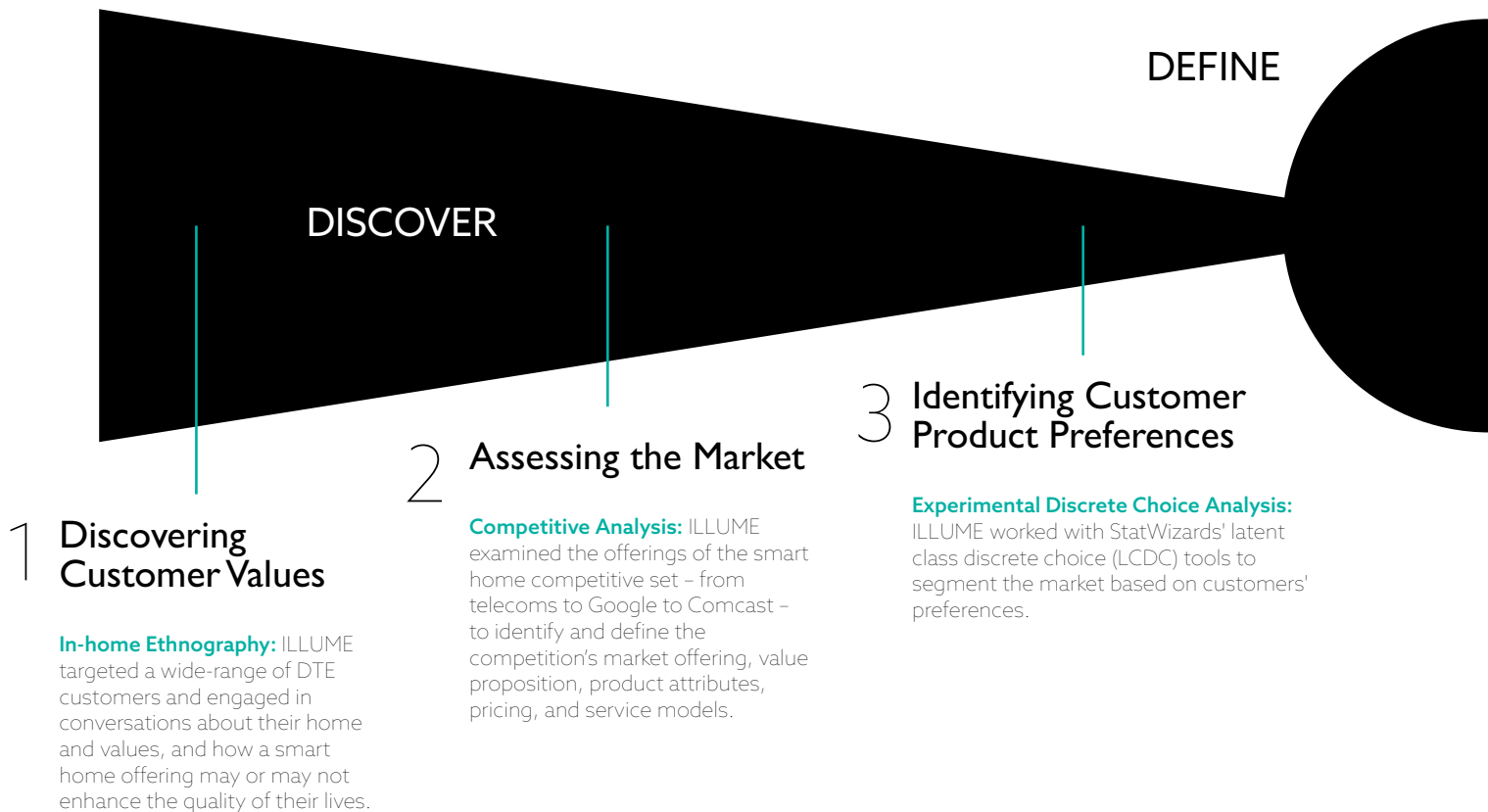
in any given case), along with a willingness to adjust preconceptions and expectations when faced with contradictory or unexpected information. This stance creates an adaptive research process, where the initial findings shape later research questions. In fact, it is a mark of authenticity in fieldwork to return with a new (or enhanced / tweaked / adjusted) set of research questions and objectives.

To return to Rumsfeld's pithy framework, with DERs, you're largely dealing with the unknown unknown. You don't know who among non-participants might be potential participants, or what value they would get from a given product or service. Why would they want to sign up or purchase this? What barriers might be preventing them from engaging with this product or service? And then there are even more unknowns – the questions we aren't even asking, that we don't know to ask. With all these unknown unknowns, you have to begin with exploration.

Rumsfeld, Remixed

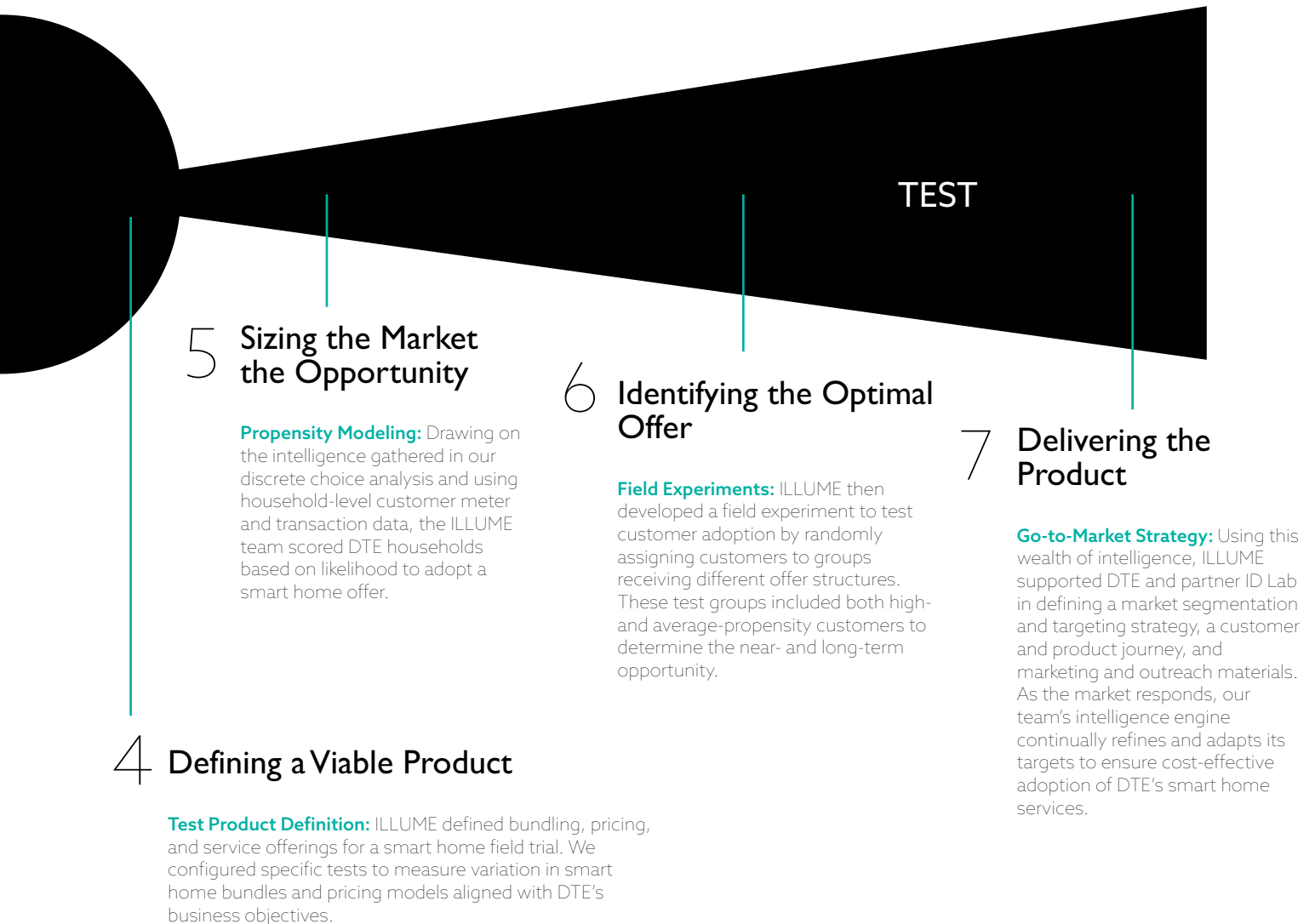
So, what does this look like in practice? ILLUME recently completed a product design and discovery effort for a new smart home product and service model, illustrated in the following pages. In a crowded and rapidly changing market, we worked the Rumsfeld typology to arrive a strategic business and delivery strategy for our client. ■

DELIVERING A SMART HOME OFFERING FROM THE CUSTOMER UP



The ILLUME Team, with partner ID Lab, is supporting DTE Energy (DTE) with end-to-end research and consulting to expand its highly regarded DTE Insight platform through an intelligence-driven go-to-market strategy. Leveraging ILLUME's seven-step, customer-centric approach to innovation, our team combined regulatory acumen with primary research and data science to define the opportunity and DTE's competitive market position. We then used this intelligence to suggest desirable product configurations to be tested in an experimental market trial to measure customer responses to offerings as well as energy savings potential.

Unlike most top-down design models that prioritize business needs over customer desires, DTE recognized that it needed to build a solution from the customer up. DTE invested early and wisely to ensure the long-term success of the DTE Insight platform. In this way, they continue to be mavericks in defining smart home opportunities – and customer engagement strategies – in the utility space.



INNOVATION ENGINE

Developing intelligence-fueled marketing is easier than you think. You have the intelligence, the trick is making it work for you.

ILLUME supported DTE Energy in developing a comprehensive customer database to drive their DTE Insight engagement. By combining intelligence that DTE had in-hand into a single database, ILLUME created an intelligence machine to support market sizing, predictive modeling, and micro-targeting for continuous outreach and learning.

To do this, the ILLUME team ingested terabytes of data to build an engine that contained three core behavioral profiles:

Energy: Demand and energy usage data across the day, season, and year to examine customer usage behaviors and patterns

Transactions: Billing and customer service preferences and transactions to understand how customers engage with DTE and through which channels

Adoption: Past product, program, and service adoption data to explore where customers are on their journey of engagement; where possible, we also incorporate in-app behaviors

We then leveraged this data to develop smarter targeting strategies using product, service, and behavioral predictive modeling. Rather than providing a static set of intelligence, we are developing an engine that continually learns from customer engagement, acquisitions, and behaviors to develop new outreach targets.

Finally, the ILLUME team is working to convert this intelligence into a user-friendly format for the DTE program and marketing teams so that our customized solution provides ongoing value to DTE well beyond our engagement. ■





HOW TO DEAL WITH DERs

We started talking about prosumers and transactive energy a decade ago when smart metering technology came on the scene, but with DERs, utility customers now wield unprecedented influence on grid behavior. They are literally more empowered today — with generation capacity behind the meter. They expect to control their personal choices, while also demanding system reliability and pricing predictability. Utilities are thus faced with balancing individual needs with the needs of the larger system. In this uncharted terrain, managing the impact of high DER penetration will require outside-the-box thinking. Here are some key insights from our experience that we don't want you to miss.

- 1 Understand your customers' expectations.** Find out how technological expectations are being set for customers and who is setting them. They will expect a lot in terms of customer service, equipment performance, and technology integration. The aim is to meet and exceed customer needs, so shifting to service-based models will be key.
- 2 Get better data now.** Expand pilots to enhance your understanding of how customers interact with technology to ensure you'll design your DER integration well. For instance, look at the user experience during the installation process. Identifying and overcoming barriers to interconnection will set the tone for your new relationship with the customer.
- 3 Break down your silos.** It takes the whole village to deliver a good, end-to-end, customer-centric experience. Don't just house DERs in your energy efficiency departments, empower cross-functional, strategic teams to develop tactics for better engagement and delivery.
- 4 Be flexible.** DER technology is rapidly evolving, don't lock yourself into aggregation solutions that can't keep up.
- 5 Engage your regulators.** Many commissions lack time, resources, and expertise to investigate and instigate the regulatory changes needed to support DERs, so come with a plan and be open to figuring it out together. ■



TEACHING THE OLD EVALUATION DOG NEW TRICKS

For 20 years, evaluation has been a key player in the success and growth of energy efficiency. It made sure that public money was indeed being used for public good. But as the industry has grown and sought to innovate, is evaluation helping or hindering progress?

Demand-side management (DSM) evaluation has created an impressive set of protocols and guidelines that ensure we produce consistent, accurate, and unbiased evaluations. But it has typically been a look in the rearview mirror, only showing us where we have been. Today, as the industry is trying to transform to survive and better serve customers, this perspective isn't conducive to exploring advancement and optimizing design. To help us move forward, evaluation has to evolve along with everything else — in a way that is productive and valuable, not limiting or punitive.

Let's Stop Chasing our Tails

Many program designers and implementation teams point to evaluation (and even evaluators) as the bogeyman that haunts their innovation dreams, preventing them from breaking out of ruts and creating

never-before-seen success. This is both unfair and untrue. Of course, in some cases, the hesitancy of evaluators to support a novel program idea has stymied innovation. But the truth is that evaluation has also acted like a security blanket for many marginal and uncreative programs, allowing all DSM actors to get comfortable and get by repeating program models that breeze through evaluations no matter their quality, customer value, or how far they are past their prime.

How Do We Teach the Dog to Wag the Tail?

In the past, evaluation has largely been the tail wagging the dog, but what if we turn that on its head? And what could we accomplish if we did? To do this, evaluation must be engaged earlier in the process, becoming involved as early as design and definitely before programs go to market. For emerging and pilot initiatives, evaluation can play a strong research and information support role during development and is integral in considering evaluability metrics. There's no better time to engage the evaluator than when programs are still puppies.



What Are the New Tricks?

Put people front and center. By bringing development and formative evaluation in from the beginning, planners and designers can identify which segments to serve, with which solutions, and for how long. Rather than thinking in terms of how many products we can move into a home or business, shift to a more customer-centric model of engagement. To do this, it is critical that we leverage research to consider the best offerings and delivery strategies for different customers. Planning will have to be considered against segments and subsegments of the population and as a direct reflection of competitive market conditions. In effect, we will have to begin to plan programs like the rest of world plans and delivers products and services. In turn, evaluation should begin considering the influence of the intervention on the segments or market as a whole rather than trying to pinpoint how a blanket effort influenced an individual's unique decision-making.

Deliver a suite of offerings, not silos of DSM widgets. When forced to consider customer behavior as an ecosystem of choices and trade-offs against resource planning goals, teams will need to rethink how to approach DSM. Key questions emerge and must be taken very seriously, such as, "what do we go after first?" Evaluation can answer those questions. By examining the intersection of customer demand and resource requirements, we can help you determine whether to prioritize efficiency, renewables, or DR for a given set of

“ we will have to begin to plan programs like the rest of world plans and delivers products and services. ”

customers, or overall. Or we may need to ask, "what is the best opportunity at this moment or for a given customer segment?" and target accordingly. To make this type of planning successful, the industry needs to understand opportunities within those segments and create the metrics of success. By engaging in the early stages, evaluation and evaluators can help define those metrics, make sure they are rigorous enough, and, ultimately, ensure they provide the right evidence that investments are returning a public good.

Think of the lifetime value of a customer, not the lifetime value of a product. With this thinking, we can start to reorient to the perspective of e-commerce sites, marketplaces, and major brands. We will have to ask, "what is the cost to serve this customer over time?" instead of, "what is the expected lifetime value we can expect from this widget?" This frame requires we rethink cost-effectiveness modeling from both the planning and evaluation perspective. It also forces us to think about exit strategies for products and services. We must ask, is this solution still serving our customers and our resource needs? If the answer is no, then customer- and market-friendly exit strategies will be critical to long-term success. Evaluation can light the path to turning off the lights on a program.

Evaluators must look more like embedded Behavioral and Data Scientists. Programs that run as single-measure offerings will face more and more scrutiny. As outcome-based evaluation grows, evaluators will have to look like, think like, and analyze data like Behavioral and Data Scientists, modeling longitudinal program engagements against both instantaneous and longer-term energy and demand effects. And evaluators will need to be embedded team members who act in close consultation with planners and designers to adapt and adjust targets and strategies as customers react in the market.

Evaluation should align with the policy objectives. Evaluation provides the insights to understand progress against the desired outcomes. Evaluators

A NEW TRICK? Meter-Level Analysis Shifts the Way we Think about Success

Traditional energy efficiency evaluation has focused on estimating the effects of individual measures, allowing our industry to stack-up measure-based deemed savings like building blocks. In a world of endless potential additions, a given home or business can save, save, save without regard to interaction effects, and limits on the total energy efficiency potential of a building, and the elasticity of markets in comparison to rebate investments.

The introduction of behavioral and behavior-enabled technology programs began to chip away at this additive approach. This new program model requires that we use meter-level analytics to examine program effectiveness. This is a game changing way of thinking about the success of program design. Driven by a desire to realize greater AMI benefits and the increased visibility beyond the meter that comes with it, more and more regions are focusing on this method to support pay-for-performance programs.

and program administrators working together can identify and establish policy objective metrics, and the means for measuring progress against those metrics, as a foundation for their efforts. This is especially important when transitioning into new models.

We Have to Herd the Cats, Too

We recognize that these changes are easy to propose but hard to execute without regulatory support. The good news: there is data supporting these shifts, and telling stories using data works at the regulatory level. It is incumbent upon us to proactively educate regulators about the changes in the market and the opportunities they bring to better serve the customer good. Instead of waiting for them to reach an “ah-ha” moment on their own, bring them the stories, the data, and the results to get them there now.

Putting it into practice. On page 47, we share an example where we put these principles to work supporting DTE Energy. To help bring their energy use monitoring app, Insight, to market, we used rigorous data and social science. As a multi-year partner developing customer- and savings-

intelligence, our team helped DTE Energy develop a sure-footed engagement, bring it to scale, and expand Insight’s suite of offerings in the home.

As advocates for the customer and the industry, ILLUME is not content to let sleeping dogs lie. Our multidisciplinary team of Engineers, Social Scientists, and Data Analysts recognize these shifts as a clear opportunity to consider the human aspects of DSM. We have Anthropologists collaborating with utilities and implementers to apply design-focused thinking to programs, both before inception and as they evolve. We have Data Scientists and customer experience experts working with home energy management software vendors to complete real-time evaluations and gather customer feedback. We are ready to address the challenges and embrace the opportunities inherent in helping evaluation evolve to better serve our industry’s needs now and in the future. ■

“

As outcome-based evaluation grows, evaluators will have to look like, think like, and analyze data like Behavioral and Data Scientists.

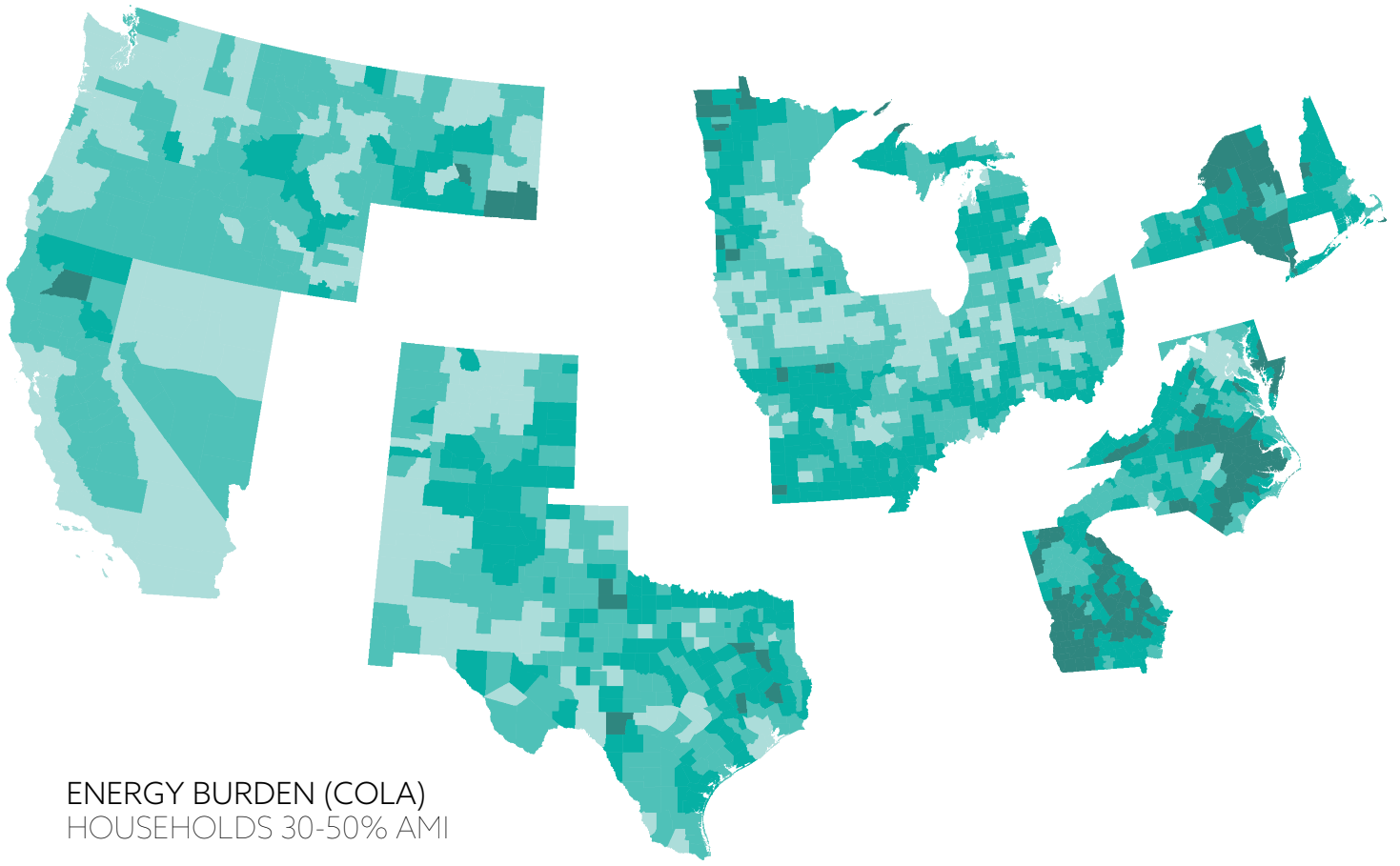
”

E N E R G Y B U R D E N

In this map, we represent the energy burden of the customers our clients serve. It represents households living within 30-50% of the area median income (AMI) or considered "very low income" based on U.S. Department of Housing and Urban Development guidelines. In some cases, their energy costs are as much 16-26% of their average monthly income. These customers are defined as having a high energy cost burden. However, our visualization takes it step further than most analyses. Rather than looking at absolute cost, we made a regional cost of living adjustment (COLA) to standardize energy burden.

Why did we include cost of living? Because the burden of poverty is not absolute. It shifts by region, among

other factors. For example, those with relatively low energy costs may have a disproportionately high percent of their income going to fixed, non-discretionary expenditures such as rent and food. As a result, the energy burden of a comparatively smaller energy bill will be higher relative to those who live in a low-cost of living area but pay more for their energy. When discussing poverty and what it costs to survive, we have to look at the whole picture and the entire pie of costs, not an absolute value on a monthly energy bill. After all, it is our discretionary income that pays for higher education, childcare, and clothing to interview for that better paying job. The smaller that slice of pie, the fewer options we have for upward mobility. ■



ENERGY BURDEN (COLA)
HOUSEHOLDS 30-50% AMI

- 4% - 9%
- 10% - 12%
- 13% - 15%
- 16% - 26%

YOUR
CUSTOMERS
ARE

WOKE

ARE YOU?

Power is shifting en masse to a customer base with many faces, identities, and cultural contexts.

This shift means it is more important than ever for utilities to embrace diversity and inclusion in their outreach and within their own teams. It's necessary for innovation and it's good for business.

But how?

Before we answer that, let's take a closer look at your customers.

The U.S. is consistently ranked as the most diverse country in the world in terms of racial, ethnic, and linguistic diversity. According to a recent study published by the Census Bureau, diversity will continue to grow and, by 2044, the U.S. will become a country with no one single racial majority group.¹ This shift is well underway among younger populations, with whites under 18 projected to become a minority group by 2020.² California, Texas, New Mexico, and Hawaii have populations in which there is no single majority group. Maryland, Arizona, Georgia, Florida, and New Jersey are expected to tip the scales in the next 10 years.³

It is also safe to say that the way we view ourselves, and one another, has changed. While the majority of Americans still say that we are better as a country due to our diversity, the experience of living in the U.S. varies dramatically based on your race and ethnicity.⁴ Black, Hispanic, and white Americans are losing trust in government and large institutions, this is more pronounced among Hispanic and black youth.^{5,6}

A great majority of black Americans feel disproportionately targeted by institutions designed to keep us safe, such as law enforcement.⁷ Shifting demographics and these findings suggest that a growing majority of utility customers feel or will soon feel disenfranchised by traditional institutions. Utilities are not immune to this trend.

In light of these changing sentiments, communicating across communities and populations feels trickier than ever. At every turn, another company is recovering from a public and cringe-worthy gaff. Pepsi's "Live for Now" spot featuring Kendall Jenner is a notable one. In it, Jenner joins a nondescript protest and eases mounting tensions between protesters and police by offering an officer a Pepsi. The brand quickly pulled the spot and apologized.⁸ The implication for utilities is that your customers have high expectations of you and will view most of their conversations with you with a dose of skepticism.





So, How Do You Communicate Across Audiences in this Tense Moment?

First, accept that your customers are right to be skeptical. Marginalized populations feel under attack at the moment. Real talk: utilities do not have a sterling track record in communities of color and in poor and immigrant neighborhoods. Power plant, substation, and distribution and transmission siting practices and waste disposal locations have a long and charged history, giving marginalized populations real justification to take your words with a grain of salt.^{9, 10} Once you accept this you can move forward with smarter communication. But how?

Admit that you don't know what you don't know. It's okay to feel adrift in this moment. All marketers are. But the difference between delivering excellent marketing and egg-on-your-face marketing is whether or not you prioritize and commit to learning and listening.

First, take stock of where you are performing well, and where you are not, with your customers and subsegments. Where you are underperforming, leverage research methods that help you listen to and engage your customers. Before leaping into a survey, take the time for one-on-one conversations. Listen to your customers' stories to discover the barriers that are keeping you from reaching them.

Extend dignity. We often talk about empathy — sharing and understanding the feelings of another. Let's introduce a new term: dignity. Extending dignity to your customers means that you take them at their word. Even if you cannot empathize, you believe and respect that they are the experts on their own lives. In other words, you listen, you believe, and you adapt to their needs.

At ILLUME, our ethnographic and data science researchers listen to the stories of your customers and dig deep into your database to examine trends as they emerge. Are your customers being treated the way they want to be treated? Are you speaking to them in their voice, from their perspective? Are you inadvertently underserving certain communities? How?

We understand that family life and decision-making practices are

structured differently in different groups. We help you learn how to relate to your customers and find them in your data. We deliver strategies that help you extend dignity and avoid introducing barriers to your already competitive markets.

Engage on their terms, not your own. In many cases, your terms and their terms are misaligned. For example, in recent work for Georgia Power, we learned that you need different messages and go-to-market strategies based on whom you engage. This work has shown that women, your primary household decision-makers, feel condescended to by your trade allies, and your black customers expect you to engage with their communities to demonstrate good faith and invest in their well-being. We have found that your second-generation immigrant customers want you to communicate in their parents' native language even if they do not speak it. Why? Because it demonstrates that you see them.

We were encouraged when, at the 2018 Energy Thought Summit, Calvin Butler Jr., CEO of BGE, described their work to build parks during the protests in response to the death of Freddie Gray while in police custody. Recognizing that their customers were mourning, BGE built trust by showing up in a hard time and creating space for communities to come together. This is an example of what it means to truly engage, see, and dignify your customers. This is the behavior that builds loyalty and trust — it takes more than making sure you show diverse faces in your advertising to connect to a diverse community.

Drop the "minority" thinking—it's offensive. Your minorities are your majority. And if they aren't yet, they will be in a few short years. This is a very important mental shift; rather than earmarking small amounts of money for "minority" research, invest in understanding all your customers, their preferences, and how they vary. This is critical to your success as a company. To compete in this rapidly shifting marketplace, you need all of your customers.

Take a look in the mirror—is there spinach in your teeth? Diversity is not checking a box. Inclusivity is making space. You cannot have a conversation with people you are not in conversation with. What do we mean by that? You need to take a hard look at inclusivity in your companies, and in your marketing and communications teams, to effectively reach your customers.

Most people now acknowledge that diverse perspectives are a requisite for innovation. But recruiting a diverse team is only half the battle. Once they're on board, how do you foster the kind of collaboration and interplay that produces effective, new solutions? How do you progress beyond recruiting diverse teams to implementing multicultural strategies and removing exclusionary practices? What metrics are in place to examine the efficacy of the inclusion and retention efforts underway? Are these metrics that focus on surface-level differences or do they capture feelings of belonging, being valued, and having opportunities to provide meaningful input that leadership takes seriously?



Have a strategy for your blind spots.

Always ask yourself and others, what might I be missing?

Often, in inclusivity discussions, factors such as social class, economic class, disabilities, gender identity, or sexual orientation are overlooked. We have learned that an effective way to illuminate our blind spots is to build a culture that is safe for all forms of diversity.

Some of the principles we apply at ILLUME are:

Broaden the search: Diversity requires intention.¹¹ If our traditional recruiting methods are reaching the same type of applicants, we look for ways to expand our reach to invite candidates from new and alternative sources.

Value a meandering path: Many marginalized populations do not have the same access to education, internships, job growth, or mentorship in their careers. Growth and advancement can take many forms. We work to identify and value talents that emerge from different or unexpected paths to career advancement.

Create a space to share our stories: Story sharing engenders empathy and infuses meaning.¹² The ability to value diverse experiences is a skill that can be learned. We hone our listening skills and create forums for open and celebratory responses to the different but equally meaningful ways that we create families, friendships, and careers.

Shut down haters: Toxicity in any form can quickly devolve into bullying

behavior. Leadership needs to set the tone and create a culture of mutual respect to maintain safe spaces for all team members.¹³

Take a side: *The Harvard Business Review* recently put out a series of articles that detail how the role of CEOs are changing as employees and customers seek to align their employment and dollars with the values of company leadership.¹⁴ When businesses remain silent on issues, silence can be taken as agreement or complicity, and the groups you aim to include feel even more marginalized.¹⁵ One way to create a safe workplace is to give voice to issues and topics that improve the lives of traditionally marginalized communities.

Most importantly, take the perspective of bounty, not scarcity: You will hear people gripe that dignifying certain populations means that others will not be heard. That we cannot extend dignity and grace equally within and outside of our organizations. If you take the perspective of scarcity, then you will believe this, and so will your team. As

leaders, it is critical that you reaffirm the value of aligning the strengths of individuals and departments to solve your business challenges.

This is the most effective path to innovation. It is imperative for organizations to recognize that the work of creating inclusive workspaces and outreach campaigns requires ongoing growth. While all communities have unique characteristics, needs, and values, these diverse groups are also interconnected. The work of finding that commonality while embracing the individual strengths that each group brings to the larger community requires a shifting mindset from the organizational level.

An approach that singles out and tokenizes marginalized groups is only a temporary patch, whereas a self-reflective, empathetic, and dignifying approach creates a community where all members are continually valued. By acknowledging past wrongs and rebuilding frameworks that promote inclusivity, your renewed strength and innovation will be unmatched. Trust us. ■

Are You Blockbuster in the Age of Netflix?

1. Anthony Ha, "For the First Time, Netflix Tops HBO for most Emmy Nominations," *TechCrunch*, June 12, 2018, accessed August 1, 2018, <http://www.techcrunch.com/2018/07/12/netflix-emmy-nominations/>.
2. Reed Hastings, "Your Economic Security is Based on your Skills and Reputation," *LinkedIn*, August 1, 2009, accessed August 1, 2018, <http://www.slideshare.net/reed2001/culture-1798664/123-Seven-Aspects-of-our-Culture>.
3. Katie Fehrenbacher, "Tesla is Starting to Actually Become an Energy Company," *GreenBiz*, June 6, 2018, accessed August 1, 2018, <http://www.greenbiz.com/article/tesla-starting-actually-become-energy-company>.
4. "How it Works," *Drift*, accessed July 31, 2018, <http://www.join-drift.com/how-it-works>.
5. George Foulsham, "Community Choice is Transforming the California Energy Industry," *UCLA Newsroom*, May 5, 2017, accessed August 1, 2018, <http://www.newsroom.ucla.edu/releases/community-choice-is-transforming-the-california-energy-industry>.
6. Jess St. John, "California Sets New Rules for Community Choice Aggregators," *Greentech Media*, February 14, 2018, accessed August 1, 2018, <http://www.greentechmedia.com/articles/read/california-rules-community-choice-aggregators#gsh.CaLLk>.

So, You Want to be the Amazon of Energy?

1. "DTE Energy Marketplace," *DTE Energy*, accessed August 1, 2018, <https://www.dteenergymarketplace.com>; "Georgia Power Marketplace," *Georgia Power*, accessed August 1, 2018, <https://www.georgiapowermarketplace.com/>; "PG&E Online Marketplace," *PG&E*, accessed August 1, 2018, <https://marketplace.pge.com/>; "SMUD Energy Store," *SMUD*, accessed August 1, 2018, <https://www.smudenergystore.com>; "Xcel Energy Store," *Xcel Energy*, accessed August 1, 2018, <https://www.xcelenergystore.com/>.
2. "BGE Smart Energy Savers Program, Smart Home Pilot Recruitment," *EmPOWER Maryland*, accessed August 1, 2018, <https://bgesmartenergy.com/residential/smart-home-pilot>; "SMUD Energy Store, Home Energy Efficient Products," *SMUD*, accessed August 1, 2018, <https://www.smudenergystore.com/>; "SMECO Smart Home Pilot Program," *SMECO*, accessed August 1, 2018, <https://www.smeco.coop/save-energy-and-money/smart-home-pilot-program>.
3. "Electric Vehicle Charger Lease," *SmartMart by FirstEnergy*, accessed August 1, 2018, <https://www.smart-mart.com/smartmart/en/Home-Products/Smart-Home/Electric-Vehicle-Charger-Lease/p/FEP-S0000225>.

4. "EV Chargers," *Con Edison*, accessed August 1, 2018, <https://marketplace.coned.com/ev-chargers/>.
5. "Go Solar with Con Edison," *Con Edison*, accessed August 1, 2018, https://marketplace.coned.com/solar/?utm_source=coned.com&utm_medium=referral&utm_campaign=coned_solar_page; "National Grid, New York Solar Marketplace," *energy sage*, accessed August 1, 2018, <https://www.energysage.com/ngny/>.
6. "Home Service Plus® Plans," *CenterPoint Energy*, accessed August 1, 2018, <https://www.centerpointenergy.com/en-us/home-service-plus/plans>.
7. "Heating and Cooling Repair Plans," *Duke Energy*, accessed August 1, 2018, <https://www.duke-energy.com/home-services/heating-and-cooling-repair>.
8. "Connected Home Plan," *SmartMart by FirstEnergy*, accessed August 1, 2018, <https://www.smart-mart.com/smartmart/en/Home-Products/Smart-Home/Connected-Home-Plan/p/FEP-S0000219>; "SurgeDefender™ Protection," *Georgia Power*, accessed August 1, 2018, <https://www.georgiapower.com/surgeprotection>.
9. "Home Services," *Orange & Rockland Store*, accessed August 1, 2018, <https://www.myorustore.com/collections/services>.
10. "Need a Contractor?," *SMUD Energy Store*, accessed August 1, 2018, <https://projects.smudenergystore.com/projects/all>.
11. "Looking to better understand your energy usage?," *Central Hudson Insight+*, *CenHub Store*, accessed August 1, 2018, <https://www.cenhubstore.com/tools/enrollment/overview>.
12. "DTE Energy Insight," *DTE Energy*, accessed August 1, 2018, https://www.newlook.dteenergy.com/wps/wcm/connect/dte-web/insight/insight-app/?utm_source=universal&utm_medium=vanity%20url&utm_campaign=dte%20insight.

Gen Z is Coming!

1. George Beal, "8 Key Differences between Gen Z and Millennials," *Huffington Post*, November 5, 2016, accessed August 13, 2018, http://www.huffingtonpost.com/george-beal/8-key-differences-between-b_12814200.html.
2. Rachel Premack, "Millennials love their brands, Gen Z are terrified of college debt, and 6 other ways Gen Zs and millennials are totally different," *Business Insider*, July 12, 2018, accessed August 13, 2018, <https://www.businessinsider.com/gen-zs-habits-different-from-millennials-2018-6>.
3. Mary Meehan, "The Next Generation; What Matters to Gen We," *Forbes*,



THANK
YOU!

August 11, 2016, accessed August 13, 2018, <https://www.forbes.com/sites/marymeehan/2016/08/11/the-next-generation-what-matters-to-gen-we/#6b6ba7737350>.

4. Teresa Bridges, "5 Ways the Workplace Need to Change to Get the Most out of Generation Z," *Fast Company*, August 19, 2015, accessed August 13, 2018, https://www.fastcompany.com/3049848/5-ways-the-workplace-needs-to-change-to-get-the-most-out-of-generation-z?utm_source.

5. Sarah Frostenson, Sarah Kliff, Soo Oh, "Today's Teens_less than you did," *Vox*, June 9, 2016, accessed August 13, 2018, <https://www.vox.com/a/teens>.

6. Pew Research Center, "Biggest Share of Whites in U.S. are Boomers, but for Minority Groups it's Millennials or Younger," *Pew Research Center*, July 6, 2016, accessed August 13, 2018, http://www.pewresearch.org/fact-tank/2016/07/07/biggest-share-of-whites-in-u-s-are-boomers-but-for-minority-groups-its-millennials-or-younger/ft_16-7-7-genage2/.

7. Meehan, "The Next Generation; What Matters to Gen We."

Your Customers Are Woke, Are you?

1. U.S. Department of Commerce, U.S. Census Bureau, "Projections of the Size and Composition of the U.S. Population: 2014 to 2060," By Sandra Colby and Jennifer M. Ortman. March 3, 2015, accessed August 6, 2018, <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>.

2. Bill Chappell, "For U.S. Children, Minorities Will Be the Majority by 2020, Census Says," *NPR*, March 4, 2015, accessed August 6, 2018, <https://www.npr.org/sections/thetwo-way/2015/03/04/390672196/for-u-s-children-minorities-will-be-the-majority-by-2020-census-says>.

3. American Enterprise Institute, Brookings Institution and Center for American Progress, "States of Change: The demographic evolution of the American electorate, 1974-2060," By Ruy Teixeira, William H. Frey, and Robert Griffin, February 2015, accessed August 6, 2018, <https://www.americanprogress.org/issues/democracy/reports/2015/02/24/107261/states-of-change/>.

4. Pew Research Center, "Most Americans express positive views of country's growing racial and ethnic diversity," By Hannah Fingerhut, June 14, 2018, accessed August 6, 2018, <http://www.pewresearch.org/fact-tank/2018/06/14/most-americans-express-positive-views-of-countrys-growing-racial-and-ethnic-diversity/>.

5. Pew Research Center, "Public Trust in Government: 1958-2017," December 14, 2017, accessed August 6, 2018, <http://www.people-press.org/2017/12/14/public-trust-in-government-1958-2017/>.

6. Geoffrey L. Cohen, Valerie Yang Hooper, and David S. Yeager, "Loss

of Institutional Trust Among Racial and Ethnic Minority Adolescents: A Consequence of Procedural Injustices and a Cause of Life-span Outcomes," *Child Development* 88, Issue 2 (March 2017): 658-76.

7. Gregory McCarriston, "76% of Black Americans Say Police Are More Likely to Target Minorities," *YouGov*, August 8, 2017, accessed August 6, 2018, <https://today.yougov.com/topics/politics/articles-reports/2017/08/08/64-americans-say-police-should-always-wear-body-ca>.

8. Kristina Monllos, "Lessons Learned From the 5 Biggest Brand Fails of 2017: Uber, Pepsi, Dove and More," *Adweek*, December 12, 2017, accessed August 6, 2018, <https://www.adweek.com/brand-marketing/lessons-learned-from-the-5-biggest-brand-fails-of-2017-uber-pepsi-dove-and-more/>.

9. National Association for the Advancement of Colored People, Indigenous Environmental Network, and Little Village Environmental Justice Organization, "Coal Blooded: Putting Profits Before People," By Katie Fink, John Fleming, Judy Hatcher, Facqui Patterson, Annie Sartor, Amanda Starbuck, Amanda Wasserman, and Adrian Wilson, March 2016, accessed August 6, 2018, <https://www.naacp.org/wp-content/uploads/2016/04/CoalBlooded.pdf>.

10. Erik Sherman, "If You're a Minority and Poor, You're More Likely to Live Near a Toxic Waste Site," *Fortune*, February 4, 2016, accessed August 6, 2018, <http://www.fortune.com/2016/02/04/environmental-race-poverty-flint/>.

11. Rob Garcia, "Intentional Diversity: 3 Ways to Create Organizational Strength and Talent Resiliency," *RiseSmart*, January 29, 2013, accessed August 6, 2018, <https://www.risesmart.com/blog/intentional-diversity-3-ways-create-organizational-strength-and-talent-resiliency>.

12. Steve Denning, "Why Leadership Storytelling Is Important," *Forbes*, February 21, 2013, accessed August 6, 2018, <https://www.forbes.com/sites/stevedenning/2011/06/08/why-leadership-storytelling-is-important/#76245e6a780f>.

13. Ron Carucci, Sabina Nawaz, John Coleman, Maura Thomas, and Shawn Thomas, "3 Ways Senior Leaders Create a Toxic Culture," *Harvard Business Review*, July 25, 2018, accessed August 6, 2018, <https://www.hbr.org/2018/05/3-ways-senior-leaders-create-a-toxic-culture>.

14. Aaron K. Toffel and Michael W. Chatterji, "The New CEO Activists," *Harvard Business Review*, July 31, 2018, accessed August 6, 2018, <https://www.hbr.org/2018/01/the-new-ceo-activists>.

15. Aaron K. Toffel and Michael W. Chatterji, "Divided We Lead," *Harvard Business Review*, July 2, 2018, accessed August 6, 2018, <https://www.hbr.org/cover-story/2018/03/divided-we-lead>.



“

She believed she
could, so she did.

”

ILLUME

MADISON • TUCSON • PORTLAND • ATLANTA • BOULDER • WASHINGTON D.C. • SAN FRANCISCO

info@illumeadvising.com