

# **K–12 and Multifamily: E Design 2020 SMB Ethnographic Insights**

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Web conference

# Agenda

Project background

Five design imperatives

K–12 insights

Multifamily insights

Key takeaways

Questions for further discussion

# The big strategic challenge

**How might we more effectively engage and delight small and midsize business (SMB) customers?**

# Primary qualitative research



**Online community**



**1:1 Skype interviews**

SAMPLE

- More than 35 SMB participants from 14 utility regions participated
- All screened to be key energy decision-makers within their business

QUESTIONING

- Approximately five days of fielding (flexible, depending on the SMB owner's schedule)
- Question topics included: relationship with energy/energy utility, renewable energy, energy efficiency, rate design, energy reliability and storage, and value-added services

- Approximately 29 one-on-one SMB interviews
- Coverage across segments and utilities of interest and engagement

- Conducted hour-long Skype video sessions
- Deeper probing into each unique business area by using the participants' online community responses as a launching point for additional probes and hypotheses



# Five SMB design imperatives

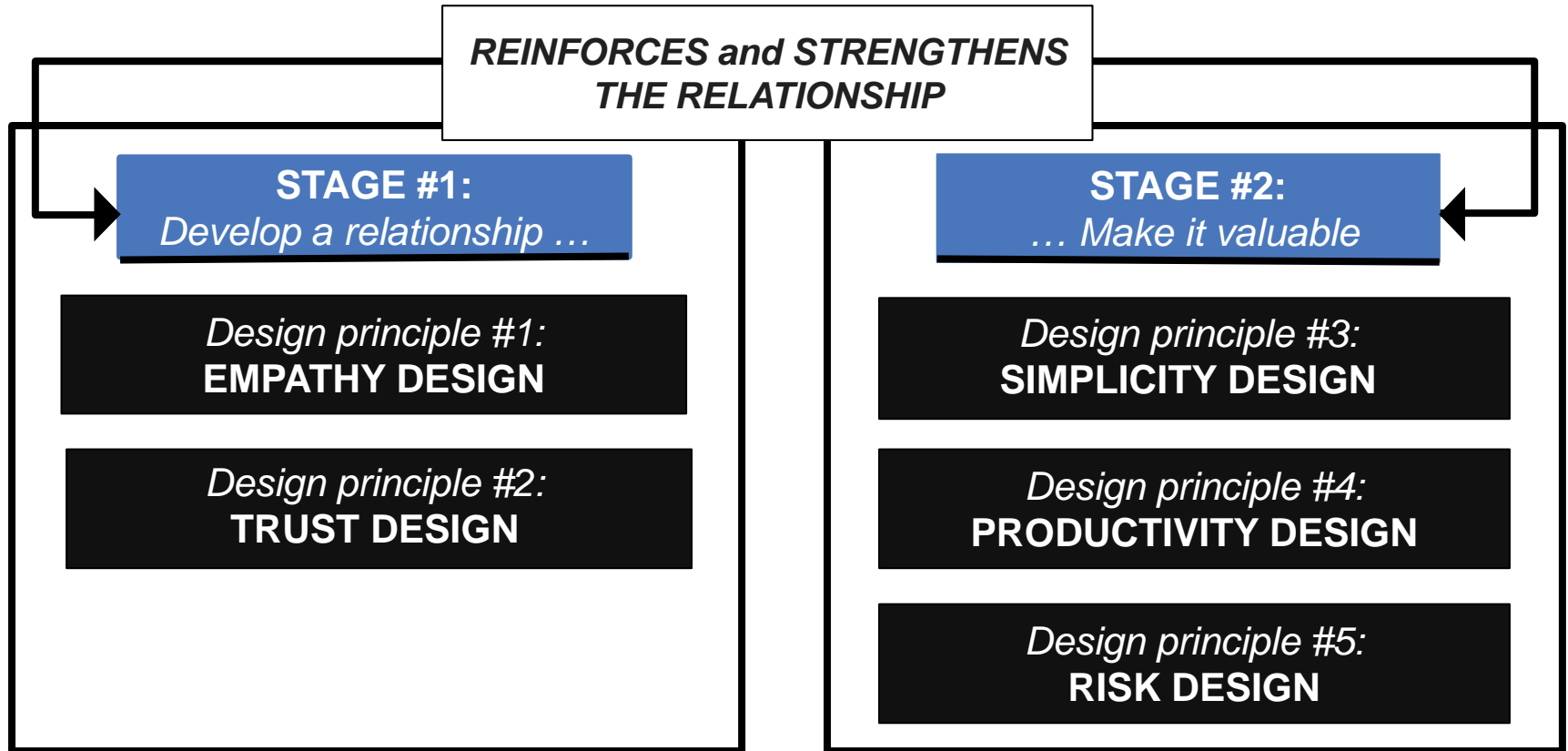
*Six different SMB segments ...*



**Five SMB design imperatives** for energy utilities to help shape the future of new SMB offerings, relationships, and engagements. Each design imperative is:

- Relevant across each SMB segment
- Based off real SMB needs and pain points
- Action oriented

The SMB design imperatives work in two stages, helping to create and reinforce more-meaningful relationships.



# #1: Empathy design

*Truly understand my business and its customers.*



Source: iStock

- Differentiated communications
- Flexible payment programs
- More-personal interactions and discussions
- Understand impact of outages on SMB's customer



## #2: Trust design

*Gain my trust by proving you care about my business.*



Source: iStock

- Relationship “kick-starters”
- Redesign billing for transparency and trust
- Personal contact at utility
- Support new businesses from the get-go

# #3: Simplicity design

*Anything you do should make my life easier.*



Source: iStock

- Proactively promote programs
- Simplify choice architecture
- Redesign bills for simplicity and value
- Supply trusted-vendor lists
- Simplify interaction experiences

# #4: Productivity design

*Anything you do should make my business more profitable.*



Source: iStock

- Virtual 1:1 energy advisory service
- Seasonal equipment tune-ups
- Detailed energy-use insights
- Demand-charge optimization strategies

# #5: Risk design

*Anything you do should give me peace of mind.*



Source: iStock

- Affordable backup services
- Monitoring and diagnostic equipment
- Insurance for cash losses from outages
- Help motivate SMB employees to be energy efficient

**While the design imperatives apply to all SMB segments, there are also important nuances that can help us better serve individual SMBs.**

*Our six different SMB segments ...*

**SMALL MANUFACTURING**

**HEALTHCARE**

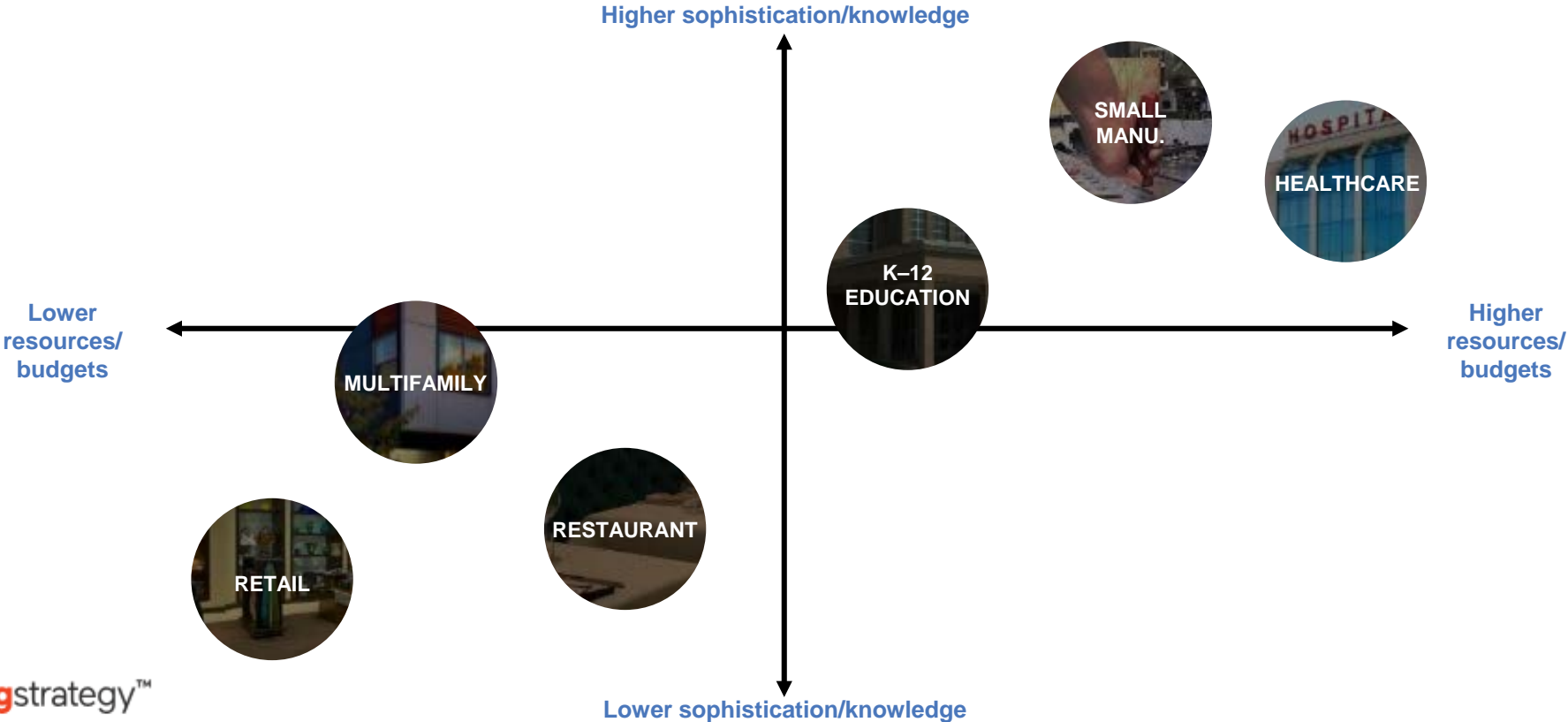
**K-12 EDUCATION**

**RESTAURANT**

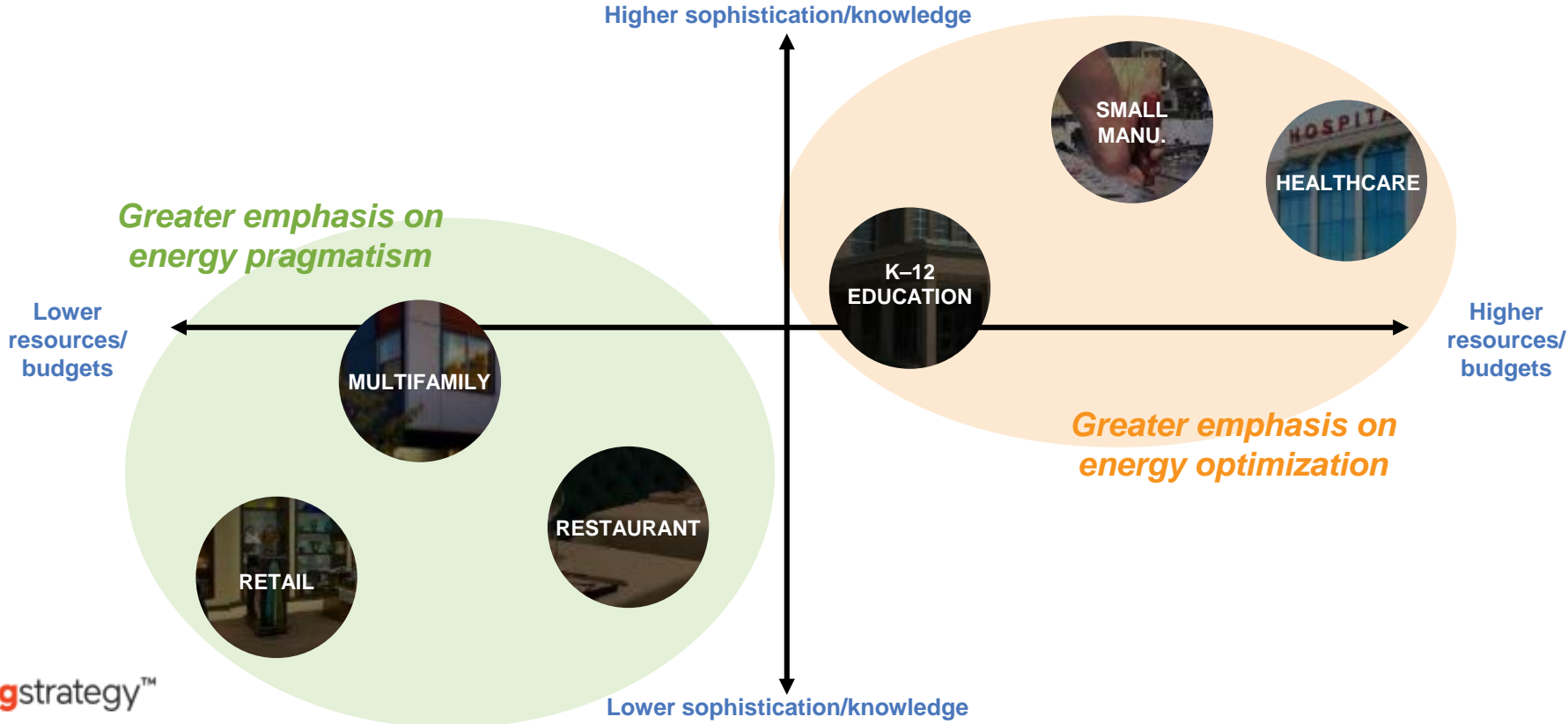
**RETAIL**

**MULTIFAMILY**

# Segments can be organized by level of energy sophistication and amount of resources they have for energy.



# We identified two overarching energy needs: lower-order pragmatism and higher-order optimization.







# K-12





To access the video files in this PDF, click the play buttons.

# K–12: Six universal truths

1. Going green is good for business

2. Energy can be part of the education

3. We're navigating complex districts and regulations

4. We're stretching an already-thin budget

5. I have to manage many properties and buildings

6. Outages create logistical havoc

# K–12 universal truths

## 1. Going green is good for business

K–12 schools are integral parts of the community, and many decision-makers understand that **green initiatives on the campus can attract parents and students, becoming a key selling point for the school.** K–12 education decision-makers often prioritize green initiatives and **seek grants, incentives, and programs** from the government and local energy utility.

*“As a public school district, **you might think we don’t have to sell ourselves ... but we do.** Our school district is very green by nature, so we have **electric car chargers, a solar array on the high school roof, and active green teams** in every school. Going green and conserving energy are closely related and we embrace it.”*

## 2. Energy can be part of the education

Not all energy or green initiatives on the school campus are passive in nature. Many **require students to actively change their behavior and/or volunteer** for special programs. This presents an interesting opportunity to **make energy part of the education offerings at the school itself.**



# K–12 universal truths

## 3. We're navigating complex districts and regulations

K–12 schools are constantly dealing with state and federal codes, regulations, and grants, and **navigating the numerous complexities of various district decision-makers is often their biggest energy challenge**. There's an opportunity for increased support and education around evolving regulations and grants to **help K–12 schools stay in compliance and capture valuable grant money**.



## 4. We're stretching an already-thin budget

Working within a **tight school budget is a reality for K–12 education decision-makers**. They have to make tough choices about where and when to deploy their limited capital. With long hours of operation and large facilities to maintain, **energy costs can eat a big chunk out of this precious budget**, which places an **emphasis on becoming more efficient** in any way they can.



# K–12 universal truths

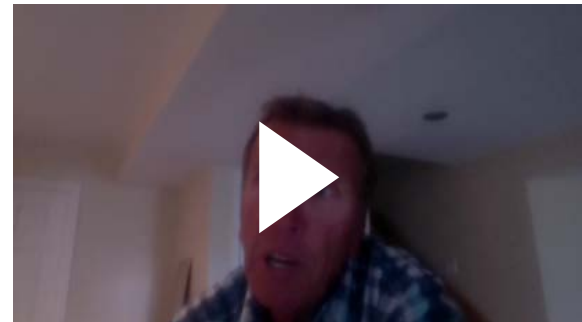
## 5. I have to manage many properties and buildings

Some larger K–12 school districts **span dozens of different buildings and millions of square feet**. With so much space and equipment to account for, facility managers can often feel overwhelmed, and **pinpointing and addressing problems in a timely manner can be challenging**. In addition, managing temperatures across dozens (if not hundreds) of classrooms can become quite a headache.



## 6. Outages create logistical havoc

Modern-day schooling is increasingly reliant on energy, so any **outages lasting more than 30 minutes typically result in cancelled school**. With hundreds of students to manage and parents often away at work, **dealing with these situations can become a logistical nightmare** for schools and their decision-makers.



# E Design Week: Key K–12 themes

Multiple decision-makers,  
“people to please,” and  
layers of approval



Outages are far  
more impactful than  
we ever realized

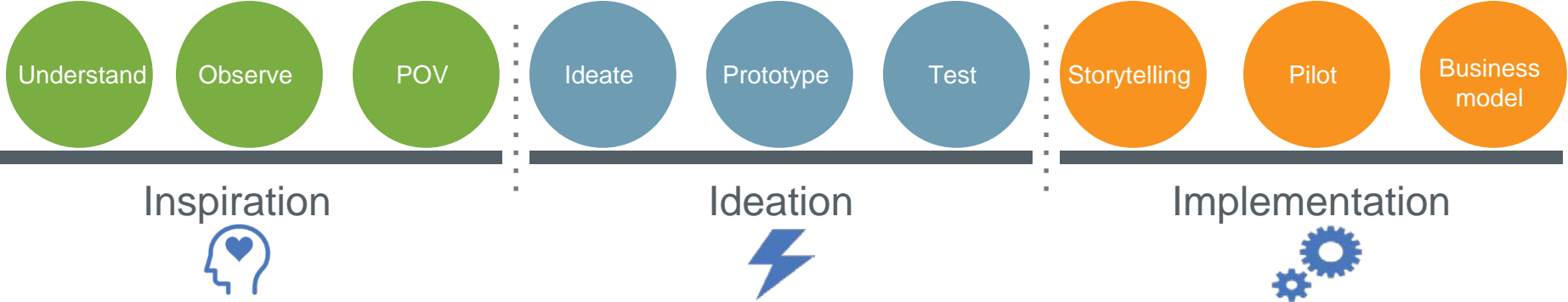


Create a culture of  
energy engagement  
and awareness

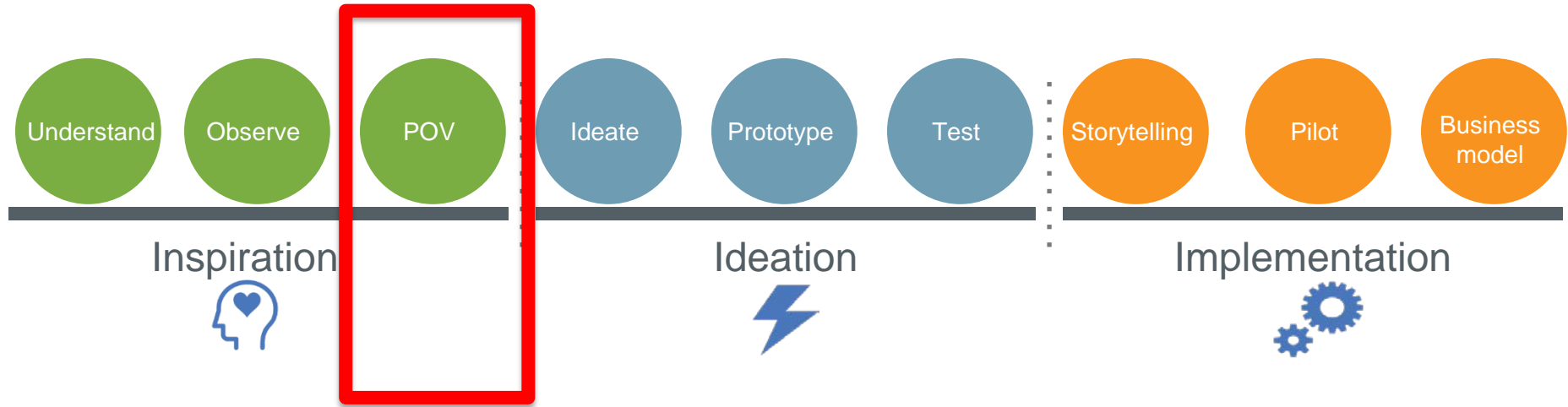


Images source: iStock

# The design-thinking process



# The design-thinking process



**Problem  
space**



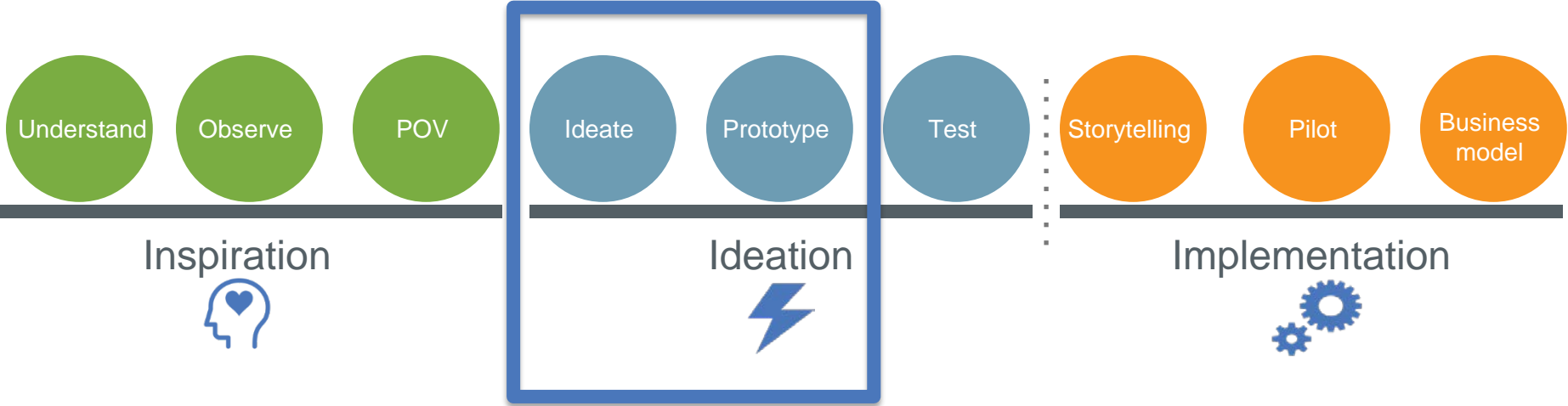
# K–12 points of view

- Shelley is a K–12 district manager who wants to make her schools more comfortable so the kids stay focused on learning instead of getting distracted by being too hot or cold.
- Daniel is a K–12 facilities operator who wants to change the entire school culture around energy so that students have energy-education opportunities while driving positive energy impacts at the school.
- Brian is a K–12 district manager who desires pinpoint information regarding power outages because he has to make challenging decisions about how to handle students during these disruptive events.

# K–12 “how might we” questions

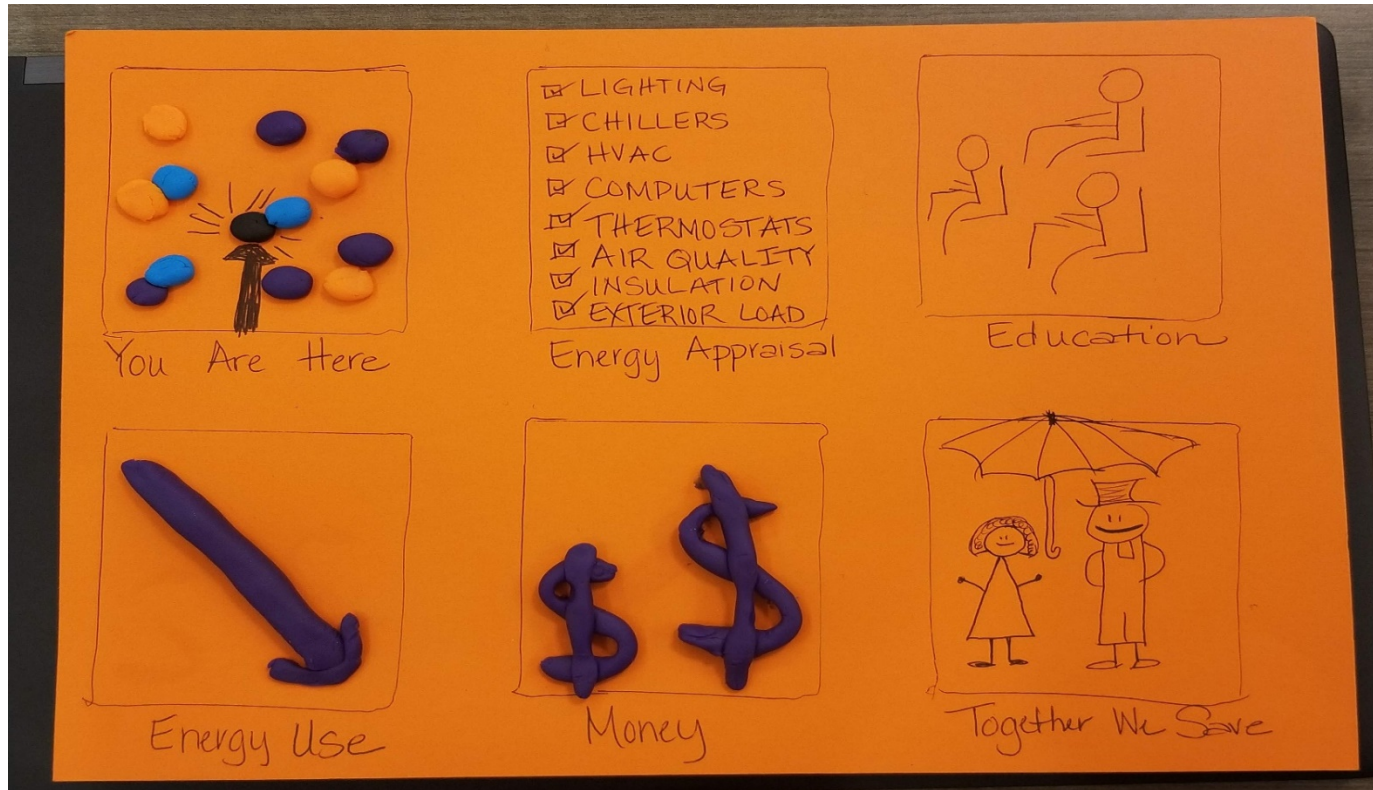
- How might we create a streamlined approach to solving the financial and bureaucratic problems schools encounter?
- How might we design an energy plan that puts students’ needs first?
- How might we help Daniel engage students with their school’s energy use?
- How might we increase energy visibility with Daniel’s students and staff?
- How might we introduce energy-education opportunities into daily student and staff behaviors?

# The design-thinking process



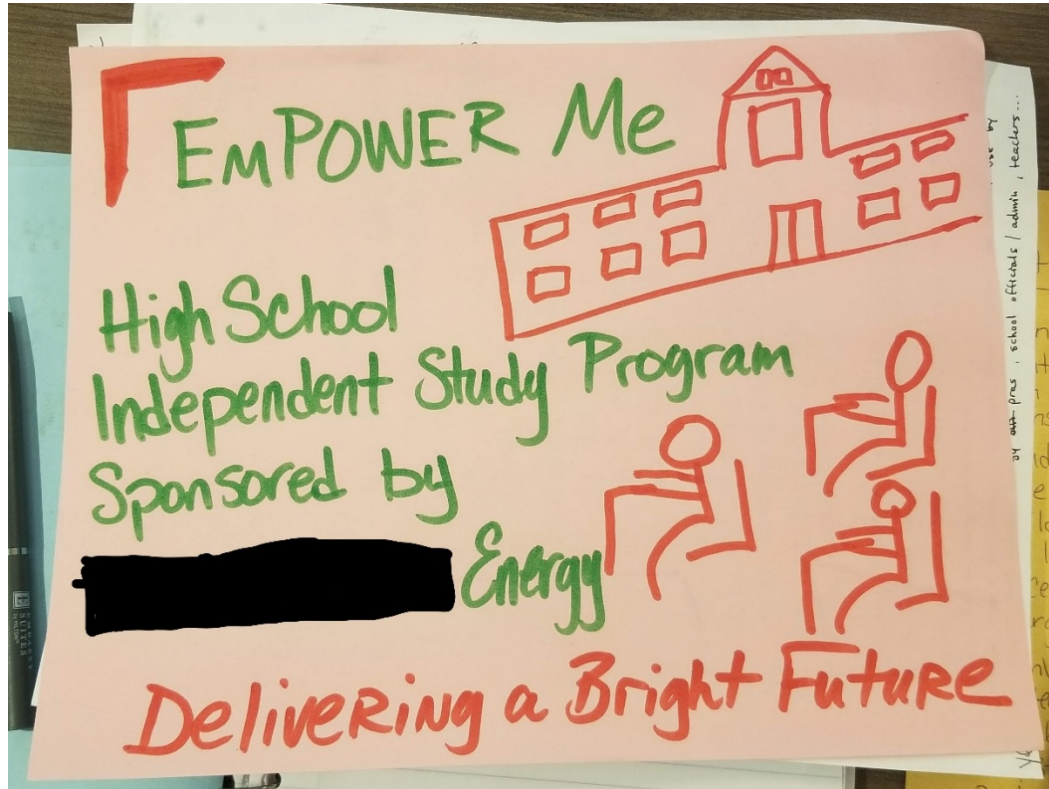
**Solution  
space**

# Participant-created K-12 concept



© E Source

# Participant-created K-12 concept



© E Source

# K–12 deep-dive questions

- Describe a typical person in charge of managing energy for a K–12 district. What’s their background? How did they land here? What motivates them, and what are they passionate about?
- Who are K–12 schools and districts trying to impress? Who are they “selling” themselves to? How are they justifying their decisions? Consider these questions from both an energy and non-energy perspective.
- Who comprises school boards? What type of people are they? Are they more rational or emotional? How does that impact decision-making processes?
- Describe what you think some of the top drivers are for schools’ interest in renewable energy. Why?
- How do you think energy-related problems are identified? How are they prioritized? Why?

# K–12 deep-dive questions

- Schools are so electricity dependent now—it's no longer purely chalkboards and notebooks—that outages are highly disruptive..
  - Create a list of everything in a school that's affected when the power goes out (cafeteria, bathrooms, classrooms, etc.).
  - What happens within a school and within classrooms during a 30-minute outage? One hour? Two hours? Be specific.
  - What happens in 1st grade versus 11th grade? How are students affected differently?
  - What individuals are impacted by outages, both in the school and outside of it?
  - Discuss whether there's an emerging need for backup solutions for schools. Why or why not? What's the value statement for backup power?
  - What type of unique solution might work for schools?
- K–12 districts might be managing many buildings, resulting in a lot of energy and non-energy issues to keep track of. The facility managers see a lot of energy-related data, but what insights does it provide? Does it enable them to be proactive in addressing issues? Why or why not?

# K–12 deep-dive questions

- At what age should we start teaching about energy? Why? What would an energy curriculum look like for various age groups?
- What types of organizations do you think K–12 staff trust for energy information? Why?
- Why aren't high school energy-education programs more prevalent?
- Student comfort is important for learning, yet it's often overlooked. Kids are expected to just deal with discomfort. Students, teachers, and parents care about the issue, but it's not high on the list of energy priorities. Do you agree or disagree with this stance? Why?





# Multifamily



# Multifamily: Six universal truths

1. My shared meters create energy headaches

2. How do I align goals and incentives with tenants?

3. I'm dealing with an aging infrastructure

4. Help drive top and bottom lines with energy investments

5. Help me benchmark my energy costs

6. Make it easy to work with you on behalf of tenants

# Multifamily universal truths

## 1. My shared meters create energy headaches

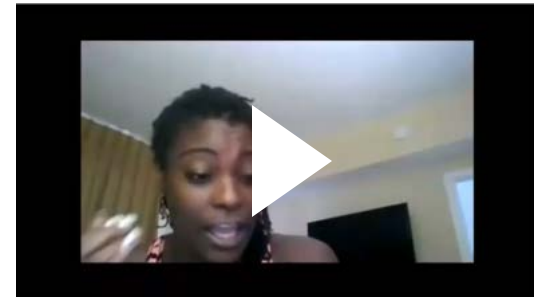
Several SMB multifamily buildings run off shared energy meters, which create **little incentive or motivation for tenants to conserve**. In these cases, the lack of control over energy costs **creates anxiety for owners (e.g., some feel they have to patrol for bad behavior)**. There's an opportunity for utilities to help multifamily owners with better methods of tracking or managing tenant energy use.



## 2. How do I align goals and incentives with tenants?

Regardless of whether they're on a shared meter or responsible for their own energy costs, **tenants and landlords don't always share the same vision when it comes to energy conservation**.

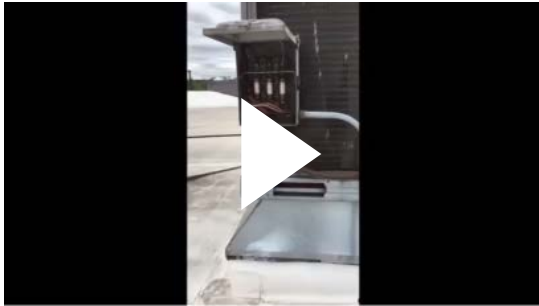
This can make it **difficult to share ideas, programs, and protocols about energy**. There's an opportunity to help multifamily owners create shared incentive programs that drive the right types of behaviors they want to see.



# Multifamily universal truths

## 3. I'm dealing with an aging infrastructure

Many small mom-and-pop multifamily operations don't operate out of brand-new energy-efficient buildings. Instead, they're **often dealing with historic buildings with aging appliances, equipment, and infrastructure**. This can create headaches for the owner, especially **during times of extreme heat and cold, when HVAC breakdowns and tenant complaints are frequent**.



## 4. Help drive top and bottom lines with energy investments

Multifamily owners are in a unique position in **that energy upgrades can drive both their top and bottom lines** (i.e., reduce energy costs and increase rents). However, it can be challenging for them to understand when and where to deploy their extra capital, especially when **considering intangible benefits like noise reduction, ambiance, and tenant comfort**.

*“Reducing energy costs not only **increases net income**, it also **increases the value of my rents**.”*

*“Some energy investments are easy to calculate (replacing bulbs with LEDs). **Other investments aren't easy to calculate**, like increased comfort level (as in windows and insulation) and noise reduction (newer AC units and insulation).”*

# Multifamily universal truths

## 5. Help me benchmark my energy costs

Most multifamily owners compare their energy costs month to month; however, they **have little understanding of how they're doing relative to similar businesses**. Include a comparison of average energy cost per square foot to help them in **benchmarking** (i.e., making decisions based on results), **prospecting** (i.e., helping potential tenants understand costs), and **planning** (i.e., creating new properties or doing construction).



## 6. Make it easy to work with you on behalf of tenants

Multifamily owners often **have to contact their energy utility on behalf of their tenants** (e.g., if they're having issues with a specific unit). Because this type of contact happens frequently, it's **important to have the process be as painless as possible**. It can be particularly frustrating if the owner doesn't have all the required information and documentation required to deal with an issue right away.





# E Design Week: Key multifamily themes

Numerous people are involved in identifying and addressing energy issues



Multifamily owners and tenants have no insight into usage or actionable, specific ways to improve

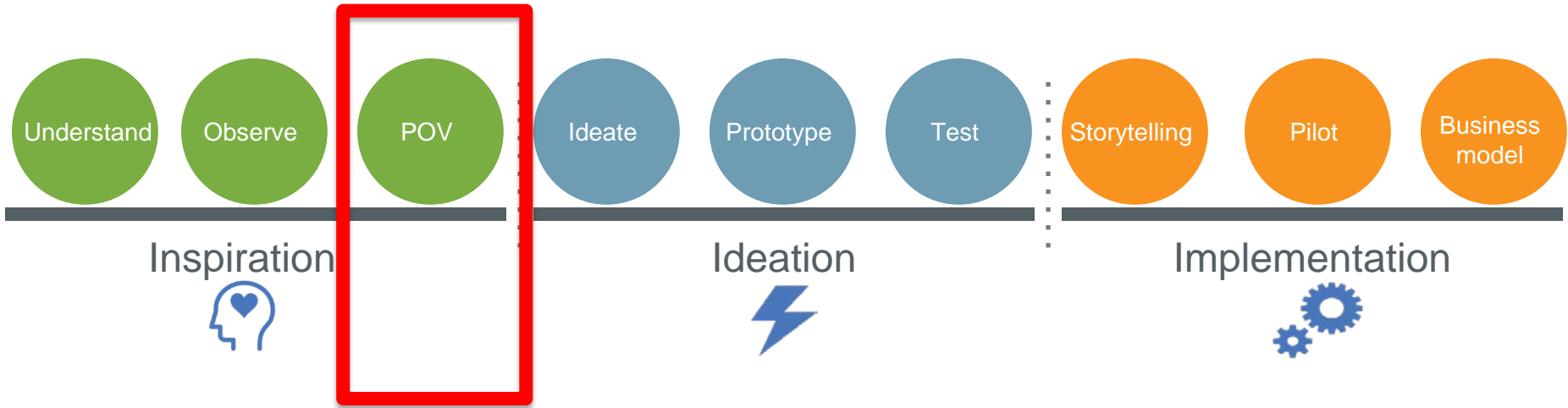


Including utilities in rent further muddies the energy picture



Images source: iStock

# The design-thinking process



**Problem  
space**



# Multifamily points of view

- Candice manages a low-income multifamily property and is stressed out by the layers of approval required to make an energy investment. She just wants to make quick fixes that improve her tenants' quality of life.
- Calvin owns a multifamily building where utilities are included in the rent, and he's desperate for deeper energy insights. He wants to drive better energy behaviors with his tenants so that their bad behaviors stop directly impacting his financials.
- Kathryn is a multifamily building owner who wants to make upgrades to her very old energy infrastructure because this inefficient equipment eats into her bottom line and restricts her cash flow.

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proactive changes around his  
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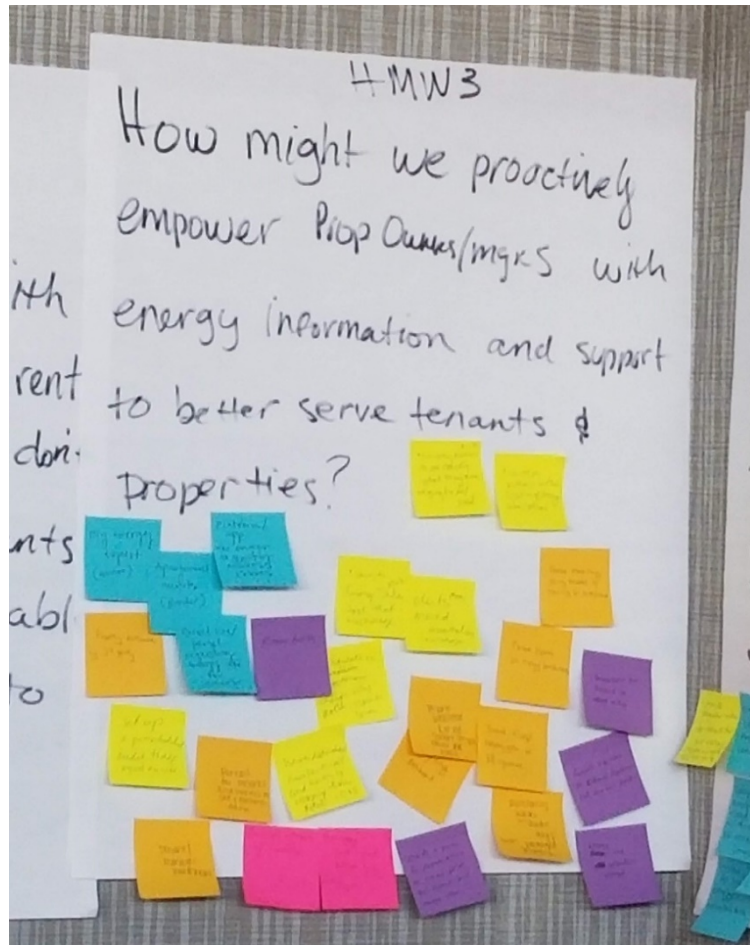
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Tenant 2 POV ter

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# Multifamily “how might we” questions

- How might we enable property managers to make quick-fix energy improvements?
- How might we help property managers encourage better energy behaviors among tenants?
- How might we engage tenants in energy efficiency when there’s minimal incentive for them to do so?
- How might we provide clear and actionable energy insights for multifamily properties?
- How might we design cash-flow-positive energy offerings?



© E Source

# Multifamily participant-created concepts

- App for multifamily owners that allows them to quickly address energy issues with their utility
- Energy-use dashboards in common spaces
- Energy challenges and prizes
- Tenant welcome kit with energy-saving devices

# Multifamily deep-dive questions

- What type of individual do you think might get into multifamily ownership or management? Why? Describe this person, their motivations, who they are, why they're in this profession, etc.
- Create a list of who you think might be involved in energy decisions—identifying a need, seeking approval, getting funding, making a purchase, installation, etc. How complex is this network? Have you done this type of thought exercise at your utility? How do you even *identify* the right person to approach, nonetheless get their ear?
- Create a list of the top priorities a multifamily property manager or owner might deal with on a daily basis. How do energy-related issues factor in? What could move energy up in priority?
- Rent is one of the most important issues for multifamily owners. Does that factor into your current engagement efforts? Why or why not? How could this impact future engagement efforts?
- Discuss the pros and cons of including utilities (e.g., electricity, gas, water, trash) in tenants' rent. What are the pros and cons for property owners? What are the implications for utility companies? How does that affect your thinking on existing energy-efficiency offerings?

# Multifamily deep-dive questions

- If a master meter is such a major cause of strife, what are the alternatives?
- How do you think multifamily owners and managers prioritize energy decisions, particularly related to aging infrastructure? Why?
- What are tenants' energy concerns? Why?
- Occupant (tenants as well as employees) behavior plays a major role in multifamily building energy consumption. Do you believe this is a well-explored efficiency opportunity at your utility? Why or why not?
- We always discuss the split incentive as a challenge to multifamily efficiency. Is that the only barrier? What other challenges exist?





# Overarching SMB key takeaways



# The engagement chasm



Source: iStock

# Key takeaways

- Missing the human touch
- Personalization
- Proactive outreach
- Actionable advice not passive data
- Partnerships may be key

# Deep-dive questions for further discussion

- What's the psychological makeup of an SMB owner or someone who starts a business? What motivates them? What's their internal composition? What are their attitudes, perceptions, etc.? Who are they?
- Everyone wants more insight into their consumption—more detailed, easier to access, real-time, and actionable. Why is this still such an acute need?
- Data on the bill appears to address one or two needs: seeing how much you owe and what drives those charges. There doesn't appear to be much actionable info on bills for SMBs. What type of data might make a bill actionable?
- Very common SMB sentiment: "I have no idea how to verify whether I'm charged correctly; I'm just forced to trust that I am." How might utilities address this?
- Benchmarking to similar business types is a huge area of interest. Why? Why isn't that provided? How might you provide that type of information?

# Deep-dive questions for further discussion

- Almost universally, people say email is the best (or one of the best) ways to communicate with them, yet they also say they tend to delete many emails from their utility. Why?
- There are constant comparisons to other service providers. Which ones? Why?
- Businesses regularly make comparisons to residential energy services they receive at their homes. If it's really hard to reach them at their business, is it possible to reach them via their residential services for business purposes?
- People seem to believe that old buildings can't become more efficient or that utilities ignore them for efficiency purposes. Why?
- There seems to be strong opposition to time-of-use rates—most SMBs think they wouldn't work. Why does opposition exist? Is it perception or reality?

# Thanks!



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SMB Summary Report: E Design 2020  
Ethnographic Market Research:

[www.esource.com/10179-001/e-design-2020-small-and-midsize-business-ethnographic-market-research-summary-report](http://www.esource.com/10179-001/e-design-2020-small-and-midsize-business-ethnographic-market-research-summary-report)



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