

# Understanding the Customer behind the Data

**Smart Efficiency Requires Smart Data:  
Using Data to Better Serve Customers**

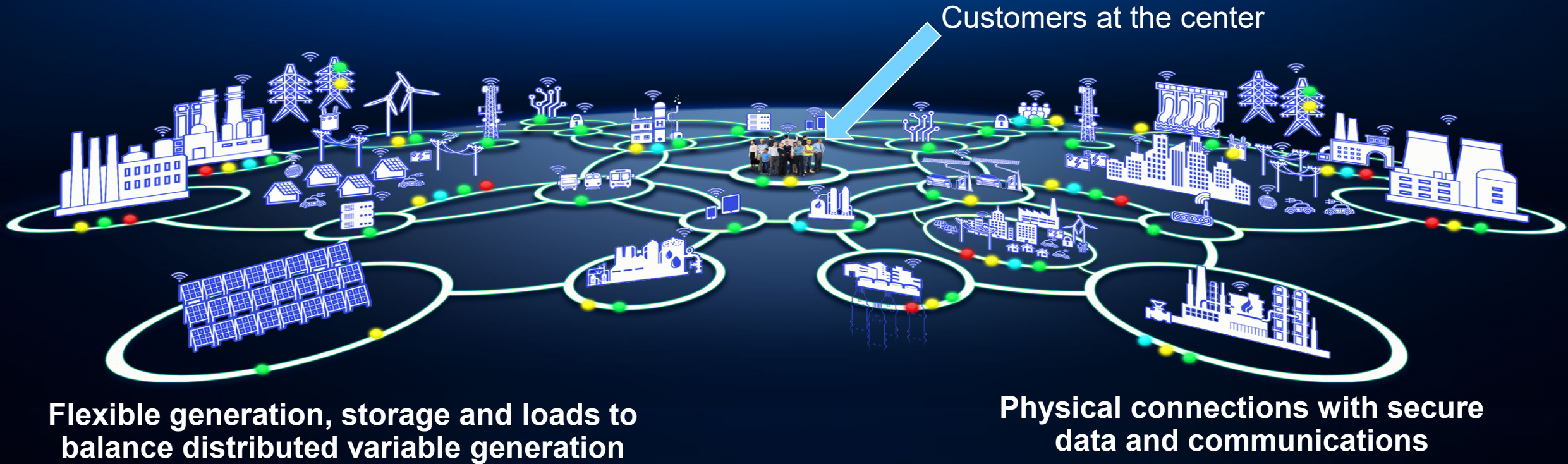
**Midwest Energy Efficiency Alliance**

February 20, 2019

Omar Siddiqui  
Senior Technical Executive



# *Integrated Energy Network*



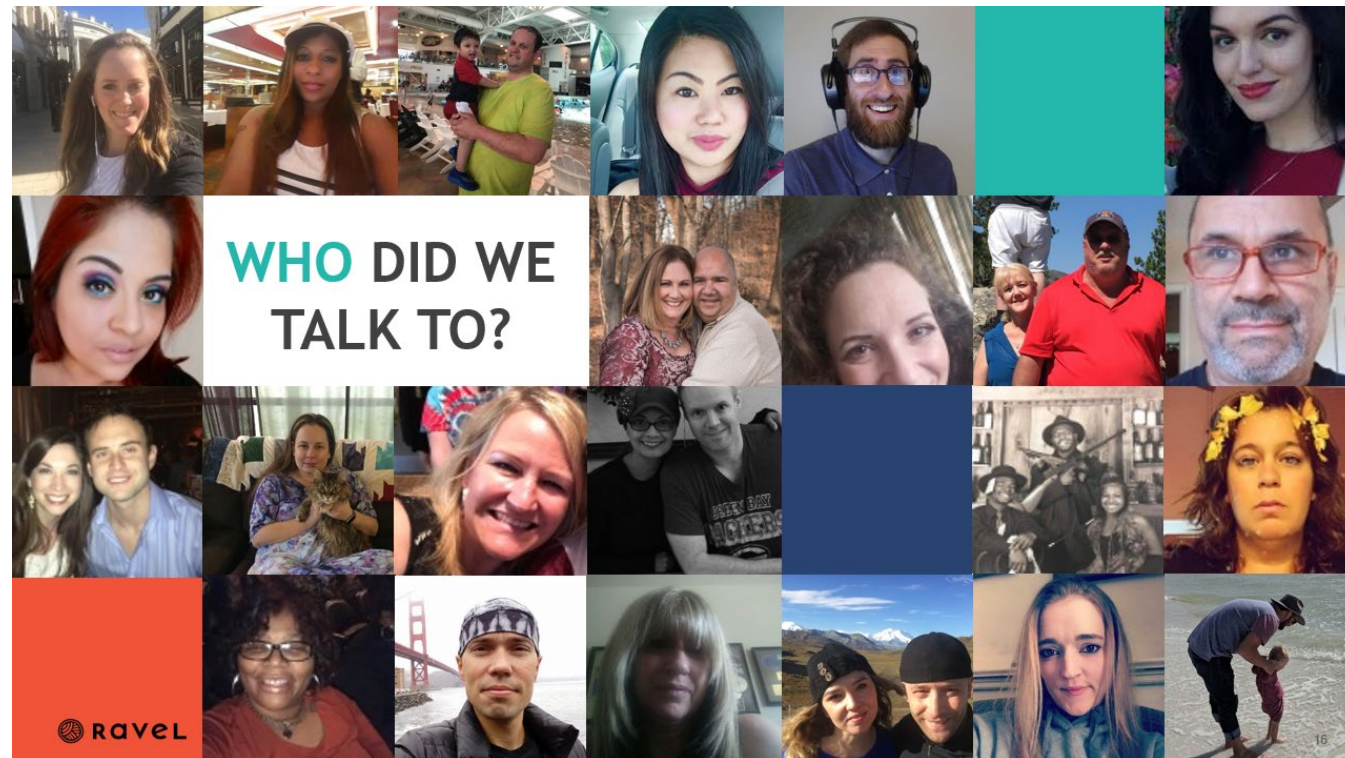
**Integration to Provide Reliable, Safe, Affordable,  
Cleaner Energy and Expanded Customer Choice**

# What do customers tell us they care about?

## Meaningful Insights

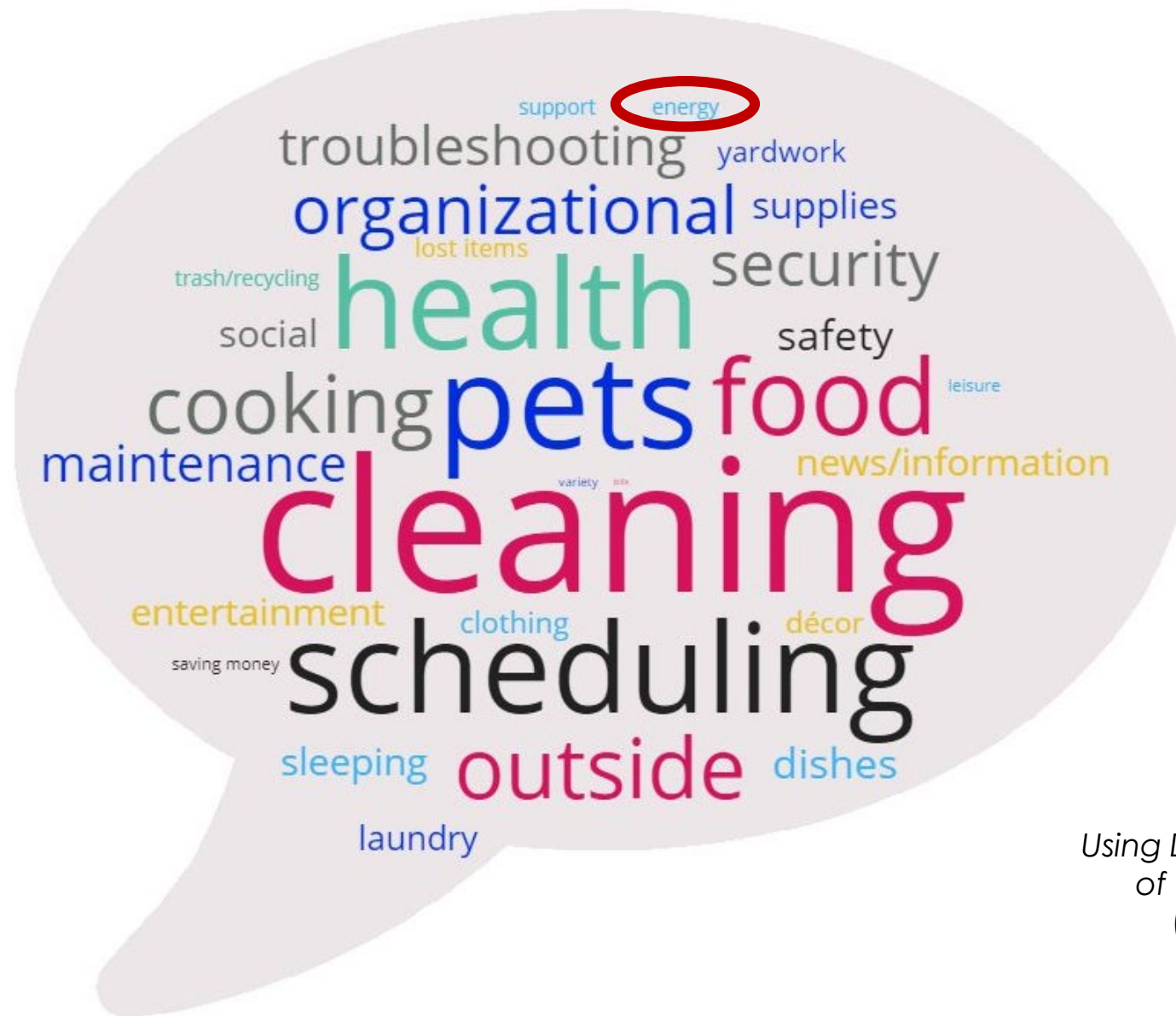
What people  
care about  
and find  
valuable

Data utilities  
have  
(consumption  
+ other data)



EPRI surveyed a consumer panel on smart homes, and asked...

***“If your home could talk, what would you want it to tell you?”***



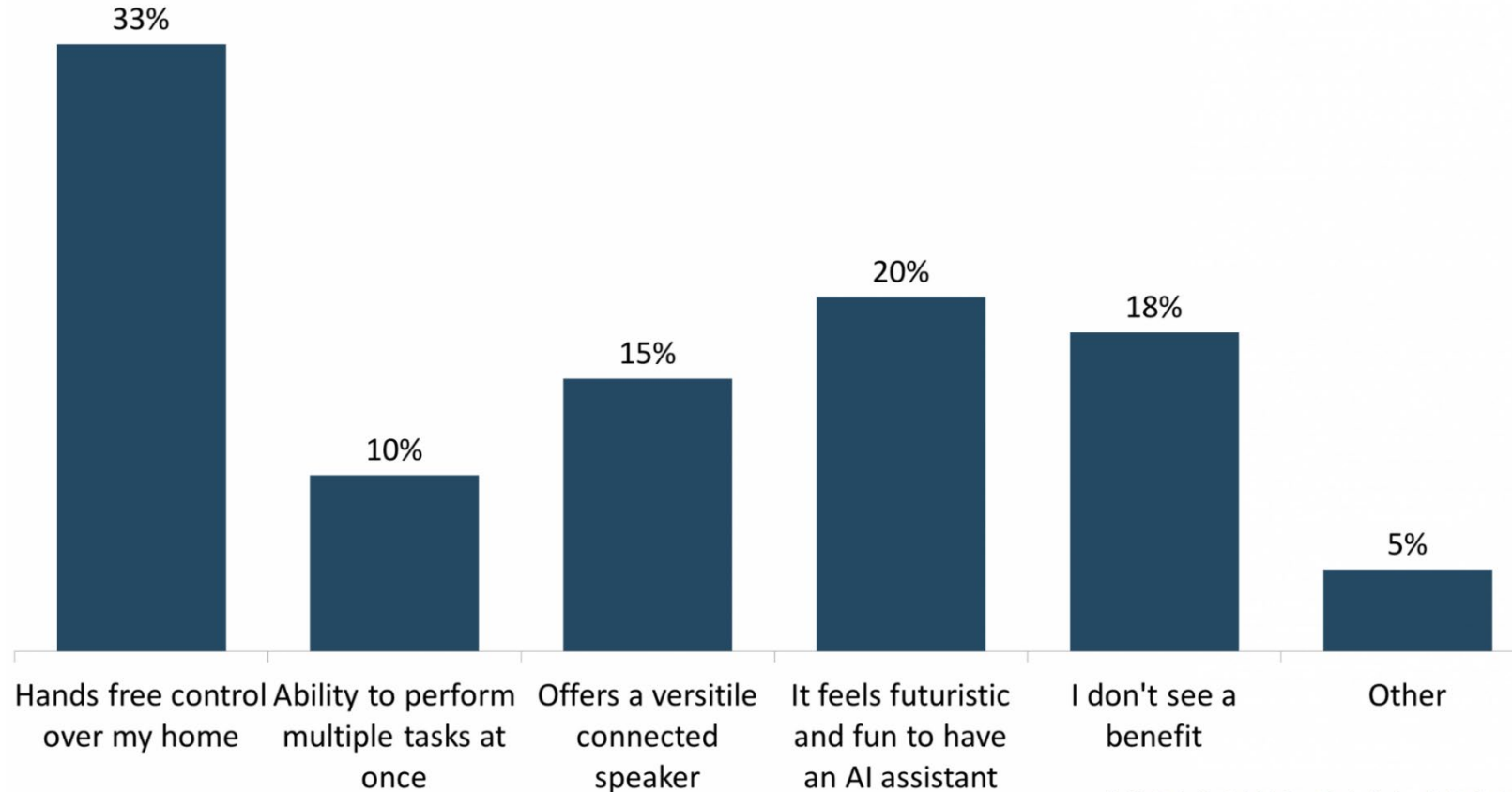
*Using Data to Provide Insights  
of Value to Customers  
(EPRI [3002013357](#))*

# *“If your home could talk, what would you want it to tell you?”*



# Smart Home Voice Assistant

## Top Perceived Benefits of Smart Home Voice Assistants *US Consumers*



Source: BI Intelligence Survey (n = 865), February 2017  
[intelligence.businessinsider.com](http://intelligence.businessinsider.com)

EXCLUSIVE DATA FROM  
**BI INTELLIGENCE**



- Voice assistants have gained traction as the hub of the smart home
- Amazon Echo Dot was the highest seller during “Prime Day”
- Behind wireless speakers lies a whole ecosystem

# Shaping customer-centric content



Identify a topic customers care about

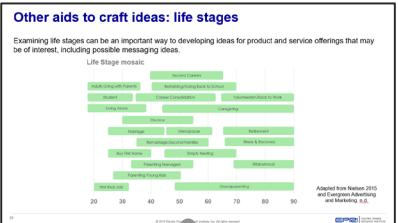


Brainstorm insight ideas

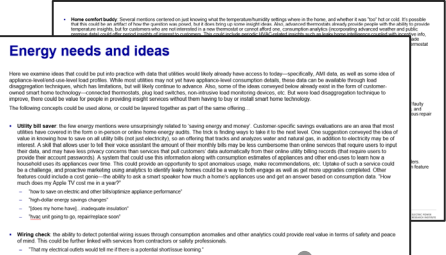


Design customer outreach

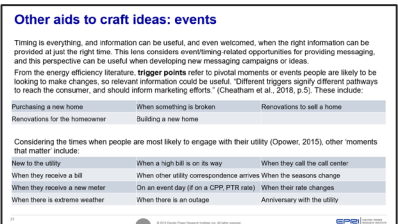
## Target Life Stage



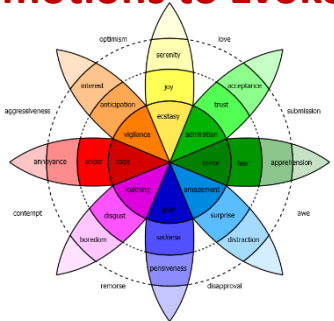
## Content



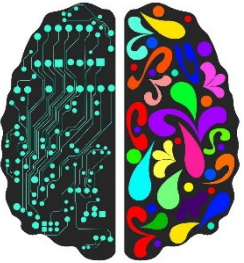
## Trigger Points



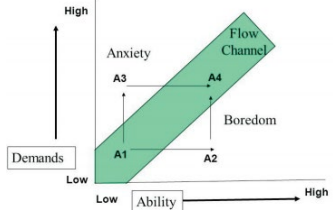
## Emotions to Evoke



## Behavioral Levers



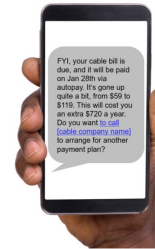
## Game Elements



# Key takeaways from customer panel on smart homes

- Top topics: cleaning, pets, health, scheduling, food
- Energy not a priority
- Focus on relevant areas
  - Scheduling, security, troubleshooting, maintenance, etc.
- Brainstorm based on customer-generated ideas
- Test value to customers

## Bill Tracking & Alerts



## Bill Insights



## Weather Alerts



## Outage Alerts



## Appliance Health



## Feedback

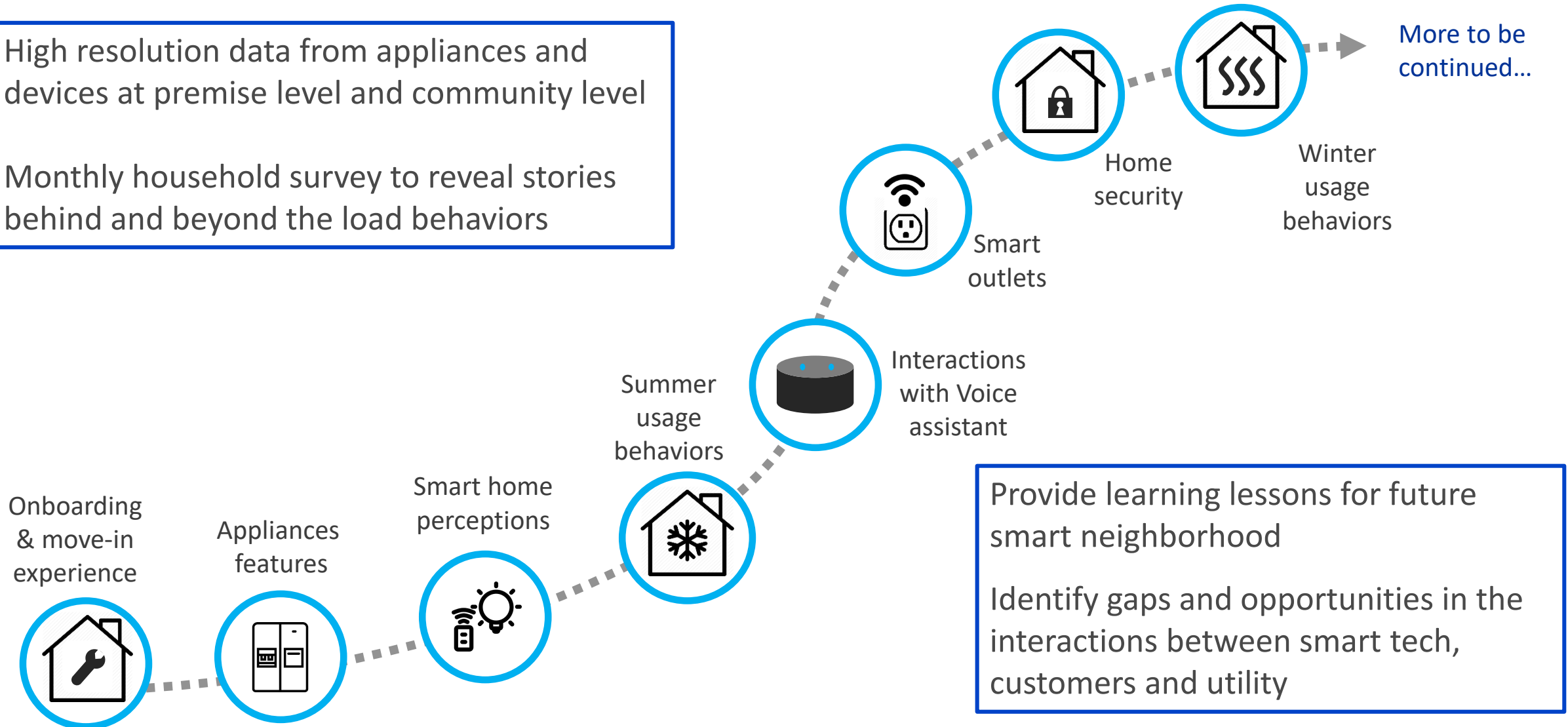


# Customers & Smart Homes

## Understand customer interactions with smart homes as an ongoing journey

High resolution data from appliances and devices at premise level and community level

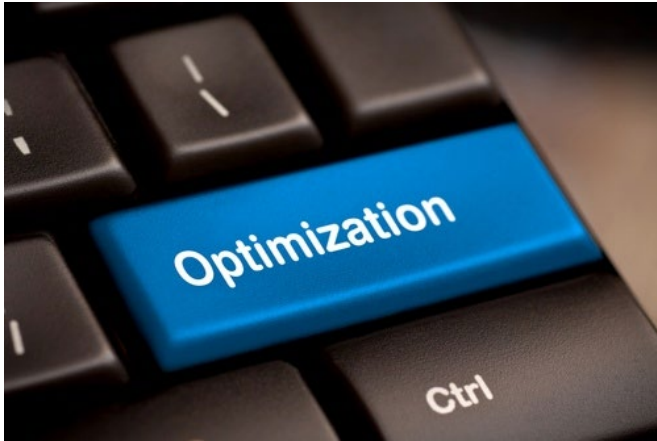
Monthly household survey to reveal stories behind and beyond the load behaviors



Provide learning lessons for future smart neighborhood

Identify gaps and opportunities in the interactions between smart tech, customers and utility

# Core Functions of Connected Home Ecosystems



## Optimization

Use of data and customer inputs to provide autonomous programming and response targeted for a specific need

**Examples** – Whisker Labs and Nest Labs

## Orchestration

Coordinated programming and response of end-use loads with a premise

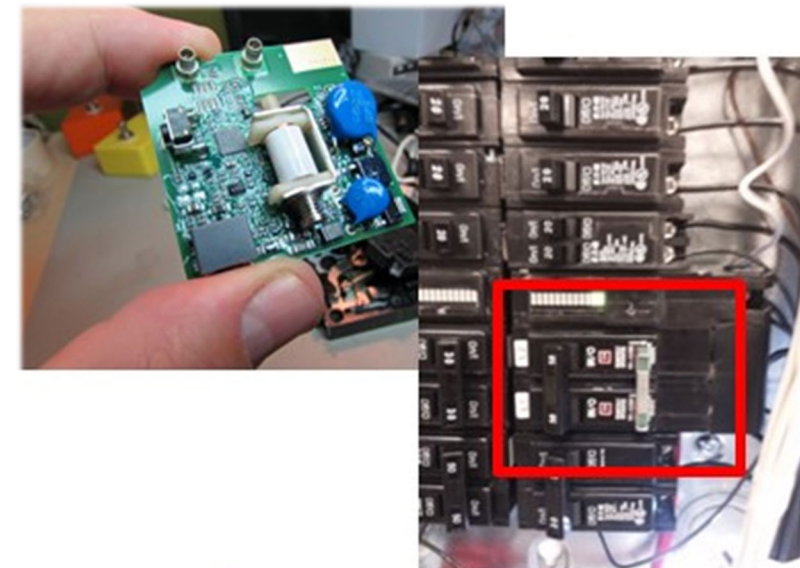
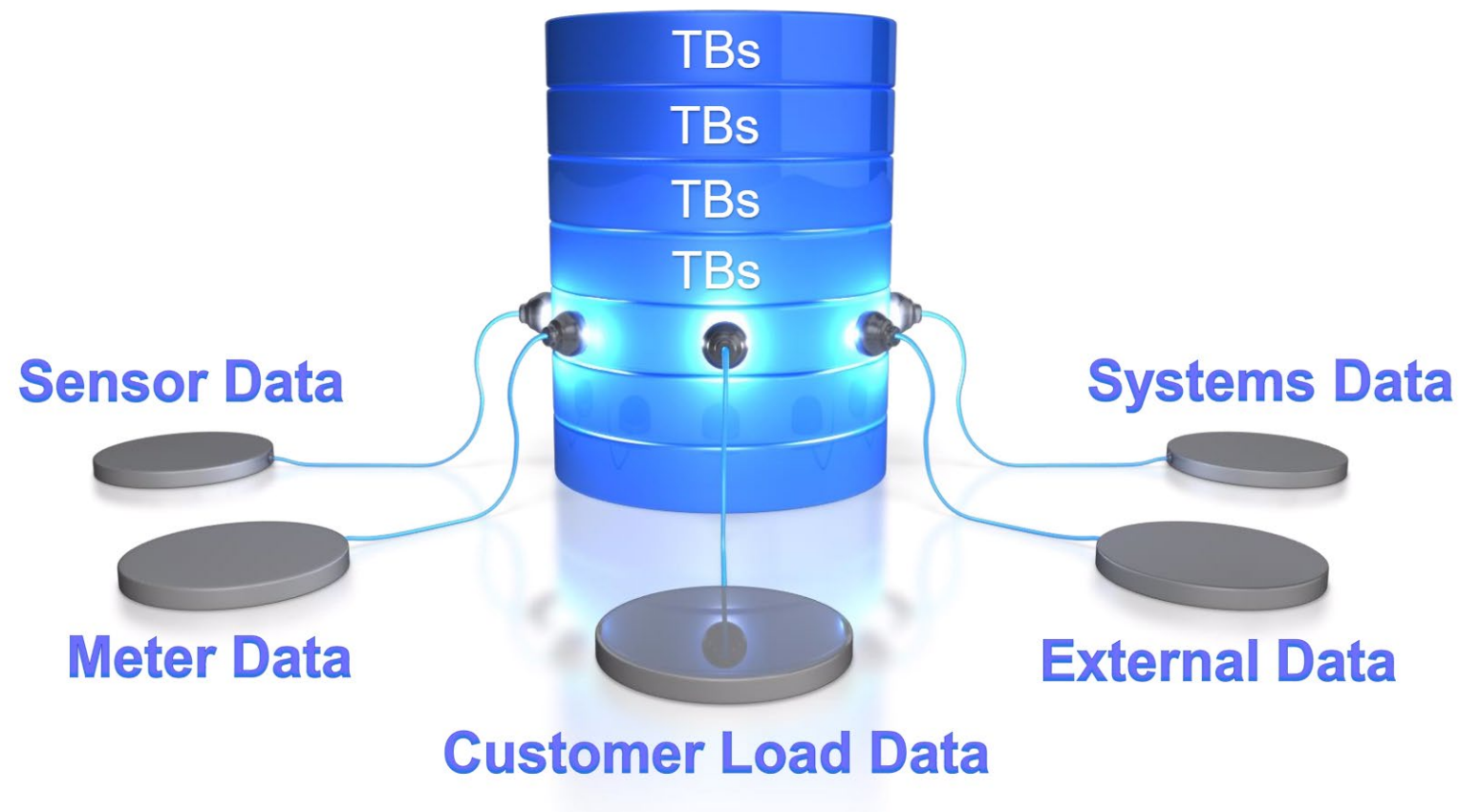
**Examples** – Amazon Alexa, Google Home, Apple HomePod, Samsung SmartThings

## Aggregation

Grouping of end-use loads, typically of the same end-use to respond to particular utility controlled signals

**Examples** – EnergyHub, AutoGrid.

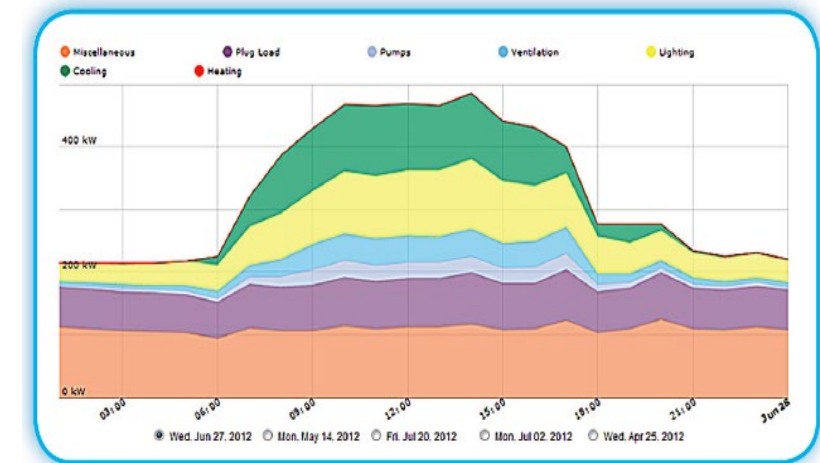
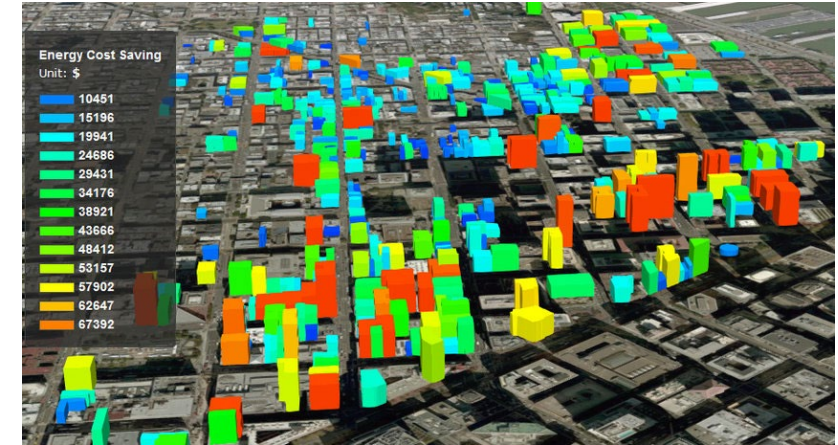
# Sources of Customer Data



**Energy Management  
Circuit Breaker**

# Leveraging AMI data analytics for customer services

- Targeted customer offerings using analytics of AMI and building data
- Applications for energy efficiency, DR and electrification
- Existing AMI analytics products have not yet scaled to commercial and residential programs



**FIRST FUEL**  
BUILDING ENERGY ANALYTICS



**Retroficiency**

**CityBES**

**XeroHome™**



# Together...Shaping the Future of Electricity