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Strategic Potential, LLC

Customer Engagement... Who Cares?

May 23, 2019

Utility Initiatives and Apogee Solutions

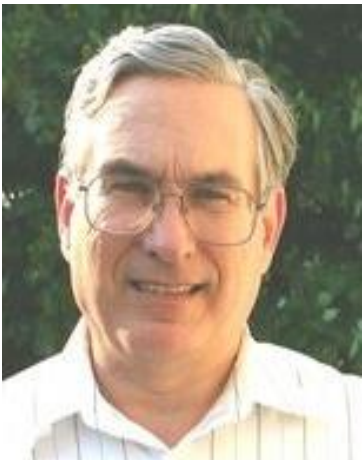


Presenters



Elizabeth Burroughs

Engagement Manager, Apogee Interactive, graduated from Georgia State University in 2013 with a BBA in Marketing. Her professional background includes experience with strategic marketing campaigns. As Engagement Manager at Apogee Interactive, her role includes creating and executing outbound communication plans for Apogee's Envoy customers. Elizabeth specializes in digital communications strategies for utilities, and is currently working with more than 20 utilities nationwide. She continues to help energy professionals meet and exceed their customer engagement goals with relevant, personalized, and proactive messaging regarding topics such as rate transformation, high bills, or utility program initiatives. Her proven campaign tactics include sophisticated digital applications that incorporate the utility customer's bill analysis with or without AMI data. Once the customer's data is analyzed the information is then selectively distributed to in the form of video, text, email, and where appropriate, utility social media.



Strategic Potential, LLC

Dan Waintroob

Owner Manager, Strategic Potential LLC., has more than 40 years' experience working with energy companies and end users to meet their strategic and tactical goals. He is an expert in how to develop and use consumer energy utilization data as well how to rapidly design and implement projects. He has been involved with numerous energy service projects for both commercial and industrial endeavors. Under his direction, over 1.5 million customers received energy billing analysis and some 20,000 commercial energy audits were performed. Recently, he led a number of innovative energy efficiency programs for in Illinois, Pennsylvania, North Carolina and Michigan. In addition, with DNV GL (formerly KEMA) he played a key role in the development, start-up and oversight of a number of C/I programs on behalf of energy utilities in the mid-west, northeast and southeast and the startup of program offices for programs with \$multi-million budgets and aggressive goals.

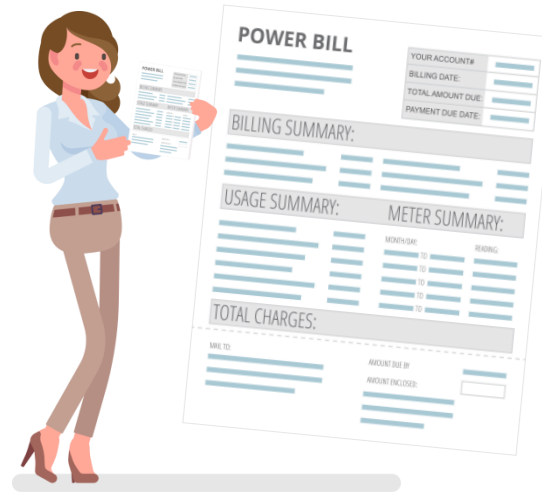
The 3-Rs of Apogee

R Customer **elationship** Programs



Program Lists
Bill Explanation
Service Messaging

Rate Transformation Programs



Program Lists
TOU
Demand

Revenue Enhancement Programs



Program Lists
Beneficial Electrification
Recommendations
Online Store

Agenda

- Mega Trends
- Virtual Assistants
- PVs
- Customers like Energy Efficiency
- Energy use is changing
- Tailored Engagement
- Bill Explanation
- Demand Response and Rates Communication



Customer Digital Engagement

Dan Waitroob on Why You Should Care



My Career History in Two Pictures (Digitalization is NOT New)

Residential Auditing Tool in 1980



“A Room Full of Mainframes” now



A Few Words About My Experience

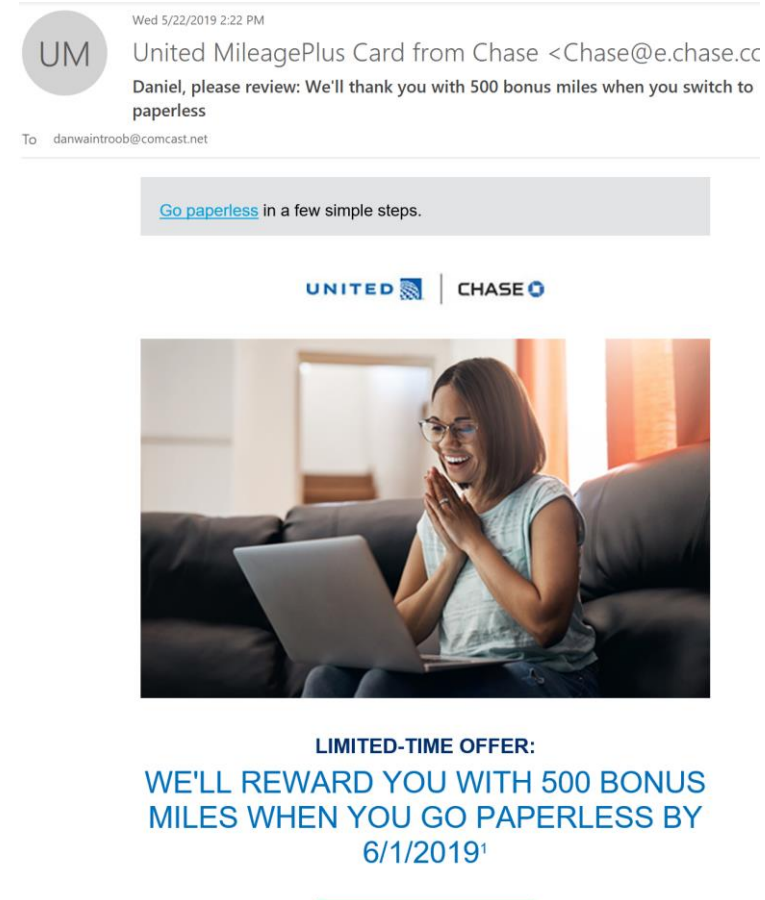
- Been in the energy space for a long time: Cranston CAP solar, Mass Save start-up, Xenergy, Aspen Systems, KEMA (now DNV GL)
- Have launched programs in throughout with strong digital with the following results:
 - 1.5 million Recaps (residential analyses) in Canada
 - 100's thousands commercial industrial audits using Xencap
 - DSM programs (both energy efficiency and demand response) meeting goals from coast to coast
- Energy services strategies in diverse environments (PRC, Mexico, Senegal, Ghana)
- Assessment of various information systems in power markets
- Currently – independent consultant and adjunct faculty at SNHU Business

Food for thought – what to the businesses below have in common?

All have dropped in EBITA multipliers according to a business broker I know

- Printing
- Copy Machines
- Commercial & Photo Processing
- Book Stores
- Department Stores

- Hint from email I received yesterday as to why

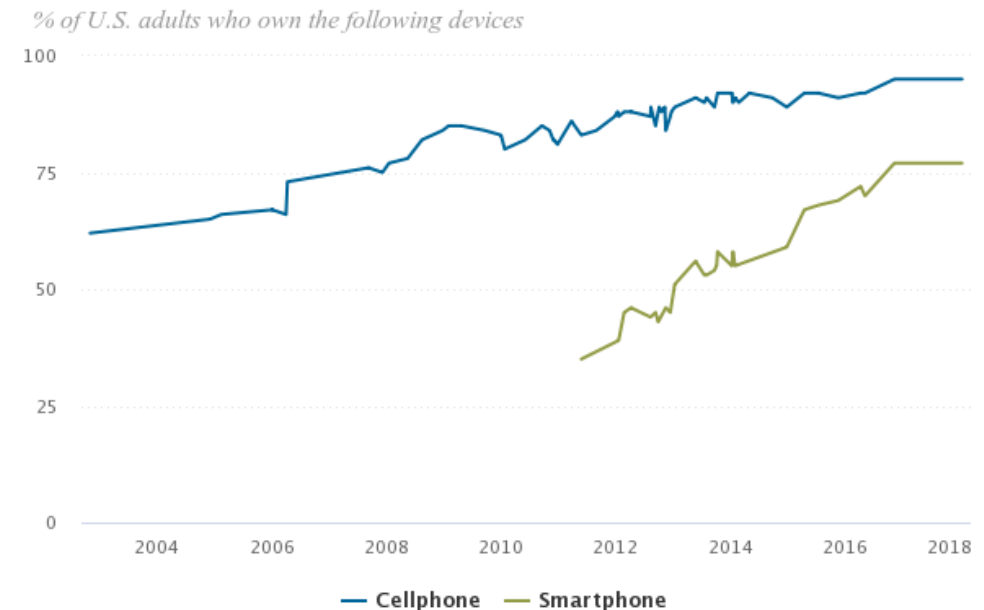


Online experiences have transformed everything

- According to PEW 94% of those 18 to 29 have a smartphone contrasted to 46% - aged 65+
- Today one-in-five American adults are “smartphone-only” internet users – meaning they own a smartphone, but do not have traditional home broadband service. <https://www.pewinternet.org/fact-sheet/mobile/>
- Ecommerce represented 14.3% of total retail sales in 2018, according to Internet Retailer’s analysis. <https://www.digitalcommerce360.com/article/us-ecommerce-sales/>
- Mordor Intelligences predicts that smart (Wifi enabled) thermostats will be a \$2.2 billion market by 2024 <https://www.mordorintelligence.com/industry-reports/smart-thermostat-market>

MEGA Trends

Markets in Transformation



Source: Surveys conducted 2002-2018.
PEW RESEARCH CENTER

Virtual Assistants are Gaining Traction.

Online experiences are transforming businesses in all sectors

In a May 10th blog (<https://blogs.oracle.com/utilities/how-virtual-assistants-will-completely-change-your-utility-world>)

Jessica Lin, Senior Solution Manager, Social Impact, MIT wrote in an article :
How Virtual Assistants Will Completely Change Your Utility World

- “Because [nearly one in five U.S. adults](#) today have access to a smart speaker. (That’s nearly 50 million U.S. adults with the capability to seamlessly reach out to their virtual assistants to access key insights.)
- Because over half of [US broadband households](#) will likely have a smart speaker with a voice-based personal assistant by 2021. ...
- Because 60% of smart speaker [owners surveyed](#) said that they’re “probably” or “definitely” interested in a utility app that makes use of voice-activated skills.”



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PVs are gaining Traction

- According to our government:

Since 2008, U.S. installations have grown seventeen-fold from 1.2 gigawatts (GW) to an estimated 30 GW today. This is enough capacity to power the equivalent of 5.7 million average American homes.¹ Since 2010, the average cost of solar PV panels has dropped more than 60% and the cost of a solar electric system has dropped by about 50%.

<https://www.energy.gov/eere/solarpoweringamerica/solar-energy-united-states>

- See [fastcompany.com](https://www.fastcompany.com) on Community Solar
- May 12, 2019 issue of the **Boston Globe** (home section) wrote that 6,000 residential solar arrays installed in 2018 with a “average payback” of 6 years (H2) and 4.1% premium when selling (p H1).

Customers Like Energy Efficiency and Renewables

- OSRAM Survey showed majority of those surveyed “excited” about phase out of inefficient bulbs (2011)
- Per www.architectmagazine.com/ “90% of respondents expect to cut back electricity usage, or at least maintain the same level as in the previous year.”
- According to a poll by the Solar Industries association: 76 percent of voters and 87 percent of opinion leaders think their utility should deploy more solar power

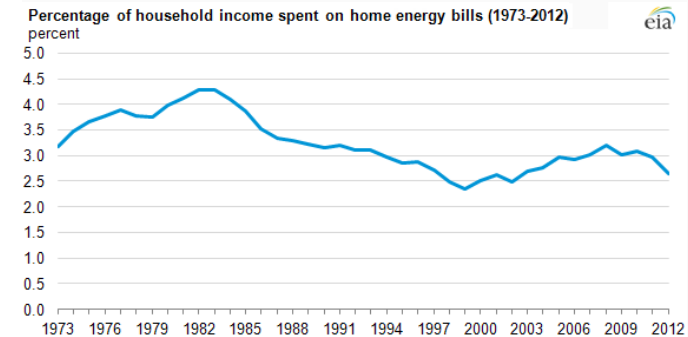
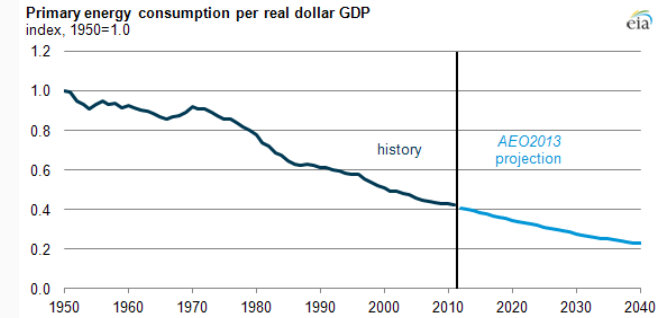
Business Press Featuring Companies With Smart Apps and Smart Tech



- WSJ May 13, 2019 – “In the lean years following the financial crisis, **Citigroup Inc.** made an unintentional bet on the future of banking and it is starting to pay off. (page B1)
- “Last Thing” in the May 13 issue of **Bloomberg Businessweek**, Honeywell’s \$1.5 billion acquisition of Intelligrated in 2016 is one of the rate large, technology-focused deals that’s been a smashing success.”

Trends Specific to Our Industry

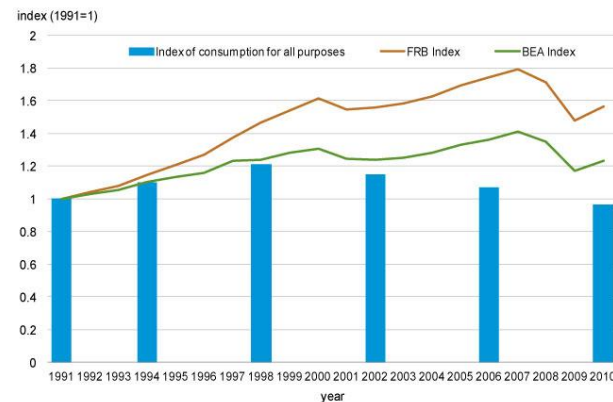
- Energy consumption per \$ of GNP continues to trend down
- Energy costs as a percent of household expenses also trending down
- The generation mix is changing in 2015 natural gas surpassed coal in generation
- Wind is now at 6% with a number of utilities making plans to use much more
- EIA predicts only 22% of generation will be from coal by 2040 (that may be high)
- Nuclear plants are retiring as well – (e.g. TMI)



Usage Patterns Are Changing

- HVAC no longer the majority household use
- Industrial consumption is falling
- The building space per commercial employee is decreasing

Figure 3: Manufacturing total energy consumption followed output levels between 1991 and 1998, but then diverged, suggesting energy efficiency gains



Source: U.S. Energy Information Administration.

Energy consumption in homes by end uses
quadrillion Btu and percent

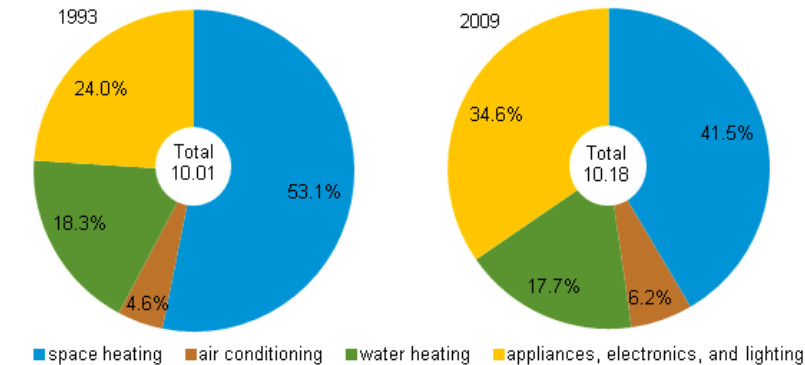
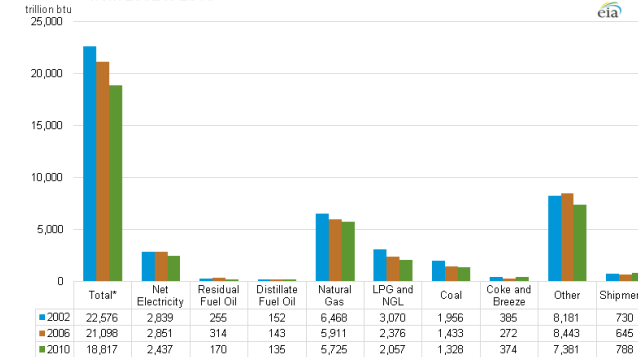


Figure 1. Total U.S. manufacturing energy consumption for all purposes declined 17 percent from 2002 to 2010



*Total is the sum of the energy sources minus the shipments. Shipments of energy sources produced onsite are those shipments produced or transformed onsite from the nonfuel use of other energy sources. Shipments are subtracted from the total to avoid duplication.

Source: U.S. Energy Information Administration, Manufacturing Energy Consumption Survey - Table 1.2: First Use of Energy for All Purposes (Fuel and Nonfuel), 2002, 2006, and 2010.

Numerous Apps are out there

- Examples of tracking apps referenced on the Web (no No endorsements 😊)

1. Kill-Ur-Watts – free
2. Energy Tracker - \$.99
3. Wiser EMS – free
4. Energy Cost Calculator
5. Nest Mobile
7. Total Connect Comfort by Honeywell
8. Green Outlet
9. CodeGreen Energy
10. Light Bulb Finder

(taken from: <https://www.servicechampions.net/blog/the-7-best-energy-efficiency-apps-for-your-smartphone-and-a-greener-lifestyle/>)

Apps  HP Connected



apps to help save energy

All

News

Shopping

Images

Videos

More

Set

About 624,000,000 results (0.69 seconds)

Similar sites:

<https://smallbiztrends.com/2017/08/mobile-apps-to-help-you-reduce-energy-costs.html>

<https://money.usnews.com/money/blogs/my-money/articles/2016-04-11/8-free-apps-that-help-you-cut-energy-consumption-and-costs>

<https://earth911.com/eco-tech/energy-apps/>

My Key Takeaways from the Trends Described

- Your customers are used to and responding to the “smartphone” society
- They can go on the Web and download numerous apps related to energy savings
- The older methods of reaching the your generations may not work very well anymore
- The investment community continues to be excited by the “Internet” economy
- A more diverse and distributed generation mix seems inevitable with elements as PVs on homes, business and community solar
- The technologies now should allow more effective communications in support of various pricing and demand response programs (e.g. WIFI instead of radio towers)
- **Therefore: having a J.D. Power Centric Digital IQ score of 512 on a 1,000 point scale offering “one of the worst digital experiences”**
<https://www.jdpower.com/business/press-releases/2019-utility-digital-experience-study> cannot be good

Some Suggested Next Steps

Assuming you agree with J.D. Powers – start by assessing your current status (below are “typical” examples)

Strengths

- Current systems, programs and marketing
- Your customer’s attitudes and survey
- Systems your customers have in place (e.g. residential NEST, Building Management Systems)

Weaknesses

- Image, PR issues
- Features of your current systems
- Operational issues
- Budgeting

Threats

- Regulatory pressures
- Change in customer characteristics.
- Competition from power marketers and other sources (including unexpected sources)

Some ideas for IOUs and smart apps

- Utility app for tracking use, paying bills and customer service
- Offering and analyzing rate choices
- Automate TOU and/or CPP
- Notifications
- Support load management
- Direct load control
- Security including outage notification

Some benefits beyond customer service would be improved load forecasting, more in-depth customer knowledge and improved public perception as a progressive organization.

Use Structured Approaches to Design/Redesign Systems

There are a variety of structured approaches that work. A tried and true approach for software is the Kano Method (see <https://foldingburritos.com/kano-model/> for a good discussion). Other good templates can be found with the Strategyzer series – Value Proposition Design (published by Wiley 2014) see <https://www.strategyzer.com/> for various templates

Riffing on Kano method follow these steps:

- Start by ranking features according to each customer segments* needs:
 - Basic needs that must be met
 - Performance needs that will increase satisfaction
 - Delighters or unspoken needs (as an example Energy Star™ products were positioned as “premium products” and the dishwashers offered the benefits on not needing pre-rinsing)
- Know what your customers want
 - Typically ease of use is at the top
 - But “coolness” can be up there as well as environmentally friendly

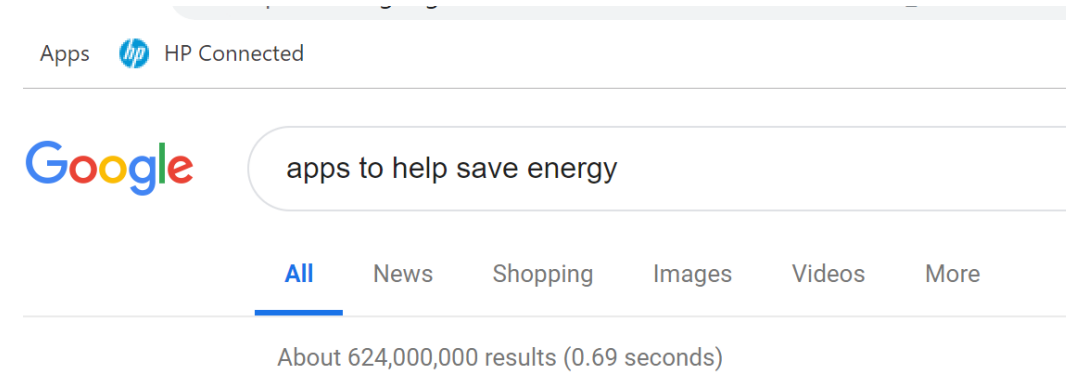
* Examples of useful sources <http://www.millennialmarketing.com/who-are-millennials/> and <https://www.pewresearch.org/>



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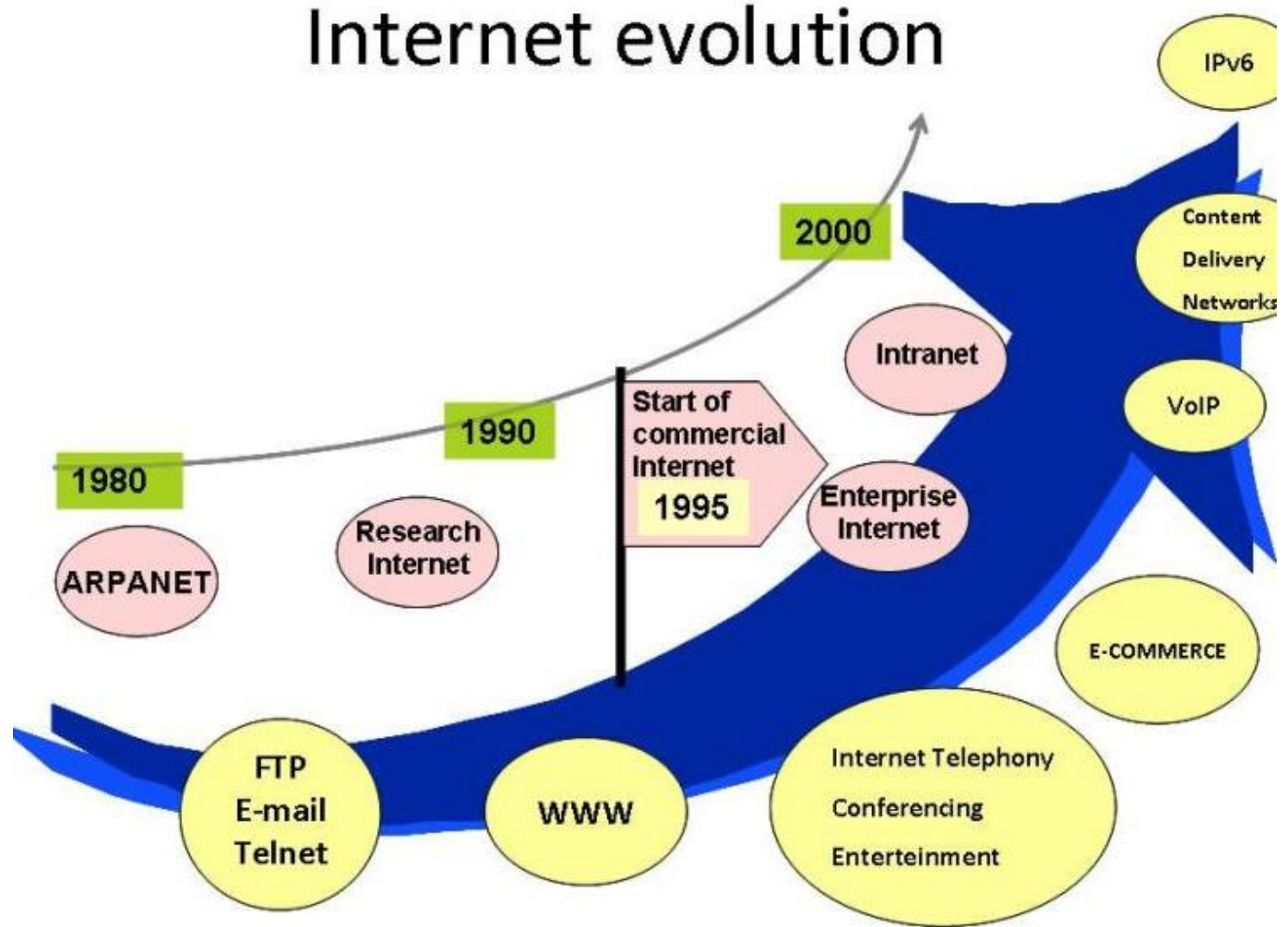
Once You Defined Your Needs and Priorities

- Keep in mind your solution may be out there (see Google screen shot)
- Seek to leverage your current partner's expertise and content
- As needed round out team with experts in consumer products (e.g. gaming)
- Prototype and test with your customers
- Market and promote using social media as well as traditional means
- Celebrate innovation



Wrapping Up

- Improving your digital engagement with your customers is a business necessity as your customers and markets are evolving.
- Utilities can also can strategic and operational advantages by taking more advantage of the “Internet of Things”



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Thank You

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Tailored Engagement

...
the **value** of tailored engagement



A concept that has been “pre-accepted” by your target audience, increasing the likelihood of success

RESULTS

- Value
- Relationships
- Empowerment
- Operational Goals
- ROI



What it has looked like

Dear Customer:

The energy management systems of our company noticed an increase in your daily and/or hourly kilowatt-hour (kWh) usage above your current pre-set threshold(s).

Account Number: XXXXXXXXXX

Usage: 13.0

Date/Time: 4/1/19 12:00 AM - 4/2/19 12:00 AM

Account Number: XXXXXXXXXX

Usage: 1.0

Date/Time: 4/1/19 1:00 AM - 4/1/19 2:00 AM

Account Number: XXXXXXXXXX

Usage: 0.0

Date/Time: 4/1/19 2:00 AM - 4/1/19 3:00 AM

Account Number: XXXXXXXXXX

Usage: 1.0

Date/Time: 4/1/19 3:00 AM - 4/1/19 4:00 AM

Account Number: XXXXXXXXXX

Usage: 1.0

Date/Time: 4/1/19 4:00 AM - 4/1/19 5:00 AM

ENERGY FORECAST - ELECTRIC COST

YOUR PROJECTED ELECTRIC COST FOR THIS WEEK IS \$88



Thermostat Savings

Adjusting your thermostat is an easy way to Save \$\$\$.
Use the thermostat below to see how much.

- Click the up or down buttons to adjust your thermostat and see your savings!

Update My Home Profile Settings

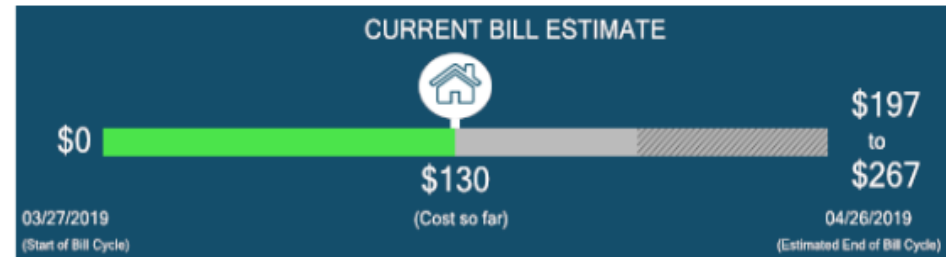


Weekly Electric Cost Breakdown



What it could look like...

You have used about \$130 worth of electricity in this billing cycle, and your total bill is projected to be between \$197 and \$267. [Learn more...](#)
Your bill for the same month last year was \$107.



* This is an estimate based on your past energy usage and the weather forecast. If you have made changes in your usage patterns like vacations, guests or how you use major appliances it will affect the accuracy of the estimate.

Here is some information on how the weather is affecting your bill...



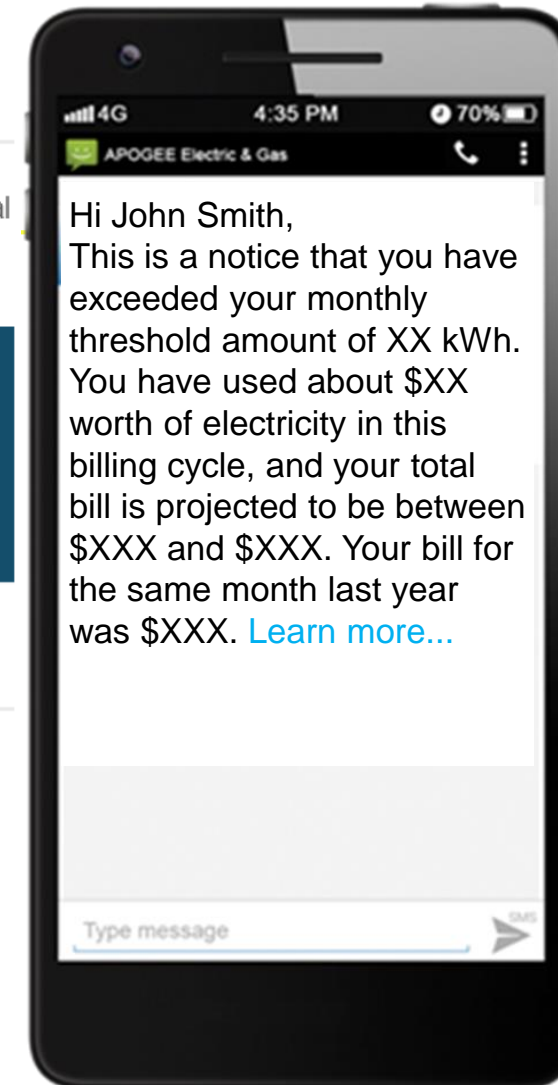
Energy Use

76% of your energy used this bill cycle is estimated to be for heating. [Learn more...](#)



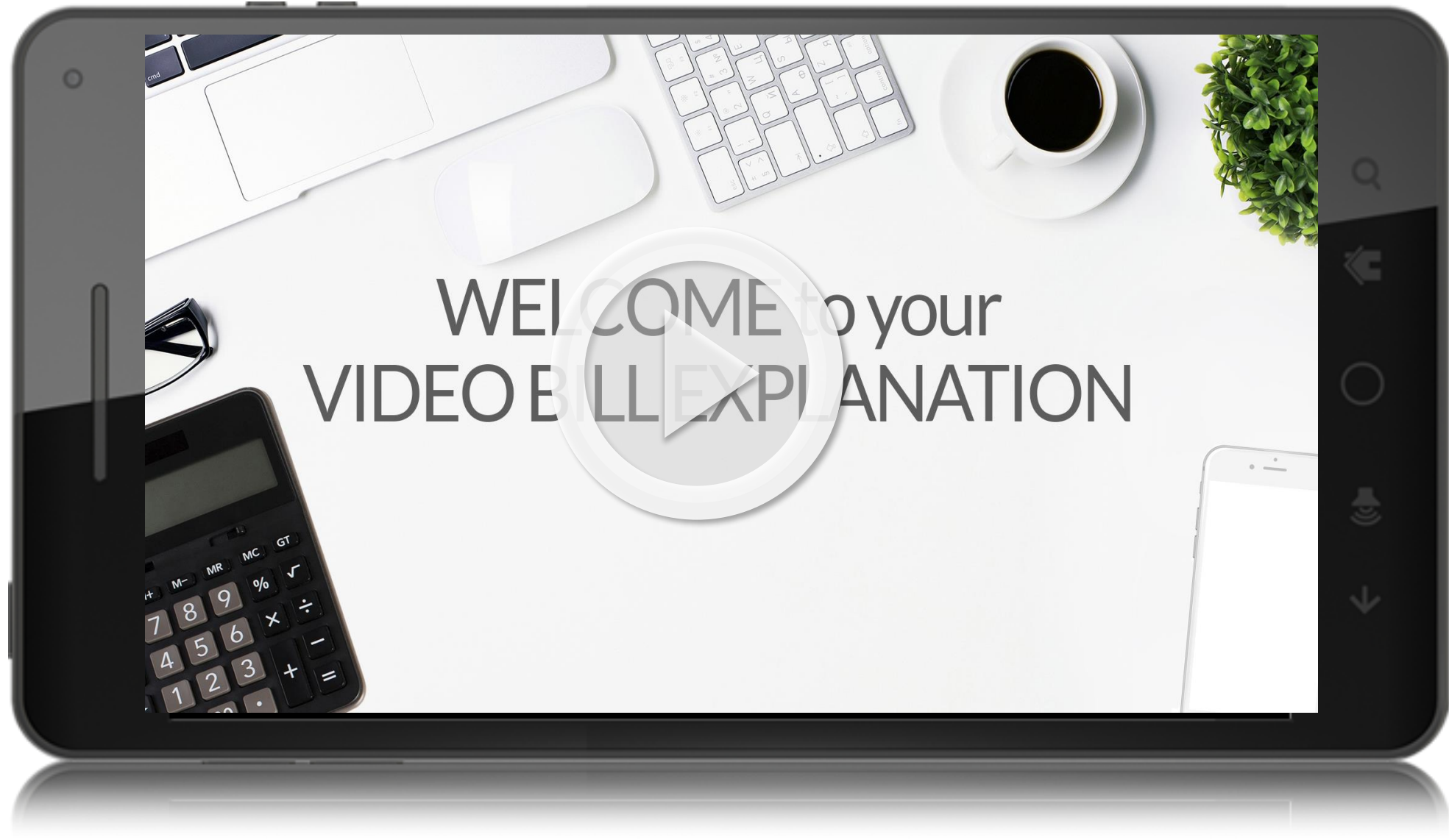
Weather

We estimate that your neighborhood has 31 days that require heating this bill cycle. [Learn more...](#)





Video Bill Explanation: Proactively explain bills *before* customers call

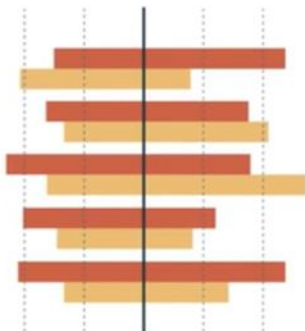
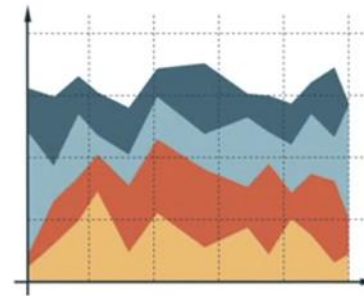
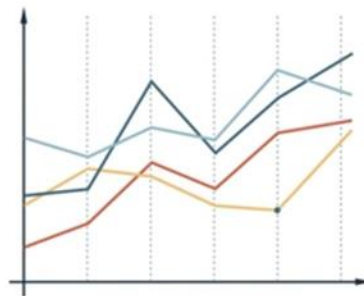
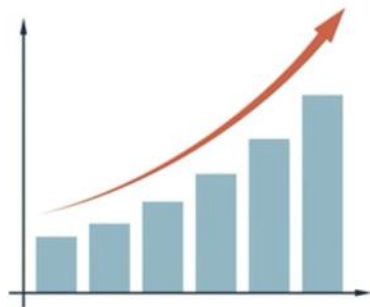


Video Bill Explanation: Proactively explain bills *before* customers call

Bill Adjustments

CREDITS

<OTHER CHARGES>





Your bill is.....

\$84 Higher

Your Bill Summary



WEATHER
IMPACT

7.4 F Colder
\$63 more



DAYS OF
SERVICE

2 Fewer Days
\$11 less



OTHER
FACTORS

\$32 more

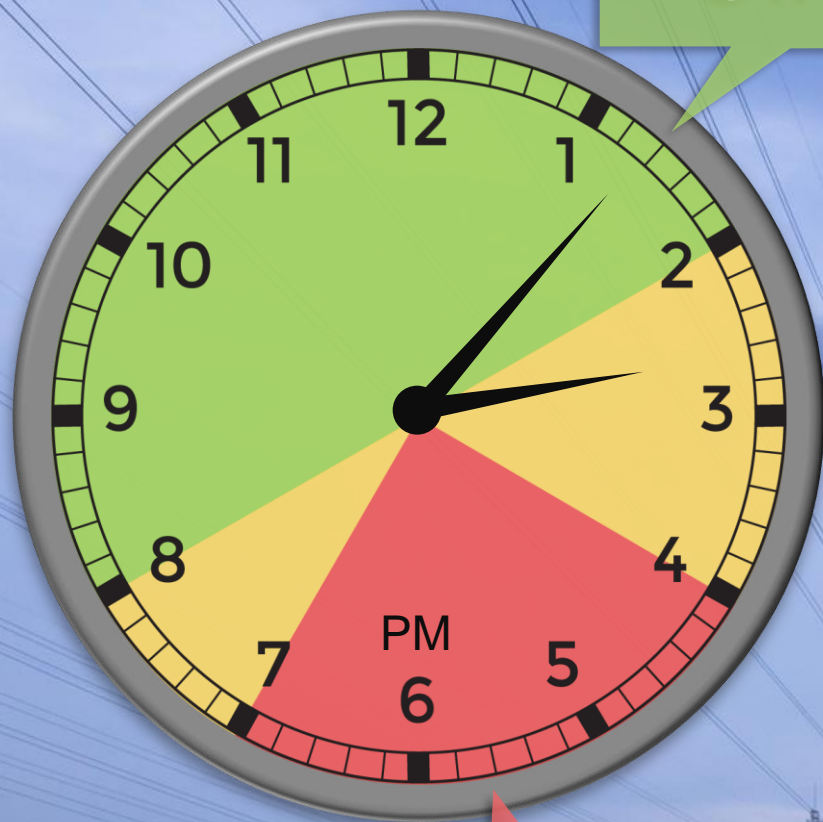
New Rate Plan



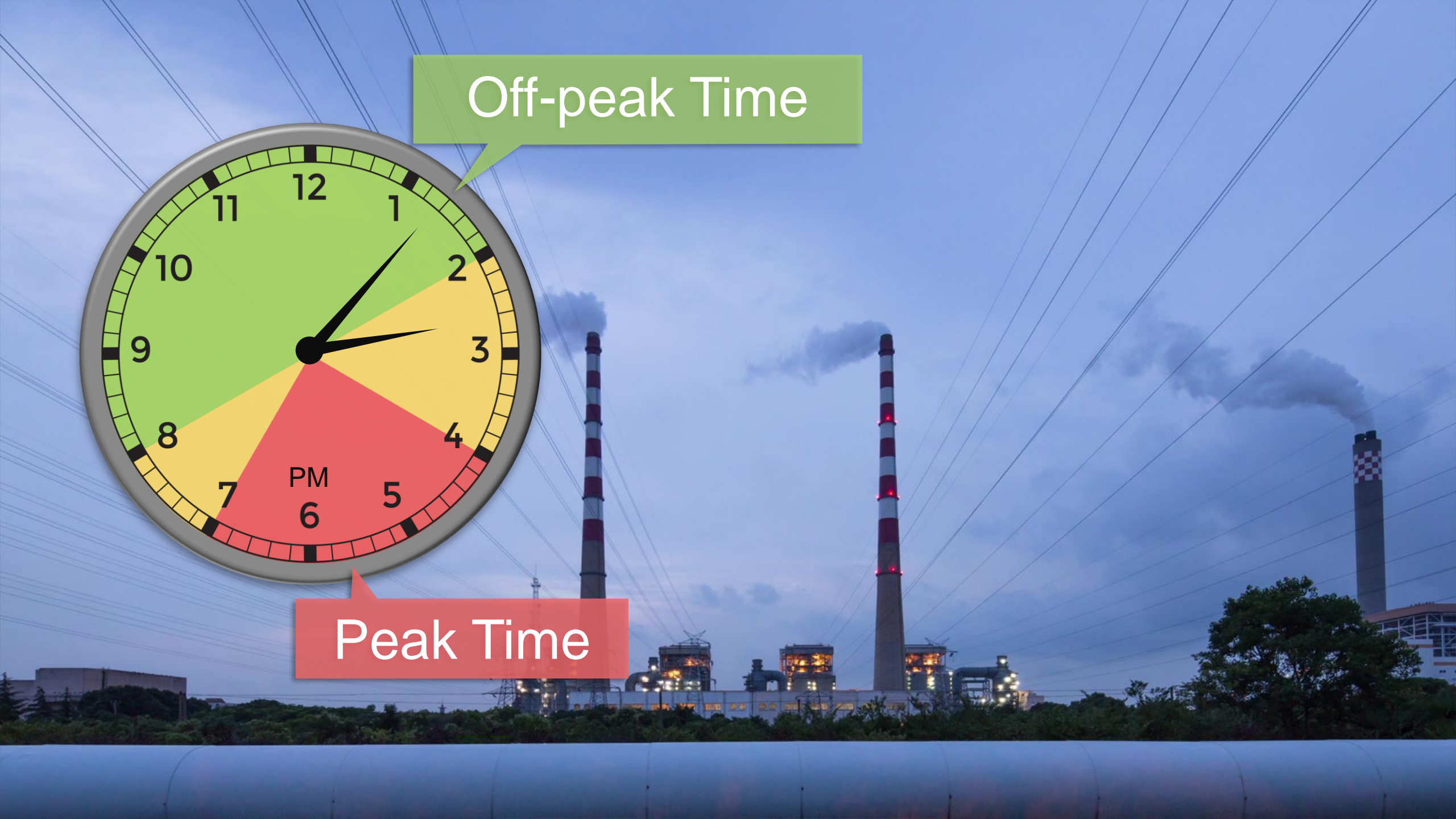
Time of Use Rate Plan



Off-peak Time



Peak Time





Peak-time Rate
\$0.53

Off-peak Rate
\$0.012

Off-peaks
times save
money!



A woman with long brown hair, wearing a red long-sleeved shirt and blue jeans, is loading laundry into a white front-loading washing machine. The machine's door is open, and a blue laundry basket is visible in the foreground. The background is dark with some blurred lights.

Annually \$985

A man and a woman are sitting on a light-colored sofa in a modern, brightly lit room. The man, wearing a light blue button-down shirt, is leaning forward and pointing at a tablet held by the woman. The woman, with long brown hair and wearing a light blue sweater and jeans, is looking at the tablet. The background shows a brick wall and large windows with blinds.

For more
Ways to save...

CLICK HERE

2018 Analytics

- **Unique Open Rates**

- Mid-cycle Alerts 42%
- Video Bill Explanation 44%
- Summary Report 46%

- **Unique Click Rates**

- Mid-cycle Alerts 3%
- Video Bill Explanation 18%
- Summary Report 14%

- **Improving customer engagement** through subsequent messages' CTR



Project Overview:

- 500,000 accounts processed
- 120,000 emails
- 3 unique messages

Goals:

- Perception
- Call Center
- Customer Engagement

Smith Home Heating Analysis

2018 Heating Cost= \$1125
This is 68% of Your Total Annual
Gas Cost

- 51,000 emails
- 34% open
- 5% CTR

+58%

perception

Smith Home

Welcome, to your bill
explanation video

- 33,000 emails
- 49% open
- 14% CTR

87%

useful

Smith Home

Save \$59 a year

- 36,000 emails
- 40% open
- 16% CTR

15% fewer calls regarding high bills

Questions



Thank
You!



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Strategic Potential, LLC

Contact us: 678-684-6801 or info@apogee.net