



Hard (to Measure) Savings: Approaches to Evaluating Behavior-Based Programs

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Costa Mesa, CA

Agenda



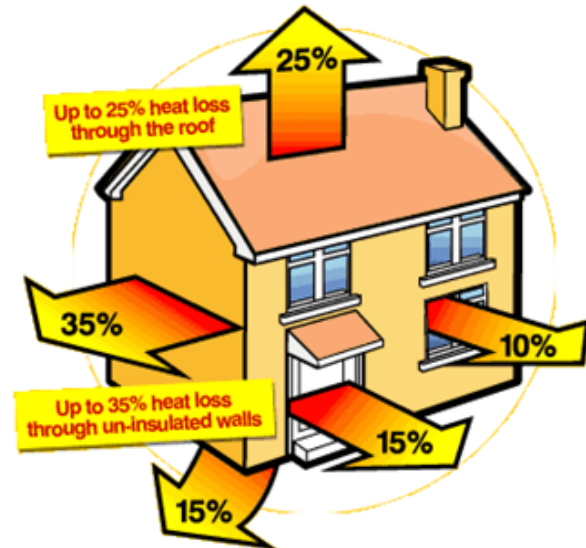
- ▶ Intros and Overview
- ▶ Program Evaluation Examples
 - Kelly Drow, SRP
 - Jason Casella, SMUD
- ▶ Q&A for panelists
- ▶ Recent Behavior Committee work: an update and discussion

Program Examples

▶ Kelly Drow, SRP
MPower



▶ Jason Casella, SMUD
Save with SMUD



M-Power Evaluation

Kelly Drow

Senior Analyst

SRP

January 26, 2011

How does SRP M-Power[®] work?



Real-Time Information Makes Electricity Tangible



User Display Terminal (UDT)

- Rate Charge is \$__./kWh
- Cost per Hour is \$__.__
- Cost Today is \$__.__
- Cost Yesterday was \$__.__
- Cost This Month is \$__.__
- Cost Last Month was \$__.__
- Remaining Credit is \$__.__
- Enough Credit for __ Day(s)
- Present Electric Demand __. __ kW

Customer Benefits

- Solution for un-banked and under-banked customers
 - \$99 deposit
 - Customers pay down arrearage over time
 - No monthly bill, credit action, or fees
- Customer controls timing and amount of purchases
 - Load card at kiosk in retail location
 - Average 4-5 \$20 purchases per month
 - Friendly Credit allows until morning to purchase power

Impact Analysis

Energy Impact Studies

- 3 separate studies between 2002 and 2006
- Over 50,000 M-Power customers
- Comparing credit-rate usage, season-to-season, with usage after they joined M-Power.
- Average saving results:
 - 2003: 11.4%
 - 2004: 12.8%
 - 2006: 12%

Experimental Design

- Pretest-Posttest Control Group Design
- M-Power sample selected from all active M-Power customers as of December 31, 2006
- The pretest and posttest periods were:
 - Summer: 4/05-10/05 on E-23, 4/06-10/06 on M-P
 - Winter: 10/04-4/05 on E-23, 10/05-4/06 on M-P
- Each customer in E-23 (control) group resided in a home close to the sampled M-P customer and had similar usage. This controlled for kWh usage, geog. loc., read cycle, housing similarity.

Statistical Significance of Results

- The difference in energy use between M-Power and Basic rate is significant
- Non-significant differences:
 - Different M-Power effect for different seasons
 - Different effect for different energy usage levels
 - Different effect for different combinations of above
- Statistical results indicate that the 12% decrease in energy usage due to M-Power is consistent for different seasons and energy usage levels

2009 Evaluation

- New department
 - First year using formal process
 - Recommend continued study of impact measurement
 - Operational process improvements
 - Changing demographics and economy
 - Understand interaction of payment method and feedback on conservation effect and satisfaction
 - Opportunity for 3rd party review with EPRI

2010 Review by EPRI

- Program elements attract enrollment for different reasons (deposit, pre-pay, UDT, kiosk, socio-economics, dwelling)
 - Interaction not measured
- Studies not intended to measure persistence
- Challenge for experimental design
 - Difficult to define control group
 - Suggest randomized encouragement design

Next Steps

2010-2011 M-Power Study

- Two studies
 - Repeat previous methodology
 - Customers on M-Power wait list compared to control of similar who stay on the basic rate.
 - Include interaction tests
 - Non-equivalent control group
- Results anticipated October, 2011
- Synthesize primary research



Evaluating Marketing Communications

Can strategic marketing impact customer behavior?

SMUD launched the **Save Today campaign** – an integrated, multi-channel advertising initiative – as one strategy **to encourage behavior change....**

Has it worked?



Objective

To measure how marketing communications can impact customer behavior related to energy efficiency and the environment

- Can our advertising campaign increase customer participation in energy efficiency programs?
- Can it improve key image attributes for SMUD related to energy efficiency and the environment?
- Will customers respond to messages besides the traditional low rates and reliability?
- Where should we be targeting our communications?
- Which communication channels are most impactful?

Methodology

- Pretest messages and images via focus groups and online survey to inform design of campaign
- Use a clear, direct call-to-action that is easily tracked – savewithsmud.org
- Track customer participation in energy efficiency programs
- Employ a research tool called the Perception Tracker
 - Survey 1,000 customers each quarter
 - Quarterly telephone surveys in English and Spanish
 - Report results quarterly and cumulatively
 - Use findings to determine campaign impact and potential adjustments

Metrics

- Program Participation
 - Monitor participation in energy efficiency programs during campaigns
- Website analytics
 - Measure clicks on savewithsmud.org
- Perception Tracker
 - Measure and monitor customer perceptions on three dimensions – image attributes, the marketing funnel, and message recall

Sample Campaign Materials



Save Today. Save Tomorrow.

This holiday season, save money and energy with energy efficient TVs, computers and monitors. SMUD, your customer-owned electric utility, is working with manufacturers and retailers to make it easy to find electronics that use up to 30% less electricity.

Look for ENERGY STAR® electronics with the SMUD **SAVE** or **SAVE MORE** labels for greater energy savings at participating retailers.

Saving energy today keeps bills low, maintains reliable electric service, and helps build a cleaner, healthier environment for tomorrow.

For a list of participating retailers, visit savewithsmud.org

Community
For proper disposal and recycling of electronics in our community, visit savewithsmud.org.

Savings
Federal tax credits available on energy efficiency home improvements. Visit energytaxincentives.org.

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT
The Power To Do More.®

Sacramento Municipal Utility District. C1009-1188_Bx10

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Save Today. Save Tomorrow.

Energy Efficiency Rebates for your home.

Peak Saving Tips

←← For more information on ways you can help, click on the links in the left-hand column.

Energy Efficiency Rebates for Your Home

Saving today starts at home. Check with SMUD first for information, rebates, and financing on qualified EnergyStar and other high efficiency products for your home. [Click here](#) for more information.

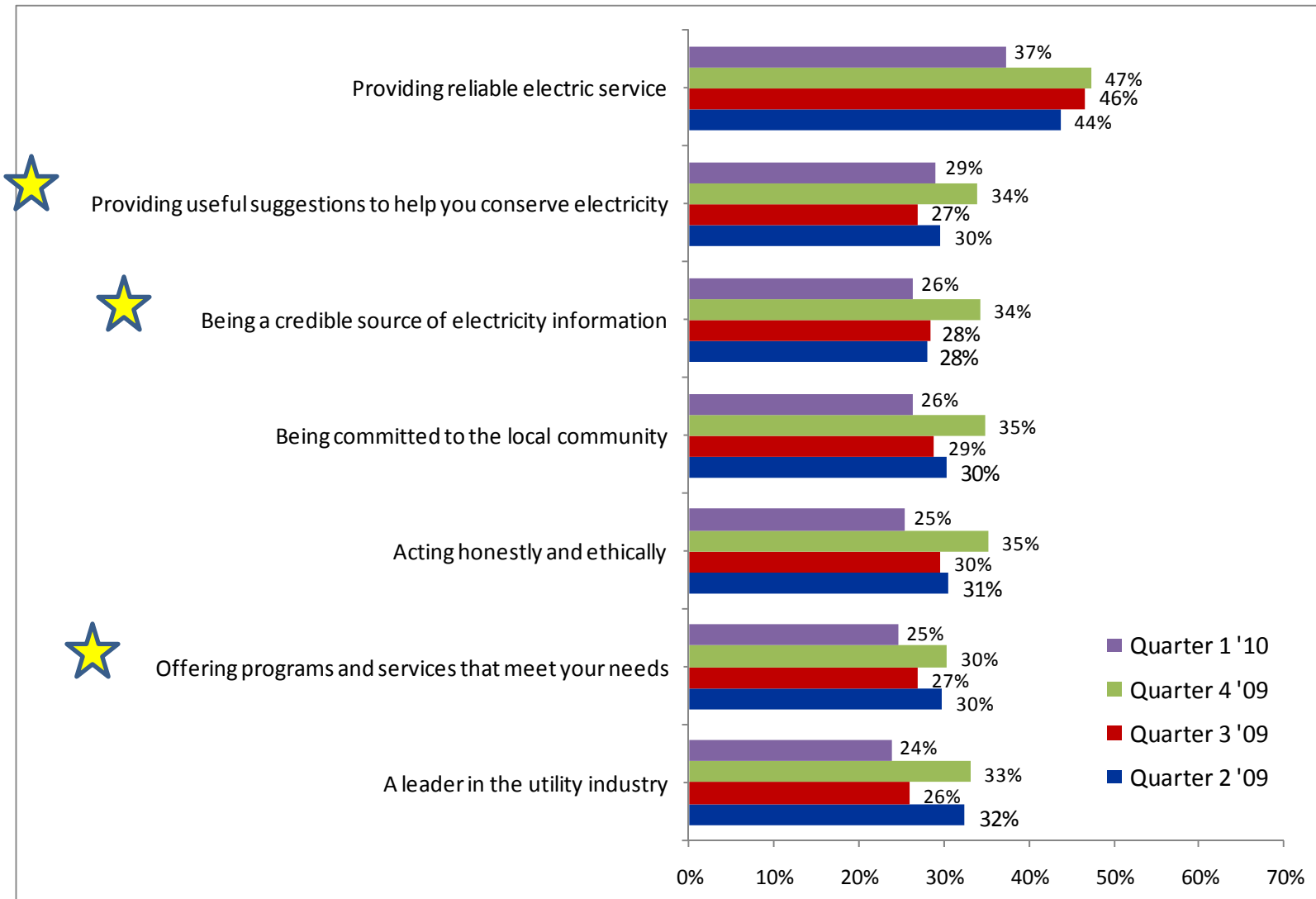
Environment

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[Go green](#)
[Reduce your carbon footprint](#)
[Solar](#)
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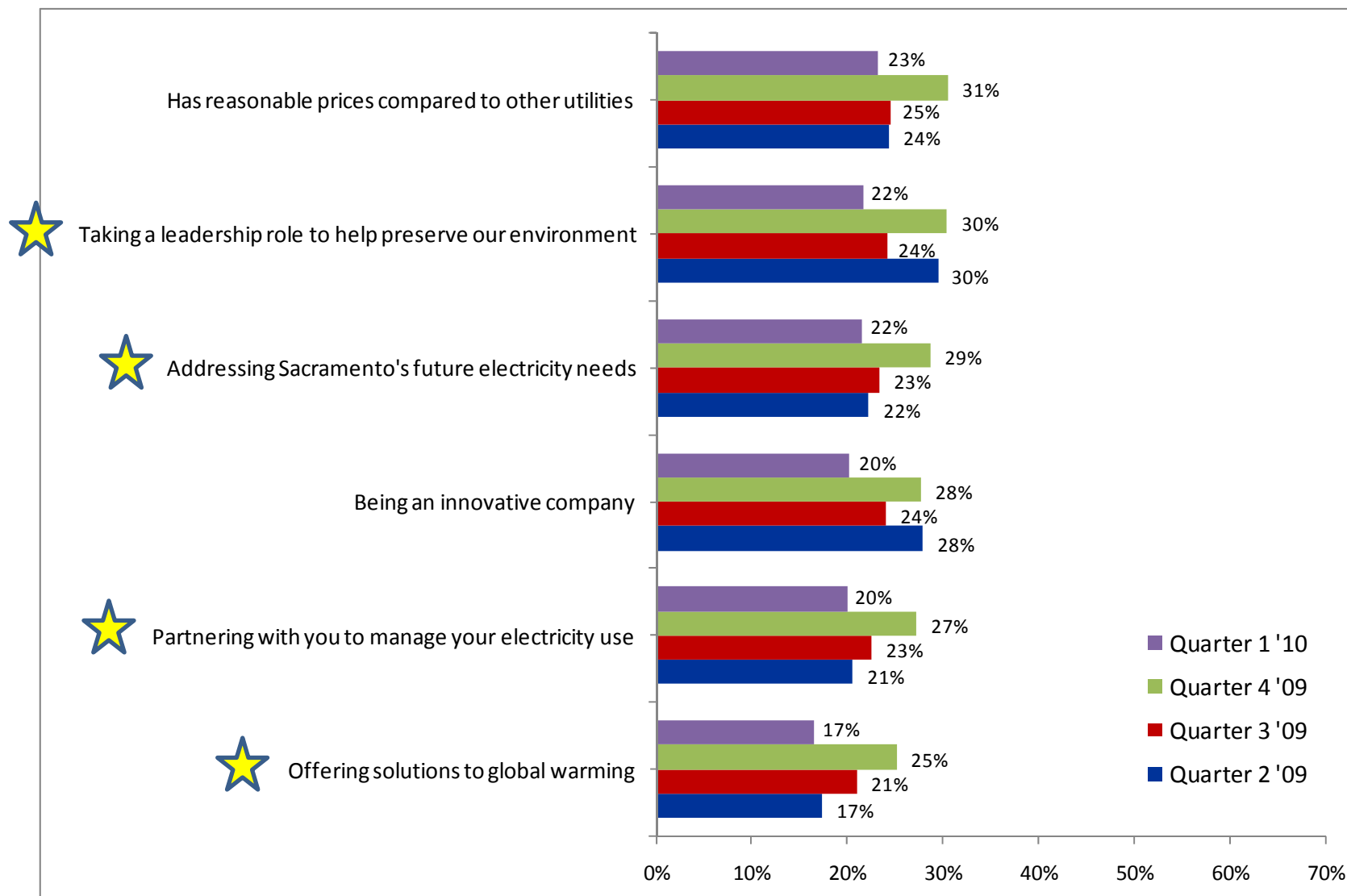
Savings

[Rebates](#)
[Replace a bulb](#)
[Take a class](#)

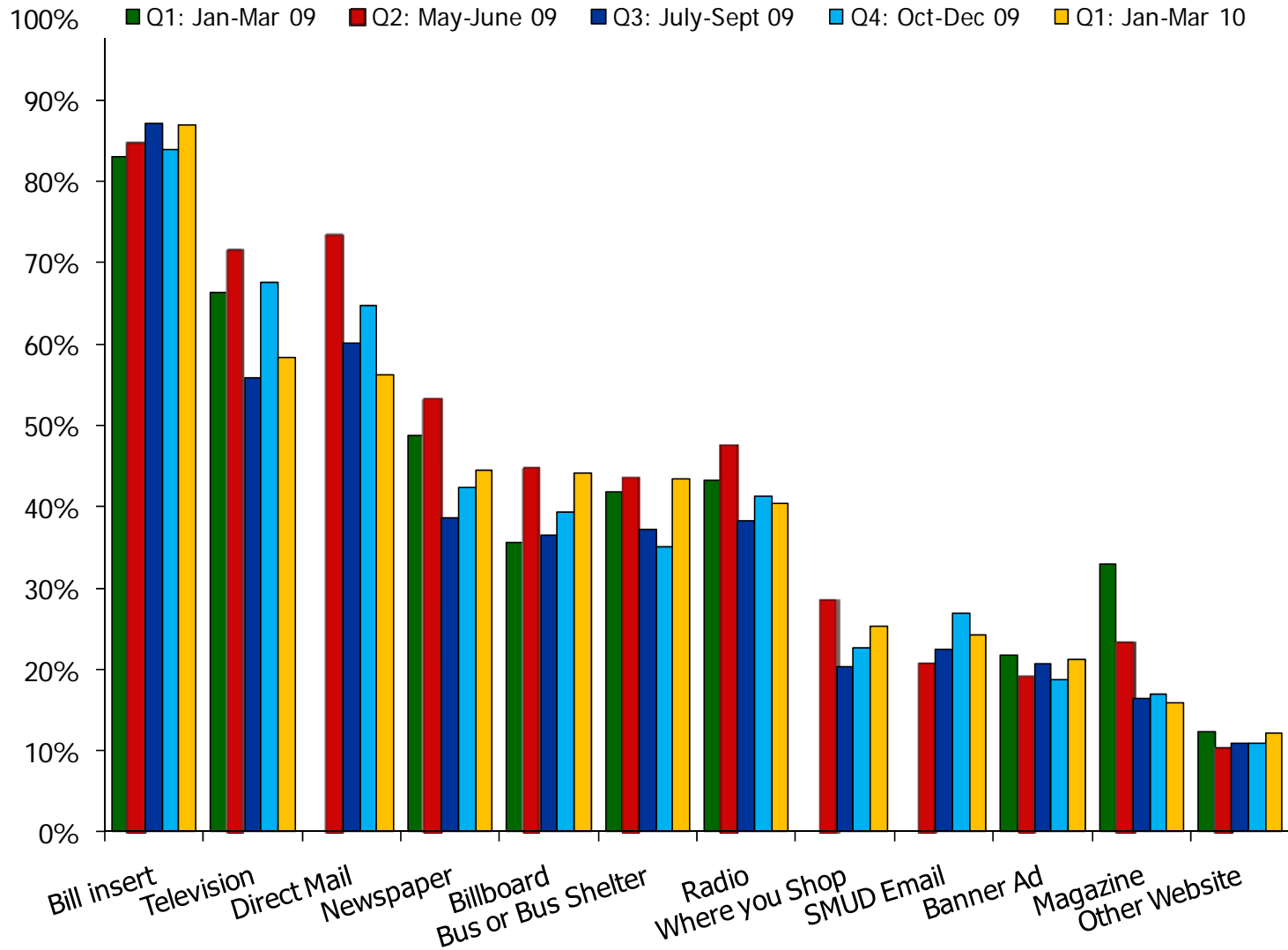
Perception of SMUD's Image – Top Attributes



Perception of SMUD's Image – Bottom Attributes



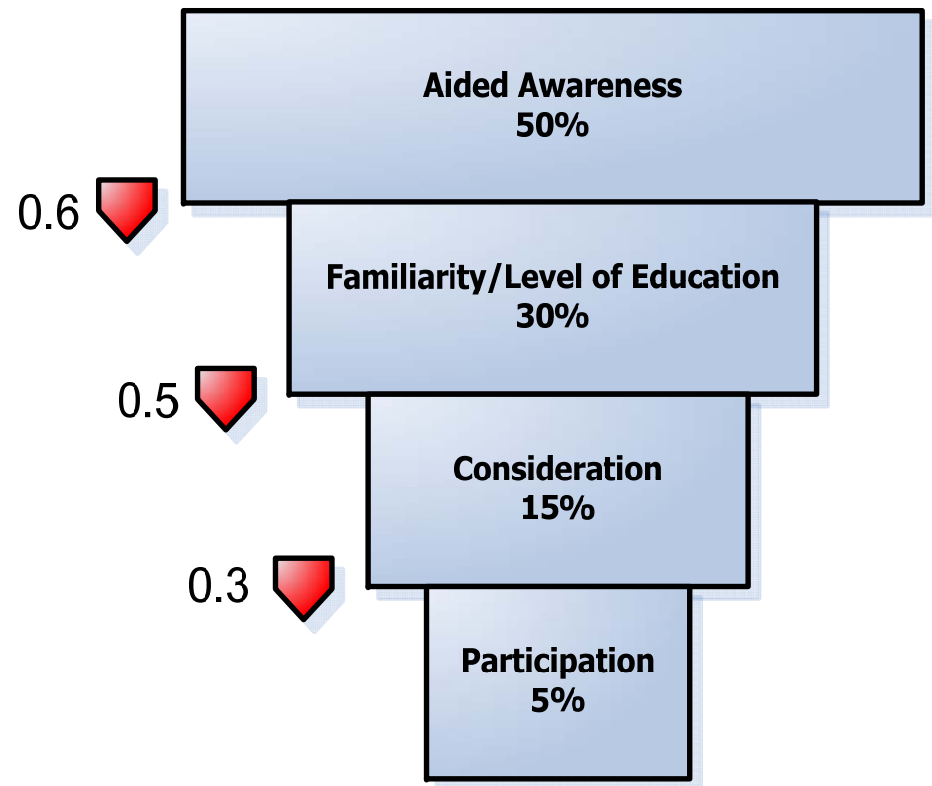
Recall by Advertising Channel



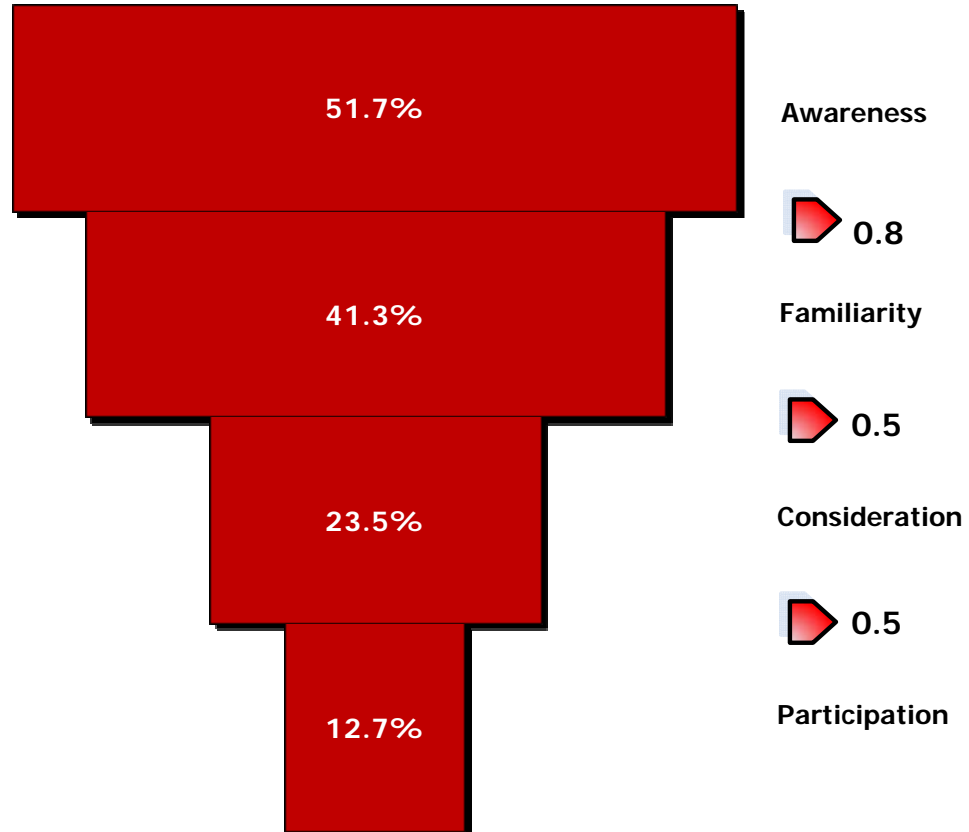
The Marketing Funnel

- Mass media drives awareness and familiarity
- Direct communications drive consideration and participation

Transition ratios are the percent of people who move to the next level in the funnel

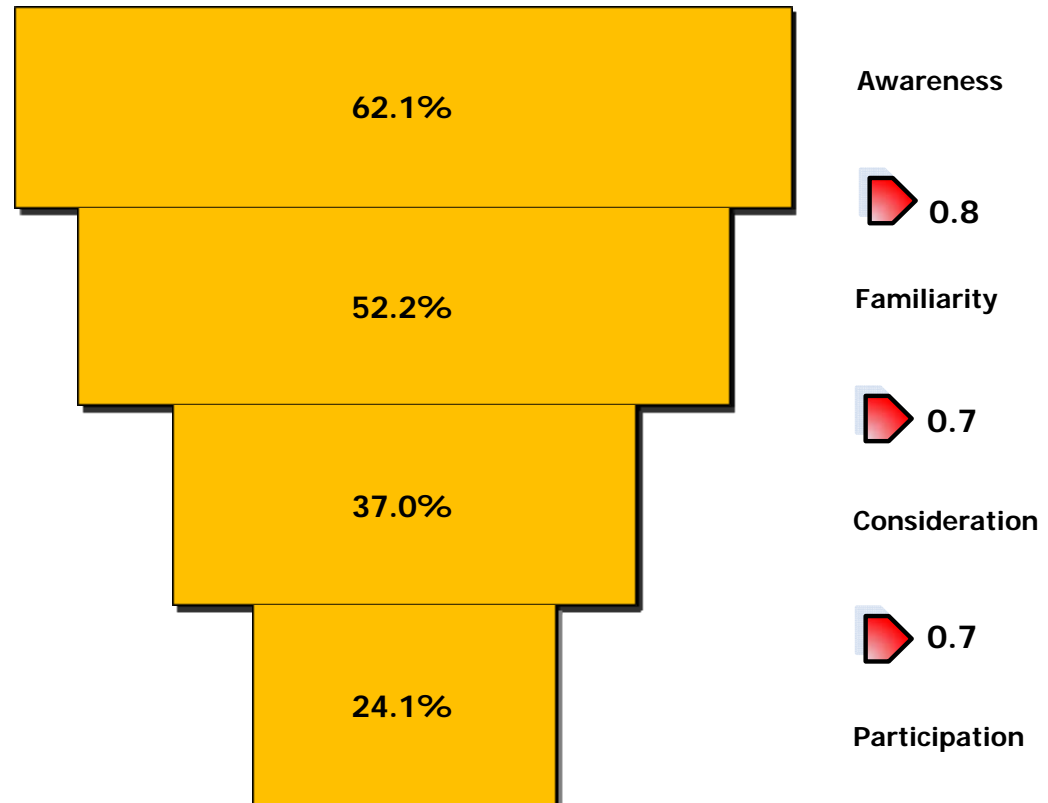


SMUD's Average Funnel (Q1 2010)



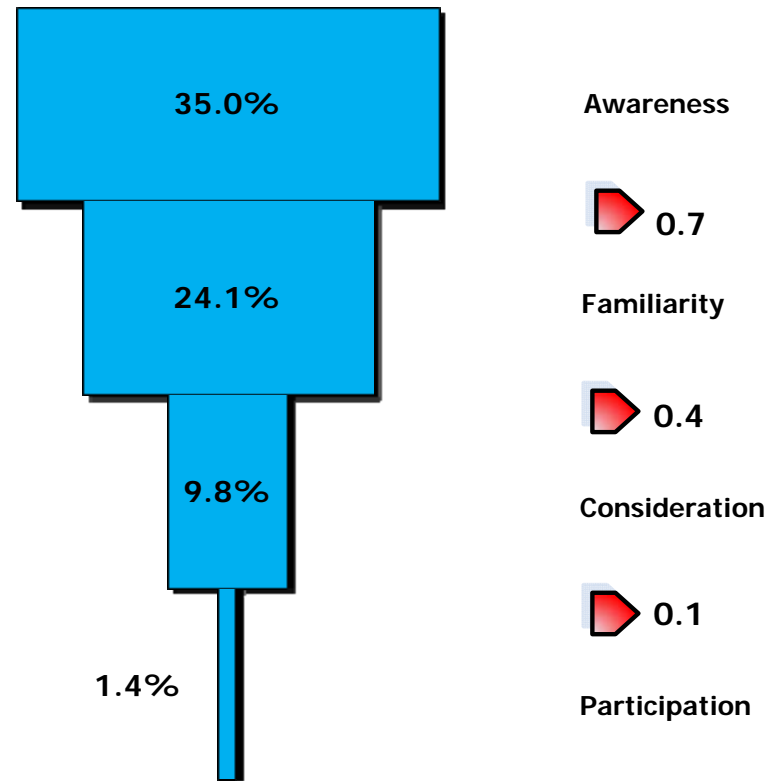
Rebates and Loans Funnel

- Rebates and Loans has some of the highest funnel scores
- Transition ratios are very high although the transition from Familiarity to Consideration dips slightly and may represent an opportunity



Photovoltaic Funnel

- PV program is significantly below average for all levels of the funnel
- The transition ratio from Awareness to Familiarity is average but the lower funnel ratios are all weak
- Weaker Consideration and Participation is expected due to the high participation costs



Summary of Findings

- Growth in SMUD's energy saving programs
 - Participation in energy-efficiency programs increased over 20% for Commercial and over 30% for Residential
- Advertising campaign improved image attributes
 - Respondents who recalled advertising gave higher scores
- Message recall on target
 - Key messages had aided recall above 70%
 - Website – savewithsmud.org – had aided recall near 50%
- Communication channels making an impact
 - Bill Inserts & TV have highest recall
 - Print, radio, outdoor significant
 - May fluctuate based on when the campaign is running, spend and other factors (outage, media coverage)

Conclusions

- Sustained marketing communications can play a role in impacting customer behavior
- Pretesting is critical to ensuring the campaign is on target at launch
- Advertising directly impacts how customers view the organization
- Customers are accepting of moving beyond traditional, core messages (low rates and reliability)
- A clear, direct call-to-action is vital to moving customers to participate

Thank you!

Questions?

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Q&A for presenters



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