Identifying Energy Saving Actions Taken in Households

Meta-Analysis of Home Energy Report Program Evaluation Survey Results

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What’s happening inside the black box?

- Analyze interval data from advanced meters to identify usage patterns throughout the day.
- Ask people what they’ve done to save energy over a period of time (i.e., “the last 12 months”).
- Ask people questions to give you a snapshot of how they are using energy at that moment (conduct a “live audit” over the phone).
If you don’t remember anything else…

» Surveys can play an important role in this research.

» Asking people to tell you what they’ve done in the past yields varied results, but does reveal some trends.

» People most often report taking actions related to lighting and thermostat settings.

» Navigant’s new method of conducting a live audit over the phone detects differences in specific participant behaviors.
What do people think they’re doing?

- Run the clothes washer with a full load: 5%
- Adjust water heater thermostat: 6%
- Unplug electronics when not in use: 7%
- Don’t know: 9%
- Seal leaks and drafts: 10%
- Upgrade lightbulbs: 10%
- Use less water: 10%
- Take shorter showers: 13%
- Program thermostat: 13%
- Other: 15%
- Set heating lower/set AC to higher: 23%
- Turn off lights when not in use: 40%

Shown as example only; results represent one survey conducted for Midwest client. (n=370 participants who said they had taken action, multiple responses allowed).
What are people actually doing?

» Live audit questions allow us to develop a snapshot of how the survey respondent is using energy at a specific point in time.

Program 1
• 0.90 fewer lights on

Program 2
• 0.5 more CFLs installed
• 0.81 fewer lights on
• thermostats set 0.5 degrees higher (in the summer)
• an actual temperature of 0.6 degrees higher

Program 3
• Coming soon!
» Look for a white paper covering the live audit survey methodology in early 2015!
» Program 1 citation [here](mailto:).