

Behavioral insights for sustainable behavior

How to make it easier to be green



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This article is the fourth of a six-part series describing inexpensive, simple solutions to some of society's most seemingly intractable problems. These solutions don't involve billion-dollar investments or comprehensive tax reform. Instead, they're based on behavioral insights that seek to explain the way we make decisions, whether consciously or unconsciously.

We all know "being green" can be a challenge. Whether it's remembering to take your reusable grocery bags to the store, waiting to pass by a recycle bin to toss your soda can, or riding the metro instead of hailing that cab, environmental friendliness often requires extra effort. However, we also know that collectively, these small choices can have a huge impact. Finding ways to encourage green behavior often demonstrates one of the areas that can be most difficult as it requires citizens to go against several of the "defaults" of human behavior — but effective tools exist. Here are a few examples.

One study found a program saved 2,300 liters of dirty water and 150 liters of detergent in a 100 room hotel each month⁷

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Prime waste management with visual cues. In results published by the Danish Nudge Network (DNN) in March 2013, a reduction in food waste was directly related to plate size provided to conference attendees. At the Danish Executive Summit, two buffet lines offered two separate plate sizes — in the control group, the normal 27 cm diameter plate was offered, while in the treatment buffet line, a 24 cm diameter plate was set. All remaining food waste was collected following the luncheon and weighed, with outstanding results. The group using the smaller, 24 cm plate produced 26% less food waste than the group

with the larger 27 cm plate — confirming the hypothesis that a subtle change in environment — in this case, a plate size — could influence sustainable food portioning.¹

Prior to this experiment, in 2011 DNN used visual cues to prime people's tendency to dispose of their garbage responsibly. In round one, researchers passed out caramel candies to passing pedestrians. Soon after, they carefully counted wrappers found in trash cans, ashtrays, bike baskets, and surrounding streets. In round two, they handed out the same candies but placed green footprints on the ground leading to nearby trash cans. Astonishingly, this resulted in 46% fewer wrappers found in inappropriate places. This concept is being applied in all sorts of ways— Wattson Clock (which shows your household energy use and associated cost at a given time) and eFergy Showertime (which shows your length of shower and amount of water used in comparison to a set target) serve as reminders of energy and water use — visually priming in a simple, straightforward way. As the design of new smart meters and grids are developed, there is potential to consider these visual cue aspects to encourage responsible household resource use.

Make it a game. Organizations like Recyclebank have taken a carrot rather than stick approach to behavior change. They partner with companies to creatively incentivize recycling programs. Participants can "cash in" recycled goods for points, earning them discounts and credit at popular stores such as Target and Barnes and Noble Booksellers. Recyclebank proved that it is possible to increase participants' active involvement in environmentally friendly activities that ranged from switching to energy-saving light bulbs to buying more local produce.² The

1 Hansen, P. (2013, Mar. 30) iNudge You Conducts Nudge Experiment Reducing Food Waste by 26%. Retrieved from <http://www.inudgeyou.com/inudgeyou-conducts-nudge-experiment-reducing-food-waste-by-26/>.

2 Lopez, J. (2011, July 5). New White Paper on Google and Recyclebank's Partnership in Gaming for Good. Retrieved from <http://www.gamification.co/2011/07/05/recycleban-partnership-in-gaming-for-good/>.

Fun Theory incentivizes the development of games to encourage better behavior with a competition. Several of these efforts have focused on re-designing recycling receptacles as various arcade games, significantly increasing their use.³

Positively play to the “keeping up with the Jones” mentality. Comparing the quality of front yards isn’t the only way people can feel competitive with their neighbors. Understanding the principle of social norms, several examples demonstrate the power of people’s tendency to conform to their peers:

- Opower partners with utilities companies to provide monthly statements for utility customers comparing their energy use to their neighbors. Providing them with easy-to-read graphics such as a smiley face scale and percentage use against nearby homes, consumers are challenged to “beat” their rating each month. Results show a consistent energy savings of up to 3% — while seemingly insignificant, aggregated across millions of homes, it all adds up.⁴
- An effort in California encouraged residents to use ceiling fans instead of air conditioning, and conducted a controlled study of four different messages. Residents were told that they should use their fan a) to save \$54 a month, b) to prevent the release of 262 pounds of greenhouse gases, c) because it was the socially responsible thing to do, or d) 77% of their neighbors already used fans — it was “Your community’s popular choice!” Option D was a standout winner — it reduced energy consumption of households by 10%, while the other three options did not reduce by a factor of greater than 3%.⁵
- Hotel guests can also be inspired to save the planet— small signs in hotel bathrooms urging guests to join a green movement of others to reduce their environmental impact by deferring daily room cleanings increased participation by 25%.⁶ Again — the collective impact has proven results — one study found a program like this saved 2,300 liters of dirty water and 150 liters of detergent in a 100 room hotel each month.⁷

Moving forward

The insights and related behavioral interventions described in this series are designed to be implemented quickly — they don’t necessitate an act of congress or laborious re-writing of existing policy. Many require a small budget but have great impact. However, even evidence-based changes like those above can have unintended consequences. That’s why we recommend coupling implementation with rigorous but rapid performance evaluation.⁸ Rapid testing and agile evaluation can enable your agency to refine strategy and measure the positive impact that behavioral insights can generate to drive mission achievement.

8 To learn more about Deloitte’s approach to program performance management and dynamic implementation, visit our *From Data to Impact* practice site to read our most recent report: www.deloitte.com/us/fromdatatoimpact.

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3 Fun Theory Initiative Videos: <http://www.thefuntheory.com/>

4 Opower Results: <http://opower.com/utilities/results/>

5 Simon, S. (2010, Oct. 17) The Secret to Turning Consumers Green. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424052748704575304575296243891721972.html>

6 Ibid.

7 <http://www.voanews.com/content/earth-conscious-hotel-guests-re-use-towels--137901808/162779.html>

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