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ReThinking red tape
Influencing behaviors to achieve public outcomes

A GovLab Study

About GovLab

GovLab is a think tank in the Deloitte Federal practice that focuses on innovation in the public sector. It works closely with senior government executives and thought leaders from across the globe. GovLab Fellows conduct research into key issues and emerging ideas shaping the public, private and non-profit sectors. Through exploration and analysis of government's most pressing challenges, GovLab seeks to develop innovative yet practical ways that governments can transform the way they deliver their services and prepare for the challenges ahead.

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Introduction

"Beep Beep Beep" 'Sarah's alarm clock goes off for the third time. She hits the off button and opens her eyes just enough to see light seeping through the blinds. Groggily, she coaxes herself out of bed and into the bathroom. With an internal groan, she makes her way to the scale and steps on while sucking in her tummy. The little window reads "156." She steps into the shower with a sinking feeling, thinking that her current diet is *not* cutting it.

By the time Sarah steps out of the shower, though, she's thinking about her next big meeting and the errands she has to get done after work. The little window on her scale will be all but forgotten an hour later, when she orders a triple mocha latte on the way to work.

Maybe you know someone like Sarah, or see someone like her in the mirror every morning. Similar scenes play out in bathrooms across the nation each day. Frustrated Americans grumble as they step on the scales but forget about their goals by the time they step up to the smiling barista. A scale is a useful measuring device, but it can't help you maintain your willpower or stay on your program.

Or at least that was true until products such as the Withings Wi-Fi body scale was introduced. The Withings scale connects to your home Wi-Fi network and reports your daily metrics (weight, body mass index, etc.) to a website that can track your progress. Users can send the information to their personal phones and even broadcast their current weight on their blog, Facebook or Twitter.[1] Thus it is designed to allow you to share your personal information with a network of friends who can function as a support group to help you reach your goals. The company believes that people trying to lose weight will find the scale innovative and motivational.[2]

Like the Wi-Fi scale, government also seeks to help us make the right choices; to recycle, eat healthy, stop smoking, or read to our children. To do this, governments often employ traditional policy levers to influence us — by taxing "bad" choices to make them more expensive, subsidizing "good" alternatives or even by restricting, through laws and regulations, the choices available to us.

These levers do help. Crime causes serious harm to individuals and society, and laws, enforcement and punishment are necessary to combat them. Similarly, governments can keep our markets dynamic and fair by preventing and punishing monopolistic behavior or price collusion.

But traditional policy levers — taxation, subsidies, laws and regulations can have their limitations.

- **Research shows people often act irrationally**.[3] We try, but sometimes it is hard to eat healthy, reduce our carbon footprints and consider interest rates before borrowing. And while various taxes, subsidies, laws and regulations have helped to some extent, the public sector is still struggling to cope with rising levels of obesity, high domestic energy consumption, and the impacts of predatory lending.[4]

- **Laws and regulations can be costly to enforce, and impose substantial compliance costs and other burdens on businesses and individuals**.[5]

- **Taxes, subsidies, laws and regulations are hard to justify when they limit personal choices that we do not see as harmful to others**. This is especially true in the U.S., where the political culture has been shaped by a desire to protect individual freedoms and limit the role of government.

The challenge for the public sector, in an era of fiscal and regulatory restraint, is to find effective, cheap and politically acceptable strategies to achieve its goals, particularly goals that are driven by individual choices. As President Obama stated in an executive order:

Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation… It must identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends.[6]

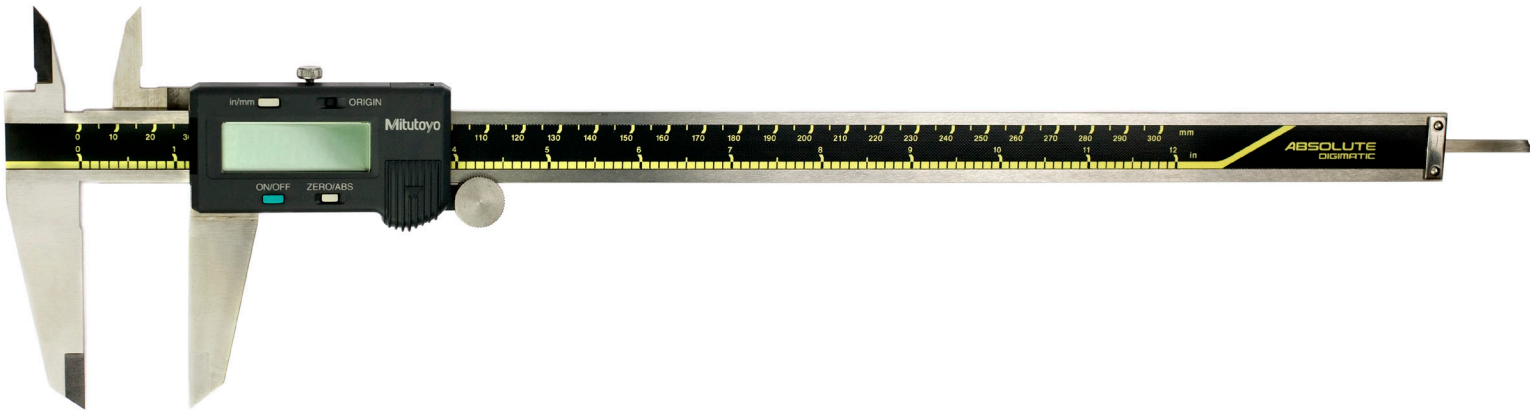
To meet this challenge, the public sector can look to valuable sources of experience for inspiration and support.

First, government itself offers many examples of positive outcomes achieved without recourse to the traditional levers of regulation, enforcement, taxation and subsidy. From J. M. Flagg's iconic 1917 "I want YOU for U.S. Army" poster to more recent advertising campaigns encouraging us to quit smoking, governments have a long tradition of using "social marketing" to influence our choices by educating and inspiring us.

Secondly, psychologists and economists have devoted many, many years to trying to understand *how* we decide. In recent years, bestselling books such as *Nudge, Predictably Irrational* and *Freakonomics* have reported some of these findings to general audiences, explaining the "irrational" elements of behavior.[7] More importantly, these authors and other leading academics in the field of behavioral economics have identified ways to influence our behavior that do not involve conventional prodding from government.

Other governments around the world have been quick to catch on. Australia and Canada are using insights from behavioral economics to help people do the right thing in the right way for the right reasons.[8] The United Kingdom has established a high level office, reporting to the Prime Minister, charged with incorporating behavioral insights into policymaking. The U.S. Office of Management and Budget (OMB) also has introduced behavioral economics to White House reviews of agency regulations.[9]

This paper examines case studies of some organizations that have effectively used behavioral approaches to influence people to make better choices, and illustrates how these approaches could help federal government agencies achieve the goals of President Obama's executive order.



Four new lenses for change

Again, in pursuing complex goals, the public sector traditionally views the problem through the lens of legislation, regulation, taxes and subsidies.[10]

Traditional lenses for government action

- Laws and regulations
- Enforcement
- Taxation
- Subsidy

Alternate or complementary approaches grounded in behavioral economics begin by looking at the human decisions that shape the problem in question and the mechanisms that could influence them.

While understanding the factors driving individual decisions and developing levers to influence them can be a complex task, such approaches can be less resource-intensive and more effective than the traditional alternatives in the long run.[11]

Behavioral economists have identified several ways of influencing human behavior. The following sections explore four of them, selected on the basis of their wide applicability and relative ease of use.

Alternate and Complementary Lenses for Government Action

- Education
- Incentives
- Structured choice
- Feedback loops

1. Education

Sometimes, the first step in making the right decision is to understand the choices we have — and their consequences. Governments can help us better understand those choices and what they mean.

Case study: Reducing child road deaths in the United Kingdom

In 2000, the UK's Department for Transport (DfT) set targets to reduce the number of people killed or seriously injured on roads by 50 per cent for children and by 40 percent overall by 2010. To achieve these ambitious targets, the department developed a three-pronged strategy (engineering, enforcement, and education) that combined traditional approaches such as regulation and enforcement with efforts to educate and influence the behaviors of road users.

The education element included a campaign called THINK! that sought to educate road users about road safety issues. To inform their strategy for THINK!, DfT analyzed the causes of road deaths and serious injuries, the characteristics of the drivers who caused them and their beliefs and motivations. Based on these insights, DfT commissioned advertisements to educate and influence the behaviors of particular groups of individuals.

One example was the "Lucky" advertisement, which targeted drivers who drive above the 30 mph limit on urban and residential roads. Many of these drivers were not convinced that driving at 40 mph was more dangerous than 30 mph, and thought of themselves as good drivers. They did not respond to threats of imprisonment because they could not imagine themselves ever becoming a convicted felon. Focus groups, however, found that this group of drivers would find it hard to cope with the guilt of killing a child.

The resulting TV advertisement, shown at times when many people in the target demographic would be watching, featured an eight-year-old girl who has been hit by a car, talking directly to the audience about the consequences of being hit at 30 mph (which carries an 80 percent chance of survival) versus 40 mph (with an 80 percent chance of being killed), and showed the level of injuries sustained in each case.

Many of the advertisements developed as part of the THINK! campaign won industry awards. More importantly, the campaign, along with engineering and enforcement measures, produced real improvements in road safety. In 2008, DfT exceeded its road safety targets, with a 59 percent reduction in child deaths and serious injuries. DfT estimates that, for every £1 spent on THINK!, £9.36 of public money was saved.[12]

Making education-based behavioral approaches work

The THINK! campaign demonstrates how educating people about choices and consequences can bring about changes in behavior. Doing so effectively requires keeping in mind the following principles:

- **Focus on the groups that matter most**. Identify the groups of people whose choices have the biggest impact on your goal. This can help you to direct efforts and resources effectively. In this case, the Department for Transport began with an analysis of the audience that regularly broke speed limits to identify the groups of people it should target in its campaigns.

- **Understand the audience**. Knowing the beliefs and motivations of the intended audience can help identify the facts and messages most likely to persuade them to make the right choices.

  In another example, when the European Union began an education campaign to deter people from smoking, it introduced new large, mandatory warning labels on the front of tobacco packages. These included a large sticker stating a medical fact such as, "SMOKING KILLS." On the back of the packages, however, an even larger sticker pointed out that, for example, "Smoking causes wrinkles," or "Smoking causes decreased blood flow which could lead to impotence." While death is obviously the most serious effect of smoking, research found that certain messages had even higher resonance with some target groups such as the young women who feared wrinkles more than other groups.[13]

- **Keep it simple**. The THINK! advertisements communicated simple facts to their audience, making them both powerful and memorable.

  In their bestselling book about change, *Switch*, authors Chip and Dan Heath cite West Virginia University's Department of Community Health Promotions, campaign in two West Virginia communities to persuade residents to reduce their intake of saturated fat by switching from whole to skim milk. In contrast to the bland and sometimes complex messages of traditional public-health campaigns, the campaign was simple and powerful. One advertisement told the audience that a single glass of whole milk contains the same amount of saturated fat as five strips of bacon. The result: reduced-fat milk doubled its market share in the targeted communities.[14]

Where to apply educational approaches
Educational approaches to behavior change work well when:

- **The facts are simple, in your favor and incontestable.** Such as the impact of retirement savings on later financial security, or the risks of smoking; and
- **A common misconception drives 'bad' choices.** Such as those concerning the consequences of speeding or the fat content of particular foods.

2. Incentives

Sometimes, a little encouragement is all we need to make the right choice. Governments often try to encourage us by altering the price of our choices through taxes and subsidies. While financial incentives can be powerful motivators, the public sector also has less costly incentives at its disposal.

Case study: helping consumers reduce their energy use

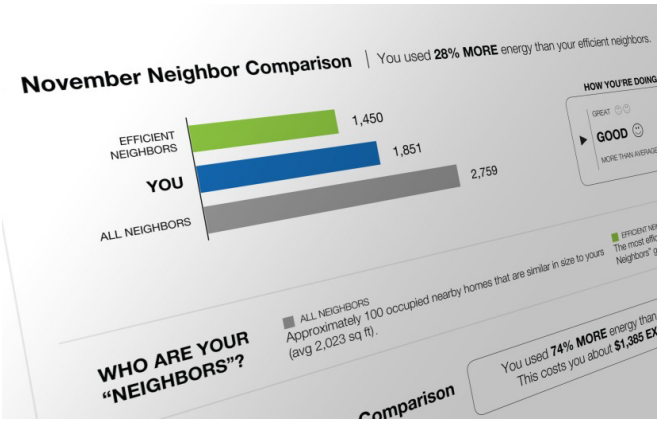
Dan Yates and Alex Laskey founded Opower in 2007. Four years later Opower became a featured Technology Pioneer of the World Economic Forum, and President Obama has acknowledged that Opower was helping to "put America on the path to a clean energy future."[15]

Opower does not generate or distribute electricity. It is a "customer engagement platform" for the utility industry. Using the power of transparent data and the behavioral science techniques of Chief Scientist Robert Cialdini, Opower seeks to transform the way in which consumers view their energy consumption.[16]

Specifically, Opower works with utility companies to track, aggregate, and analyze consumption data and present them to consumers in ways that can encourage them to save energy.

An energy report designed by Opower, for instance, is likely to feature a simple chart that anonymously compares the consumer's household energy consumption to similar-sized nearby homes. Another module then compares their energy use to that of their most *energy-efficient* neighbors. Those who do well compared to their neighbors' households are rewarded with a smiley face, while those who are among the most energy-efficient receive two. This presentation of both comparative data and a symbol tied to human emotion is a combination that helps create incentives for behavior change.[17]

Opower reports also provide consumers with data on how their energy consumption for a particular purpose, such as air conditioning, compares to their neighbors' usage, and provides tailored advice to help them reduce their use. In some reports, this comparison is taken a step further by telling the consumer how much their additional consumption costs them per year.



Caption: Opower home energy report.

As a result of such simple, non-monetary incentives, Opower has tracked average energy savings of 2 to 4 percent across nine independent evaluations at more than twenty-five of its utility clients.[18] While this may appear small, in the scope of America's massive energy consumption it can add up to savings of millions of kilowatt hours.

Opower plans to introduce further non-monetary incentives for energy savings. It has collaborated with Facebook and the Natural Resources Defense Council to launch a Facebook social energy application.[19] Their goal: To "get friends to compete against each other to use less energy, and to hold each other accountable for energy-use-reduction goals."[20] According to Opower, a feature called "Friend Rank" will let consumers compete with others in their social networks to use the least energy. Another will allow users to compare themselves to others with similar-sized homes, and to share and discover energy-saving tips and advice.

Making incentive-based behavioral approaches work in practice

As shown in the case study above, it is possible to urge people towards action using non-monetary rewards, such as positive feedback and leaderboard positions. Some key facets of incentive design include:

- **Reward the "heart and soul" before the wallet**. While savings or material rewards obviously appeal to consumers, less expensive incentives such as ego-boosting rewards, normative comparisons, and plain fun can also be effective.

  In 2010, Volkswagen announced a competition called "Fun Theory" that invited participants to submit ideas to encourage individuals to do the right thing by modifying public infrastructure in ways that made good choices more fun.[21] Entries ranged from trash bins that make the sound of something large falling and crashing each time they are used (which increased use by 130 percent) to a recycling return machine with bells, lights, and a scoreboard that attracted 50 times more users than a conventional recycling bank nearby.[22] Opower's reports are similarly designed to appeal to our intrinsic goodness, sense of fun and desire to save money by ranking us with peers, "smiling" at good behavior and providing customized money-saving tips.

- **Offer incentives of the right magnitude at the right time.** People generally are focused on the present, and prefer smaller, immediate payoffs to larger, distant ones.

  In the example of Opower, feedback on energy use is intentionally set to arrive three to five days after each bill. Rewards for the energy-saving efforts in one period, in the form of reduced energy costs, smiley faces and a better relative position among peers are provided in the next report.

- **Compare users with their peers**. Individuals often compare their own behavior with that of others. They do not like to underperform in comparison to their peers, nor do they like to be different — or at least not *too* different.[23]

  For example, UK tax officials tested the power of social norms by adding the phrases, "Ninety-four percent of people pay their tax on time," and, "Even if one person does not, it has a significant impact," to a block of letters chasing £600 million in unpaid tax. The repayment rate went up from an average of 50 percent to 85 percent.[24]

  "Norming" behavior in this way has significant implications in a world increasingly enabled by social networks and expanding urban environments. Opower also plays upon the power of "norms," by presenting information in a way that anonymously compares you to a representative sample of households considered to be your "neighbors," both literally and statistically.

- **Loss is more memorable than gain**. Our decisions can be influenced by a fear of loss. For example, we are more motivated to act out of the fear of *losing* $10 than the prospect of winning $10. When you show people how much they will lose by failing to act, you are more likely to incentivize the desired outcome.[25]

  Opower uses loss language tied to social comparison by telling consumers that, for example, "using 30 percent more electricity than your neighbor 'costs' you over $250 per year." Opower bases this wording on research showing that the prospect of losing $250 is significantly more motivating to people than the opportunity to gain or save the same amount.[26]

- **Urge *specific* actions**. Individuals typically have a natural preference for the status quo. They are likely to keep doing what they are doing unless the case for change is both compelling and easy. Governments can help make it easy by illustrating short, simple actions people can take that are specific to them. Opower provides customized energy-saving advice for consumers to help them take practical steps to reduce their consumption.

Where to apply incentive-based behavioral approaches

Incentive-based approaches to behavioral change can work well in cases in which:

- **People need an incentive to overcome inertia**. If doing the right thing goes against the path of least resistance, incentives can provide the extra motivation needed.

- **The incentive brings to life the value that the desired behavior already possesses**. Incentives do *not* need to be monetary; people respond well to systems that recognize and value their positive actions. Well-designed incentives do not depend on money or prizes with a monetary value. Instead, they should encourage activities that *already* have an implicit value, to avoid signaling that an activity is not worth doing.

3. Structured choice

Even when people *want* to make the right choice, they sometimes fail to do so due to the fact that other choices are expedient, or simply because they are overwhelmed by options. Policymakers can design or structure choices in ways that can help people make the right decision.

Case study: helping people eat and drink healthier

What if restaurants were designed so that the easiest decision was also the healthiest? Massachusetts General Hospital (MGH) did just that with the simple redesign of its cafeteria. More than 6,000 people visit the MGH cafeteria each day. The hospital wanted to encourage people to make healthier food and beverage choices. MGH collaborated with Harvard Business School to educate customers and structure the choices available to them in different ways.

The cafeteria ran a two-phase experiment from December 2009 to September 2010. In the first phase, they introduced a simple labeling system to visually educate patrons about the nutritional value of various items. Red-labeled items had little to no nutritional value, yellow had some, and green items were a healthy choice. This made the food selection process simple; it was easy for a customer to know when they were eating healthy. In the second phase of the study, they placed the healthiest food items at eye level so they were easy to see and select.

The experiment documented how sales of healthy food items changed due to the new labeling system and the relocation of healthy foods. MGH found that in phase 1, color-coding alone reduced sales of "red" food items by 9.6 percent. In phase 2, red food item sales fell by an additional 4.9 percent. MGH not only boosted its sales of "green" food items, but also saw a significant increase in healthy beverage sales. The sale of water alone increased by 25 percent.[27]

Making structured choice work in practice

Phase 2 of the Massachusetts General Hospital experiment showed that you can help people make better choices simply by changing the order in which options are offered. Several other techniques can also be used for guiding choices:

- **Make the default the high-quality choice**. Studies show that users are likely to accept default settings.[28] Choices, however, typically are offered in a way that makes *no* action the default, requiring people to overcome natural inertia to make the right decision. If the default option leads to the "good" decision, that same inertia can encourage people to stay on the high-quality path, while still giving them the freedom to exercise their own choice.

  The UK government, for instance, uses the default option to encourage people to save for retirement. Rather than requiring employees to sign up for a retirement plan, British companies are required to automatically put a designated percentage of their employees' income into a pension plan. The employee still can choose to opt out of saving for retirement or to reduce their contributions.[29]

  In the U.S., research has shown that automatic enrollment in employer pension plans encourages workers to participate. One organization that switched from standard to automatic enrollment for new hires found that participation in its pension plan was 35 percent higher after three months on the job.

  "Virtuous" defaults also affect saving rates. For example, in one firm with a default pension contribution rate of 3 percent of salary, more than a quarter of its workers contributed exactly that amount to their plans despite the fact that the employer would match up to 6 percent of salary. Once the organization switched to a 6 percent default, virtually no new hires selected the 3 percent contribution rate.[30]

- **Present choices in an order that encourages the "right" choice**. Individuals are more likely to make a particular decision based on the order in which choices are presented.[31] MGH placed the healthiest food items at eye level so they were easy to see and select. By the time customers saw the less-healthy food, many had already selected a healthier option and would need to make a conscious decision to change their minds.

- **Reduce the number and complexity of options**. Too many choices can overwhelm an individual.[32] On January 1, 2006, President Bush launched a new prescription plan for Medicare recipients. In a survey of seniors conducted just before the initial enrollment period, nearly three quarters said that having 40 or more drug plans to choose from made it difficult to pick the best one. Choice overload translated into anxiety. In addition, 61 percent said they understood the drug benefit "not too well" or "not at all" in the days leading into the enrollment period.[33] This poor understanding of the benefit, combined with unease about how to pick the best plan amidst a multitude of choices, proved a recipe for chaos in the early stages of the launch. Thoughtful choice architecture could have been used to help people make the right choice for their individual situations.[34] By contrast, MGH employed a simple labeling system for more than 100 food options and created positive behavioral change.

- **"Prime" people right before decision making**. Exposure to a stimulus such as pictures, words, or other subliminal and overt sensations can influence decisions.[35] Grocery stores often employ such primers to encourage shoppers to spend more.[36] Some stores play slow music to reduce the tempo of the environment and encourage shoppers to meander slowly through the store and ultimately to buy more items. Others use in-house bakeries for a dual purpose — to sell fresh bread, but *also* to use the *smell* of baking bread to make shoppers feel hungry and increase their average spending on food items.

Where to apply structured choice

Structured choice can work well in cases in which:

- **The available options cannot be restricted**. When the personal choices in question are not seen as harmful to others, it can be very hard to reduce or restrict them. Structured choice can help people make the right choice by presenting different options, while allowing individuals to maintain their freedom.

- **The complexity or number of choices makes it hard for people to make the right choice**. In such cases, defaults can take advantage of people's natural inertia to help them make the right choice.

4. Feedback Loops

Sometimes, our lack of awareness about our choices and their implications can lead to undesirable behavior. Feedback loops can change behavior by providing individuals with information about their actions in real time.

Case study: feedback slows down drivers and increases road safety

The city of Garden Grove, California faced the common challenge of residents speeding through school zones and other parts of town.[37] Rather than continuing to rely solely on speeding tickets, the city chose to experiment with feedback loops, posting electronic signs that showed drivers the legal speed limit next to a radar reading of their actual speed. The radar speed signs provided drivers with real-time information, allowing them to react quickly to the information and self-police, rather than gaming the odds of receiving a ticket. The signs also made drivers feel that their speeding had been "observed."

These radar checkpoints have had a significant impact on reducing speeds in school, residential and construction zones without fining citizens. Garden Grove noticed that drivers slowed down by an average of 14 percent in areas in which the radar signs were posted.[38] Other studies have found that the presence of a radar speed sign reduces average speeds by 5 to 8 mph. This small change still represents a substantial reduction in the risk of serious injury or death. An alert and skilled driver traveling 20 mph who spots a child in the road 50 feet ahead can come to a full stop within the distance. The same driver traveling 30 mph will not even *begin* to slow down before hitting the child.[39]

Making feedback loops work

The radar speed sign example shows that you can change behaviors by providing feedback. The effective use of feedback loops should involve the following:

- **Provide *immediate* feedback**. Real-time feedback allows the actor to draw an instant correlation between his or her behavior and the desired behavior.[40]

  Teague, a design consultancy, tested follow-up feedback against real-time feedback in a water usage experiment. The designers attached a water meter to an office faucet. When hand washers received follow-up feedback about the amount of water they used, *after* they finished using the faucet, there was no subsequent change in behavior. The designers then connected the meter to an iPad that provided real-time feedback as people washed their hands. This resulted in a 75 percent reduction in water usage.[41]

- **Present measurable and relevant data**. Feedback loops should provide the target audience with clear, objective data that helps individuals recognize discrepancies between their behavior and the desired behavior. It is important to present only the most relevant data to the user.

  For example, cars such as the Toyota Prius feature an energy monitor and consumption screen on their dashboard. This screen is designed to display instant and average miles per gallon with a graph that changes based on acceleration or breaking. Most other drivers only receive feedback about miles per hour, and would have to calculate gas mileage manually after they fill up. Providing drivers with immediate feedback about their gas consumption has helped to create a small but growing band of "hyper-milers," who use less gas to travel the same distance and consume less fuel overall.[42]

- **Keep it simple**. Feedback should be conveyed in an easy-to-understand format without an overwhelming amount of data. Too much data or confusing feedback can overwhelm the user. Often, it is most effective to present feedback about performance compared to a goal, or what the individual "should" be doing.

  In the Garden Grove radar speed sign example, the drivers saw both their own speed and the speed limit — all the data that was needed to encourage change, without additional data points that could cause confusion.

- **Align the feedback to encourage the right choice**. Sometimes the natural feedback people receive about a decision is not aligned with making the right choice. At a time when healthcare costs are rising faster than inflation,[43] the Federal Government's role in regulating healthcare is expanding. Making healthy choices can be hard for citizens, especially when feedback loops

are not aligned to encourage healthy behavior. For example, when someone eats a piece of cake, he or she does not necessarily feel different at that time and, if anything, receives positive feedback in the form of enjoying the cake. Eating cake and other treats over time can impact long-term health, yet individuals do not receive real-time feedback about the long-term effects of food consumption. Follow-up feedback — in the form of diabetes, obesity, or other ailments — may not surface for several years.[44] Companies such as Massive Health recognize that people could adjust their behavior if they receive feedback about short-term or long-term consequences of health related choices. Massive Health is using technology and creating products to provide users with real-time feedback about their food choices. For example, through The Eatery app, users can post photos of what they eat and other users will rate the choice on a "fit" to "fat" scale.[45]

Where to apply feedback loops

Feedback loops can work well in cases in which:

- **The cost of collecting data for feedback is not prohibitive**. Providing good data to users can be costly, but sensors and other technology can help make this cost manageable.
- **Immediate feedback is aligned with the high-quality choice**. Feedback should encourage people to make the right choice. In some cases, feedback loops can be used to overcome instances where natural feedback in the environment is not aligned to the right choice.
- **The feedback itself will not engender perverse incentives**. When designing feedback loops, it is important to understand the audience and their reactions. For example, small children may enjoy watching the water meter on the iPad go up in the Teague example, and could end up using *more* water as a result of the real-time feedback.

Determining when behavioral approaches might add value

As the case studies show, behavioral approaches can be used either alone or in tandem with traditional levers to provide the public sector with inexpensive ways of achieving positive social outcomes by influencing personal choices.

This section provides five simple questions that policymakers can ask to determine whether behavioral approaches can help achieve a particular positive societal outcome.

Consider the outcome you desire. If the answer to any of the questions below is "yes," behavioral approaches could help.

1. **Is the outcome sought driven largely by personal choices that individuals do not consider harmful to others?**
   Using regulations or taxes to restrict citizens' freedom to make choices they see as "their own business" can be difficult and even counterproductive. In such cases, behavioral approaches can provide more politically acceptable ways to achieve the desired outcomes. In addition, when people do not perceive their choice as harmful to others, even though it may be (such as driving above a speed limit), behavioral approaches can provide cost-effective complements to the traditional levers of regulation and enforcement.

2. **Do the choices you wish to influence occur frequently?**
   In case of frequent choices, such as what to eat, how much to save or whether to exercise, behavioral approaches can influence a large number of decisions at relatively little cost. Traditional levers such as legal and regulatory enforcement can be prohibitively costly due to the huge number of choices that must be affected.

3. **Do the choices that drive the outcome occur regularly over a long period of time?**
   In an era of rapid social change and shifting attitudes, what influenced our choices five years ago may no longer do so. A strength of behavioral approaches is they typically are not enshrined in law and can be refined over time to respond to changing beliefs and motivations in the same way that advertising campaigns for long-standing consumer products evolve to respond to changing consumer preferences. Traditional levers, such as those established through legislation, can be much harder to adjust and adapt. They also may become less effective over time due to desensitization.

   For example, new drivers are sensitive to and highly aware of road laws when they first begin driving. Over time, they can become desensitized to the laws as they gain experience and "get away" with behavior they do not see as harmful. In such cases, nimble behavioral approaches can be a useful complement to more static traditional levers.

4. **Do you want to influence a large or diverse number of people?**
   Traditional approaches such as regulation and enforcement can falter in influencing a large or diverse group of people. Though their strength is that they apply universally, their enforcement can be expensive due to the scale of coverage necessary and the diversity of actors. Taxes or subsidies may disproportionately influence some people more than others due to their differing motivations or price sensitivity. In contrast, behavioral approaches can be designed to target different communities or groups of actors in ways that will resonate most effectively with them.

5. **Is the outcome sought in the distant future, but driven by choices that occur now?**
   People have a natural tendency to discount future consequences compared to the costs and benefits of their actions today.[46] For example, the costs of inadequately saving for retirement are felt once people have stopped working whereas the benefits associated with increased income during working years is felt immediately. Behavioral approaches can help people make real-time decisions that help them in the future.

Conclusion

Regulators and policymakers face three distinct and difficult challenges that will require them to consider radical changes in the way they approach their task of achieving the outcomes they seek.

First, the deep austerity measures that have or are about to grip many western governments will require them to think hard about cost-effectiveness. Regulations and their accompanying detection and enforcement structures will likely be under greater pressure to demonstrate their worth.

In addition, the increasing complexity of the societal challenges we face, from climate change to poverty among the elderly, will require the public sector to consider influencing individual decisions in an increasingly protected "personal space" where public tolerance of government regulations, taxes and subsidies is wearing thin.

Finally, in the wake of a serious financial crisis in a closely regulated industry, public confidence in the effectiveness of the traditional levers of regulation and enforcement is declining. These levers, along with others such as taxes and subsidies, are showing their limitations in addressing some of the most pressing challenges we face.

In responding to these challenges, regulators and policymakers should consider adding cheaper, more effective and politically palatable components to their strategies to achieve the real-world changes they seek. Behavioral approaches could be among the most powerful new tools available.

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