FEATURE

Nudging compliance in government

A human-centered approach to public sector program design

Michelle Cho, Josh Schoop, and Tim Murphy

Noncompliance among citizens can cost government agencies billions of dollars and prevent goals from being achieved. Learn how policymakers can use behavioral science lessons to redesign programs and improve outcomes.

The compliance challenge

What are the biggest challenges facing government? Bureaucracy? Gridlock? A shrinking pool of resources?

Chances are compliance—when people act in accordance with preset rules, policies, and/or expectations—doesn't top the list for many. Yet maybe it should. Compliance touches nearly every aspect of public policy implementation.[1] Over the past 10 years, US government spending on compliance reached US$7.5 billion.[2]

Even the most sophisticated and well-planned policies often require cooperation and input from real humans to be successful. From voluntary tax filing at the Internal Revenue Service (IRS) to reducing greenhouse emissions at the Environmental Protection Agency (EPA), to achieving the public policy outcomes decision-makers intend, compliance is fundamental.

Consider these examples of noncompliance and their costs:

- **Taxes.** By law, the IRS requires all income-earning, eligible constituents to file and pay their owed taxes. Tax evasion—the illegal nonpayment or underpayment of tax—cost the federal government an average of US$458 billion per year between 2008 and 2010.[3] The IRS believes it will recover just 11 percent of the amount lost in that time frame.

- **The environment.** The incorrect disposal of recyclable materials has cost more than US$744 million in the state of Washington since 2009.[4] The city audit in San Diego found that 76 percent of materials disposed of citywide are recyclable and estimates that those recyclables could power 181,000 households for a year or conserve 3.4 million barrels of oil.[5]

Those who fail to comply with these rules could face direct and indirect consequences, including penalties and even jail time. Yet a significant subset of the population still behaves in a noncompliant manner. Why?

Behavioral sciences offer some clues. Through the combination of psychology, economics, and neuroscience, behavioral sciences demonstrate that people do not always do what is asked of them, even when it seems in their best interest to do so. Often, people choose a noncompliant path because of one of these reasons: They are *unaware* of their improper behavior, they find the "right" choice is *too complex* to decipher, or they simply are *not intrinsically motivated* to make the compliant choice.

For any of these reasons, when a cognitive hurdle emerges, some people resort to noncompliant behavior. But these hurdles can be overcome. Policymakers can use these same behavioral insights to understand why noncompliance occurs and alternatively, employ behavioral-inspired tools to encourage compliant behavior in a more agile and resource-efficient fashion.

In this spirit, leaders can take a more human-centered approach to program design by using behavioral science lessons to develop policies and programs in a manner that can make compliance easier and more appealing. In our article, we discuss

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three common reasons behind noncompliance and how better, more human-centered design can help policymakers achieve more positive results.

Augmenting carrots and sticks with behavioral insights

The Deloitte Insights article, *Beyond carrots and sticks*, discusses how extrinsic rewards and penalties, if not carefully directed, can lead to costly interventions that still may not resonate with the intended audience.[6] This is because traditional policy design can fall short:

On the **institutional side**, policymakers can overdesign or overcorrect when individuals or organizations fail to comply. After the 2008 financial crisis, designed to prevent the same thing from happening again, the 848-page Dodd-Frank Wall Street Reform and Consumer Protection Act was enacted in 2010. In an effort to minimize precarious trade activity, one component of the law required banks to complete a 383-question survey that included 1,420 sub-questions.[7] Given its length and complexity, many bank leaders found the survey challenging to complete; it doesn't seem to encourage adherence and reduce improper practices. If policies overcorrect, participants can be left feeling confused and alienated, they can lose trust in the process, and compliance can become difficult, especially for those who actually want to be compliant. And it can then become a vicious circle: Continued and visible policy failure can erode public confidence, constituents might question their government's ability to improve regulation, which could then lead to more rules being "promulgated while confidence in government regulation lessens and compliance outcomes become worse."[8] But if government leaders respond to noncompliance by adding more regulation and more bureaucracy, it can make systems more and more complex (as happened with Dodd-Frank). Meanwhile, one of the key principles of behavioral science reveals that leaders should be doing the exact opposite: If you want to get people to do something, make it easy for them.[9]

On the **target side**, people do not always behave rationally. They also do not always have access to complete, clearly stated information that would allow them to digest and weigh the pros and cons of action versus inaction.[10] Individuals in a target population also often have varying amounts of resources at their disposal to help them fulfill a requirement. Consider filing personal income tax: Some citizens file paper tax forms manually, others file electronically using a guided tax software program, while others will hire an accountant to complete the forms. While the accountant option is the most expensive, it saves taxpayers time and reduces complexity, increasing compliance. But not everyone can afford this option.

To augment and improve both the bureaucratic and target side of policy, leaders can use behavioral

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insights to construct beneficial interventions for a program, population, or process. These human-centered interventions, commonly referred to as "nudges," can be enormously powerful in influencing how people make decisions and interpret changes happening around them.

But to be effective, nudges should be calibrated; "one size fits all" approaches tend to fall short of expectations. Instead, policymakers can tailor their nudges to align with these three dimensions:

1. **Spectrums of acceptability (and deviance)**. How strictly must targets adhere to the rule? While driving a couple of miles over the speed limit is unlikely to result in a traffic violation, attempting to bring a weapon onto an airplane requires zero-tolerance enforcement.

2. **Frequency of action**. How often must the target group provide input? It may be easier to have targets make a single decision to contribute or obey, as opposed to encouraging them to repeatedly make the same decision over time. For example, people usually only need to choose to be an organ donor once, but drivers put their seat belt on every time they get into a car.

3. **Target group diversity**. How heterogeneous is your target group? People may come from different socioeconomic backgrounds, have different interests, or may speak another language, all of which makes it challenging to apply a blanket rule with universal success. Moreover, targets can be geographically scattered or online, making it difficult for policymakers to surveil the target group. For example, all vehicle owners must register their cars, but not everyone should seek the same preventative medical treatments. And even those that do require similar treatments may have different motivations for doing so.

There are three distinct types of noncompliance: *unintentional noncompliance, burdened noncompliance,* and *intentional noncompliance.* By drawing on simple principles from behavioral science and design—and calibrating the design to match expectations and audience makeup—policymakers can encourage compliant behavior across

each type. Here is a look at what each noncompliance type generally entails and how using these techniques can work to improve results.

UNINTENTIONAL NONCOMPLIANCE: "I DIDN'T KNOW"

The most innocent form of noncompliance stems from a lack of awareness. Sometimes, a peripheral awareness exists, but people do not clearly understand the expectations for compliant behavior. From the institutional side, doubling down on regulation would likely be ineffective at altering behavior; the main issue with this group is they are missing the baseline message.

Instead, policymakers can focus on developing more effective marketing campaigns that infuse behavioral insights, developing messaging that resonates with intended audiences.

Demonstrating *social proof*—when people validate their choices based on what those around them are doing—has been particularly effective at teaching people the right way to behave. When making decisions, people will often look to their

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neighbors to understand societal norms and expectations so they can "do the right thing."

Some government agencies are already deploying social proof to teach citizens what compliant behavior looks like. The city of Sacramento is using social proof messaging and feedback in its efforts to decrease energy consumption. A select group of

customers was informed about their home electricity and natural gas usage, highlighting individual household consumption relative to neighboring homes.[11] In this case, social proof is an appropriate nudge since the spectrum of accessibility is quite wide; any improvement in energy consumption can net a significantly positive impact. The results of this effort were promising: Consumption decreased by 6 percent in homes using the most energy. Even more promising, the reduced electricity costs yielded savings for consumers enrolled in this program. If deployed across the city, an estimated US$20.7 million could be saved.[12]

Here, the simple act of sharing salient, little-known statistics on average household energy consumption seemed to persuade some of the highest-volume consumers to conserve more.

BURDENED NONCOMPLIANCE: "IT'S TOO COMPLEX"

Sometimes people know they aren't doing the right thing but aren't exactly sure *how* to behave correctly. And the more complicated the process gets, the more *cognitive overload*—decision fatigue from weighing too many choices—can set in. When this happens, people can become frustrated and make the wrong choice, or defer the choice altogether.[13]

People can experience cognitive overload when trying to choose a health plan, a retirement vehicle, or simply trying to pick a jam at the grocery store. For public programs, those experiencing burdened noncompliance may have attempted compliant behavior and been discouraged by the bureaucracy in the process, or may have simply ruled themselves out before giving compliance a real shot.

To remedy this phenomenon, program designers can decrease cognitive overload by simplifying steps, scripting the exact moves needed to comply, setting optimal default options, and sending targets motivating reminders throughout the process. Ad-

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ditionally, they can give targets the option to make commitments to complete needed actions in the future, which has been shown to motivate people to follow through.

By providing step-by-step guidance, program designers can help target groups manage new, complex situations that require their attention. Offering this level of granularity can be especially important when actions require frequency and/ or are complex. For example, many people find the task of filing their taxes to be confusing, time-consuming, and littered with financial jargon that means little to anyone who is not an accountant. But readily available tax filing software typically simplifies the process by providing an interactive questionnaire that breaks down the sanitized, often challenging forms, translating those form fields into easily understood questions.

Similarly, the IRS provides a number of tools to help taxpayers overcome these hurdles and submit their returns in an accurate and timely fashion. The IRS's Tax Time Guide is designed to help taxpayers navigate through common questions they may ask during the tax filing process. The agency also provides a free tool called "Where's My Refund?" that allows tax filers to actively track the status of their refunds within a day of e-filing or within four weeks of mailing a paper return.[14] This interactive tracker can reduce ambiguity—and complexity—by breaking down the refund process into three stages, using a color-coded status bar to indicate the status of the return, and providing an estimate for when the refund should be issued. Since April 2016, "Where's My Refund?" has been utilized 231 million times.[15]

Policymakers can make these decisions less cognitively taxing by infusing simple, tailored, behaviorally inspired mechanisms into the process.

INTENTIONAL NONCOMPLIANCE: "I DON'T CARE"

The intentionally noncompliant can be the trickiest group to nudge. Their motivations may range from apathy to a shortage of time and resources to an intentional desire to break the rules.

Once again, social proof can be a powerful means to persuade behavior. Unlike before, though, where we discussed ways program designers could use social proof to signal proper behavior, these targets often best respond to signals of noncompliant behavior. People are highly aware of how they measure up to their peers and when highlighted, this knowledge can change behavior. For this reason, program designers should ensure that a relevant peer group is used as a means of comparison. Otherwise, the nudge may fall short of expectations.

Government leaders in Bogotá, Colombia, used social proof to combat its high traffic casualty rate. The city had many signs, countdown crosswalks, and generally recognized expectations of when and how to cross the street, yet many city residents still regularly and deliberately jaywalked. So city program designers got creative in using social proof: To reduce the number of pedestrian fatalities, they deployed more than 400 mimes to shadow jaywalkers, mimicking and playfully mocking the ridiculousness of their dangerous street-crossing behavior.[16] This program, which was paired with another initiative that placed stars on locations where pedestrians died, resulted in a 54 percent reduction in traffic deaths.

By having mimes be the channel by which this message was communicated, the absurdity of the situation and fear of being selected as a mime target deterred pedestrians from crossing streets illegally.

Bogotá didn't limit its use of behavioral nudges to pedestrians, either. In 1997, a critical tunnel providing water to the city collapsed, prompting a water shortage that threatened to leave 70 percent of the city without enough water.[17] City officials alerted residents of the shortage, urging them to change their consumption patterns.

This plan backfired dramatically. Worried they would lose out on the existing supply, residents consumed *more* water, stockpiling it while they could. To course correct, the city then distributed stickers with a picture of San Rafael (the namesake of the reservoir), asking residents to place the sticker by their faucets. Pictures placed next to faucets made water conservation salient, and other city initiatives that promoted slogans and entertaining campaigns like public service announcements relied on social rewards and punishments instead of merely providing notices of the shortage. After eight weeks, citywide water savings peaked at approximately 14 percent, a rate that held for more than a decade. It's worth noting the geographical importance of San Rafael to this community. In any other region of the country, the picture would not likely resonate, which reinforces the need to ensure nudges are congruent to the target group's beliefs and values.

As these examples illustrate, behavioral nudges can help people across the spectrum of behavior, from those who want to do good make the right choice to others who are purposefully noncompliant. But it is important to note that to nudge effectively, there is no "one size fits all" approach.

Designing for compliance: Using a human-centered approach

Noncompliance can be both taxing and inefficient. For institutions, noncompliance often impedes efficiency, multiplies bureaucracy, and contributes to negative perceptions. And ineffective or poor government policies can breed noncompliance.

Using a behavioral insights lens to uncover why noncompliance occurs can be an invaluable tool to foster positive behavior change in a target group or population. Program designers should seek interventions in which people's fears, limitations, and

motivations serve as the foundation of generating solutions for compliance problems.

To achieve this human-centered approach, when designing your next policy, consider trying to:

- **Understand your population.** Conduct interviews, focus groups, and observations to learn why targets may not be complying. Develop the problem statement that captures the type of compliance needed and its purpose.
- **Gravitate toward the testable nudge.** Synthesize insights gathered from step 1 to establish a *current state assessment*. Consider which behavioral insights could be applied in an intervention and how these could be incorporated into a testable nudge. Brainstorm solutions that focus on the wants and needs of each target group, and consider individual, design, and social factors.
- **Iterate, iterate, iterate.** Conduct appropriate analyses to determine the effectiveness of the intervention. Make recommendations about the potential to scale and repeat this intervention.

Adopting a human-centered approach to boost compliance might not only improve our understanding of the needs and preferences of target populations, but also help make government agencies more efficient and effective.

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