How to Use Behavioral Economics to Drive Adoption and Save Money in Your Organization

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Initiatives: Manufacturing IT Optimization and Modernization

CIOs and other business leaders are seeking ways to save money, create better digital experiences and empower digital transformation. This document gives an introduction to how behavioral economics can be used by IT to help change an organization or product and do it with small and subtle efforts.

Overview

Key Findings

- People are ruled by common psychological biases that lead them to make decisions that aren't always rational.

- IT leaders are under pressure to deliver optimization of processes to drive efficiency gains and to motivate people in the organization to adopt new technology.

- Projects or initiatives sometimes fail or don't live up to expectations because employees or consumers don't behave the way they are expected to.

Recommendations

CIOs trying to optimize operations in manufacturing and transportation should:

- Determine whether their organizations have a behavioral insights team, and if they do, see whether that group could save money or change culture by designing interventions using behavioral economics.

- Create pilot interventions and then test them to see if they deliver results in areas where there seems to be a misperception or inaction related to a product or process.

- Prevent misfires on behavior change by hiring a behavioral insights consulting team if your organization doesn't have in-house talent.
Introduction

Companies have begun to take advantage of behavioral insights teams to drive better outcomes in their organizations. These experts look at common human tendencies and design products, systems, interfaces, incentives and disincentives in order to drive better outcomes. Many of the most mature organizations using behavioral insights are in the finance industry, but fundamentally, the insights can apply to any company.

Trying to take advantage of some of these mental shortcuts and biases while avoiding others is the basis of a field of study called behavioral economics. This is a method of economic analysis that applies psychological insights into human behavior to explain economic decision making. It isn't always related to money; it may relate to a less tangible value. This research will help demonstrate how, as a leader in IT, you can take advantage of it to drive positive outcomes in your organization.

Some of the observations about how people act irrationally can be put into common aphorisms — like "don't go throwing good money after bad." This saying refers to a real behavioral heuristic called the "sunk cost fallacy." It is seen in situations in which people think that they can redeem bad investments by continuing to invest in something that has been shown to be a bad investment. The truth is, they won't get that wasted money back.

IT leaders and CIOs, in particular, have the ability to be "choice architects" by having a hand in the design of digital interfaces and processes where people in their organizations and customers of their products are frequently making decisions.

Putting snack food near the check-out in a grocery store is an example of choice architecture. In the context of IT, choice architecture might be building defaults into a system to make it easier to use. Or it might be using data to show a person that his peers are doing a desired behavior to encourage him to do so, as well. This is designing by taking into account how people actually act — not how we would like them to act. 1

Analysis

Let's start with a story. The University of Pennsylvania Health System was upgrading its systems and providing doctors with electronic tablets on which they could enter patient information and order prescriptions. A programmer in the IT department knew that it was the policy of the hospital to have doctors order generic drugs whenever possible. So, he decided to make a change in the interface. The drug ordered for a patient would default to the generic drug unless the doctor checked a box to specifically order a name-brand drug. The programmer may not have known it, but this subtle change in the interface saved the hospital system $32 million over two years. Why? Because doctors are harried and busy, and sometimes they simply prescribed drugs they remembered by name or they just didn't bother entering the generic.

This use of a default toward the desired outcome of ordering a generic drug, while maintaining choice, is a powerful demonstration of “choice architecture.” It is a way that an IT organization can drive better
outcomes, spending virtually no money by simply taking advantage of the way that humans operate.

Defaults are a very powerful tool in the hands of smart CIOs and may be the simplest way to implement behavioral psychology and economics in your organization.

Identifying Problems

Behavioral scientist Jason Riis, who runs consulting firm Behavioralize, says an organization can begin to find areas where improvements could be made by spotting two common ways that people get on the wrong track:

1. **Misperception of reality** — of value, product, people, self, market, ease, difficulty

2. **Inaction** — problems with adherence, follow-through, initiative, change, closing, completion time

For example, a salesperson may perceive that a new CRM system that is being implemented by IT is worse than the existing system. Or a developer may believe that an interface that IT has designed is easy to use when, in fact, it is challenging, and employees or customers don't use it. These are misperceptions of reality. In the first case, the salesperson simply hasn’t used the new system enough to see the benefits. In the second case, the developer’s deep knowledge of the system blinds him to how difficult it is to use.

Figure 1 shows an example of how a behavior could be corrected, tracing the problems and potential solutions. Two common reasons for behaviors not lining up is that there is a fundamental reality that is misunderstood for some reason, often because of biases or mental shortcuts that people have. To be sure, often a perception is correct. If someone attempted a process — like filling out forms — and it was difficult and confusing — that is not a misperception. Misperception changes the intention and leads either to the wrong action or to no action at all. Inaction, the second challenge, is often caused by friction or a misperception of the reality.
Figure 1: Using IT to Improve Behavior Outcomes

Using IT to Improve Behavior Outcomes

Inaction in an organization or with an external-facing product or service is a major issue. Inaction for instance, occurs when people don’t fill out and return a form in a timely manner, or when they put an item in an online cart but never check out or when they fail to complete required internal training courses.

Here is a sample problem that uses Dr. Riis’s framework for identifying issues. The reality is that traveling by bus in a city is inexpensive, it often takes less time than commuting by personal vehicle and it is fairly simple. The perception is that it will take more time, and because many people aren’t familiar with the schedule, they worry about navigating the system or getting lost. Therefore, they do not take the bus. To change the behavior, you would try to create an intervention that corrects the misperception (taking the bus will take too long) and eliminates the inaction (I won’t take the bus).

The city of Vancouver worked with The Behavioral Insights consulting team to implement a series of interventions to get infrequent users to use the bus. These included trip planning text messages, real-time visibility of bus locations and travel times, and a simplified payment method. The series of changes that led to greater adoption.

Creating Interventions
After identifying an area where you would like to see a change, the next step is to create the intervention to change the behavior. The intervention can take many forms, and in today’s digital world, IT will likely be designing the system, architecting it and creating it.

If your organization doesn't have a behavioral insights team, it may be worthwhile to hire a consultant to design an intervention. But if that's not an option, a framework and a checklist developed by The Behavioral Insights Team might help you (see Note 1).

The EAST framework applies four principles of behavior change — easy, attractive, social and timely — that take advantage of a series of the biases that we mentioned earlier. While there isn't an exact prescription for a tool in each of these categories, there are some common applications for them.

**Easy**
Make something easy to do. The framework gives these three tips:

- **We have a strong tendency to go with the default or preset option, since it is easy to do so.** Making an option the default makes it more likely to be adopted. How strong and important are defaults? Google pays Apple more than $11 billion a year to make Google the default search engine on iPhones.

- **Reduce the “hassle factor” of taking up a service.** The effort required to perform an action often puts people off. Reducing the effort required can increase uptake or response rates.

- **Simplify messages.** Making the message clear often results in a significant increase in response rates to communications. In particular, it's useful to identify how a complex goal can be broken down into simpler, easier actions.

Defaults might be the most straightforward way for IT to affect behavior. The key here is to create defaults that are usually good for most people, but maintain choice for those who need more flexibility. Any person in IT would be familiar with the default installation of an operating system versus the “custom” installation. Imagine the average user installing an OS where every instance gave a long series of choices and the outcomes of those choices wasn't clear to the person.

**Recommendation:** Look for processes and workflows where a no-harm default could be set up, such as a purchasing order or a CRM entry.

**Example:** A salesperson is supposed to follow up a sale with a visit to a client for a detailed discussion of CRM features that were previously explained. But this is tedious and compliance is low, especially with clients who are frequently visited. IT creates a one-button entry into the CRM for a “normal” visit that fills in the common elements. Then, there is an option for a unique visit where there are special instructions for a follow up and the ability to adjust the other fields in the system.

**Attractive**
Make something physically look good or emotionally attractive by making it personal. The use of images, color or personalization may help change behavior. Design incentives that appeal.

Blood banks in Sweden and Australia implemented a system that automatically sent a text to donors telling them when their donated blood was used. In Australia, it led to a significant increase in the percentage of people who gave blood again. In addition, nontraditional financial incentives, like a lottery, have been shown to be much more effective at changing behavior than straight financial reward, and they cost less to implement. In fact, some banks have created lotteries for people who put money into savings accounts. This has been an effective way to get low-income people to save money as an alternative to spending on traditional lotteries.

**Recommendation**: Look for ways to personalize data for users that might intrigue or delight them, or use a lottery to incentivize use rather than a simple financial benefit.

**Example**: An automaker is having trouble getting people to use a new feature in its connected vehicle mobile application, and advertising hasn’t been successful. The automaker decides to have a lottery offering a substantial award that is automatically logged as a submission every time someone uses that feature. Taking cues from the first tip in the framework — to make it easy — the submission is done automatically by IT with no effort from the user.

### Social

Social pressure, commonly expressed by peer or societal pressure, is a very effective way to change behavior. Governments have done experiments using different language on tax bills. They found that telling people that most people pay their taxes on time was more powerful in motivating tax payment than letters with threats, offers of help or explanations of the benefits that their tax dollars provided.

You can show that most people in their situation do the desired behavior. And you can also stop yourself from highlighting that a problem is commonplace, which might inadvertently give people a kind of permission to do the opposite of a desired behavior.

**Recommendation**: Use social pressure to your advantage by finding ways to socialize the positive behavior you are looking for.

**Example**: A company’s telephone costs skyrocketed during the pandemic, and the CIO encouraged employees to use VoIP phones instead. The company then publicized that a significant percentage of people had switched, leading to real savings. This drove even more people to change their behavior.

### Timely

An intervention needs to be made when people are most open to change, or most aware of the behavior that needs to be changed. They struggle with decisions when their effect is not clearly visible. Making
interventions for behavior in sync with when people are most apt to change — or right after a good or bad behavior happens — is the most effective way to get results.

For instance, people are more open to changing behavior when they already are going through a big change in routine, like after moving, or having a child, or changing a job. Being able to use information about people's potential life changes to introduce a potential behavior change could be an effective way to design an intervention.

In addition, praising someone or rewarding them immediately after they have done something the way you would like helps to strengthen the response.

**Recommendation:** Look for ways to send real-time feedback on positive or negative behavior and try to make it social or attractive, as well.

**Example:** A fleet management program delivers a text to a driver when he drives a route smoothly in an area that normally results in harsh braking because drivers are driving too fast in a busy urban area. The text is timely, so the driver knows which section of the route is being recognized.

In addition to the EAST framework, The Behavioral Insights Team has developed a checklist for creating policies. It can be used in conjunction with the EAST framework when creating both internal and external policies to help generate the best outcomes.
## Table 1: MINDSPACE Framework

<table>
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Source: The Behavioral Insights Team

### Evidence

1. A study that showed that nudges — a type of choice architecture — are effective in changing behavior. [Do Nudges Actually Work?](https://www.thebalance.com/do-nudges-actually-work-2057125) The Balance

2. [How to Save $32 Million in One Hour](https://www.freakonomics.com/2014/09/30/how-to-save-32-million-in-one-hour/), Freakonomics

3. [Behavioralize](https://www.boards-institute.org/resources/behavioralize)

4. [Applying Behavioural Insights to Transportation Demand Management](https://www.alta-planning.com/resources/applying-behavioural-insights-to-transportation-demand-management), Alta Planning + Design and the Behavioural Insights Team

5. A breakdown of the EAST framework and how it can and should be used. [Four Simple Ways to Apply Behavioural Insights](https://www.thenetnews.com/2016/04/07/four-simple-ways-to-apply-behavioural-insights/)
6 Evaluation of the Impact of a Personalized Postdonation Short Messaging Service on the Retention of Whole Blood Donors, Transfusion

7 What Are Prize-Linked Savings Accounts?

Note 1: The Behavioral Insights Team

The Behavioral Insights Team was formed as part of the U.K. government and was spun out into a public consultancy.

Recommended by the Author

Create Self-Sustaining Culture Hacks by Applying Nudging Techniques

Introduction to 4 Psychological Hot Spots in Transformation

Spend Smarter to Accelerate COVID-19 Recovery and Renewal

U.S. Healthcare Payer CIOs Use Technology Innovations to Tackle Managed Medicaid Operating Model Changes

Maverick* Research: Climate Change Needs a Digital Drug Against Delusion
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