CHANGING THE GAME

A New Playbook for Government Financial Management

BY ANTONIO OFTELIE

The game is changing for government chief financial officers. The convergence of advanced analytics, evidence-based budgeting, and behavioral economics has the opportunity to transform not only how programs are evaluated and decisions are made, but also how program design can be improved to create greater public value. Together, these methods will help solve the problems that are often present in traditional ways of managing program investment — a zero-sum game where someone wins and someone loses, the "budget office" becomes either a hero or villain, and value for citizens isn't fully achieved.

MANAGEMENT TECHNIQUES

Advanced Analytics. Advanced analytics is the use of technological platforms, social networks, environmental sensors, data storage, and data analysis methods (both people and software, and what's referred to as "big data") that allow better measurement across the entire enterprise of inputs, outputs, outcomes, and impact. When these measures are put together, leaders can assess the performance of a system from a wider perspective — across departments, agencies and jurisdictions — and from deeper within programs and operating units. This analysis can then drive innovation in programs and the creation of new services.

As a case in point, the New York City Mayor's Office of Data Analytics is now employing analytical techniques at an enterprise level to capitalize on opportunities to improve and transform services. The office began in 2011 with just three junior analysts, some old computers, spreadsheets, a lot of performance reports, and data that were siloed in different agencies. Now, the unit is working on city-wide challenges, and its insights help city employees perform their jobs more effectively, with a measureable impact that benefits New Yorkers through more responsive and accurate services.

For example, the "Databridge" platform allows authorized users to analyze and share current and historical data, enabling predictive modeling to uncover useful insights buried in the data.[1] For one project, the analytics team developed a mobile inspection app to combine data from different departments and agencies for buildings and neighborhoods. Previously, anyone who led a property inspection had to gather information from multiple agencies.

Databridge is useful in real-time as well. In the past, first responders to emergencies had little advance information. Before sending out a fire truck, they might have had to query the Department of Environmental Protection system about hazardous materials storage and check with the Department of Buildings systems to find out about recent construction that could affect sprinkler systems. Now, the app allows the fire department to query all building records and assess the circumstances immediately, predicting the most dangerous situations and ultimately saving lives.

Evidence-Based Budgeting. Evidence-based budgeting uses rigorous analysis of program investment, outputs, and impact relative to outcomes to quantify return on investment and other financial metrics. The "engine" of evidence-based budgeting is the randomized control trial, which compares metrics of one program (via data on program outcomes and impact) to those of a control group or program. Historically used for scientific experiments, this technique is rapidly gaining acceptance for use on social programs and initiatives that produce a lot of data. This form of analysis is unequaled in its ability to measure or provide "evidence" of a program's results.

Evidence-based budgeting is becoming a central strategy within the White House and the executive branch. A recent U.S. Office of Management and Budget (OMB) memorandum notes, "An important component [of the president's management agenda] is strengthening agencies' ability to continually improve program performance by applying existing evidence of what works, generating new knowledge, and using experimentation and innovation to test new approaches to program delivery."[2] For the first time in history, the White House is piloting mechanisms that tie funding streams to tiered-evidence approaches. Under this tiered model, the projects that get the most funding are those that exhibit the strongest evidence of effectiveness, and the least-funded projects are

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considered new "high-potential approaches" that still require evidence.[3] Five agencies currently use the tiered-evidence approach to support innovation in education, health care, workforce development, and the social sector.[4]

Behavioral Economics. Behavioral economics combines insights from psychology and consumer economics to reveal how people actually make choices and what motivates them as they make economic decisions. It is different from traditional economics, which assumes that people are "rational" decision makers. Behavioral economics has found that people are influenced by habits, biases, and social norms that can lead to poor decision making. Applying "nudges" — changes to program and service design, based on behavioral insights — can improve outcomes and answer questions around why policies fail and how they might be improved.[5]

The benefits of using behavioral economics in creating effective public policies have been demonstrated by an initiative of the British government called the Behavioral Insights Team (BIT), a.k.a. the "Nudge Unit." According to its website,[6] the BIT claims responsibility for "encouraging and supporting people to make better choices for themselves and considering the application of behavioral science to policy design and delivery." Akin to a policy research lab, BIT (now a public/private organization) scientifically tests approaches to a public policy program through randomized control trials that take human behavior into account to determine the most effective interventions.

The Nudge Unit has had some notable successes. One BIT study — of a government employment center — led to adjustments including simplified intake forms and commitment-based agreements with job seekers, which improved client follow-through. This "nudge" led to a 15-20 percent increase in clients finding jobs within 13 weeks.[7] Another study increased the number of people paying their taxes by telling them that their neighbors had already paid, an intervention that saved approximately 20 times the cost of the program. The unit also improved efforts to collect road tax. The response to letters previously sent to offenders was weak, but the number of payments tripled after the Nudge Unit simplified the letter and added a photo of the offender's car, with a headline warning "Pay your tax or lose your car."[8] Other BIT initiatives include testing the best messages for increasing the number of organ donors and incentives to get people to insulate their attics.[9]

THE NEW PLAYBOOK

The convergence of these three methods is already changing the environment for government performance. Advanced analytics makes it possible to analyze information in order to understand where performance needs improvement. Evidence-based budgeting relies on rigorous evaluations that allow policymakers to measure *whether* a program or policy is a prudent investment. Insights from behavioral economics can then be used to help explain *why* a program or policy worked as designed or not, and *how* improvements in design can lead to better outcomes and public value. By putting all three methods together, policymakers and financial officers are able to provide new forms of guidance, recommendations, and expertise to government as a whole.

A key capability and value of the convergence of analytics, evidence, and behavioral economics is its ability to improve policies and programs, both retrospectively and prospectively. A framework for making this happen is "choice architecture," advanced by Harvard Law School's Cass Sunstein in his book *Simpler: The Future of Government*. Choice architecture, according to Sunstein, is the "social environment in which we make decisions,"[10] and it affects the way people interact with and respond to government regulations and programs. Government executives can help people make better (and more rational) decisions by improving performance through strategies like simplifying program design, changing the default decision points, and modifying active choices.

An example of this fusion is the way the U.S. Department of Agriculture, Food, and Nutrition Service is making use of evidence and behavioral economics for demonstration projects to improve child nutrition. One

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project tested a simple, low-cost intervention using insights from behavioral economics and choice architecture. It found that fruit placed in a colorful bowl in a convenient part of the school lunch line led to a 102 percent increase in fruit sales.[11] Based on these findings, policymakers can direct funds to the National School Lunch Program to scale up this type of intervention in school lunchrooms across the country. This example — one of many — shows how an understanding of human behavior enables the government to evaluate a program's impact, in a cost-effective way, before committing resources.

In another example, the U.S. president's fiscal 2015 budget proposal included funding directed to the Department of Treasury for a new "starter" retirement savings account, called "myRA," to help more Americans save for retirement. Employers will offer the program, which automatically enrolls employees in IRAs. This initiative draws on findings from behavioral economics, which demonstrate that individuals are more likely to invest in retirement plans if enrollment is the default option.[12] In this case, accepting human nature (i.e., that people tend to discount the future) is in many ways the best and cheapest available evidence that government can use to help people make the right decisions.

The retrospective impact can be just as powerful as the prospective. As part of a U.S. Presidential executive order[13] that requires federal agencies to conduct "regulatory lookbacks," the U.S. Department of Health and Human Services has simplified policies and, as a result, anticipates five-year savings in excess of $5 billion. Looking forward, the rise of social impact bonds shows the potential value of leveraging insights from program data, designing customer-centric interventions, and showing evidence of savings and return on investment for bondholders. In 2014, 17 states had cross-functional and cross-sector teams developing or launching "pay for success" initiatives such as social impact bonds.[14]

The convergence of these methods will also lead to efficiency in overall performance management. Large-scale randomized controlled studies on program effectiveness can often be expensive. Governments can minimize the costs of conducting rigorous evaluation by using insights from behavioral economics to create targeted and simplified studies. Behavioral economic principles provide a new lens through which organizations can look at evidence. When a program or policy fails to produce the intended outcome, these principles can help prompt policymakers to reframe their questions

and reassess the scope of the problem. Thus, data, evidence-based budgeting, and behavioral economic principles can be used in concert to not only optimize the allocation of limited budgeting resources, but also the design and implementation of policies and programs that create desired outcomes. It helps government spend scarce tax dollars in ways that provide the services the public finds most beneficial.

PUTTING IT IN PLAY

As much as the convergence of advanced analytics, evidence-based budgeting, and behavioral economics will bring about new capacity for transforming government performance, it's not a quick fix or silver bullet. Convergence of these methods represents a major shift in the way government operates, requiring organizations to acquire and adopt new competencies. In this new way of managing performance, "the budget office" will have a substantial role in creating, analyzing, and evolving government programs and their outcomes.

The key is for government financial officers to understand how this convergence can be applied, and to take a series of steps to integrate them into operations over time. Below, a four-stage implementation plan provides a model to start with.

Step One: Launch an "Insights Unit" to Make Use of Advanced Analytics. There's a wide spectrum of how robust analytics can be — from a small team of people collecting and analyzing data in spreadsheets to enterprise-wide automated systems — but the key is to find new and useful insights from previously underutilized information. It is vitally important to have executive sponsorship of the unit and to task it with finding solutions to unsolved problems.

Step Two: Implement an "Evidence Lab" to Conduct Evidence-Based Budgeting Pilot Programs. This unit can manage a small portfolio of policies and programs that it will assess and report on. In the early stages, the lab may have to rely on comparisons across state, jurisdictional, or sector lines, as running full-scale comparative analysis can be challenging. Then, as the lab matures, it can start providing guidance on whether or not select programs should be funded or if innovation is needed to improve outcomes.

Step Three: Start a "Nudge Team" to Develop Policy and Program Innovations that Make Use of Behavioral Economics. The role of this team would be to assess the design of policy and/or citizen-facing programs and find opportunities for simplification and improved choice architecture. The team can work with agency leads to develop innovations that enable better constituent decision making, enhance customer interactions, and improve subsequent outcomes.

Step Four: Converge the Insights, Evidence, and Nudge Teams in Order to Develop an Enterprise-Wide View of Opportunities. The goal should be to embed this new form of performance management throughout the entire spectrum of policy creation, program development, service delivery, and evaluation. As the organization matures, it should be able to review old regulations and program guidelines, as well as providing analysis of new policies, programs, and interventions.

CONCLUSIONS

The fusion of the three methods discussed — advanced analytics, evidence-based budgeting, and behavioral economics — enables policymakers and financial officers to provide new forms of guidance, recommendations, and expertise to government as a whole. But government leaders will have to take concrete and sequential steps to adopt the methods, scale them up over time, and institutionalize the capability.

The bottom line is that understanding and making use of this convergence can significantly improve policy outcomes while lowering costs in direct operations.[15] And while this in itself is valuable, the extent to which the fusion of advanced analytics, evidence-based budgeting, and behavioral economics can change the mindsets of policymakers is also at stake. As best stated by Richard Thaler, one of the founders of behavioral economics, the "lasting impact is that … such experimentation is rare in government policy, where neither legislators nor bureaucrats are eager to acknowledge that they don't already know the best way of doing things."[16]

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Notes

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