CHAPTER FOUR

Managing Performance

John M. Kamensky

Highlights

- Performance management initiatives over the past two decades helped shift the conversation within and across U.S. government agencies—from a focus on measuring program activities and outputs to a focus on achieving mission outcomes.
- These performance management initiatives started with developing a supply of information via new routines, then moved to the use of more sophisticated techniques. Together, these information-gathering efforts have gradually contributed to a greater demand for performance information by decision makers.
- Trial and error led to the development and institutionalization of a performance management framework for the federal government, and this performance management framework has successfully navigated the transition to successive administrations.

MANAGING PERFORMANCE

By John M Kamensky

In the early 1990s, the U.S. Coast Guard had based its marine safety efforts on inspections and certifications of vessels such as tug boats. The Coast Guard measured its marine safety performance by counting the number of inspections and outstanding inspection results that it conducted. A new law encouraged it to shift its performance focus to counting the number of accidents, injuries and deaths. The Coast Guard then investigated the causes of accidents and found they were largely caused by human error, not equipment failures. As a result, the Coast Guard shifted its enforcement strategy from inspections of vessels to a joint effort with industry to train crew members how to avoid accidents. For the towing industry, the fatality rate dropped 70 percent between 1990 and 1995.[1]

INTRODUCTION

The U.S. federal performance management movement is rooted in the passage of the Government Performance and Results Act of 1993. But this was only one milestone in a much broader trend toward the development and use of performance information that includes international, state, local, and nonprofit participants.

The scope and depth of different approaches to performance management makes this topic difficult to characterize, but academics offer several conceptual models to describe the many variations. For example, Geert Bouckaert and John Halligan offer four models of performance management systems that constitute a continuum of four different levels of maturity:

- **The performance administration model**: Formal, procedural mechanisms create a linear input/output measurement system that focuses on program productivity and efficiency.
- **The siloed performance model**: Specialized performance systems for different functions and programs are disconnected and lack integration among components, even within the same organization.
- **The performance management model:** Performance measurement used not just for accountability but for learning and improvement of operations within an agency. Performance information is systematically generated, integrated, and used.
- **The performance governance model:** Collaborative approaches replace hierarchical performance management, and are cross-agency and cross-sector in approach. Multiple independent actors contribute to the delivery of public services and inform policy making in conjunction with non-governmental actors.[2]

These four notional performance management models do not exist in a pure form anywhere, but they provide a useful construct for understanding how different approaches to performance management have evolved over the past 20 years, and where it might go in coming years.

Enduring Challenges of Performance Management Drive Reform Efforts

Performance information has long been collected and used to varying degrees at the federal, state, and local levels in the U.S. since the early 1900s, as part of the reforms brought about by the Progressive Movement. Localities and several state governments began developing performance measurement systems more methodically in the 1970s. The federal government undertook some performance-related initiatives, such the Defense Department's Planning, Programming, and Budgeting System (PPBS) of the 1960s, but other agencies did not begin in earnest until the passage of the Government Performance and Results Act of 1993 (GPRA). That law required federal departments and agencies to develop strategic plans, annual performance plans, performance measures, and annual performance reports.

By 2010, a number of lessons had been learned in how to effectively develop, use, and govern a performance management system. Many of these lessons came from the Government Accountability Office's (GAO's) observations in various reports on GPRA's implementation, but also from agencies' practical experiences with the effectiveness and impact of various performance management routines. Changes based on these lessons were incorporated into the GPRA Modernization Act of 2010.

The overarching implementation challenges highlighted by GAO and others pointed to two enduring realities faced by agency implementers, which continue today:

- **Too much focus on measuring outputs vs. outcomes**: The traditional hierarchical governance model, especially at the federal level, tends to be more suited to focusing on accountability for producing "outputs," such as the student-teacher ratio in classrooms, or the number of hours of instruction in given subjects. It is less suited to producing "outcomes," such as the percentage of high school students who graduate and either get a job or pursue higher education. Achieving outcomes requires dynamic cross-agency measures and the use of collaborative governance approaches (see Chapter Six). Again, some progress has been made in this dimension, but largely around the edges of the performance management framework.
- **Lack of a demand for performance information:** The law effectively mandated a supply of performance plans, measures, and reports, but did not influence decision makers' behaviors sufficiently to create a demand for performance information. Numerous efforts, ranging from creating incentives through the use of scorecards to creating new organizational models, have yet to "crack the code" to embed the use of performance

information more systematically in budgeting. In contrast, agencies have made progress in using performance information more regularly to administer programs. One area of focus in recent years has been on the supply of information—making it more readily interpretable via visualization and other interpretive tools, as well as more timely so decision makers will see it as more relevant. However, absent a stronger integration between performance and budget systems, the use of performance information by decision makers may continue to be episodic.

In addition to federal performance-related efforts, a number of state governments adopted similar laws to GPRA. Similarly, professional communities (such as those involved with the implementation of foster care programs) and municipal professional associations developed standard measures for common functions, such as waste collection and emergency response. In addition, by the 2010s, a number of nonprofits, foundations, and advocacy groups supported initiatives related to improved performance, evidence, and analysis.

Organization of Chapter

As seen in the chart titled, "Evolution of Performance Management: 1998-2018," the evolution of the performance movement in the U.S. federal government during this time period can be divided into three phases:

- **Early action**: In response to the adoption of the Government Performance and Results Act of 1993, federal agencies began developing performance management routines to create a supply of performance information. This started with the development of agency strategic plans, annual operating plans, performance measures, data collection systems, and data reporting systems. These efforts reflect the first two of the four performance management models described by Bouckaert and Halligan. In addition, there was a new focus by agency leaders on achieving program "outcomes" instead of "outputs." While agencies made a limited use of performance information to manage at the federal level, there were pioneering efforts to do so at the local level.
- **Expansion**: This phase reflects the beginning in the shift from creating a supply of performance information, to creating a demand for its use by managers and policy decision makers. This included uses such as for accountability, operational management, and to inform budget and pay decisions. This phase can also be characterized as the beginning of the development of more sophisticated approaches to collecting and using information, such as measures of "unobserved events" (e.g., illegal drug smuggling) and predictive measures, such as where and when crimes are more likely to occur.
- **Institutionalization:** Lessons learned from more than a decade of experimentation and observation were incorporated into an update of the

GPRA law in 2010. This included newly defined governance structures, a more stable operating framework, and new authority for agencies to work collaboratively on shared outcomes. In parallel, technological advances made data collection and reporting less burdensome and more available for analysts and decision makers. This contributed to new demands for evidence-based decisions and new performance-based program models, such as tiered evidence grants and Pay-for-Success programs.

Even with expanded institutional capacity, enduring challenges continue for the performance management movement's efforts to mature to the point of achieving the "performance governance" model described above by Bouckaert and Halligan. This will require better integration with other management

Evolution of Performance Management: 1998—2018

1998 → 2001

Early Action: Creating a Supply of Performance Information

- Developing new performance routines
- Expansion of Performance-Stat Model
- Creating a new agency model

2002 → 2010

Expansion: Creating a Demand for Performance Information

- Increasingly used for:
  - Accountability
  - Organizational Performance
  - Budgeting
  - Pay Decisions
- Increased maturity in the development and use of performance information

2011 → 2018

Institutionalization: Embedding Performance into Broader Governance Framework

- Implementation of GPRA Modernization Act
  - Performance management framework
  - Agency strategic reviews
  - Staff capacity
  - OMB Evidence Unit
- Growth of Evidence-Based Government initiatives

systems in use within government—personnel, technology, regulatory, budget, etc.—and a greater availability of granular, real-time, and contextually-relevant performance information. However, the most significant challenge facing government leaders will involve adopting performance management approaches as their day-to-day leadership strategy, and not just another set of government compliance processes.

The remainder of this chapter details these three phases and concludes with lessons learned and observations as to what policy makers may face in the next few years as the performance movement continues to evolve.

The reader will note that this chapter discusses issues that are also raised in Chapter Three, "Using Data," and Chapter Six, "Becoming Collaborative."

EARLY ACTION: CREATING A SUPPLY OF PERFORMANCE INFORMATION

By 1998, GPRA had been in place for five years, but its requirements were only beginning to be applied governmentwide. The 1993 law called for at least ten pilot projects for performance goal-setting in agencies before a governmentwide launch in 1997, but OMB actually approved about 70 pilot projects between 1994 and 1996. As a result, many efforts emerged across the federal government to develop a set of routines—or administrative processes—for planning, measuring, and reporting. Multiple agencies or programs also significantly rethought approaches to achieving their missions as a result of implementing the new law.

Developing New Performance Routines

Even with the passage of the Government Performance and Results Act of 1993, it took a long time before agencies developed the necessary administrative routines to meet the law's requirements. The law required a series of pilot projects for developing approaches to:

- strategic plans and goal setting
- annual performance plans, measures, and targets
- performance reports and program evaluation

GAO was directed by Congress to assess agencies' compliance with the implementation of the law's requirements. The first agency strategic plans were to be in place by September 30, 1997, the first annual performance plans by September 30, 1998, and the first annual performance reports by early 2000. These requirements trickled down to the bureau and program levels in departments and agencies at different rates, with different experiences in how the new performance routines were adopted. Some were complianceoriented, while others used the new routines to rethink how they met their mission objectives.

Strategic Planning and Goal Setting

GPRA required agencies to develop strategic plans covering at least a three- to five-year period. This included the development of mission statements and setting long-term goals. For example, the U.S. Air Force in 1997 completed a corporate strategic plan with stretch goals that reached out to 2025. Colin Campbell, in a 2000 report, *Corporate Strategic Planning in Government: Lessons from the United States Air Force,* described how the then-chief of staff of the Air Force, General Ronald Fogelman, assembled all of the Air Force's four-star generals in 1996 to develop a long-term vision via a collaborative process.[3] He then staffed the development of the plan via a Board of Directors comprised of the Air Force's three-star generals. This led to the identification of 16 key potential issues, of which four were then further fleshed out.

However, General Fogelman retired before the plan was implemented. The transition to a new Air Force chief of staff with different priorities led to a delay and then the development of a new plan, completed in 2000. Unlike the 1997 plan, the process leading to this new plan engaged the Secretary of the Air Force—not just uniformed military officers—and resulted in a shorter timeframe. Instead of 30 years, it focused 20 years out.

Campbell observed, "Corporate strategic planning does not come naturally to organizations within the U.S. federal government."[4] He found insufficient staff capacity and too much turnover of top leaders to gain commitment to longer-term objectives, but that efforts to be collaborative and engage stakeholders helped ensure ultimate success. He concludes that the development of a strategic planning routine would likely involve a good deal of trial and error to develop a sustainable process. This observation was borne out in many other agencies, according to GAO's assessment of the implementation of agency strategic plans.[5]

Annual Plans, Measures, and Targets

Effective strategic plans should tie to an agency's day-to-day operations in order to be meaningful. This requires the development of annual operating plans linked to resources, meaningful measures of progress, and target-setting.

A particularly challenging example of the development of action plans and measures is when this kind of effort is undertaken across multiple agencies that are working toward a common result. The Office of National Drug Control Policy (ONDCP) pioneered the creation of a Performance Measurement and Evaluation System in 1997. ONDCP orchestrates the joint efforts and strategies of more than 50 federal agencies, with combined resources of $19 billion, toward anti-drug efforts.

In a 2001 report, *The Challenge of Developing Cross-Agency Measures: A Case Study of the Office of National Drug Control Policy*, Patrick Murphy and John Carnevale described the evolution of ONDCP's performance system that spans organizational boundaries. They concluded that even with the statutory limitations of ONDCP to focus primarily on coordination—without any authority to direct agency compliance—"it managed to produce an impressive set of goals, objectives, and performance measures intended to improve the management of federal drug control efforts.[6]

However, measurement systems sometimes have unintended consequences. In response to GPRA, the Department of Labor pioneered the development of a performance management system in the late 1990s for the then-new Workforce Investment Act. In a 2005 study, Carolyn Heinrich examined the implementation of the new system and found the target-setting problematic for unforeseen reasons.[7] The system had three elements:

- performance measures to evaluate progress toward goals
- a method for setting standards and performance targets, and for measuring progress against those targets
- rewards and sanctions for achieving goals

The performance targets to be achieved were negotiated with each state using prior year baseline data. But economic conditions changed with the 2000 recession, so states began to miss their targets for reasons outside their control. Heinrich noted: "...states were not prepared or in a position to adjust for dramatic economic changes that led to significant risks of failure to meet performance targets during an economic downturn."[8]

Performance Reporting and Program Evaluation

A key rationale for performance management systems lies in their value in creating accountability and learning opportunities, so as to improve performance in the future. This is typically manifested in performance reporting and program evaluation routines. Program evaluation routines were pioneered in agencies—beginning in the 1970s, in social services agencies such as the Department of Health, Education and Welfare (HEW)—but experienced a lack of support until the early 2000s.

In a 2009 report, *Performance Reporting: Insights from International Practice,* Richard Boyle examined the performance information in a sample of performance reports from four countries (Australia, Canada, Ireland, and the U.S.) in order to identify commonalities, differences, and key attributes of effective reporting of output and outcome information.[9] He found: "On the whole, indicators in the U.S. reports are more likely to report on outcomes, be quantitative in nature, meet data quality criteria, and have associated targets and multiyear baseline data." Interestingly, the U.S. went a step further with the adoption of the GPRA Modernization Act of 2010 stipulating that agency performance reporting should be *at least* annual, with more frequent updates of actual performance.

Performance information helps program managers and stakeholders understand "what" happens, but typically does not explain "why" a certain level of performance occurs. Understanding "why" requires deeper knowledge about a program. This is often found by conducting program evaluations. In a 2001 report, *Using Evaluation to Support Performance Management: A Guide for Federal Executives,* Kathy Newcomer and Mary Ann Schierer examined the capacities of 13 large federal departments and 10 large agencies.[10] They found federal agencies generally had a low capacity for conducting program evaluations, but a high demand for valid and reliable evidence to meet the requirements of GPRA.[11] They also found that program evaluation could improve agencies' strategic planning, program delivery, accountability to Congress, and link performance results to specific programs.[12] They concluded that strengthening program evaluation capacity with additional personnel and dedicated financial resources "will enhance the likelihood that the performance measurement and management framework…will result in both improved program management and desired results."[13] Newcomer and Schierer recommended bringing together agency-level program evaluation and program management staffs to "transfer knowledge" between the two professional communities.

Examples of the Early Uses of Performance Information

The use of performance information by managers and political leaders happened more rapidly in the 1990s at the local level than at the federal level. But, as federal agencies began to define outcome-focused goals for their programs, the dialogue between the federal government and states and localities changed with regard to how federal grants should focus more on societal outcomes.

Expansion of the PerformanceStat Model

A new data-driven model for managing performance and accountability—ultimately dubbed "PerformanceStat"—was created in the early 1990s in New York City, rapidly spread to other cities, and was adopted by various state governments and federal agencies over the next decade.

As noted earlier in Chapter Three, "Using Data," the New York City police pioneered the use of what was initially called "CompStat," beginning in 1994, by redesigning the city's police department accountability approach to institutionalize a data-driven approach to policing. Paul O'Connell, in a 2002 report, *Using Performance Data for Accountability: The New York City Police Department's CompStat Model of Police Management,* described how New York City Police Commissioner William Bratton "shocked his subordinates by establishing new, exacting standards of operational performance." CompStat data was gathered and analyzed on a near-real-time basis at the precinct level. Crime reduction strategies were derived from these data via twiceweekly meetings between the commissioner and precinct commanders.[14] O'Connell wrote: "CompStat has transformed the department into a learning organization that can 'analyze, reflect, learn, and change based on experience.'"[15] By 2001, the CompStat approach was attributed to having reduced major crimes in New York City by 63 percent.[16] Because of the success of the CompStat approach in New York City, its use was rapidly expanded over the following decade, covering all city services in Baltimore's CitiStat program under Mayor Martin O'Malley, as described in Lenneal Henderson's 2003 report, *The Baltimore CitiStat Program: Performance and Accountability*,[17] and Robert Behn's 2007 report, *What All Mayors Would Like to Know About Baltimore's CitiStat Performance Strategy*.[18] It also spread to school systems, such as the case detailed in *Philadelphia's SchoolStat Model*, a 2007 report by Christopher Patusky, Leigh Botwink, and Mary Shelley.[19] It then spread to entire states, such as Maryland's StateStat and Washington State's Government Management, Accountability, and Performance (GMAP) system.

Collectively, professor Robert Behn called these related performance management systems "PerformanceStat" in his 2014 book on this management phenomena.[20] However, this approach did not always carry over intact from one elected official to another. Many of these systems disappeared when the top political leaders left; others were sustained, but often evolved in new directions (e.g., Washington State's GMAP became "Results Washington," with a new focus). This probably could have been anticipated, notes Behn, who says "PerformanceStat is not a system, or a model. It is a leadership strategy. For to achieve the strategy's potential to produce real results requires active leadership. Moreover, the leadership team must adapt the strategy to fit its specific public purposes."[21] Thus, it should not be expected that the management styles of one political leader can readily transition to the next political leader.

In a 2003 report, *Strategies for Using State Information: Measuring and Improving Program Performance,* Shelley Metzenbaum found that federal GPRA requirements reinforced existing performance-related conversations between states, localities, and the federal government. Would federal agencies use state- and local-generated data about their performance? Would federal agencies define desired national outcome goals and require states and localities to report on progress towards those goals? How would federal agencies treat goals that states set for themselves?[22] None of these issues were addressed in GPRA. Metzenbaum examined how federal agencies resolved these kinds of issues in a series of case studies involving environmental protection, highway construction, highway safety, and public education.

Metzenbaum found that, "Common measures across states and across time are useful for identifying problems to be addressed and successes to be replicated."[23] She observed that comparative data was a powerful motivator for states to act. She also found that federally mandated goals and measures can work, but that if federal agencies "make it a priority to build measurement systems that serve the needs of those they measure" it would lessen the chances that states would organize to dismantle the measurement system via appeals to Congress.

Creating a New Agency Model

The National Performance Review in 1996 (later renamed the National Partnership for Reinventing Government) attempted to embed performance management into federal government culture by creating a new agency model that would, "Give agencies that deliver measurable services a greater degree of autonomy from governmentwide rules in exchange for greater accountability for achieving results."[24] This model was inspired by the British "Next Steps" executive agencies initiative which began converting away from traditional agencies in the 1980s. By 1997, about three-quarters of the British government had converted to this new agency model, which remains its dominant organizational approach even today. Independent assessments of the model—which had been adopted by other countries as well—found it an effective way to shift agency cultures to focus more on performance than on administrative processes.

The U.S. version was termed a "performance-based organization" (PBO), defined as "a government program, office, or other discrete management unit with strong incentives to manage for results. The organization commits to specific measurable goals with targets for improved performance. In exchange, the PBO is allowed more flexibility to manage its personnel, procurement, and other services." In a PBO, the agency head would not be a civil servant nor a political appointee, but rather someone with strong managerial experience hired via a term contract, with a portion of his or her salary contingent on meeting agreed-upon performance targets. The PBO would receive statutory flexibilities to operate outside traditional governmentwide personnel, pay, and procurement systems.[25]

By the end of the Clinton Administration, three agencies had been designated as PBOs: Air Traffic Operations, within the Federal Aviation Administration; the Office of Federal Student Aid, within the Department of Education; and the Patent and Trademark Office, within the Department of Commerce. The Bush Administration considered adding additional agencies, but never pursued the effort. These three agencies continue in their PBO status.

A New Focus on Outcomes Over Outputs

In addition to developing measurement systems and capacity, GPRA changed the conversation within many agencies. Harry Hatry, Elaine Morley, Shelli Rossman, and Joseph Wholey, in a 2003 report, *How Federal Programs Use Outcome Information: Opportunities for Federal Managers,* profiled 16 federal programs that made use of regularly collected outcome information.[26] A number of these initiatives were initiated in response to GPRA. For example, the Department of Housing and Urban Development (HUD) created in 1998 its Real Estate Assessment Center to collect and assess information on public housing. These data were provided to local HUD program offices to help them “identify risks and direct resources to improve the quality of public housing.”[27] The Assessment Center used its data to create scores for housing projects, which in turn informed improvement plans for “standard” performance and helped teams for troubled performers. The resulting outcome data identified high performers, poor performers, common problems, and solutions.

The focus on outcomes had become part of a worldwide performance management trend. In a 2006 report, *Moving from Outputs to Outcomes: Practical Advice from Governments Around the World*, Burt Perrin provided substantial evidence from a World Bank roundtable of government officials from around the world that a wide range of countries—both developing and developed—were moving toward a results-oriented approach. He wrote: “Implementing an outcome focus represents a fundamental shift in the nature of thinking, acting, and managing within the public sector, away from a focus on *process* and on what one needs to do, to a focus on *benefits.”*[28] He described how the motivating force behind this trend was expressed by participants as: “We are supposed to be in the business of improving services to citizens, and outcomes are what are important to them.”[29] Like in the U.S., other countries used both a top-down and bottom-up approach to linking outcomes to strategy. Perrin concluded with the observation that a focus on outcomes is not so much an administrative initiative as a “fundamental change in the approach to thinking and managing within government.”[30]

EXPANSION: CREATING A DEMAND FOR PERFORMANCE INFORMATION

Performance management routines that created a supply of performance information in the 1990s and early 2000s did not necessarily lead to an expected demand for the information by managers and decision makers. Starting in 1997, GAO conducted periodic surveys of mid-level federal managers on their use of performance information to support operational decisions. Every GAO survey found that only about one-third of managers responded that they used available performance information.[31]

While GAO could not identify why there was so little use, Behn wrote in a 2003 article that: “The leaders of public agencies can use performance measures to achieve a number of very different purposes, and they need to carefully and explicitly choose their purposes. Only then can they identify or create specific measures that are appropriate for each individual purpose.”[32] He also described a series of purposes for which agency leaders and managers could use performance information, such as to evaluate performance, to control subordinates, and to learn and improve performance. Understanding these potential uses helps target strategies to better engage leaders and managers about using performance information in the course of their decision making.

An Increase in Ways Performance Information is Used in Decision Making

Following are four ways that expanded the use of performance information in government agencies:

- greater accountability
- improving organizational performance
- making budget decisions
- informing employee pay decisions

Using Performance Information for Greater Accountability

Metzenbaum, in a 2006 report, *Performance Accountability: The Five Building Blocks and Six Essential Practices,* explored what it means to "hold someone accountable" without creating a culture that would worry primarily about avoiding punishment.[31] Typically, if a measurement system focuses on accountability, managers are incentivized to set lower performance targets for their organizations and themselves. But, she found, if a measurement system focuses on performance improvement, then managers tend to be more comfortable with higher performance targets. Ideally leaders want both, but there are trade-offs. Managing this tension is possible, by creating five building blocks:

- **Goals:** clear, measurable goals that drive the performance of an organization
- **Framework:** a measurement framework that connects individual efforts to the progress and overall outcomes related to the organization's goals
- **Individual Feedback:** one-on-one verbal feedback that stimulates ideas and specific plans for meeting goals
- **Group Feedback**: group feedback that encourages "interactive inquiry," such as the approach used in Baltimore's CitiStat sessions
- **Incentives:** a cautious use of incentives, with a focus on group rather than individual performance

Along with these building blocks, Metzenbaum described managerial practices to ensure the building blocks work. These include actions such as "measurement mastery," where managers study their data to look for patterns, anomalies, and relationships to find what works and what doesn't; and developing longer-term strategies, coupled with shorter-term action plans based on the best available evidence and ideas.

President George W. Bush launched the first President's Management Agenda in 2001. The Agenda included an initiative to "create an integrated plan/budget and to monitor and evaluate its implementation." But this approach was soon seen as too ambitious and vague. The focus of the Agenda became more targeted with the creation of an accountability system for individual federal programs in 2003 in order to make them more results-oriented. The Office of Management and Budget developed an assessment framework, which it named the Program Assessment Rating Tool (PART). The PART was based on a scoring system, ultimately used to assess about 1,000 individual programs. OMB intended to use these scores to hold program managers accountable and to make funding decisions.

In a 2006 report, *Implementing OMB's Program Assessment Rating Tool (PART): Meeting the Challenges of Integrating Budget and Performance,* John Gilmour assessed the progress of the PART initiative and found "little evidence that PART has caused significant changes in program management."[34] Later assessments by GAO confirmed this assessment, noting: "of the federal managers familiar with PART, a minority—26 percent—indicated that PART results are used in management decision making, and 14 percent viewed PART as improving performance."[35]

Using Performance Information to Improve Organizational Performance

Other approaches were employed in attempts to use performance information to improve organizational performance. These approaches met with varying degrees of success. For example, a private sector approach called Balanced Scorecard was adopted by several federal agencies. A 2006 report by Nicholas Mathys and Kenneth Thompson, *Using the Balanced Scorecard: Lessons Learned from the U.S. Postal Service and the Defense Finance and Accounting Service,* examined these two agencies' experiences.[36]

The Balanced Scorecard calls for forward-looking measures that balance different perspectives of an organization's performance in order to create a more strategic assessment of how well that organization meets its vision and strategy. As Mathys and Thompson describe it, "The balanced scorecard, or BSC, is primarily a tool for translating an organization's strategy into action."[37] The typical Scorecard includes financial, customer, learning and growth, and internal business process measures. In their assessment, they concluded, "we have seen some dramatic improvements in their performance resulting from the use of the balanced scorecard and the organizational culture and fact-based improvement that are part of the process," but that it takes a focused effort from top management to sustain.[38] When agency leaders who championed these approaches left, the systems fell into disuse.

A second approach was the expanded use of the PerformanceStat model at the federal level. In a 2010 report, *A Guide to Data-Driven Performance Reviews*, Elizabeth Davies and Harry Hatry described the use of data-driven performance reviews pioneered by several federal agencies.[39] The federal "data driven" reviews were patterned after the PerformanceStat reviews initially developed by states and localities. They consisted of regular, data-driven review meetings led by senior agency officials. For example, the Department of Housing and Urban Development's HUDStat launched in 2010 and focused on four priority goals. Meetings focused on the progress of one of the four goals and were attended by the secretary and up to 30 invited participants from across the department engaged in that particular performance goal.

Based on their observations, Davies and Hatry developed a "how-to" guide for implementing data-driven reviews in other agencies. This approach was ultimately endorsed by OMB and used by agencies to conduct effective, data-driven decision forums. The most notable of these, which successfully navigated the transition from the Obama to the Trump administration, are the annual agency reviews of progress against strategic objectives, and the statutorily required quarterly reviews of progress of agency priority goals.

Using Performance Information to Inform Budget Decisions

A third use of performance information that expanded in recent years has been to inform budget decisions. Anecdotal experience suggests that, at the federal level, Congress only intermittently uses performance information to inform budget decisions—but that executive branch agencies do so on a more consistent basis.

In a 2003 report, *Linking Performance and Budgeting: Opportunities in the Federal Budget Process*, Phil Joyce identifies challenges to tying budget to performance information within executive branch agencies, mainly in the context of the PART tool. At the time, the Bush Administration was also preparing a performance budget based on demonstrated effectiveness of programs. However, Joyce noted, "the relationship between funding and performance is not well understood, even where good performance data exist."[40] He further observed that *saying* budgeting and performance should be integrated "is not the same thing as *doing* it."

A more optimistic assessment was provided by Lloyd Blanchard in a 2006 report, *Performance Budgeting: How NASA and SBA Link Costs and Performance.*[41] Blanchard had been an appointed executive in two large federal agencies (NASA and the Small Business Administration) where he introduced two different methodologies—Full Cost and Activity-Based Costing—in an attempt to connect cost information with performance information. He described each approach, along with their strengths and weaknesses, and offered advice on ways to improve cost allocations in order to better link budget and performance decisions. However, this approach never gained traction with other agencies, and fell into disuse in the two agencies after he left.

A third report, *Four Actions to Integrate Performance Information with Budget Formulation*, by John Whitley in 2014, offered four pragmatic actions agencies could undertake in order to better integrate performance and budget information at a more granular level. He observed that the budget and performance professional disciplines have different data needs and processes and that they need better alignment so performance measurement is seen "as a key component of an agency's internal analysis function, not just a collection and reporting function for external accountability."[42] Whitley's four suggested actions are:

- **Engage agency leadership:** Ensure interest and constructive involvement in using performance information to improve outcomes when making budgeting decisions.

- **Focus on the development and use of analytic talent:** Talent needs to bridge both performance and budget functions within the agency, and analyses that offer alternatives for decision makers.
- **Improve the budget formulation process:** Budget formulation should be "capable of isolating, analyzing, and constructively presenting issues for decisions to leadership."[43]
- **Reform agency budget account structures**: Account structures should align costs of an activity or program within a single budget account and define cost elements that occur in different years so that agency staffs can construct more accurate cost estimates.

While agency-wide use of performance information in budgeting has not been widely adopted, it has been woven into selected elements of budgeting. For example, beginning in 1999, OMB began requiring greater justifications for information technology investments by agencies, requiring agencies to include performance information via its "Exhibit 300B," used by agencies to justify information technology investments. OMB required agencies to "Identify performance targets for evaluating operations," and other performance-related metrics. In the late 2010s, this requirement was absorbed into a broader IT Dashboard that tracks the implementation of IT investments across all agencies.[44]

The topic of performance-informed budgeting will likely remain of interest to government reformers, but past experience shows that acting on any such initiatives will require top-level sustained attention.[45]

Using Performance Information to Inform Pay Decisions

A fourth potential use of performance information has been to inform decisions about levels of pay for civil servants and career executives. Much like performance-informed budgeting, more has been written than done in this area. Nevertheless, it is a perennial topic of interest.

In 2002, legislation creating the Department of Homeland Security authorized the creation of a performance pay system for the department and for the career Senior Executive Service across the entire government. And, in 2003, the Defense Department was authorized to overhaul its personnel performance management system to be more performance-based as well. A 2004 report by Howard Risher, *Pay for Performance: A Guide for Federal Managers,* describes different pay-for-performance models and offers advice to managers in these agencies on lessons learned in designing successful performance-based pay systems in the private sector and in a dozen federal pilot programs. Risher "warns that the transition to a pay-for-performance environment is not going to be easy."[46]

GAO, in a 2009 report assessing the implementation of the new Defense pay system, observed: "As DOD and the components proceeded with implementation of the system, survey results showed a decrease in employees' optimism about the system's ability to fulfill its intent and reward employees for performance." In response to GAO's observations and other complaints about the fairness of the pay-for-performance systems, Congress abolished both the Defense and Homeland Security pay-for-performance systems in early 2010.[47] Nevertheless, in a 2017 testimony before Congress, GAO did not recommend abandoning this approach. It noted that "implementing a more market-based and more performance-oriented pay system is both doable and desirable. However, we also found that it is not easy."[48] In 2018, the President's budget proposed to move from a tenure-based pay system to a performance-based pay system.[49]

An alternative approach being used by some federal agencies is the use of performance-oriented pay-banding. A 2007 report by James Thompson, *Designing and Implementing Performance-Oriented Payband Systems,* examined initial efforts by nine federal agencies that adopted performance-oriented pay banding systems.[50] Pay banding takes the existing 15-step pay structure used by the federal government over the past six decades and allows agencies to restructure job positions into broader categories. For example, one agency reduced its existing 15-step structure into three broad pay bands.

According to Thompson, "With paybanding, there is no need to make fine distinctions between the duties or responsibilities of different jobs because many related titles can be accommodated within a single band."[51] Pay banding provides greater organizational agility by allowing greater lateral movement within an agency. For managers, it shifts the emphasis within the performance system from the "job" to the "person." Thompson "makes the case that successful designs are those that (1) achieve a balance between efficiency, equity, and employee acceptance; (2) acknowledge the importance of soft as well as hard design features; and (3) fit the organization's context."[52] However, to date, this approach has not expanded more widely in the federal government.

Increased Maturity in Development and Use of Performance Information

Another aspect that increased demand for performance information during the expansion years was the availability of new techniques to collect and use data, and more sophisticated treatment of data in analyses that increased the utility of performance information to decision makers.

Easier Data Collection and Visualization Tools

Over the past decade, government began to share administrative data more readily, both within and across agencies. For example, OMB's 2013 directive on open data directs agencies to treat data "as an asset" and to make administrative data interoperable and machine-readable.[53] This is described in more detail in Chapter Three. Related to making data more readily available was the drive to make data more consumable by decision makers.

This is exemplified by the rapid spread of geographical data and dashboards across government agencies. In 2013, a report by Genie Stowers, *The Use of Data Visualization in Government,* noted that, "The best visualizations help viewers understand not only the data, but also their implications."[54]

In a 2010 report, *Using Geographic Information Systems to Increase Citizen Engagement,* Sukumar Ganapati described the rapid spread of mapped data, such as the location of Recovery Act projects around the country, so that citizens could see where these funds were being spent, and by whom.[55] And in a 2011 report, *Use of Dashboards in Government,* Ganapati described the expanded use of dashboards for internal agency and public use, such as the Recovery.gov and Performance.gov websites.[56] Dashboards can put easily digestible information in one place for a busy reader. As Stowers notes, "Even with these more sophisticated means of analysis, government managers still have the challenge of explaining issues and results to decision-makers and the public; that is where data visualization comes in."[57]

More Sophisticated and Nuanced Uses of Performance Information

Probably one of the most interesting developments during the expansion phase was the evolution of more sophisticated and nuanced uses of performance information by program managers and decision makers.

In a 2013 report, *Incident Reporting Systems: Lessons from the Federal Aviation Administration's Air Traffic Organization,* Russell Mills described how the Federal Aviation Administration (FAA) developed a performance reporting system that tracks operational errors by air traffic controllers.[58] By analyzing patterns of these errors, FAA revised its operating procedures and training protocols to reduce or preclude future incidents, thereby reducing risks of accidents. Mills addressed FAA's strategies over the previous decade to systematically develop measures, targets, and reporting methods to create an effective incident reporting system. The lessons from FAA's approach to developing its incident reporting system apply in other policy domains, such as food safety violations, reporting sexual assaults in the military, or privacy breaches.

Another challenge to performance analysts is how to measure "unobserved events." For example, how can we know if law enforcement strategies actually work to prevent or deter crime? To assess this requires an ability to measure events that cannot be observed, such as tax cheating, drug smuggling, or illegal immigration. In a 2012 report, *Five Methods for Measuring Unobserved Events: A Case Study of Federal Law Enforcement,* John Whitley described five data estimation methods being pioneered in different federal law enforcement agencies. He concluded that when decision makers systematically analyze their existing data, "it is possible to bring about radical reforms" and achieve impressive improvements in performance.[59]

A third example of using performance information in a more sophisticated manner was reflected in a 2013 report by Jennifer Bachner, *Predictive Polic-*

ing: Preventing Crime with Data and Analytics, on the use of data and analytics to predict crimes in city neighborhoods and prevent them from occurring.[60] Bachner describes how new policing approaches in selected communities are using "big data" techniques common among commercial retail stores such as Walmart, to predict criminal behavior. These same tools apply in other policy areas such as predicting and preventing homelessness, reducing tax fraud, and mitigating communities vulnerable to natural disasters.

A fourth example of the increase in sophistication in the use of performance information has been the growing interest in the use of evidence-based decision making and program evaluation. A 2018 paper by Nick Hart and Kathy Newcomer describes a wide range of initiatives undertaken in both the Bush and Obama Administrations to use evidence and performance information to improve organizational performance. In the Bush Administration, assessments of the efficacy of individual programs was integral to its Program Assessment Rating Tool and created a new demand for program evaluations. And in the Obama Administration, Hart and Newcomer wrote, "The administration emphasized using evaluation to assess causal impacts for determining whether to fund or not fund programs."[61] They concluded that the value of evaluation holds bipartisan interest.

These evidence and evaluation initiatives have operated separate from, but in parallel to, the performance management movement. But a 2018 article by Alexander Kroll and Donald Moynihan observes that "evaluations facilitate performance information use by reducing the causal uncertainty that managers face as they try to make sense of what performance data mean."[62] They recommend greater integration between these two professional disciplines, much like Newcomer and Schrier did in their 2002 report, discussed earlier.

Identifying Challenges to Institutionalization

During the expansion years, the development and use of performance information revealed a number of implementation challenges. The following five challenges were subsequently addressed during the institutionalization phase that followed, as discussed in the next section.

Challenge One: Developing a Governance Framework

A federal performance management framework did not exist in law until GPRA in 1993. An earlier law, the Chief Financial Officers Act of 1990, placed a statutory duty on CFOs to provide for "the systematic measurement of performance," but most CFOs focused their energies on other priorities. Consequently, OMB and agencies varied widely in their approaches to define roles and responsibilities, during the early steps and expansion phases.

Challenge Two: Defining the Unit of Analysis

The organizing construct for measuring performance changed between the Clinton, Bush, and Obama administrations, from a focus on agency performance, to program-level performance, to a focus on strategic outcomes. As the focus for the organizing construct changed, significant shifts occurred in what agencies and program managers focused on to comply with the expectations of their respective administrations. In many cases this drained energy from agencies' ability to use the performance management system to improve performance.

Challenge Three: Linking Performance Information to Decision Making

As noted earlier, multiple potential uses of performance information exist, as well as multiple potential users. The goal of "using data, evidence, and analytics to create insight that influences decision making, actions, and results" became the focal point of most agency performance management systems, but only after much trial and error in terms of agencies producing various reports and data feeds in response to the requirement of GPRA.

Challenge Four: Distinguishing Between Executive Versus Legislative Uses

The GPRA statute and many policy makers presumed that Congress would be a key user of performance information. When congressional appropriation committees explicitly rejected using performance information being reported by agencies, some observers felt that the law was a failure. However, agencies have made greater use of performance information in the budget development and execution processes than previously thought.

Challenge Five: Using Performance Information for Accountability Versus Learning Purposes

Because performance information has multiple uses and users, there is a constant tension between its use for accountability versus its use as a learning device. The emphasis on accountability versus learning varied significantly during the early stages and expansion phases, often depending on the philosophy of political leaders at the time.

INSTITUTIONALIZATION: EMBEDDING PERFORMANCE INTO A BROADER GOVERNANCE FRAMEWORK

The institutionalization phase, which began roughly around 2010, addressed many of the issues identified above. The GPRA Modernization Act of 2010 incorporated many of the lessons learned during the expansion phase. It put into place a statutory governance structure by:

- designating agency chief operating officers (typically deputy secretaries or equivalents)
- designating agency performance improvement officers, who report to the chief operating officers
- creating a cross-agency Performance Improvement Council, comprised of agency performance improvement officers, to coordinate performance-related initiatives

The new law also clarified the authority of agencies to work across agency boundaries on common goals, authorized the designation of cross-agency goal leaders, and mandated quarterly progress assessments towards cross-agency goals, released publicly for accountability purposes.

In a 2013 report, *The New Federal Performance System: Implementing the GPRA Modernization Act,* Donald Moynihan described key challenges facing the new law's implementers: the need to ensure that the law's many procedural requirements do not overwhelm federal agencies through a focus on compliance rather than on improving performance. He optimistically noted that, if implemented thoughtfully, the new law could catalyze a culture that thrives on outstanding performance.[63]

Implementing the GPRA Modernization Act by Embedding New Routines into Existing Administrative Processes

In a 2016 article, Moynihan and Kroll assessed early efforts to implement the GPRA Modernization Act's goal of establishing a series of new routines to encourage the use of performance information. They wrote that these "routines centered on the pursuit of cross-agency priority goals, the prioritization of a small number of agency goals, and data-driven reviews." They concluded that agency managers were using data from these routines at a higher rate than before these routines were put in place.[64] They saw this as an encouraging sign of progress.

In addition to these new statutory routines, several other actions further institutionalized the use of performance information. These include:

- the creation of an overarching federal performance management framework and performance management cycle that successfully made the transition from the Obama to the Trump administration.[65]

- the creation of agency annual reviews of strategic objectives outlined in their strategic plans. These reviews inform long-term strategy and budget formulation, and identify areas for improvement.[66]
- the creation of an Evidence and Innovation Unit within OMB in 2013 to serve as the catalyst, convener, and champion for the development and use of evidence in agency program decision making. The unit works with the OMB office responsible for performance management issues, in order to integrate with budget, performance, and risk management routines.

Growth of Evidence-Based Government Initiatives

Efforts began in the late 2000s to take a longer, more strategic look at how to manage austerity by finding what works and targeting dollars accordingly instead of funding programs that cannot demonstrate effectiveness. This trend is the heart of what is being called "evidence-based government," and there are initiatives both inside and outside the federal government to use evidence and program evaluations to reframe budget debates in ways that reflect value created, not just dollars spent.

In addition to OMB's Evidence and Innovation Unit's efforts, bipartisan congressional support for a wide range of initiatives at the federal, state, local, and non-profit levels includes:

- the creation of tiered-evidence grants, where new, untested programs receive small amounts of funds and funding increases over time as programs can demonstrate their effectiveness
- performance contracting, where service contractors deliver results based on pre-defined targets to government purchasers
- pay-for-success programs, where investors fund social services up front and, based on demonstrated success, government pays for results achieved

Following are examples of how these initiatives result in new service delivery models:

- **Tiered Evidence Grants**: GAO examined this relatively new grant-making approach in 2016. According to GAO: "Under this approach, agencies establish tiers of grant funding based on the level of evidence of effectiveness provided for a grantee's service model. Agencies award smaller amounts to promising service models with a smaller evidence base, while providing larger amounts to those with more supporting evidence."[67]

  GAO further noted: "Proponents of tiered-evidence grants contend that they create incentives for grantees to use approaches backed by strong evidence of effectiveness, encourage learning and feedback loops to inform future investment decisions, and provide some funding to test innovative approaches." Patrick Lester, in a 2017 report, *Tiered Evidence Grants—An Assessment of the Education Innovation and Research Program,* examined the U.S. Department of Education's Education and Innovation Research program and found promising success in distinguishing effective from ineffective projects.[68]

- **Performance Contracting:** Patrick Lester, in a 2016 report, *Building Performance Systems for Social Service Programs: Case Studies in Tennessee,* writes that performance-based contracts create financial incentives or penalties for providers to meet pre-defined performance benchmark targets in social services. This approach differs from traditional fee-for-service contracts that use fixed payment rates for services provided. In the case studies in Lester's report, the performance incentives are to place children in permanent homes with foster families instead of housing them in group homes. He says that performance-based contracts can take a policy initiative to scale because they are straightforward and easy to understand, and they allow flexibility in changing service delivery approaches over the course of the contract because "Most performance-based contracts…specify only the outcomes to be achieved, leaving providers freedom to decide how to meet them."[69]

- **Pay-for-Success Programs:** Like performance-based contracts, pay-for-success programs (also called "social impact bonds") tie payments to a provider's performance in delivering outcomes. However, social impact bonds link funding to meeting pre-determined performance goals. Payments are not made until results are achieved. This creates substantial risks for providers, but has attracted bipartisan political attention and the support of various non-profits, universities, and foundations.

Beginning in 2009, OMB and agencies undertook a series of initiatives to build or expand the skills and capabilities of federal agency staff to be more evidence- and evaluation-based in their decision making. In some cases, this required new money. But, in many other cases, this changed how existing work was done. Initiatives developed in subsequent years included: building greater agency-level analytic capacity, increasing the amount and variety of data available for analysis, increased use of existing administrative data, and the creation of "what works" repositories in agencies.[70]

LESSONS LEARNED

Government has made substantial progress over the past twenty years in developing a results-oriented performance management framework. Most of the progress has been iterative, with many setbacks but steady progress.

As many of the examples cited above demonstrate, successes have not often taken root with long-term sustainability over time. In fact, one long-time observer, Beryl Radin, has expressed some skepticism as to the ability of the performance movement to institutionalize an overarching approach into the federal system, given its complexity. She notes there are at least seven different perspectives or users, such as program managers, planners, policy staffs, budgeteers, and political leaders. She suggests that, absent a single agreed-upon theory or model across these varied perspectives, modesty and a rejection of one-size-fits-all approaches will be important attributes for the future success of the performance movement.[71]

Nevertheless, because of the statutory framework and a bipartisan commitment by top government executives, the performance movement seems assured of a place at the table. Yet, still more that needs to be done before performance becomes embedded as part of the government's culture. Following are several lessons gleaned from observations over the past two decades.

- **First, it takes time, effort, and commitment.** The seemingly simple goal of "creating performance information that is useful and used" sounds easy, but in reality there are substantial challenges, both technical and personal, to meeting that goal. There are challenges related to definitions, measurement, analysis and methodology. And there are organizational, political, and human behavioral challenges. Developing a multi-dimensional strategy and long-term commitment is essential. Robert Behn probably puts it best when he says that performance management isn't a system, but rather a leadership strategy.
- **Second, successfully linking performance information to decisions is less a technical issue than a human behavioral issue.** Both managers and employees must trust data before they will use it for actions that may have significant consequences. Analyses of performance information have to be readily interpretable by busy leaders or they will revert to intuition instead of using data to make decisions. Ideally, causal links between the data and results will allow leaders to have confidence in making decisions on data that will result in the change desired. In addition, agency leaders will need to create and embed both individual and organizational incentives to be more results-oriented and performance-based. And in the end, the insights derived from data need to be tied to concrete steps that can be taken to influence desired results.
- **Third, performance information is increasingly used by a broader set of government and public users**. While congressional use lags, performance information is increasingly used by government executives and program managers to inform operational decisions and budget choices. In addition, more performance information is being shared with the public to inform a wide range of individuals' decisions—on healthcare choices, travel routes, education opportunities, and housing locations, to name but a few. As the use of artificial intelligence expands and creates the ability to tailor information needs to specific individuals or situations in real time, the potential for greater use in day-to-day decisions becomes more likely.

LOOKING FORWARD

While performance management may now be formally institutionalized via the GPRA Modernization of 2010, it still is not ingrained as part of the organizational culture in government. Moynihan and Kroll write that, as performance routines become embedded into government, they will drive a new culture. However, Behn says that leaders need to explicitly adopt performance management as their leadership strategy, and that this will foster culture change. Most likely, both approaches will be needed.

Going forward, three key steps could help further ingrain the use of performance management approaches to create a culture where decisions are based on data and evidence, including:

- **Embedding performance management as a part of the front-line culture:** Line managers need to view performance management not as a compliance cost but a way of doing business. But studies show little progress on this front over the past two decades. Interestingly, some potential for addressing this comes via the relatively new field of "behavioral sciences," which may provide new strategies to incentivize behaviors and attitudes regarding the integration of performance information into frontline work.[72]
- **Creating stronger, more explicit "line-of-sight" links:** Creating links between broader strategies, program budgets, and individuals will improve decision making and demonstrate relevance. For example, one approach might involve "portfolio budgeting" to frame broader strategic tradeoffs in the allocation of resources. This could be a long-term outgrowth of the agency annual strategic review process.[73]
- **Making performance information more granular, real-time, contextual, predictive, and intuitive:** Managers are more likely to use information that is relevant and reliable for their specific needs, and tied to how they normally "do business," whether through administrative systems or their agency's budget process. If performance information is easy to use, and seen as integrated into their existing administrative routines, then the likelihood it will be used will increase.

Taking steps such as these could help move the U.S. federal government closer to the "ideal" performance governance model described by Bouckaert and Halligan in their 2009 book, as well as a long-term vision for modernizing the federal government.

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