



A Year in Review:

Outcomes and Lessons Learned from Implementing Agency-Led TechStat Reviews Across the Federal Government

CIO Council

Management Best Practices Committee

DECEMBER 8, 2011

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1. Introduction

The Federal Government has spent over \$600 billion on information technology (IT) over the past decade. Far too often, IT projects, especially large projects, cost hundreds of millions of dollars more than they should, take years longer than necessary to deploy, and deliver technologies that are obsolete by the time they are completed.

As a result of the state of IT projects across the Federal Government, the Office of Management and Budget (OMB) launched TechStat Accountability Sessions (TechStats) in January 2010. A TechStat is a face-to-face, evidence-based accountability review of an IT investment; it enables the Federal Government to intervene to turn around, halt or terminate IT projects that are failing or are not producing results for the American people.

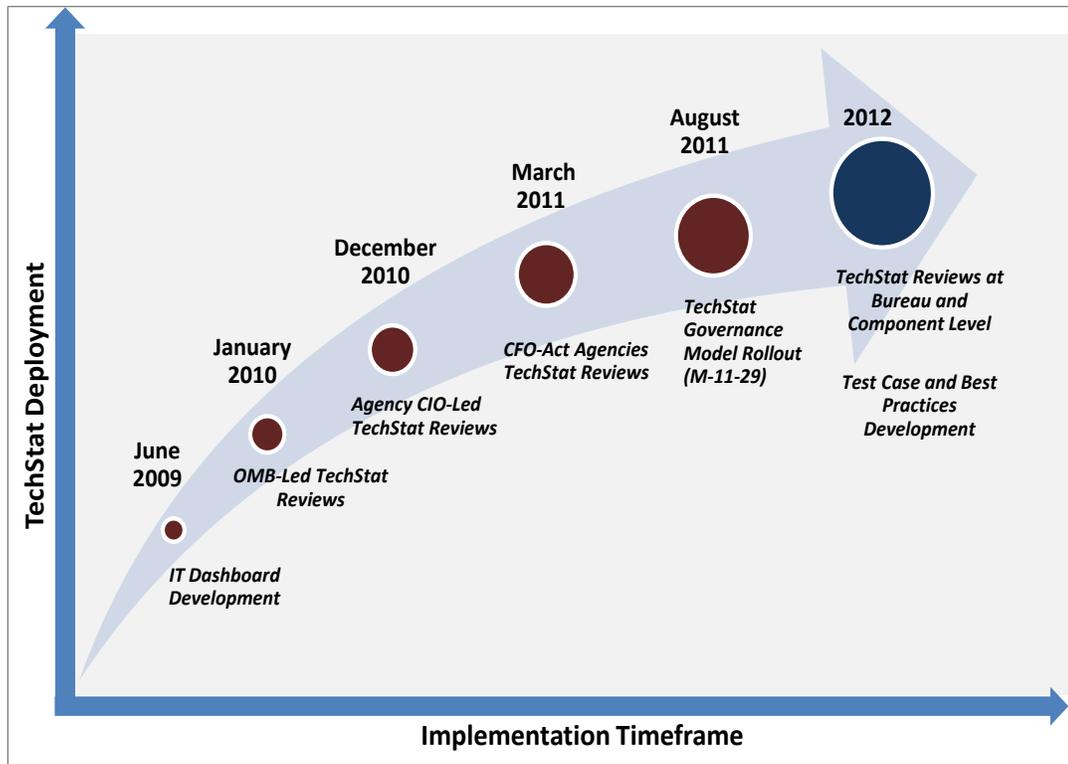
On December 9, 2010, OMB launched the 25 Point Implementation Plan to Reform Federal Information Technology Management to deliver more value to the American taxpayer.¹ The plan established the requirement for Federal agencies to conduct TechStats on troubled investments on an on-going basis. This report, presented by the Chief Information Officer (CIO) Council's Management Best Practices Committee, captures the experience of agency-led TechStats at the one year mark – sharing information with the public regarding outcomes, lessons learned, and opportunities for further growth.

¹ 25-Point Implementation Plan to Reform Federal Information Technology Management, Vivek Kundra, U.S. Chief Information Officer, December 9, 2010, at <http://www.cio.gov/documents/25-point-implementation-plan-to-reform-federal%20it.pdf>.

2. TechStat Implementation Framework

To develop, and then implement the TechStat model across the Federal Government, OMB began with a two-phased approach, which has continued to evolve since its inception in January 2010. Figure 1 provides an overview of the TechStat Implementation Framework.

Figure 1: TechStat Implementation Framework



Phase 1: In June 2009, OMB launched the IT Dashboard which allowed OMB and the American public to monitor IT investments across all agencies in the Federal Government. Building on the transparency enabled by the IT Dashboard, OMB utilized the data provided by agencies via the IT Dashboard, among other data sources, to identify underperforming investments. As a result of OMB's analysis of this information, the Federal CIO initiated the first OMB-led TechStat reviews with Agency CIOs and members of their leadership team in January 2010.

Phase 2: With the release of the *25 Point Plan* in December 2010, the second phase of TechStat was initiated, in which agency CIOs led TechStats at the departmental level. In order to ensure TechStats built upon existing best practices within agencies that had already launched aggressive Investment Review Boards (IRBs), OMB worked with a task force of agency leads to develop, document, and release the [TechStat Toolkit](#), a comprehensive guide to holding TechStats at the

agency-level. To ensure that the desired outcomes were well-understood by agency TechStat leads, OMB held in-person training sessions through February 2011 in which all CFO-Act agencies sent at least one representative to attend.²

By March 2011, all CFO-Act agencies were required to hold at least one agency-led TechStat.³ Out of 24 CFO-Act agencies, 21 held their first agency-led TechStat by this deadline, with the final three completing their first session by the end of May 2011. Since then, agencies have continued to hold sessions and report their outcomes to OMB on an ongoing basis. To help guide this process and enable the sharing of best practices across agencies, the Federal CIO Council's Management Best Practices Committee formed the TechStat working group as a subcommittee and named it the IT Governance and TechStat Subcommittee.

In August 2011, OMB took an additional step to support the rollout of the TechStat governance model to the agency level with the issuance of the Chief Information Officer Authorities Memorandum.⁴ The memo (M-11-29) directs "*changing the role of Agency CIOs away from just policymaking and infrastructure maintenance, to encompass true portfolio management for all IT.*" From a governance perspective, the guidance requires CIOs to drive the investment review process for IT investments. In accordance with the IT Reform plan, it also requires Agency CIOs to lead TechStat sessions to improve line-of-sight between project teams and senior executives, to formalize outcomes from these sessions, and to follow-up on them through completion. As noted in the memo, the goal of such reviews is to terminate or turn around "*one third of all underperforming IT Investments by June 2012.*" In addition, CIOs must work with Chief Financial Officers (CFOs) and Chief Acquisition Officers (CAOs) to ensure IT portfolio analysis is integrated into the yearly budget process for an agency.

² The 24 CFO-act agencies are: Department of Agriculture; Department of Commerce; Department of Defense; Department of Education; Department of Energy; Department of Health & Human Services; Department of Homeland Security; Department of Housing & Urban Development; Department of the Interior; Department of Justice; Department of Labor; Department of State; Department of Transportation; Department of the Treasury; Department of Veterans Affairs; Environmental Protection Agency; National Aeronautics & Space Administration; Agency for International Development; General Services Administration; National Science Foundation; Nuclear Regulatory Commission; Office of Personnel Management; Small Business Administration; Social Security Administration. For more information, visit <http://www.cfo.gov/>.

³ Non CFO-act agencies have also held agency-led TechStats: U.S. Agency for International Development; U.S. Army Corps of Engineers.

⁴ Chief Information Officer Authorities, Memorandum M-11-29, Jacob J. Lew, Director. Office of Management and Budget, August 8, 2011, at <http://m.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-29.pdf>.

Moving Forward: TechStats conducted to date have uncovered significant opportunities to turn around underperforming IT investments. However, the full impact of TechStat reviews has been limited by focusing only on OMB- and agency-led reviews. To realize the full potential of the reviews, the next level of maturity will focus on rolling out the TechStat model to the bureau and component levels by June 2012. Agency CIOs, in collaboration with other agency leaders, will deploy the tools and training necessary to implement a process for the effective review and management of IT investments at the bureau and/or component level.

The CIO Council's IT Governance and TechStat subcommittee will also play a key role in continuing to mature the TechStat process. The subcommittee will analyze the TechStat outcomes from the past year to identify Government-wide trends in technology and management approaches that limit IT investment performance and systemic issues that impede successful resolution of such trends. These analyses will serve as test cases and will assist the CIO Council's Management Best Practices Committee in compiling common challenges and lessons learned for managing IT investments across the Government and informing policy changes.

3. TechStat Outcomes

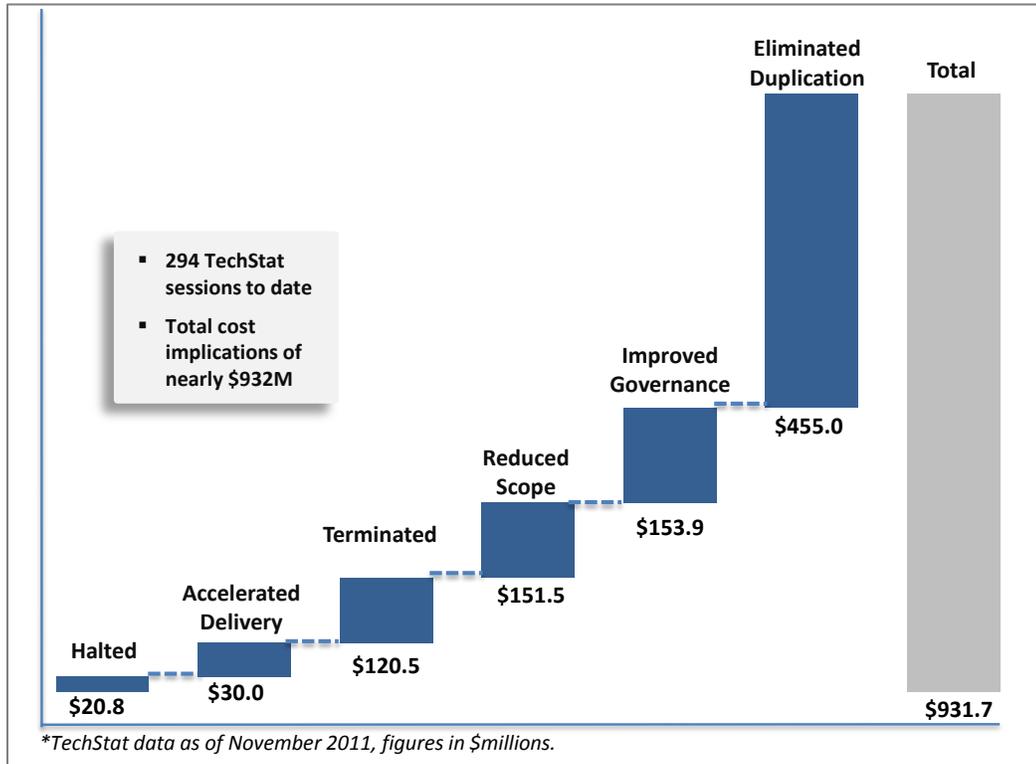
TechStats provide a valuable accountability tool by enabling IRBs and agencies to review and confront IT project management challenges, make bold adjustments to investments, and ultimately, drive better performance. The outcomes from the sessions have not only led to improvements for specific projects, but the lessons learned have also fostered increased collaboration and sharing of best practice across the Federal Government. Typical TechStat outcomes for IT investments include: *Accelerated Delivery; Improved Governance; Reduced Scope; Eliminated Duplication; Halted; and Terminated.*

Phase 1 Outcomes: OMB has led over 60 TechStat sessions, including 38 high priority reviews between August and December. These reviews resulted in \$3 billion in total cost implications and an average acceleration of deliverables from over 24 months to 8 months. By holding TechStats first at the OMB-level, OMB was able to incubate this innovation before scaling it more broadly across agencies. OMB continues to hold TechStats as needed.

Phase 2 Outcomes: Since its official launch in December 2010, many agencies have used the TechStat model to make decisions that significantly change the course of IT projects. To date, CIOs across the Government have held 294 agency-led TechStats, and the results of these reviews have enabled agencies to achieve over \$900 million in cost implications (e.g. cost avoidance, life cycle cost avoidance,

and/or reallocation of funding) and terminate six investments. Figure 2 illustrates total cost implications by category as of November 2011.

Figure 2: Agency TechStat Cost Implications By Category

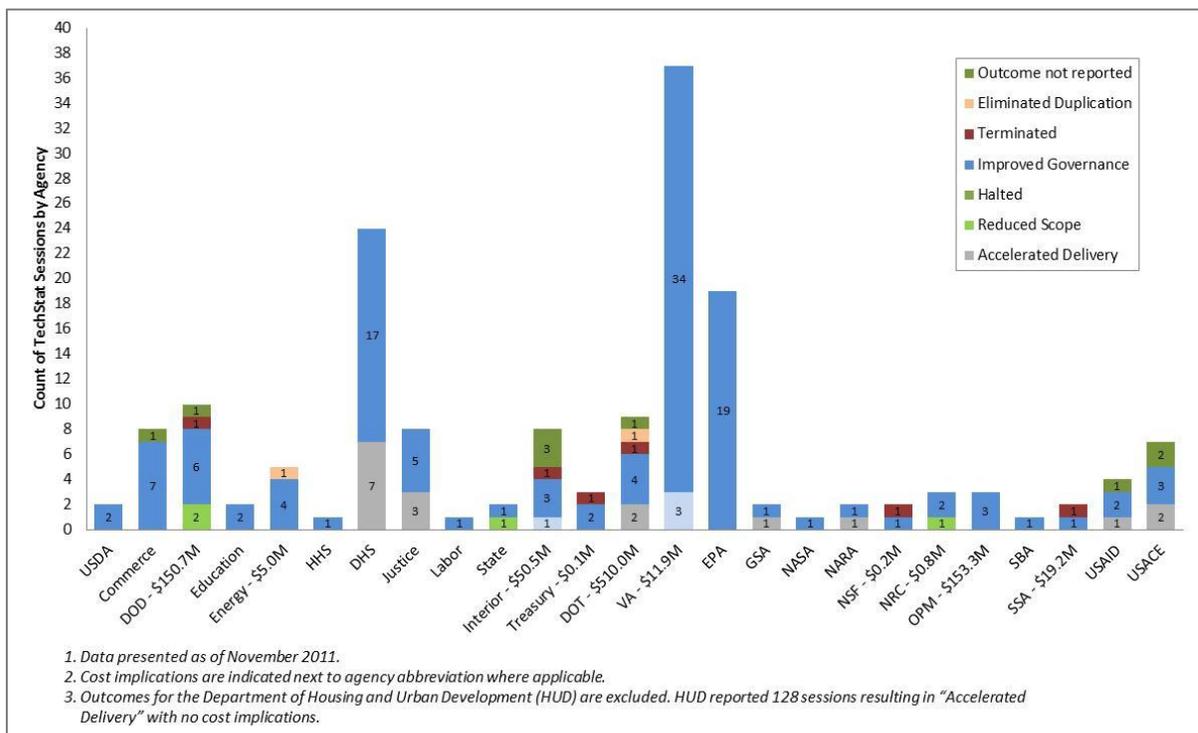


Agency-Specific Outcomes: At the Department of Interior, the Point-of-Sale System (POSS) was designed to establish a service-wide fee collection system; however, two years into the POSS implementation schedule, the contractor had implemented the system across only three of the 128 planned sites. Consequently, a recommendation was made to terminate the current development contract and to halt additional funding for the program. The POSS team will re-scope the implementation to only those parks that have greater than \$1 million in revenue, formulate a less cumbersome plan for the smaller parks reporting requirements, and convert the three parks running the current software to the new solution. Terminating the contract resulted in a cost avoidance of \$9.5 million.

The Department of Defense (DOD) held a TechStat to examine Mission Planning System Increment 4 (MPS Inc 4). MPS Inc 4 is a collection of individual programs that provide automated flight and weapons delivery planning. DOD restructured the program to focus on fielding enhanced capabilities on specific aircraft. Due to this reduction in scope, the MPS Inc 4 has achieved a life cycle cost avoidance of \$150.7 million.

Other agencies have also made significant progress using TechStats. The Department of Veterans Affairs Performance Management Accountability System (PMAS) is used in conjunction with TechStats to monitor and evaluate the ongoing status of projects and the agency's CIO holds TechStats on an ongoing basis to remediate issues. The Nuclear Regulatory Commission reduced the scope of its License Fee Billing System, freeing up \$800,000 for other agency priorities. The Department of Energy identified areas of duplication at a recent TechStat review on commodity IT investments, and is creating a high-level plan to eliminate these inefficiencies and save money. Figure 3 illustrates the distribution of agency-led TechStat sessions and outcomes across the Federal Government as reported by the agencies.

Figure 3: Agency-led TechStats and Cost Implications By Agency



4. Lessons Learned

Based on their experiences implementing TechStats, agencies identified five key lessons learned on implementing effective investment reviews:

- 1. Collaborate with Investment Managers to Develop Agreed-Upon Action Items.** A TechStat review is intended to mitigate risk and identify the root cause(s) of investment problems or issues, identify the appropriate corrective actions, and assign responsibility and due dates for the actions. These

reviews are intended to assist the investment managers; however, if not approached properly, they can be viewed negatively and cause individuals to feel exposed under the spotlight. Therefore, it is important to avoid any potential blame game or “gotcha” tones from reviews. Realizing that not all problems are within the project team’s control and collaborating to identify issues and develop corrective action plans will minimize the “spotlight effect,” and ensure that reviews are appropriately focused on problem resolution. Open communication and a focus on outcomes can contribute to a collaborative atmosphere.

2. Shift Broad Project Reviews to Focused Strategic Assessments.

TechStats provide the CIO community a tool and process framework to strategically attack IT issues and problems. Before the introduction of the TechStat model, departments and agencies already conducted program reviews of IT projects to assess performance and identify issues and risks. However, these reviews typically covered such a wide range and depth of information that focusing on meaningful problem resolution was difficult. The advantage of TechStats, particularly at the program level, is that they allow the CIO and IRB to address specific issues that might not otherwise be visible in project or program reviews, with the end goal of identifying actionable, corrective items with due dates and ownership. Effective implementation requires the department or agency to embrace the shift in focus.

3. Engage Senior Management in Investment Reviews. The effective management of major IT investments requires expertise and insight from many disciplines, such as strategic planning, budgeting, contracts/acquisition management, IT security, and risk and performance management. The TechStat process should include both technical and business representatives encompassing these experiences and possessing the authority to redirect resources. The board should be comprised of senior-level leadership such as the CIO, CFO, and CAO, and other senior-level agency officials as required by the investment. This is critical for making the difficult decisions required to turn-around underperforming projects. The board should participate in reviews, assist with problem resolution, ensure action items are closed, and when necessary, follow through with difficult recommendations that may include halting or terminating projects.

4. Integrate TechStat Reviews into the Agency’s Broader IT Management Framework. TechStats should not be viewed as a separate investment review process, but instead, a component of an agency’s broader investment

review process. Integrating TechStat reviews creates a complementary rather than conflicting oversight mechanism that reuses investment performance data for decision-making. Integrating TechStats with other existing review processes will reinforce efforts to institutionalize rigor, discipline, maturity and control into the IT project planning and management life cycle. TechStats are most effective when integrated into comprehensive performance management frameworks.

- 5. Customize the TechStat Process and Focus based on the Size and Level of Agency Federation. Consider Collaboration and Openness Levels within the Existing Culture.** While the TechStat model has rolled out across the Federal Government, successful implementation will require customization and tailoring of the model to meet the requirements and culture of each organization. Each CIO organization must determine who within the organization should be involved in the implementation of the TechStat process and which new or existing board should serve as the governing body. Organizational structures, resource constraints, and budget authority were some of the issues that each CIO had to address in determining “who” and “how” to implement an effective TechStat model within each organization. TechStat sessions may be managed by the capital planning team, a new dedicated TechStat Project Management Office, or the existing IRB. To be effective, the TechStat “owner” and the “governance team” must have flexibility in implementing the model, the requisite experience to understand project complexities, access to the information necessary to perform an accurate assessment, permission to report actual results, support from executive leadership, and the authority to halt or terminate investments.

TechStat sessions should improve effectiveness of the overall mission of the organization through increased process transparency, project team collaboration, and corrective action accountability.

5. Ongoing TechStat Opportunities

The outcomes and lessons learned from initial implementations of the TechStat model at both OMB and the agency level have demonstrated that aggressive management involvement and oversight can be effective in resolving many of the problems with IT programs. However, TechStats are often triage efforts, intervening during crises. While effective as an intervention tool, over time this model should evolve to proactively inspire improved performance earlier (for example, holding a session when customer service rates dip below a certain mark, rather than when the system fails altogether).

True reform must address the three common root causes that have emerged from the TechStat efforts to date: a lack of early CIO involvement, effective contracting, and workforce training.

- **Early CIO Involvement:** Agencies need to have internal processes that ensure effective involvement of empowered CIO organizations prior to program initiation, as required by the Clinger-Cohen Act (Title 40) and as reinforced by M-11-29. Having the CIO and his or her staff conduct reviews early in a project or program's life can provide project and program managers with guidance and direction on planning, help ensure that functional and non-functional requirements are clearly defined, and that the need for the project is balanced with the risks that have been identified for the investment.
- **Effective Acquisition Processes:** Prior to program initiation and as the program evolves, agencies need to carefully review any contracting language to ensure the principles of TechStat are incorporated, such as including performance metrics that incentivize the delivery of investments within cost, and on schedule. Contract mechanisms should be used to encourage the rapid and early delivery of desired capabilities to end-users (e.g., such as agile development), versus taking multiple years to deliver a product or service, which often results in systems and applications being obsolete at the time of their deployment.
- **Skilled Workforce:** Finally, effective processes, while necessary, do not solve all of the existing problems within IT acquisition across the Federal Government. Success also depends on a highly trained and motivated workforce that has the skills and experience necessary to navigate the myriad of challenges involved in managing IT projects. Developing and sustaining sufficient levels of excellence in a variety of areas, such as program management, contracting, financial management, and systems engineering is difficult and expensive. The recently launched Presidential Technology Fellows Program works to attract and bring this critical talent into the Government.

6. Conclusion

The Federal Government is the largest single purchaser of IT in the world, spending approximately \$75 billion annually on over 6,000 separate IT investments. Given the significant size of this investment, agencies must ensure they provide strong oversight and financial stewardship of taxpayer dollars spent on IT. Agency-led TechStat sessions have helped support these objectives by driving increased CIO accountability and program management transparency in the management of

Federal IT investments. TechStats have produced significant outcomes, yielding nearly \$1 billion in cost implications to date, and improving the return on investments in agency IT projects. These reviews have also had a profound effect upon the culture of Federal IT management by facilitating face-to-face, data-driven conversations about problems and issues that are discussed openly, collaboratively, and with a relentless focus on outcomes for the end-user.

However, opportunities still exist to improve the way large-scale IT investments are managed across the Federal Government. The TechStat process is only the first step in a series of reforms required to change the way Federal IT investments are managed. Policy reforms and process changes are also essential for transforming the way IT investments are managed.

TechStats have enabled the Federal Government to fulfill its promise to deliver better value and results for the American people. As agencies and bureaus undertake future TechStat reviews, additional benefits will be realized and lessons learned will be shared across the Federal IT community. Effective implementation of TechStats will strengthen overall IT governance and oversight and provide a means for proactively identifying and resolving problems before investments experience significant delays or cost overruns. This proactive management tool will continuously evolve and change to accommodate the ever-changing nature of technology.

7. Acknowledgements

- Federal Chief Information Officer: Steven VanRoekel
- Members of the Chief Information Officers Council (CIOC)
- CIOC Vice-Chairman: Richard Spires
- CIOC Senior Advisor: Adam Sedgewick
- Members of the Management Best Practices Subcommittee
- Management Best Practices Committee Co-Chairs: Teri Takai, Christopher Smith, and Mike Locatis
- Members of the IT Governance and TechStat Subcommittee, and all individuals supporting TechStat at agencies across government
- IT Governance and TechStat Subcommittee Co-Chairs: Charlene Myrthil and Peter Lenentine
- Office of Management and Budget (OMB) TechStat Lead: Ari Isaacman Astles