

Accelerating the Pace of IT Modernization in Government



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The Office of Management and Budget (OMB) controls a fund that the General Services Administration (GSA) administers for bringing technology innovation to help modernize government, where the funds spent are overseen by a group of federal Chief Information Officers (CIOs). The funds are spent on multiple projects based on agency requests and spent via GSA multi-year budget accounts. This scenario generally describes the current implementation and oversight of the Technology Modernization Fund (TMF), created as part of last year's Modernizing Government Technology (MGT) Act.

Key Success Factors for IT Modernization

The TMF program elements—purpose, principles, processes, people, and more—are clearly displayed on the Federal CIO Council website at www.tmf.cio.gov. Over time, agencies, Congress and industry stakeholders will be able to leverage this transparency in improving fund operation and oversight. Congress has legitimate questions about how these funds are being spent to build successful modernization activities in agencies; given the experience from past administrations, similar transparency about results will help OMB secure additional TMF resources in the 2019 budget and beyond.

The TMF criteria reflect best practices in modernization, including:

- A digital services approach that embodies agile and iterative development methods, continuous testing and user feedback, and the incremental introduction of emerging technologies including AI, blockchain, IoT, and mobile in a manner tied to agency mission goals;
- A focus on the data that agencies collect over modern technology infrastructure and applications. This is reflected in the data strategy Cross-Agency Priority (CAP) goal under the President's Management Agenda



(PMA) that is tightly linked to the counterpart goal for IT modernization;

- Integrating security into the modernization lifecycle, from the onset of planning to the scale of delivery, rather than having security be “bolted on” to applications after development; and

- Driving innovation as a practice by the government workforce supported by industry stakeholders.

Moreover, GSA has advanced the practice of IT modernization for adoption by agencies through its five Centers of Excellence that reflect private sector best practice in cloud migration, infrastructure optimization, data and analytics, customer experience, and call center efficiency—with security embedded as a key element throughout.

During this period of transition, agencies will need to recognize that modernization will not occur in the short term. Just as industry’s continuing journey to adopt 21st century approaches relies on discovery and planning to migrate applications over a period of years, government will achieve positive results by recognizing that a “hybrid” environment is necessary for continued delivery of services that rely on legacy systems while introducing cloud-based applications.

How Can Industry Help?

Industry can help by bringing forward commercial experience. Agencies can learn from private sector practice in taking the next steps toward a modernized IT environment. Industry has experience with commercial investment models that capture ROI across years and over time. Industry uses a full cost model where benefits are measured and recognized over time, and an understanding of the full costs can be identified and applied.

However, government rules generally do not allow budgetary recognition of the outyear benefits and Return on Investment (ROI). The MGT Act authorized multi-year funding that addresses ROI recognition over time.

The Technology Business Management (TBM) Framework, introduced in the last administration and captured as another PMA CAP goal, also provides agencies with an industry benchmark for IT cost allocation.

Ideally, TBM could also help agencies adapt such financial estimation to the procurement process in re-introducing gain sharing and share-in-savings approaches to contracting. This category of acquisition initiatives was authorized for technology modernization as part of the E-Government Act, but the provision expired in 2007 with no actual project implementation. Government could look to adapt similar models used for energy savings performance contracts, which have received an exemption from annual budget scoring rules to promote multi-year ROI capture.

Agencies that lean forward to incentivize companies that can show how private sector practice can be adapted will likely drive greater innovation and do so more rapidly. Agencies can also promote capacity for companies to bring forward ideas and prototypes in a way that does not rule out their ability to compete for downstream work because of a conflict of interest.

Next Steps: Findings from Research on Modernization

The IBM Center’s IT Modernization report¹ by Greg Dawson recommends a modernization roadmap based on research into past experiences in IT modernization at the federal and state levels, as well as in industry. The author frames impediments to modernization and risks for agencies that do not modernize, including continued cybersecurity weaknesses. The report uses this framing to develop eight key lessons for government leaders at various stages of IT modernization and concludes by setting out a roadmap for implementation that agencies can adapt to address these key lessons.

The report examines the status of IT modernization in the public sector, and identifies key lessons from private industry and government agencies that include:

- Understand the organizational drivers for modernization;
- Plan at the enterprise level and implement at the local level;
- Communicate value to citizens and shareholders;
- Focus on people, then address processes, and only then technology; and
- Make modernization a long-term commitment.

Based on these lessons, the roadmap illustrates how successful IT modernization can take place in government, in a manner consistent with the MGT Act including:

- Regard modernization as an on-going process rather than a single standalone event, to allow for continuous improvement rather than costlier sporadic “catch ups;”
- Seek feedback throughout the process to capture lessons learned and act accordingly;
- Focus on how technology is supporting mission goals;
- Identify stakeholders for each step, making leadership and operational staff aware of their requirements and empowering them to act;
- Ensure check-ins with agency leadership, functional leadership, technical leadership and key users take place throughout the process;
- Blend a strong execution strategy, technical approach and the right team;
- Provide 360-degree communications to foster knowledge and buy-in; and
- Measure results both inside and outside the organization.

If the government embraces these lessons, agencies can reduce operating costs, lower the risk of cybersecurity attacks, and position themselves to take advantage of new technologies, including cloud, analytics, mobile, and artificial intelligence. ■

¹ <http://www.businessofgovernment.org/report/roadmap-it-modernization-government>