

DAY ONE PROJECT

Scaling Proven IT Modernization
Strategies Across the Federal
Government

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Summary

Seven years after the creation of the U.S. Digital Service (USDS)¹ and 18F², the federal government still struggles to buy, build, and operate technology in a modern, scalable way. While there have been small success stories, most government technology and delivery practices remain antiquated and ineffective. Critical systems underperforming during the COVID-19 crisis are the latest example of technology and delivery failing to meet the needs of Americans. The federal government will spend \$90.9 billion on information technology (IT) projects in fiscal year (FY) 21,³ an increase of \$15.3 billion since the federal government began to embrace the digital-services movement in earnest in FY14 in response to the high failure rate of federal IT projects. Yet the public is not receiving the value expected from this substantial investment in technology. Between 2003 and 2012, only 6.4% of IT projects with a budget of over \$10 million were considered successful. 41% were complete failures that had to be scrapped and started again.⁴ There is no evidence that performance has improved on a large scale since FY12.⁵ In spite of efforts to implement transformative technological practices, most government systems still fail to meet modern standards or expectations. This memo proposes a new effort to scale proven IT modernization strategies across the federal government. The result will be a federal government with the structure and culture in place to buy, build, and deliver technology that meets the needs of Americans today and into the future.

Challenge and Opportunity

Government administrations typically arrive with a significant policy agenda and a limited management agenda. The management agenda often receives minimal focus until the policy agenda is firmly underway. As a result, the management agenda is rarely well implemented, if it is implemented at all. Such an approach is counterproductive. An administration's failure to implement a management agenda and improve government operations jeopardizes the success of that administration's policy agenda, as poor government technology inhibits successful implementation of many policies.

After the failed implementation of HealthCare.gov, the Obama administration created USDS and 18F to begin addressing the federal government's technology problems. The Trump administration created the Office of American Innovation (OAI) to further advance government technology management. These efforts have facilitated progress in multiple federal departments and agencies: the Air Force's efforts with Software Factories⁶ and workforce investment is an excellent example. Yet much remains to be done. Technology modernization is frequently met with resistance from management staff who are unfamiliar with modern best

¹ <https://www.usds.gov/>

² <https://18f.gsa.gov/>

³ <https://itdashboard.gov/drupal/summary/000>

⁴ <https://www.computerworld.com/article/2486426/healthcare-gov-website--didn-t-have-a-chance-in-hell-.html>

⁵ IT remains on GAO's high report: <https://www.gao.gov/assets/700/697245.pdf>

⁶ <https://www.airforcemag.com/article/the-air-force-software-revolution/>

DAY ONE PROJECT

practices.⁷ The federal government as a whole spends 78.5% of its IT budget on maintenance of outdated systems—a percentage that is increasing, not declining.⁸ Successful innovations in federal technology and service delivery have not scaled, leaving pockets of success throughout the government that are constantly at risk of disappearing with changes in staff or leadership.

As a result, the government and the public continue to struggle with dysfunctional legacy systems that make government services difficult to use under normal circumstances and can be crippling in a crisis. This has been demonstrated most recently during the COVID-19 pandemic. Distribution of stimulus checks and resources from other COVID-19 relief programs were [hindered](#)⁹ by outdated legacy systems. The pandemic also exposed the outdated technologies (in some cases, 50-year-old technologies) that slow state responses¹⁰ to unemployment claims and threaten future performance of Medicaid and Medicare systems.¹¹

The solution to these problems is to boldly scale emerging modernization efforts across the federal government enterprise. This requires centralized executive support for policy implementation along with a cadre of mid-level and senior leaders with experience in large-scale organization modernization. Moderate changes in governance practices and training are not enough. Experienced leaders in key positions throughout government are required to truly effect change. Additionally, an influential advisory board should be established to ensure continuity of efforts, as good practices are often lost when administrations turn over or agency leadership changes. Increasing the prevalence of technological experience in government can be achieved with little to no additional cost by prioritizing technological experience as a qualification when hiring to replace retiring government workers. This will yield enormous improvements in government-service delivery without significant marginal financial investment.

Failed policy implementation due to failed technology implementation and modernization will continue until management and leadership practices associated with modern delivery are adopted at scale across government and retained between administrations.

Plan of Action

First Step – Prioritize Policy Delivery through the General Services Administration (GSA)

Actions: Elevate the role of the GSA Administrator to a Cabinet-level position, and formally recognize GSA as the federal government’s “Operations & Implementation” agency. These actions will effectively make the GSA Administrator the federal government’s chief operating

⁷ <https://issuu.com/govloop/docs/your-roadmap-to-it-modernization> and

https://www.performance.gov/CAP/action_plans/FY2018_Q1_IT_Modernization.pdf

⁸ Office of Management and Budget, FY18 budget, excludes DoD, State, NRC and Commerce:

https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/ap_16_it.pdf

⁹ <https://www.washingtonpost.com/business/2020/04/17/stimulus-unemployment-checks-delays-government-delays/>

¹⁰ <https://www.nj.com/coronavirus/2020/05/nj-failed-to-fix-unemployment-system-for-19-years-records-show-now-murphy-pleads-patience.html>

¹¹ <https://www.programmableweb.com/news/how-usds-modernizing-medicares-50-year-old-payment-system/native-case-study/2018/11/13>

DAY ONE PROJECT

officer (COO). Policy, financial oversight, and governance will remain the purview of the Office of Management and Budget (OMB). Operations & implementation will become the responsibility of the GSA, aligning existing GSA authorities of Technology Transformation Services (TTS), Acquisitions, and asset management with a renewed focus on government-service delivery. The GSA Administrator will collaborate with the President’s Management Council (PMC) and OMB to coordinate policy delivery strategy with delivery responsibility, thereby integrating OAI, existing fellowships, the office of the U.S. Chief Information Officer, USDS, 18F, TTS, Acquisitions, and guidance from the GSA Project Management Office (PMO) towards a common mission.

Benefit: For the government to improve government services, it needs a high-level leader charged with prioritizing operations and implementation—as a COO does for a commercial organization. Elevating the GSA Administrator to a Cabinet-level position tasked with overseeing “Operations & Implementation” would ensure that management and implementation best practices go hand in hand with policy development, dramatically reducing the delivery failures that put even strong policy agendas at risk.

Second Step – Inspire the Innovation Workforce with the Presidential Leadership Fellowship

Action: Establish a new Presidential Leadership Fellowship program comprised of 2,000 mid- to late-career professionals with proven expertise in modern service delivery to work for the federal government in four-year tours of duty. The cohort of experienced leaders will work inside the government to help modernize and scale practices across departments and agencies, driving efforts to transition away from dangerously outdated system infrastructure. This large cohort of mid- to senior-level leaders and managers will fill a gap with and align well with existing fellowships, including the White House Fellows (a small cohort of senior policy executives), the Presidential Innovation Fellows (a small cohort of change agents and innovators), and the Presidential Management Fellows (large cohort of entry-level managers). The fellowship will also fill a leadership gap that has been created by the retirements of senior leaders from the government’s current leadership team.

Benefit: A Presidential Leadership Fellowship would bring in the modern experience and senior leadership needed to replace management employees retiring from government. This will provide a much-needed boost to Federal workforce capabilities and refresh outdated management habits that are entrenched in government.

Third Step – Guide Government Leaders with the Agency Transformation Playbook

Action: Building on the success of the Digital Services Playbook,¹² the government should develop a set of “plays” for improving technology and service delivery across an entire agency. The Agency Transformation Playbook will act both as a guide to advise agency leaders in scaling best practices, as well as a standard against which modernization efforts can be assessed. The “plays” will be based on practices that have proven successful in the private and public sectors,

¹² <https://playbook.cio.gov/>

DAY ONE PROJECT

and will address concepts such as fostering innovation, modernizing legacy systems, and continually improving work processes. Where the Digital Services Playbook has helped successfully innovate practices in pockets of government, the Agency Transformation Playbook will help scale those successful practices across government as a whole.

Benefit: An Agency Transformation Playbook will provide a living document to guide leadership and management, helping align policy implementation with policy content. The Playbook will also clearly lay out expected practices for Federal employees and contractors who collaborate on policy delivery.

Fourth Step – Ensure Continuity by Establishing a Transformation Advisory Board

Action: Establish a Transformation Advisory Board (TAB) comprised of senior and well-respected appointees who serve fixed terms not tied to the presidential administration. The TAB will be chartered to impact management and technology policy across the government and make recommendations to change governance that impacts modernization and transformation of government. Modeled after the Defense Innovation Board,¹³ the TAB will focus on entrenching modernization efforts across administrations and on supporting, protecting, and enhancing existing digital-transformation capabilities.

Benefit: A Transformation Advisory Board will ensure continuity across administrations and changes in agency leadership to prevent the loss of good practices, enabling successful transformative innovations to take root and grow.

¹³ <https://innovation.defense.gov/>

Frequently Asked Questions

We have given CIOs lots of authority already and nothing has changed. Why should we do this now? What difference will it make?

While things have not changed as much as we'd like, departments and agencies have made progress in modernizing their technology products and processes. Elevating the GSA Administrator to the Cabinet level, adding a Transformation Advisory Board, and bringing in a cadre of management experts will provide agencies and departments with the expertise and support needed to scale and sustain that progress over time. Additionally, CIOs—who are responsible for technology delivery—are often siloed rather than part of a broad, holistic approach to operations and implementation. An empowered GSA Administrator serving in the role of a government COO could organize such an approach.

How will this help fix and modernize the federal government's legacy systems?

Establishing a government COO will provide more authority and attention for the President's management agenda, thereby aligning policy content with policy implementation. Bringing in a cadre of mid- to late-career leaders who are experienced in scaling innovation will inject experience and energy throughout government and, with support from senior leaders, will deliver even greater benefit than the Presidential Innovation Fellows, Presidential Management Fellows and White House Fellows programs have delivered in their respective focus areas. A new focus on successful policy delivery aided by experienced leaders will drive modernization of government systems that rely on dangerously outdated technology.

How do we ensure that scaling modernization is actually part of the President's management agenda?

We believe that an administration that embraces the proposal outlined in the Day One memo will see scaling innovation as critical. Establishing a government COO along with an appointed board that crosses administrations will dramatically increase the likelihood that that improved technology and service delivery remain a priority for future administrations.

How do you plan to pay for this?

Hiring 2,000 new leaders under the Presidential Leadership Fellowship, will mostly be accomplished in a budget-neutral fashion by replacing a small percentage of retirees (which currently average 61,000 per year) with fellows. Creating a new Cabinet position for the GSA Administrator will simply change the reporting relationship of GSA without impacting the agency's cost. With a minimum investment, the government can be restructured and government leadership can be updated in ways that will have a large impact on government modernization and successful policy delivery.

DAY ONE PROJECT

Is the federal government doing anything now that can be built upon to implement this proposal?

The federal government has many pockets of innovation that have proven modern methodologies can and do work in government. These pockets of innovation—including OAI, USDS, 18F, the U.S. Air Force Software Factories, fellowships, the Air Force Works Program (AFWERX), Defense Advanced Research Projects Agency (DARPA) and others—are inspiring. It is time to build on these innovations, coordinate their efforts under a U.S. government COO, and scale solutions to modernize government as a whole.

Is another Cabinet-level agency necessary to solve this problem?

Yes. A Cabinet-level “COO” with top-level executive authority over policy operations and implementation is needed to carry out policy agendas effectively. It is hard to imagine a high-performing organization without a COO and a focus on operations and implementation at the highest level of leadership.

A President has a great deal to think about. Why should modernizing government technology and service delivery be a priority?

The legacy of any administration is based on its ability to enact its policy agenda and its ability to respond to national emergencies. Scaling modernization across government is imperative if policy implementation and emergency response is important to the President.

About the Authors



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About the Day One Project



The Day One Project is dedicated to democratizing the policymaking process by working with new and expert voices across the science and technology community, helping to develop actionable policies that can improve the lives of all Americans, and readying them for Day One of a future presidential term. For more about the Day One Project, visit dayoneproject.org.