

December 26, 2018

Ms. Suzette Kent
Federal Chief Information Officer
Executive Office of the President
1650 Pennsylvania Avenue, NW
Washington, DC 20502

RE: Request for Comments on the Update to Data Center Optimization Initiative (DCOI)

Dear Ms. Kent:

On behalf of our member companies, the Professional Services Council (PSC) respectfully submits the enclosed recommendations in response to the Office of Management and Budget (OMB) Request for Comments on the Update to Data Center Optimization Initiative (“DCOI,” *FR Doc. 2018–25573 filed: November 23, 2018*).

PSC is the voice of the government technology and professional services industry. PSC’s member companies represent small, medium, and large businesses that provide federal agencies and the military with technology and professional services of all kinds, including cloud computing and data center optimization.

Ultimately, the goal of updating DCOI should be to help achieve the vision of a high-performance government described in the President’s Management Agenda and the White House Report to the President on IT Modernization. Continuing to optimize federal data centers can save taxpayer resources and allow agencies to better leverage their data as a strategic resource to improve citizen services and deliver on their mission. For example, agencies have reported billions of dollars in cost savings and cost avoidance from data center optimization efforts since 2010. Modernizing computing platforms and data storage also increases the government’s overall IT security posture in this era of relentless cyber threats.

The updated DCOI policy should not be a simple revision that anticipates only diminishing returns from this decade-long IT rationalization effort. Rather it should be a bold initiative to support digital transformation across the federal government. PSC thus urges OMB to go further and faster than the policies outlined in the draft DCOI memo. We make recommendations for change to many, but not all, of the sections of the Updated Initiative.

Section: Introduction

1. Include a vision statement setting the purpose of DCOI to help achieve a high-performance government.

PSC urges OMB to include a strong vision statement for DCOI that aligns with the 2017 White House Report to the President on Federal IT Modernization (available at <https://itmodernization.cio.gov/>) and the “Modernizing Government for the 21st Century” description in the President’s Management Agenda (PMA, available at <https://www.whitehouse.gov/omb/management/pma/>). The Federal government today has a tremendous opportunity to access innovation and the best ideas and solutions that the private sector has to offer. Ultimately, the goal of updating DCOI should be to help achieve the vision of a high-performance government through technology-enabled transformation.

Section: Background

2. Clarify that federal data center closure and consolidation is still a priority under DCOI.

While much of the “low hanging” fruit in terms of savings from consolidation has been achieved, data center closure and consolidation should remain a priority in the final DCOI update. This background section currently implies that “optimization” will be the only priority, with closure and consolidation activities simply continuing where appropriate. While PSC supports making optimization a key priority, this should not preclude robust OMB oversight of agencies’ closure and consolidation of data centers. For example, the latest “FITARA Scorecard” published on December 12, 2018 by the Committee on Oversight and Government Reform of the U.S. House of Representatives (available at <https://oversight.house.gov/wp-content/uploads/2018/12/Scorecard-7.0-details-v2.docx>) shows that five agencies received failing grades for DCOI. The FITARA scorecard also highlights that one agency saved just 12% of its \$66 million savings goal and did not meet any optimization metrics.

3. The final DCOI policy should align with White House Report to the President on IT Modernization and PMA goals of accelerating IT modernization and leveraging data as a strategic resource.

The final DCOI memo should be as clear as the 2017 Federal IT Modernization Report that, while federal data center policy has already helped agencies modernize, the updated policy aims to resolve remaining impediments to data center optimization and to further accelerate IT modernization. The final policy should emphasize the continued transition from government asset ownership to service management, which enables agencies to better leverage private-sector innovation engines and commercial cloud-based technologies.

4. Leverage commercial innovation to improve the performance of data centers that will not be consolidated or migrated to the cloud.

The updated DCOI should also recognize that contractors can help agencies improve the performance and security of those data centers that will remain government-owned, on-premises facilities. This includes offering modern data storage and data management technologies that facilitate digital transformation such as flash storage and automated infrastructure management technologies.

Section: Development Freeze for New and Current Data Centers

5. PSC supports the new policy requiring OMB approval for new agency data centers or significant expansion of existing data centers.

As written, this new policy provides flexibility for building or expanding agency data centers when appropriate to meet mission needs. Moreover, encouraging detailed discussion between agencies and OMB in advance of building or expanding data centers is appropriate and should occur, at a minimum, during regular “portfolio stat” reviews.

Section: Consolidation and Closure of Existing Data Centers

6. As an editorial suggestion, we recommend replacing the reference to the draft “Cloud Smart” policy with “Federal Cloud Computing Strategy (‘Cloud First’) or its successor policy.”

7. Prioritize migration from government-owned data centers to contractor-provided cloud computing technologies.

The final policy should prioritize the continued transition from government asset ownership to service management, which enables agencies to better leverage private-sector investment, commercial innovation and cloud-based technologies. See also recommendation #3 above.

8. Direct agencies to evaluate closure and consolidation of existing data centers in alignment with the Federal Cloud Computing Strategy (Cloud Smart).

PSC supports language in the draft DCOI noting the importance of policy alignment with the (forthcoming) Cloud Smart strategy. The draft Cloud Smart document, for example, encourages agencies to “consider whether virtualization, containerization, and other modern practices can be leveraged to increase efficiency in agency-owned data centers and vendor offerings.” It is important to ensure that the final DCOI and Cloud Smart policies do not give conflicting guidance to agencies. Including a clear vision statement in each policy, as described in PSC’s first recommendation above, could help achieve this.

9. Align the final DCOI with the Federal Data Strategy.

Data center closure and data migration can have significant data governance implications that, if not addressed, can impede agencies’ ability to leverage data as a strategic asset. Therefore, the DCOI policy should also align with the upcoming Federal Data Strategy, which

will discuss data governance and other policy considerations that should guide agencies' decision-making for data center closure and consolidation initiatives.

Section: Classification of Physical Data Centers

10. Replace blanket removal of requirement for consolidating server closets with continued OMB review of agency inventories.

The draft policy states that further consolidation of small server closets, telecom closets etc. is unlikely to lead to significant cost savings. However, IT rationalization and cost savings are not the only reasons to continue consolidation efforts. The final policy should recognize that individual server closets and other dispersed, small scale IT infrastructure can pose security challenges from the relative difficulty of updating/patching individual equipment in response to cyber threats and, in some cases, from physical access to the equipment by non-authorized personnel. While agencies that achieve significant data center closures should not be unfairly penalized for any difficulty consolidating remaining network closets, agencies should nevertheless continue to provide OMB regular inventory submissions. OMB should also scrutinize agency inventories as part of its regular Portfolio Stat reviews.

Section: Closures and Cost Savings

11. Delete language discouraging the use of vendor-provided cloud computing services.

The draft DCOI policy states that “vendor-provided services such as cloud technologies... are not always more cost-effective alternatives to agency-hosted services.” While there are appropriate use cases for government-owned, agency-hosted data centers, OMB policy should continue to encourage cloud migration not only for cost savings but also for access commercial innovation, to enhance cybersecurity protection and to accelerate IT modernization. While pure “lift and shift” migrations of applications and workloads to the cloud may achieve cost savings, pursuing more ambitious digital transformation can help agencies take even better advantage of the flexibility and scalability of cloud technologies. Cloud computing is also a platform technology that enables adoption of AI, machine learning, and other innovative tools.

12. Delete statement that the federal government should not expect dramatic savings from DCOI.

The draft DCOI policy states that “the Federal Government should not expect to see continued dramatic savings... from ongoing data center consolidation and optimization efforts.” In fact, the Government Accountability Office (GAO) believes that implementation of its previous recommendations will help agencies meet OMB's targets for data center cost savings and optimization of performance (see FITARA Scorecard, cited above). In its May 2018 report, *Data Center Optimization: Continued Agency Actions Needed to Meet Goals and Address Prior Recommendations*, GAO further recommends that OMB improve its oversight of agencies' DCOI strategic plans and their reporting of cost savings and avoidances. The latest FITARA Scorecard also indicates that more cost savings can be achieved by agencies that receive failing or low grades for data center optimization. Cost

effectiveness should also encompass enhanced cybersecurity and increased flexibility from data center optimization and cloud migration.

Moreover, as noted in our recommendation #11 above, cost savings is not the only reason for a robust DCOI policy. Data center optimization policy should support broader PMA goals of IT modernization and leveraging data to achieve a high-performance government.

Section: Automated Infrastructure Management

13. PSC supports DCOI policy to encourage use of data center infrastructure management (DCIM) tools.

DCIM tools help evaluate and monitor data center performance, improve energy efficiency and reduce use of floor space. The final DCOI policy should provide guidance to agencies on standard DCIM requirements across agencies to better measure and evaluate meaningful, performance-based metrics for data center optimization. Vendors today can provide self-managing and cloud-based predictive analytics tools that help better inform operational decisions, improve the quality and reliability of system configuration changes and upgrades, make performance and capacity planning more accurate.

Section: Performance Metrics

14. OMB should consider adding a new “storage utilization” metric.

OMB should consider adding a new “storage utilization” metric to help agencies measure continuous improvement and promote optimization. Such a metric could complement virtualization and server utilization metrics, for example, by adding a measuring for storage density, or how fast applications can read or write data given a fixed volume of data.

Section: Updated Metric: Virtualization

15. The final DCOI should include additional agency guidance related to virtualization.

PSC supports language in the draft DCOI noting the “rapidly growing marketplace around virtualization and containerization” and its importance for helping agencies realize savings and optimization. New container and microservices technologies also provide enhanced portability for applications and workloads beyond using virtual servers. DCOI guidance related to virtualization metrics should also discuss the potential role for software defined data center, software defined networks and network function virtualization in agency DCOI efforts. Finally, while virtualization is an important metric, it should be a tool to achieving optimization rather than an end state.

Section: Clarification on the Prioritization of Concerns

16. Re-order DCOI policy priorities to clarify that data center closure is a top priority when considering allocation of limited agency resources or conflicting priorities.

The draft DCOI policy should prioritize data center closure in order to encourage agencies to leverage private sector investment and innovation to the maximum extent possible. Congressional committee and GAO oversight documents cited above indicate that many agencies can still realize significant cost savings and avoidance through data center consolidation. While there is a role for government-owned, on-premises data centers, agencies should first consider ways to leverage vendors' commercial capabilities.

17. Add a new priority that encompasses security, scalability and flexibility.

In addition to the closure, consolidation, and optimization priorities listed in the draft policy, OMB should direct agencies to consider security, scalability and flexibility. As noted above, closing and consolidating many "closet servers" housed across the federal government may not deliver significant cost savings, but it is still worthwhile to achieve improved security from better physical access controls and faster software patching. Adding scalability and flexibility to the list of priorities could also encourage agencies to pursue bolder digital transformation to achieve the PMA goal of a high-performance government.

18. Consider adding a new priority related to PMA workforce goals.

Data center optimization and digital transformation efforts also provide an opportunity to support PMA workforce-related goal of shifting more time spent on low-value work to accomplishing mission-critical objectives by leveraging vendors' commercial offerings, automation tools and other advanced technologies.

Section: Reporting

19. OMB should consider ways to automate and streamline agency DCOI reporting requirements with other agency data gathering efforts.

OMB currently conducts "Portfolio Stat" reviews of agencies' IT investments and maintains the Federal IT Dashboard, a helpful online transparency tool for IT spending across many agencies. In updating the DCOI, OMB should consider ways to streamline or consolidate agency IT reporting requirements. A longer-term goal should be to automate agency DCOI reporting and rapidly incorporate this information in the Federal IT Dashboard. Shifting from quarterly reporting requirements to a more automated, continuous monitoring and assessment approach could improve agency accountability, oversight and transparency.

Section: DCOI Strategic Plan

20. Make closures the first data point included in agency DCOI Strategic Plans.

The list of information included in agencies' DCOI Strategic Plans should move item number 2, "Planned and achieved closures, by year" to the top of the list.

We thank you for your consideration of the above comments and recommendations. PSC would welcome the opportunity to provide additional details to OMB, as well as policymakers across government, at your convenience. Should you have any questions, please feel free to contact me at chvotkin@pscouncil.org or Kevin Cummins, PSC Vice President Technology, at cummins@pscouncil.org.

Sincerely,

Alan Chvotkin
Executive Vice President and Counsel