Data Center 2020: Federal Modernization in Focus

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Underwritten by:

Hitachi Vantara Federal
Introduction

With the DCOI* deadline extended to 2020, Federal IT leaders need to push hard to keep data center modernization momentum moving forward. With the right technology, agencies have the opportunity to reduce OpEx and establish an infrastructure that is able to scale quickly, integrate emerging technology, and effectively support dynamic missions – but are they?

Where are agencies in the data center optimization process today, and how can they accelerate progress to meet the mandated goals? Where have they made inroads and what challenges remain? As agencies adopt modern infrastructure, are acquisition models changing? How are they defining data center modernization success and what do they still need to achieve it?

For the Data Center 2020 study, MeriTalk surveyed 150 Federal data center decision makers to answer these critical questions and define a practical path forward.

*Data Center Optimization Initiative
Executive Summary

Federal IT managers struggle to see a short-term path for DCOI:
- **69%** of Federal IT managers agree with the Office of Management and Budget’s (OMB’s) decision to extend the DCOI deadline
- Fewer than **one-fifth** say their agency was on track to meet the original September 2018 goals

Many lack a clear data center vision:
- While **84%** of Federal IT managers say their agency has a formal data center modernization strategy, only **47%** of them say that they are applying the strategy consistently agency-wide
- In fact, just **32%** have developed case studies or ROI estimates around planned data center investments

The good news, there are pockets of excellence and success that can guide others just starting out:
- Federal IT managers leading their agency’s modernization efforts and who are “very satisfied” with their progress reported strikingly different approaches than their peers who are “not satisfied” with modernization progress, including: Prioritizing **next-generation technology**, making the case for **new investments**, and replicating their data center modernization strategy **agency-wide**
- The modernization leaders are significantly more likely to invest in modern data center technologies – **67%** of those “very satisfied” with their modernization progress have implemented DCIM solutions, compared to just **30%** of those who are “not very satisfied.” Similarly, **36%** of those “very satisfied” with their modernization progress have implemented Data Centers as-a-Service, compared to just **21%** of those who are not very satisfied
Federal IT managers struggle to see a short-term path for the Data Center Optimization Initiative (DCOI), and welcome the extension.

- Just 19% were very likely to close 25% of tiered data centers by Sept. 30, 2018.
- Only 13% were very likely to close 60% of non-tiered data centers by Sept. 30, 2018.

69% agree with OMB on the deadline extension.

Take away: Sigh of Relief but Short Window
Feds Look to MGT For Help

- Still, agencies are disappointed in their data center progress. And while FITARA scorecards may not have moved the needle yet, they’re optimistic about the Modernizing Government Technology (MGT) Act

Just three in ten Federal IT managers (30%) are “very satisfied” with their agency’s modernization efforts to date

And, the majority did not notice an increase in DCOI efforts following the November FITARA scorecards

But, 77% say the MGT Act will help their agency meet its DCOI goals

Take away: MGT Could Turn the Tide
Defining the Modern Data Center

- Federal IT managers envision the modern data center as one that’s highly secure, able to quickly apply mission critical applications, effectively utilizes resources, and adapt to emerging technology – but just 11% are hitting that mark today.

How do Federal IT managers define data center effectiveness?*

- 62% Keeping data highly secure and protected
- 57% Quickly standing up and optimizing mission critical applications
- 47% Consolidating to maximize facility and server utilization
- 45% Enabling emerging technologies
- 37% Supporting a mobile workforce
- 35% Scaling to fluctuating workload requirements

But,

- 89% say their current data centers are not completely effective, and
- 57% say they’re a poor match for current mission needs

Take away: A Long Way from 2020 Vision

*Respondents asked to select all that apply
What’s Working and What’s Not

- Agencies see security and performance as the most effective aspects of their current data centers, while costs and automation need the most work. Just 10% give themselves an “A” for their ability to support emerging technology.

How would you rate the following aspects of your agency's data centers?*

*Respondents asked to rate each on a scale of 1-5, where 1 is poor and 5 is excellent. In the chart above, 5 = A and 1-3 = C or below

Take away: New Solutions Needed

*Respondents asked to rate each on a scale of 1-5, where 1 is poor and 5 is excellent. In the chart above, 5 = A and 1-3 = C or below
Modernization Hits and Misses

- Nearly all Federal IT managers say their agency has a data center modernization strategy, but many are missing other foundational necessities

84% have a formal data center modernization strategy, but only 47% are applying it consistently agency-wide

Additionally, just 35% say their agency has a modernization leadership team or a formal vision for their future data center:

- 32% have audited data center(s) to understand current capabilities and shortcomings
- 22% have created a list of data centers to move or close
- 19% have published a shared services catalog

Take away: One Step Forward, Two Steps Back
Why is Modernization Hard?

- Federal IT managers see security concerns, a lack of skilled personnel, and insufficient budget as the top issues.

75% of Federal IT managers say data center modernization has been a painful process.

What has made modernization so painful?*

1. Security concerns (52%)
2. Lack of skilled personnel to manage the transition (49%)
3. Insufficient budget (34%)

Take away: Prioritize Progress

*Respondents asked to select all that apply.
The Benefits of Moving Forward

- Despite challenges, the vast majority of agencies agree that consolidating and optimizing data centers is necessary for the larger goal of IT modernization.

73% say the drive to close, consolidate, and optimize data centers is a necessary precursor to the larger goal of IT modernization.

What are the most significant benefits of data center modernization?*

- 51% Improving government security
- 42% Increasing workforce productivity
- 41% Improving data access for advanced analytics and decision making
- 36% Reducing infrastructure maintenance costs
- 35% Simplifying the architecture of government IT

Take away: Data Centers Lead to Digital Transformation

*Respondents asked to select all that apply
Learning from the Leaders

- Federal IT managers leading their agency’s modernization efforts who are “very satisfied” with their progress, report strikingly different approaches than their peers who lag behind, reporting they are “not satisfied” with their progress

**Leaders prioritize next-gen technology:** Those “very satisfied” with their modernization progress are almost 3x more likely than those who are “not very satisfied” to say one of their top modernization priorities is improving their ability to support emerging technologies – 29% of those “very satisfied” to 10% of those “not satisfied”

**They make the case for new investments:** Leaders “very satisfied” with their modernization progress are more than twice as likely as those who are “not satisfied” to say they develop case studies and/or ROI estimates around planned data center investments – 53% of those “very satisfied” to 23% of those “not satisfied”

**They execute their strategy agency-wide:** Leaders “very satisfied” with their modernization progress are significantly more likely than those who are “not satisfied” to have a formal strategy for data center modernization and apply it consistently across their agency – 78% of those “very satisfied” with progress to 33% of those “not satisfied” with progress

**THE RESULT?**

These leaders are significantly more likely to invest in modern data center technologies:

<table>
<thead>
<tr>
<th></th>
<th>Those “very satisfied” with their modernization progress</th>
<th>Those “not very satisfied” with their modernization progress</th>
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</thead>
<tbody>
<tr>
<td>DCIM solutions</td>
<td>67%</td>
<td>30%</td>
</tr>
<tr>
<td>Modular data centers</td>
<td>47%</td>
<td>19%</td>
</tr>
<tr>
<td>Data Centers as-a-Service</td>
<td>36%</td>
<td>21%</td>
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*Includes those who selected somewhat satisfied, not very satisfied, or not at all satisfied

Take away: Look Ahead, Demonstrate Value, and Execute
Modernization Wish List

- Nearly all Federal IT managers (95%) say their agency needs help to accelerate data center modernization progress

**Top requests:**

- Increased staff training: 49%
- Funding from the MGT Act: 43%
- New hires via OPM’s hiring exemption**: 36%
- New/more flexible procurement options: 31%

Going forward, agencies say they’ll prioritize improvements in **security, performance, and reliability*****

**Take away:** All Eyes on Staffing, Security, Procurement

*Respondents asked to select all that apply  **OPM’s hiring exemption for IT modernization  ***Respondents asked to select top three
Federal IT managers are also considering new acquisition models to accelerate transformation

- **64%** say their agency’s data center acquisitions are beginning to shift toward utility-based or pay-as-you-go/use models

- While just **25%** say they’ve invested in Data Centers as-a-Service, **83%** say they will be important to the success of their modernization futures

- Federal IT managers also see promise in DCIM solutions **(89%)** and modular data centers **(78%)**

**Take away:** New Options to Accelerate Progress
Advice from the Trenches

- As agencies move forward, Federal IT managers stress the importance of simplicity, security, and investing in personnel.

What recommendation would you give your agency’s senior leadership regarding data center modernization?

- **Reduce complexity** of all systems where possible. Everything should ‘talk to one another’ easily.
- **Improve security and efficiency** across the enterprise.
- **Settle the ownership** of data as well as **access** to the data.
- **Invest in personnel**.
- **Continue to listen to those on the front lines** who can best suggest and implement modernization solutions.
- **Simplify** the purchasing process.

**Take away:** Streamline the Acquisition Process.
Recommendations

Acquisition: Beyond the Optics
While few have tested the waters, Federal IT managers see a clear need for newer data center acquisition models such as Data Center as-a-Service. Agencies should begin assessing these next-generation alternatives, and building out ROI estimates, as a baseline for broader IT transformation.

Set Your Eyes on the Prize
While Federal IT managers are down on their data center modernization progress, many have taken critical steps to improve upon their strategies. Agencies should look to ensure that their data center modernization strategy is applied agency-wide, create a modernization leadership team, use MGT Act funding, and develop a formal vision for their future data center.

Find Value
Federal IT managers who are “very satisfied” with their agency’s modernization progress have prioritized next-gen technology, made the case for new investments, and executed their strategy agency-wide. Those making less progress should follow these leaders to gain momentum.
MeriTalk, on behalf of ViON and Hitachi Vantara Federal, conducted an online survey of 150 Federal IT managers familiar with their agency’s data center(s) and data center modernization efforts, in December 2017 and January 2018. The report has a margin of error of ±7.97% at a 95% confidence level.

Respondent job titles

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>CIO/CTO/CISO/CDO</td>
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<tr>
<td>Deputy CIO/CTO/CISO/CDO</td>
<td>10%</td>
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<tr>
<td>IT Director/Supervisor</td>
<td>22%</td>
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<td>IT Program Manager</td>
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<td>Data Center Administrator/Manager</td>
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<tr>
<td>Network Administrator/Manager</td>
<td>9%</td>
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<tr>
<td>Software Applications Administrator/Manager</td>
<td>9%</td>
</tr>
<tr>
<td>Other IT manager</td>
<td>10%</td>
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Agency type

<table>
<thead>
<tr>
<th>Agency Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Government: Civilian agency</td>
<td>57%</td>
</tr>
<tr>
<td>Federal Government: DoD or Intelligence agency</td>
<td>43%</td>
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Expertise

100% of qualifying Federal IT managers are familiar with their agency’s data center(s) and data center modernization efforts.