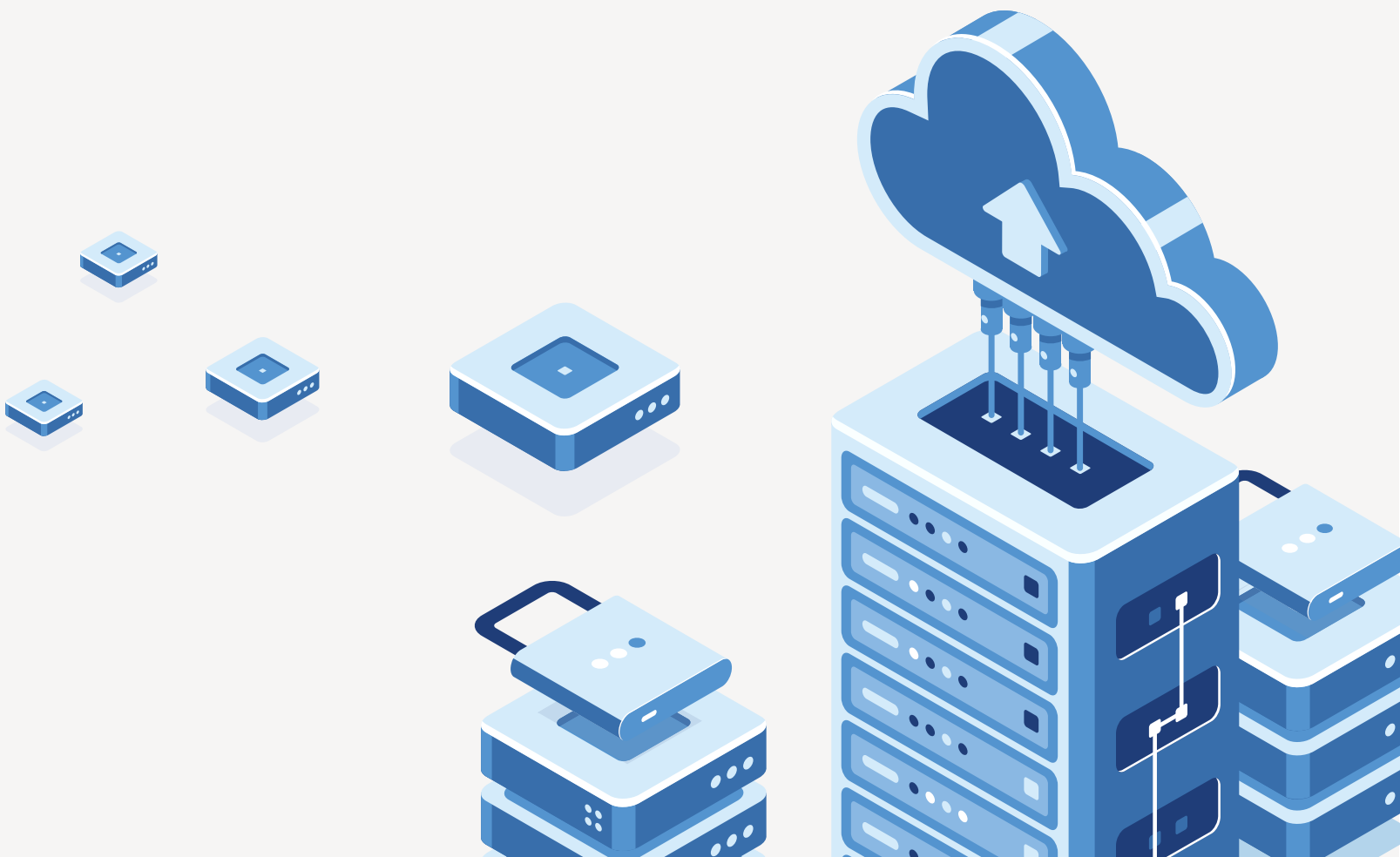# DYNAMIC
SYSTEMS INC

DRIVING CLOUD INFRASTRUCTURE INTO GOVERNMENT OPERATIONS AND SERVICE DELIVERY DURING A PANDEMIC

Why Government Agencies Need the Cloud Now More than Ever

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INTRODUCTION

Governments worldwide are under enormous pressure, due to the new coronavirus threatening the wellbeing, safety, and livelihood of many. The World Health Organization (WHO) characterized Covid-19 as a pandemic, four months on from the outbreak of the virus in China. This global outbreak has had considerable consequences for government operations.

As offices remain shut, e-government services are seeing an unprecedented surge in demand stretching the governments' ability to deliver. For example, the U.S. saw almost 3.3 million people file initial claims for unemployment benefits between March 15 and March 21, 2020, according to McKinsey. Complex and difficult-to-access application forms that are not designed to handle the current volume of requests reportedly overwhelm legacy information technology (IT) systems.

Claimants are expecting fast, value-based service following Covid-19, and unemployment websites must deliver outstanding results accordingly. This means governments and IT leaders responsible for helping the workforce become productive should keep up and enable them to address claimant benefits fast. Fortunately, there is a roadmap that government agencies can follow to enhance operations to be more secure and efficient while being good stewards of taxpayer resources.

In this whitepaper, Dynamic Systems offers government entities and their IT teams a framework to support a swift and coordinated pandemic response through best-in-class cloud services. Towards the end of this document, you will get clarifying recommendations and strategies to guide you on the right cloud infrastructure for you and your organization.

PANDEMIC SITUATIONS CREATE SECURITY AND PRODUCTIVITY CHALLENGES

Cloud infrastructure best practices are essential now more than ever, but the increase in remote work setups is putting a strain on these practices.

How Covid-19 dramatically increased threat vectors

Inadequately secured home computers accessing government networks

Unsecured devices used in remote user home networks

Use of unsecured productivity tools and utilities by remote workers

Overloading remote connectivity hardware and software components

Unprecedented work volumes for IT teams responsible for securing government data

Imbalance in attention to help remote work productivity and helping secure operations, data governance and best practices

Recommendations

To help you better deal with remote work and Covid-19, consider:

- free vendor offerings and assistance
- review your current vendor websites
- look for vendors stepping up to help organizations with data security and remote connectivity

FEDERAL CLOUD COMPUTING ACCELERATES
DIGITAL TRANSFORMATION

Systems administrators and security team members responsible for protecting government data use the best technology, including existing, emerging, and new ones, at their disposal to improve and keep operations humming.

Federal Government Spending on IT

(in millions of dollars)

	2016	2017	2018
Department of Defense	38,061	40,844	42,521
Non-Defense	52,219	53,250	53,168
Total	90,280	94,094	95,688

Note: Defense IT spending includes estimates for which details are classified. All spending estimates reflect data available as of May 8, 2017.

Source: White House

As shown in the image above, the federal government budget for IT has seen increases in total dollar figure in three years. According to a report from White House, these IT investments are determined to be major if the associated initiative "has significant policy implications; has high executive visibility . . ., or requires special management attention because of its importance to the mission and function of the agency." One such initiative is cloud computing – the delivery of computing services from a remote location.

Key Figures Shaping the Federal Cloud Computing Market

$1.2 billion

Cloud computing spending of DoD in 2018

Source: Bloomberg Government

$3.2 billion

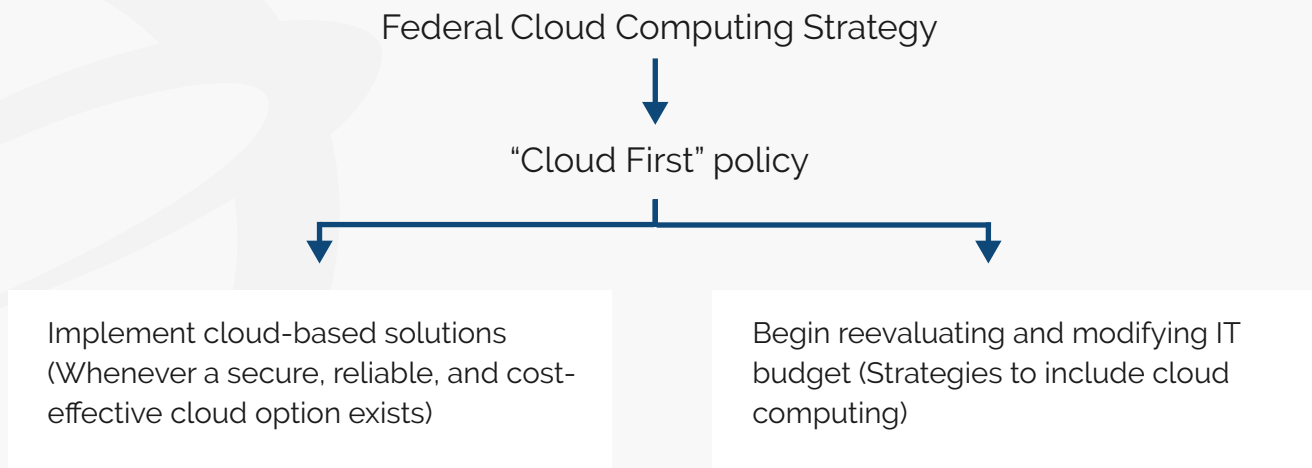Spending of civilian agencies on cloud services in 2018

Source: Bloomberg Government

$9.1 billion

Expected cloud investments in FY 2024

Source: Deltek

In a Congressional Research Service report, it has been revealed that the U.S. federal government has been shifting its data storage needs to cloud-based services and away from agency-owned data centers since 2009. This transition aims to reduce investments by the government in IT data centers, as well as realize other advantages of the cloud – efficiency, accessibility, collaboration, rapidity of innovation, reliability, and security.

"A 25-Point Implementation Plan to Reform Federal IT Management" – U.S. CIO

Federal Cloud Computing Strategy

↓

"Cloud First" policy

| Implement cloud-based solutions (Whenever a secure, reliable, and cost-effective cloud option exists) | Begin reevaluating and modifying IT budget (Strategies to include cloud computing) |

Source: U.S. Chief Information Officer (CIO), 2010

However, according to the same report, federal agencies are faced with multiple challenges as they make this shift. For example, CIOs are concerned about losing control over their data when moving their data from data centers to outsourced cloud services.

BRINGING CLOUD INFRASTRUCTURE INTO GOVERNMENT OPERATIONS AND SERVICE DELIVERY

Each day, hundreds of millions of people interact with the federal government. People expect and deserve simple, fast, and valuable experiences. Regardless of constraints imposed by unprecedented workloads, the transition to remote work, and security challenges, government leaders need to continue to innovate with cloud computing best practices and away from aging legacy systems.

IT teams can turn to new cloud-based solutions to address efficiency and mission risk issues posed by legacy systems, as well as combat emerging Covid-19 data security challenges altogether.

Now governments agencies need to move from "cloud-first" and into the federal government's "cloud-smart" strategy. Transitioning to "cloud-first," in this sense, is now a basic element in government agencies' shift to the cloud that needs a new approach.

"A 25-Point Implementation Plan to Reform Federal IT Management" – U.S. CIO

Assess	Seek	Deliver
Understand service and mission needs, and evaluate technical requirements and existing policy limitations	Identify environment solutions (e.g. hybrid, multi-cloud environments)	Achieve near- and long-term mission and service goals

As agencies adopt and migrate to cloud platforms, government leaders need to examine the impact that this shift has on the workforce.

Workforce Readiness Critical to Cloud Smart Strategy

Assess	Seek	Deliver
Identify potential skills gaps resulting from the imminent cloud-based services transition	Shop for tools and technology options needed to equip staff with additional skills	Align workforce once cloud adoption is complete with support training for employees (e.g. leverage vendors involved in cloud migration activities to provide assist initiative)

Recommendations

- Map out the most basic functional needs of your IT infrastructure
- Review the tools available that can support and facilitate implementation
- What cloud platform will you migrate your data and workloads to?
- Assess the capabilities of vendor solutions against your specific requirements
- Is your vendor of choice able to support transition strategies?

WHY DYNAMIC SYSTEMS

Not all cloud approaches are the same. Cloud migration and hosting are a complex task. Dynamic Systems has a team of seasoned and certified technical experts to help your organization transform and meet your future requirements more efficiently.

Professional Service

- **Cloud Consulting and Migration.** Get sound migration strategies, tools, timelines from Dynamic Systems' cloud migration consultants. Our professionals work directly with your technical in-house team to help transform your application portfolio to cloud-ready for scalability and high availability.

Cloud Services

- **Multi-Vendor cloud architecture.** Optimize the integration of multi-cloud environments for your business processes. Work with our experts and harvest the value from your cloud investments – whether it be AWS, Oracle Cloud Infrastructure, Microsoft Azure and/or Google Cloud.

- **Cloud Strategy.** Start your cloud journey right. Our experts at Dynamic Systems can help you develop a clear strategy and robust roadmap from the get-go.

- **Cloud Migration.** Host your applications and data in the most effective IT environment possible. Dynamic Systems experts can do just that based on your operational needs, such as performance, security, availability, sustainment, and costs.

- **Cloud Readiness Assessment.** Understand your organization's cloud readiness and existing technology infrastructure. We can help you determine the right cloud platform and build the right cloud architecture.

- **Cloud Hosting.** Develop cloud and infrastructure hosting strategy using complex operational cloud patterns that meet your evolving IT requirements. Collaborate with Dynamic Systems experts, who identify opportunities for transitioning into cloud-hosted environments.

Security Service

- **Cloud Security.** Build and maintain central security policies for your cloud infrastructure with our cloud security engineers. We guide you towards continuous improvement of company security policies and standards.

Recommendations

When seeking technology and solutions for government operations, assess vendor solutions if they fit your needs. Consider the following:

- Do they support rapid deployments?
- Is ease of use offered?
- Are the security roles of the vendor clearly spelled out?
- Can solutions offered support your organization's ability to comply with critical statutory and policy cybersecurity requirements?
- Can your organization support the solution with limited – or in some cases, no – IT resources?

Your answers to these questions may suggest that the current best option would be to partner with a new cloud service provider, like Dynamic Systems. If you consider this to be a viable option, then consider the solutions and services above.

Want more information about Dynamic Systems Cloud Services? Contact us today and let us know how we can be of service. We are here to help.

ABOUT DYNAMIC SYSTEMS

Dynamic Systems provides technology solutions that make data management simple. We work closely with our clients to understand current challenges, long-term goals, and budget requirements – then combine best-in-class hardware, software, services, and support to streamline maintenance and optimize performance.

Since 1991, Dynamic Systems has built a solid reputation as the IT experts of choice with a relentless focus on customer satisfaction and a strong understanding of our clients' core requirements. Our cleared resources, financing options, and contract vehicles make it very easy to work with us, particularly for our government and education customers. With enterprise-class resources, partnerships, and state-of-the-art facilities, we provide IT consulting, product advice, and training you need to succeed.

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