IT Modernization In Brief

WHAT YOU NEED TO KNOW

Quick tips & facts about IT modernization from GovLoop
Executive Summary

Today, IT modernization – the continuous updating of IT and technology infrastructure – in government is a must. It’s important to deliver the necessary levels of security, functionality and efficiency to help government employees in their roles. More importantly, modernization will help government deliver better services to the American public.

Of the $82 billion in federal IT spending planned for 2017, approximately 78 percent ($63 billion) is dedicated to maintaining legacy IT investments.
Defining IT Modernization

IT Modernization - the continuous evolution of an organization’s existing applications and infrastructure software, with the goal of aligning IT with the organization’s ever-shifting business strategies.

Agencies can use these tactics to define their modernization strategies:

- **Rehost** applications on new platforms
- **Rearchitect** business-relevant code from legacy applications
- **Replace** legacy applications with new ones
- **Integrate** legacy applications into cloud environments
- **Migrate** to new technologies without changing app design
$3.1 billion kick-start fund to help the nation modernize its IT infrastructure and further improve its cybersecurity posture

Housed under the Cybersecurity National Action Plan (CNAP), which outlines short- and long-term strategies to enhance cyber awareness and protections

Establishes self-sustaining mechanism for federal agencies to regularly refresh their IT systems
The Role of DCOI

The 2016 Data Center Optimization Initiative (DCOI), established by OMB, seeks to consolidate datacenters, reduce the cost of hardware, automate infrastructure management and shift IT investments to more efficient platforms like cloud and shared services.

The DCOI requires agencies to:

Develop
and report on data-center strategies

Transition
to more efficient infrastructure, such as cloud services and shared services

Leverage
technology and advancements to optimize infrastructure

Provide
quality services for the public good

DCOI Goals: Optimization & Cost Savings
STEP 1
Assessment & Roadmap

Assess your current infrastructure and create a roadmap for your IT modernization project.

- **Conduct** an assessment of your current IT state
- **Define** the scope and complexity of your modernization project
- **Analyze** project alternatives with a comparative risk analysis
- **Outline** a roadmap considering lifecycle costs and time constraints
**STEP 2**

Modernization Readiness

Establish the technology architecture and project management goals, focusing on how to plan, communicate, organize and staff the project.

- **Strategize** how the project manager, project leadership, key stakeholders and executive board are going to communicate.
- **Keep** key stakeholders involved at every step of the effort.
- **Create** a strong modernization management team by thoughtfully filling each of the leadership roles to make the subsequent steps smoother.
STEP 3
Modernization Execution

Design, build and configure your new IT environment and applications, while keeping cybersecurity top of mind.

- **Outline** your execution strategy by evaluating unique business cases, drivers, strengths and weaknesses.
- **Define** the steps for developing and maintaining information systems and align those steps with the strategy of your agency.
- **Review** the architecture of applications early on in the process to identify and address potential security vulnerabilities.
- **Use** test cases to identify the steps and preconditions needed for systems to function correctly in an operational environment.
**STEP 4**

Modernization Deployment

Launch your new tools and strategies, but be prepared for mishaps.

- **Anticipate** what might go wrong and develop contingency plans and fallback strategies accordingly
- **Determine** who will be responsible for each part of your deployment process and contingency plans
- **Do** a dark launch, testing your modernization project in a production environment before making it fully available to your users
- **Use** A/B testing to incrementally test new applications, websites or software
- **Keep** your stakeholders in the loop on how deployment is going
STEP 5
Post-Modernization

Provide post-implementation support while agency personnel are brought up to speed on new systems.

- **Determine** return of investment in terms of saved costs and impact on productivity
- **Document** strategies, wins and failures and relate them to all relevant stakeholders
- **Keep** staff on hand to address the inevitable glitches, issues or any questions users may have about the project
- **Use** a detailed training plan to avoid issues with end-user acceptance
Conclusion

“The important thing is to make sure you’re understanding what you’re doing, why you’re doing it and educating yourself and your users.”

Dustin Laun, Technology Expert at the Federal Communications Commission

With an IT modernization roadmap, agencies can execute their modernization efforts more confidently and increase the likelihood of successful projects.
Thanks to ViON & NetApp for their support of this valuable resource for public-sector professionals.