



Strengthening and Securing Federal Networks Through IT Modernization

A Conversation with the Experts

On September 27, 2017, the Center for Public Policy Innovation and Homeland Security Dialogue Forum convened a panel discussion on Capitol Hill featuring experts from across the government and the private sector on the topic of modernizing IT across federal agencies. Moderated by Mr. Luke McCormack, former Chief Information Officer (CIO) at the Department of Homeland Security (DHS), the discussion highlighted a number of areas including best practices for managing the IT modernization process, how modernization lends itself to improved cybersecurity posture, and opportunities to deliver increased capability to operators and improve the citizen experience.

Ms. Margie Graves, Acting Federal CIO, provided a high-level perspective on enabling federal agencies to realize modernization

Ms. Graves began by laying out the success factors for achieving modernization stating, "I'm starting to see stars align in a certain manner, that gives me greater optimism than ever before that we can meet the challenge." At OMB much of their work is centered on recognizing the specific challenges in each agency, identifying their High Value Assets, and understanding their cyber and operational posture to determine how to align these different areas to achieve modernization.

Two recent Executive Orders- *Comprehensive Plan for Reorganizing the Executive Branch* (EO 13781) and *Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure* (EO 13800)- have helped provide guidance on modernization. With the focus on reforming business processes across the federal government and modernizing the IT environment to better secure federal networks, these provide a helpful

conduit to inform ongoing modernization efforts. Ms. Graves recognized that the leadership from the Administration and bipartisan support on Capitol Hill for the IT modernization topic has helped accelerate progress.

Acquisition strategy plays an important part of the effort, and she pointed to the Enterprise Infrastructure Services (EIS) contract as a good example of an innovative vehicle for federal agencies to address future IT needs by establishing "on-ramps and pathways to work with the commercial sector." The governance piece is also very important at OMB as they have internal discussions about the selection process for IT modernization projects. They have been examining business cases to understand associated costs, the return on investment, and expected timeline. Ms. Graves commented that part of the selection criteria is predicated on improving the delivery of citizen services and OMB has recently convened a mock board to practice how the selection process would proceed.

The perspective of an agency CIO was provided by Mr. Joseph Klimavicz from the Department of Justice (DOJ) who highlighted how modernization can reduce risks

In his role as CIO, his main focus includes cybersecurity, providing better services, and protecting the mission- all of which are complimentary. "At DOJ, there is tremendous interest in cybersecurity and modernization at the leadership level, which has been great to have," said Mr. Klimavicz.

He also laid out what is required to modernize infrastructure and services to include: retiring legacy systems, moving to shared and managed services, and

creating operational efficiencies. Mr. Klimavicz commented that decreasing IT complexities is also critical, "IT systems have been built from the bottom-up for many years, as you try to retire them you have to untangle a lot of connections and configurations, and that is not an insignificant job."

Reducing complexity reduces risk, in his view, and as the attack surface shrinks, there is less exposure to cyber threats.

He also remarked that there are 43 component offices across DOJ and 22 component CIOs comprising a world-wide IT operation, and they are in the process of assessing opportunities to consolidate and driving the use of shared services to gain IT efficiencies.

Mr. Chip Fulghum the Deputy Under Secretary for Management at DHS talked about the importance of having strong management functions in place to support IT modernization from all directions

Mr. Fulghum commented that the challenge of IT modernization is a great example of the need for integration across business lines. He said that DHS has made a lot of progress on the integration aspect. This includes enabling the IT professionals to effectively communicate with the CFOs about technology challenges and "what it means in real terms." Once the resources are in place, then the acquisition team needs to be brought in to discuss a strategy for acquiring the technology in the most efficient way possible.

"IT demands a need for speed," said Mr. Fulghum who went on to say his office is looking to re-engineer the entire IT process from a management perspective to include: reducing documentation; reducing the time to evaluate alternatives- it currently takes 12-18 months; having the right measures in place for accountability; reducing the time for lifecycle cost estimates and working with the chief cost estimator on this issue; and delivering capability to operators and the IT community in a timely manner. In addition, there is a definitive need to hire the right IT and cyber talent by using the



From left to right: Mr. Luke McCormack, Ms. Margie Graves (OMB), Mr. Joseph Klimavicz (DOJ), Mr. Chip Fulghum (DHS), and Mr. Steve Harris (Dell EMC)

authorities granted by Congress and also hiring "smart buyers of IT," which requires a unique skill set.

He also commented that making buying decisions around IT can be complicated posing the question, "What business should we be in?" For example, should DHS maintain their own data centers or should that be bought as a shared service- these are the types of major IT

decisions the agency wrestles with on a regular basis.

Mr. Steve Harris, Senior Vice President of Dell EMC Federal provided some unique insights from the industry partner perspective

Mr. Harris commented on one of the major advantages of federal IT modernization, "Agencies can improve constituent services and decrease cybersecurity risk rapidly, while simultaneously saving money- it is a desirable trifecta." Dell EMC recognizes the shared goal with federal agencies to reduce risk and increase capability, while decreasing costs.

From an industry partner perspective, he said they would like to have a role earlier on in the acquisition process to help formulate a strategy for federal agencies. "It is difficult to arrive at an alignment between policy, funding, and contracting." Having the ability to engage with agencies on a solution basis would be helpful for the contractor to deliver capability and best meet the needs of their federal customer, he commented.

The panelists addressed questions about the major barriers to delivering IT services

The DOJ CIO commented that with large IT transformations it is possible to use "positional authority" to make decisions more quickly, but ultimately it is better to work collaboratively anytime money and acquisition is involved. "Most components will get onboard with your ideas when you show the value to the mission," he said. Funding is a pacing function for IT modernization, and having flexibility in

Total Federal IT Spending by Type (in billions)



\$7.3 billion decline since 2010

Source: GAO analysis of agency data, (GAO-16-696T); originally published by fedscoop and Dell EMC.

funding sources can help components get over hurdles associated with legacy IT systems,

Mr. Fulghum remarked, "One of the biggest inhibitors is to want to take-on risk. We are risk averse in the federal government and we need to figure out ways to reward innovative failure." He also candidly spoke about the challenge of protests from the contracting community that have become so frequent; it inhibits the department from moving forward to meet important IT needs. There are no consequences for industry when they protest, so it will likely remain a challenge for the foreseeable future.

From Steve Harris' perspective, one of the greatest inhibitors is not having the ability to collaborate on the front-end. It makes a big difference when industry has a prospective partner willing to work together in the early stages. He also said that "risk sharing models and public-private ventures" can be a good avenue for collaboration because both parties have "shared skin in the game," which can improve outcomes.

The panelists also shared their perspective on what is still needed to make federal IT modernization a reality

Ms. Graves remarked that many times agencies have good intentions but plans can fall through. She emphasized the need to demonstrate "commander's intent"- if you want a certain outcome you need to make sure the policies and approaches are in place. Mr. Fulghum said, "CIOs need to figure out how to speak with everyone else and answer the question- what does IT actually do?" At DHS, there are few things that do not depend on IT and it is the backbone of every mission area. Mr. Klimavicz commented that as CIO he is responsible for pushing innovation and evaluating new technologies - "What can we do with new technology that we can't do today?" is a question he frequently asks.

In their final comments, the panel indicated that they are on the right track to take advantage of the momentum building around IT modernization, but much work remains to be done

"There is a big opportunity here to take a huge leap forward to modernize both networks and applications, but it will require the collective efforts of all lines of business and staying power within leadership," said Mr. Fulghum. He also said it is important to have transparency with industry and justify agency needs to Congress. As Acting Federal CIO, Ms. Graves remarked she is very positive about the direction agencies are taking to modernize, "Taking the right level of risk is what we are seeing today, and it has been building for a while." In closing, Dell EMC's Steve Harris said, "There is great opportunity to embrace software defined and solutions, and the alignment between contracting and IT will bring revolutionary progress to modernizing IT." ■

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- Steve Harris of Dell EMC on federal IT modernization