"Innovation at the Speed of Business"

Nelson P. Moe

CIO for the Commonwealth of Virginia

7/24/19

Introduction

Chairman Kilmer, Vice Chairman Graves and Members of the Committee, thank you for the opportunity to speak today. As a preparatory note, my remarks for the committee are my own and are based on my experiences and observations. They do not reflect the position of Governor Northam's administration. I am here with the administration's knowledge and consent.

Executive Summary

My testimony today will cover the importance of innovation and modernization within the Government Public Sector IT and the difficulties to achieve it. I will also cover what the Commonwealth of Virginia has been able to achieve in what I believe is fundamentally transformative way for obtaining IT infrastructure services and sourcing (contracting). I'll go out on a limb and provide some suggestions to the committee with respect to policy and governance. Finally, I'll close with an optimistic view for the future of Government IT.

Innovation/Modernization

There is a constant drive for the government IT manager to provide cost-effective, relevant and reliable services while managing change and innovating to keep with technology options and lifecycles. Citizens demand the same IT experience of the government that they get from Silicon Valley. Nothing earth shattering here.

My message to the committee is about the torturous path the government IT manager must follow to achieve innovation/modernization. Sometimes all that can be achieved is keeping the lights on and minimal service improvement.

The Path

The government IT manager's path includes:

- 1) Understanding the business and organizational objectives which may change or are not fully articulated.
- 2) Managing the existing services and expectations. These can be high especially in Internet access, website capability and email delivery.
- 3) Timing the necessary steps for a successful procurement action from market research, RFP and contract award.

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- 4) Implementing and integrating the new technology into the existing environment with project management best practices.
- 5) Anticipating of funding for efforts (implementation and recurring). This includes the working through the appropriation process and any spending constraints.

None of this is easy and the Government IT manager is not incentivized to take risks.

IT Integration

In my experience the key factor in being able to innovate at speed and scale is based on the Integration capability of the IT organization. This is a growing field of industry expertise and its field of companies is expanding.

For the past 8 months the Commonwealth has employed a professional IT service integration supplier (vendor) and seven separate best-of-breed suppliers for its infrastructure needs (e.g., email, mainframe, servers, storage, networking, desktop and printing support).

My agency is using this model to provide the 63 Virginia executive branch agencies such as VDOT and DMV for all their infrastructure needs. This amounts to about \$360M in annual spend and supports over 60K Virginia employees and the hundreds of applications they use (e.g., ERP, EHR, etc).

We are performing this at less cost than the previous single supplier contract (it ran from 2005 to 2018) amounting to \$114M over 8 years @ ~6% savings per year. More importantly, we are adding new services at a much higher rate. In this fiscal year, we will add over 40 new services to include more circuit choices, laptop options and Cloud services. The model allows agencies (e.g., DMV) to focus on the citizen facing applications which provide noticeable differentiation and value for the Commonwealth.

A small number of states have started on this path but I believe the Commonwealth is the first state in the nation to fully achieve this MSI model for its infrastructure needs.

How was this done?

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In late 2018, the Commonwealth shifted its IT sourcing services approach and contracting strategy to be "Build to Adapt". This service and contract structure allows for adding capabilities to the existing model even if an existing provider is in place. A non-exclusionary clause is in place.

Additionally, there is significant contract language in the Transition Out section to motivate suppliers to perform. The model is like Legos. Each part is competitively bid and awarded but designed to interconnect.

We awarded contracts to Multi-Sourcing Service Integrator (MSI) and 7 other infrastructure suppliers. Service Level Agreements and internal Operational Level Agreements are key keeping the "team" on the same page and working together. We still working the kinks out but we're making progress every day.

We had a long term plan starting in 2013 and spanning two Governor's administrations, several Legislative Assembly sessions. It took significant stakeholder management and cooperation toward the ultimate goal of the new services/contract structure.

It also built on the groundbreaking efforts for Virginia starting in 2005 to consolidate all the IT infrastructure of the commonwealth under one comprehensive approach and single governance and management.

Cyber-security

Just a quick note on cybersecurity. This has been a top priority of the Commonwealth for many years and is still so for the Governor Northam Administration. We take very seriously the responsibility to protect citizen data and follow the best practice requirements for protection. (e.g., HIPPA, CJIS, IRS 1075).

The advantage of the "build to adapt" model is allows us the ability to hire best of breed suppliers as the market and capabilities change. It also allows us to bring in industry expertise for specific events if necessary.

Policy and Governance Suggestions

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I would suggest the committee consider:

- 1) Additional consolidation in commodity IT infrastructure and focusing on enhancing the ability to provide high value-add, differentiation IT services for the Members.
- 2) Determine where the House is on the Innovation vs Risk Mitigation scale. In my navy nuclear power career, it was fundamentally a process driven, risk mitigation focus for obvious reasons. IT Innovation requires some more acceptance of risk.

This determination is needed because it sets the foundation for IT strategy and contract architecture and approach. This should be done being mindful of what I understand as their basic organization drivers of 1) Legislation; 2) Member to Member and Constituent communications; and 3) Oversight

Conclusion

I'd like to close with my expression of optimism for the future. Innovation at speed and scale can be done and by at least on objective measure we are nowhere near the full potential for IT.

Let's say area of one page of my testimony represents the Internet of today and all its connections and data sources. It is about ½ of a square foot.

The Internet of the future can be as large as the area of the orbit if Neptune. The 8th planet from the sun.

Setting up the policy, governance and service contract frames work architecture is key realizing this mind boggling future.

This concludes my opening remarks and I look forward to answering any questions from the committee.