

IT Modernization in the Public Sector: Maximizing Value and Reducing Risk

Recent mandates and legislations have helped the Government focus on the importance of federal agency modernization, most notably the Federal IT Acquisition Reform Act (FITARA) and the more recent Federal Cloud Computing Strategy — Cloud Smart and Modernizing Government Technology (MGT) Act.

Also, the U.S. Federal Risk and Authorization Management Program (FedRAMP) authorizes secure cloud-based services to help accelerate modernization efforts. IT modernization initiatives can transform an agency's infrastructure, technologies, applications, and services to greatly reduce costs, improve performance, and meet evolving mission needs and priorities.

However, managing IT investment strategy to improve infrastructure is one of the most difficult aspects of running an enterprise. The sheer number of decisions to be made, each one leading to potential, unforeseeable pitfalls down the road, is enough to challenge even the most technically and financially savvy organizations.

Boston Consulting Group research shows that 70% of digital transformations fall short of their goals, often with profound consequences. The cost of failure is much higher in the public sector. Any disruption to flow of information within and amongst Government agencies can have a catastrophic effect on the citizens.

Contracting IT implementation and operations to the private sector has been an effective strategy to ensure Government IT systems are built on modern, yet stable technologies.

Influencing IT Modernization

IT Modernization in the Federal Government is influenced by several factors that differ not only among agencies but also between centers and offices within an agency. To support the agency in maximizing its return on investments, the vendor needs to understand the factors that influence IT Modernization.

To be truly effective, a technology consultant must understand the cultural, business, and technical needs of the agency and preferably have experience supporting the agency mission – e.g., healthcare or cybersecurity.

A good contractor should know the culture of the agency. What level of innovation is it willing to adopt? How much risk can it take? What is the mindset when it comes to workflows, work requirements and other factors? Some organizations are ripe for a complete change while others need to take baby steps to a more gradual solution.

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Legislative mandates, such as implementing a new payment model, migrating to the cloud, or updating the entire IT footprint often have a very short lead time. IT processes and systems need to support such turnaround times.

Promotion of Enterprise Services

IT architecture, implementation, and operations are significantly influenced by the availability of shared services available for use by the enterprise. Leveraging enterprise offerings lets project teams focus on delivering business value instead of duplicative effort of building infrastructural components. There are also significant cost savings for the agency as it can negotiate lower licensing costs and optimize the use of personnel and their skills.

Business and Technical Agility

The business and technological environment is constantly changing as agencies adopt lean and agile methodologies. The focus of IT implementations is not on 'freezing' requirements and compliance with inflexible processes, but on adapting to change and more effective governance without becoming overbearing.

A constantly evolving technical landscape calls for the use of architectural principles and tools that can adapt to the yet unknown future without locking an agency down to a service provider, software vendor, or an inflexible standard. Also, the focus should be on what fulfills the business need, and at times when simple solutions and processes are the best alternatives.

Equally important is the need to understand the skill level of both the agency workforce and relevant contractors. In most cases, agency staff will have more expertise when it comes to architecture and interdependencies of their data environment, while contractors perform actual maintenance and carry out operational duties. A good consultant should be able to bridge the gap between these two worlds, guiding the entire team to a more effective and efficient ecosystem.

Set Goals

Most agencies already have a number of IT options at their disposal. Online portals offer a wide range of generic resources that may or may not satisfy operational needs. More specialized tools can be developed as well, but there is often a lot of red tape to get the necessary

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authorizations. A good consultant should be able to pinpoint the specific needs of individual programs, as well as the available resources and funding to meet those needs. And it should be able to articulate the pros and cons of each approach, up to and including the establishment of entirely new infrastructure.

Non-Biased

It should go without saying that a consultancy should not favor one platform over another, or even open-source versus proprietary solutions. Full agnosticism requires solutions to be focused on the needs of the agency and not just on the desire to deploy, or to try out the latest and greatest technology. The focus should be on what fulfils the business need, and at times when simple solutions and processes are the best alternatives. This means integration should be a core competency, whether it is cross-platform, cross-cloud or cross-data architecture.

Proven Success

Digital transformation is not something that can be done by novices. A proven track record of success is vital in the selection of a consultant, and that success should be demonstrated across all the major methodologies and environments influencing IT development today, such as Agile, Waterfall, Datacenter and Cloud.

None of these approaches is right for every challenge, so the right path to success often features a hybrid strategy in which forward-leaning technologies are deployed where and how they deliver the greatest value while more established systems provide greater stability and compatibility with legacy environments.

Customer Success Stories

We recently orchestrated an end-to-end DevSecOps environment that allowed one agency to coordinate more than 30 development tools under a single, secure, development environment built around agile principles and full support of CI/CD methodologies.

In another instance, we designed and vetted a data lake that allows users to securely access data from across the enterprise while maintaining full security and governance. The solution simplifies on-boarding of new users so they can begin consuming data and developing model templates quickly and easily and promotes self-service and development independence through data description catalogs and standard.

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Nimbus orchestrated the full migration of a remote access call center to the Amazon cloud. The architecture was devised in close coordination with multiple technical teams to ensure the resulting environment was robust, secure, cost-effective and delivered an exceptional user experience. Also, we provided a more loosely coupled collection of components than a typical vendor solution, which enabled greater flexibility of design and enhanced failover capabilities.

Our experience also includes leading the design of a secure API gateway that offers full integration with multiple identity management systems and allows development teams to proceed at their own pace. We also performed a major system redesign that enables more advanced data modeling and migration that support parallel development transitions.

As these examples show, success does not depend on a single piece of cutting-edge technology but on careful coordination of multiple systems, frameworks, and architectures. These strategies must be carried out over the long-term in ways that are both flexible and lead to greater efficiency and overall performance.

The Right Partner

Having a strong, knowledgeable partner is invaluable in this transition, not simply to integrate various systems into a working environment but to guide your organization toward a more value-added IT environment that reduces risk and produces successful outcomes.

Choosing the right vendor(s) who are vested in the success of the agency's mission and in delivering value reduces the risk of IT transformation. We, at Nimbus Consulting, believe in providing unbiased and objective advisory services to our Government clients, boosting their confidence in their decision making and ensuring their IT investments are being delivered with maximum value while reducing risk.

The Nimbus team has seen and experienced business, technical, and most importantly, cultural transformations during our engagements at the Centers for Medicare and Medicaid Services (CMS). We have developed approaches that adapt to the changing impediments and opportunities of our customers.

Learn more about our capabilities and additional customer stories at <https://nmbs.io>