

PATHS TO MODERNIZATION:

Navigating Options for Upgrading Legacy Systems

As Secretaries of State look to modernize critical and aging software systems, they face an evolving landscape offering various paths to improvement. However, not all solutions are created equal, and the choice of platform carries long-term implications for efficiency and cost management. Determining the right modernization path requires a clear understanding of the available options and their impact. This white paper outlines three distinct modernization approaches: Custom Solutions, B2B SaaS with Government Overlays, and Configurable Government-Specific SaaS platforms. By exploring the benefits, risks, and resource requirements of each, this guide will help Secretaries and their staff make informed decisions tailored to the unique needs of their state.

OPTION 1: CUSTOM SOLUTIONS

Custom-built software has traditionally been the go-to choice for government agencies, offering purpose-built systems designed to meet highly specific needs.

Key Features:

- Purpose-built for individual agency needs: Tailored to align with unique legislative, regulatory, and existing workflows.
- Unique and potentially complex codebase: Requires significant development expertise.
- **Vendor dependence:** Once a custom system is deeply integrated, changes at the vendor level can significantly impact operations.
- Capital expenditure: High upfront costs, with little opportunity for additional capital budget approvals for upgrades to individual technology components through the life of the system.



Risks:

- Hidden project costs: Experienced agency staff with substantial subject matter expertise
 will be needed throughout the project to provide requirements, statutory guidance, and process design. Extensions to project timeline will affect the availability of line-of-business staff.
- Security vulnerabilities: Maintaining compliance with evolving cybersecurity standards requires constant vigilance and requires full-time security staff engaged in continuous learning.
- Operational inefficiencies: While custom systems are initially flexible, over time they lack the agility to adapt quickly to new demands.
- Obsolescence: Without regular updates, systems quickly become outdated. As custom systems age, they become increasingly prone to failures and outages caused by compatibility issues with newer hardware, middleware, and hosting technologies.

Recommendations for RFP Alignment:

- Request services, not software, and be clear that respondents will be creating work for hire.
- Include timelines and milestones with penalties for delays.
- Define expectations for system updates and ongoing support.

Staffing Needs:

Custom solutions require a skilled project manager to oversee the activities of both in-house and vendor staff. Full time subject matter experts from the agency will be needed throughout the life of the project to participate in requirements gathering, design, testing and training activities. Once the system is in production, it will demand substantial internal IT expertise, including developers, system architects, and cybersecurity specialists. Governments must also allocate resources for long-term maintenance and support.

OPTION 2: B2B SAAS WITH CUSTOM GOVERNMENT OVERLAYS

Business-to-Business (B2B) SaaS platforms with custom government overlays provide an alternative to custom solutions. While they offer faster deployment, they often fall short in addressing the unique needs of state agencies.

Key Features:

- Easy market entry: Prebuilt functionality accelerates deployment.
- One-size-fits-all: Designed to support diverse operational needs across different industries and sectors. Customization options are limited.
- Custom development for government use: Platforms designed for broad, diverse audiences require significant customization to meet the unique demands of government operations. This includes creating custom objects, triggers, workflows, and integrations tailored to specific regulatory, operational, and service needs. There may be a marketplace of plug-in or add-on capabilities designed to be compatible with the base platform.
- Highly complex architectures: Custom components, custom integrations and assembled



platform components require a diverse group of specialists with subject matter expertise and platform-specific knowledge to maintain.

Capital + operational expenditure: Initial setup costs are high, and recurring operational expenses often depend on unpredictable factors, such as fluctuations in the general population size.

Risks:

- **Limited control:** Customers have minimal influence over the core platform, including when and where updates are performed. Updates from offshore environments may not comply with U.S. privacy and security regulations.
- Failure to Meet the Needs of Government: Overlays may not adequately address unique legislative or regulatory requirements.
- Resource-intensive maintenance: Overlays often introduce additional complexity, increasing the maintenance burden.

Recommendations for RFP Alignment:

- Clearly define required overlays and configurations.
- Clearly identify allowable locations for software and data access.
- Specify data ownership and security requirements.
- Include provisions for regular updates to meet legislative changes.

Staffing Needs:

Similar to Custom solutions, B2B SaaS solutions require experienced agency subject matter experts to participate throughout the development process. Once the system moves into production, staff are required to manage overlay configurations, monitor vendor updates, and address integration challenges. Agencies must also allocate resources for training and ongoing system oversight.

OPTION 3: CONFIGURABLE GOVERNMENT-SPECIFIC SAAS

Government-specific SaaS platforms are emerging as a leading solution for modernization, offering the flexibility and scalability needed to meet evolving demands.

Key Features:

- **Purpose-built platforms:** Designed specifically for government use, ensuring alignment with unique needs.
- Flexible architecture: Easily adapts to legislative changes, new regulations, and increased demand.
- Low maintenance: SaaS providers handle updates, patches, and infrastructure management.
- Operational expenditure: Predictable, subscription-based pricing aligned to factors within the Government agency's control.



Risks:

Resistance: Internal stakeholders or external partners may be hesitant to adopt a newer, unfamiliar solution.

Recommendations for RFP Alignment:

- Focus on vendor experience in government-specific solutions.
- Require detailed service-level agreements (SLAs) covering uptime, updates, and support.
- Specify data ownership, security certifications, and compliance requirements.

Staffing Needs:

This option requires minimal internal IT staff. SaaS providers handle most maintenance tasks, allowing agencies to focus on service delivery rather than system upkeep. A small team may be needed to oversee vendor relationships and manage user training.

MAKING THE RIGHT CHOICE

Choosing the right modernization path depends on your agency's specific needs, budget, and longterm goals. Here are key considerations for each option:

- 1. Custom Solutions: Best suited for agencies with highly unique requirements and robust internal IT capabilities. However, the long-term costs and risks (associated with technical debt) may outweigh the benefits.
- 2. B2B SaaS with Overlays: Offers faster deployment but may struggle to fully address government-specific needs, requiring additional resources for configuration and maintenance.
- 3. Configurable Government-Specific SaaS: Provides the most flexibility and scalability, positioning agencies to adapt to future challenges with minimal technical debt.

CONCLUSION

Modernization needs to meet the unique needs of each state. By understanding the benefits and challenges of each option, Secretaries can align modernization strategies with their unique requirements, resulting in systems that are secure, efficient, and aligned with long-term goals. With intentional planning and strategic RFP alignment, state and local agencies can modernize their systems in a way that minimizes risk, optimizes resources, and enhances public service delivery.



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