The Shift From On-Premises Strategies and Its Impact on Chief Election Officials and Secretaries of State

In the ever-evolving landscape of government technology, Software as a Service (SaaS) has emerged as a more economic and efficient way of delivering applications. This white paper explores the benefits of SaaS solutions specifically tailored for Chief Election Officials and Secretaries of State (SOS) and identifies unique advantages over traditional government software development and maintenance.

Transitioning From Traditional Software Development

The unique nature of government operations traditionally required investment in custom software to ensure regulatory compliance, data security, and legacy system integration. But the evolution of cloud computing provided a foundation for scalable, accessible, and cost-effective software delivery, and as government technology developed to meet complex requirements, systems became increasingly adept at handling critical voter registration and election administration workflows.

The Emergence of SaaS

Much like the shift away from custom development, cloud computing offers agencies the ability to move from on-premises to SaaS. On-premises solutions allow for extensive customization to meet specific agency needs, and organizations have full control over their security and infrastructure. But as govtech advances in its ability to meet the unique needs of Chief Election Officials and SOS agencies, many are left wondering if the costs of a traditional on-premises strategy outweigh its benefits.
ON-PREMISES

**Location:** On-premises software is installed and runs on the agency’s local servers and hardware, which are maintained within its physical premises. Agencies are responsible for physical security such as access control, environmental conditions, and power supply.

**Infrastructure Control:** Agencies have complete control over their infrastructure, including servers, data storage, and networking. They are responsible for purchasing, maintaining, and upgrading the hardware.

**Capital Expenditure:** On-premises solutions typically involve significant upfront costs, including hardware purchases, software licenses, and implementation expenses.

**Scaling Challenges:** Scaling can be challenging and may require additional hardware purchases. Agencies plan for future growth and allocate resources accordingly.

**In-House Maintenance:** Agencies are responsible for managing and maintaining software, including updates, security patches, and troubleshooting. This requires dedicated IT staff.

**High Customization:** On-premises solutions allow for extensive customization to meet specific business needs. Agencies have control over the configuration of the software.

**Limited Accessibility:** Access to on-premises software is typically restricted to the agency’s internal network. Remote access may require additional security measures.

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**Cloud-Based:** SaaS applications are hosted on the cloud, and users access them through the internet. SaaS providers typically invest heavily in securing their cloud infrastructure.

**Vendor-Managed Infrastructure:** The infrastructure, including servers, storage, and networking, is managed by the SaaS provider. In this scenario, organizations are not required to invest in or maintain hardware/software, and the risk of this maintenance is transferred to the vendor.

**Operational Expenditure:** SaaS is typically based on a subscription model with recurring monthly or annual fees. This reduces upfront costs, making it more accessible for agencies of various sizes.

**Easier Scalability:** SaaS solutions are designed for scalability. Agencies can scale up or down based on demand without the need for significant upfront investments.

**Vendor-Managed Updates:** The SaaS provider is responsible for maintenance, updates, and security. This alleviates the burden on the agency’s IT staff, ensuring users have access to the latest features.

**Limited Customization:** While SaaS applications typically offer configuration options, the level of customization may be limited compared to on-premises solutions. This trade-off allows for easier maintenance and updates.

**Anywhere, Anytime Access:** SaaS applications can be accessed from any device with an internet connection.
CONSIDERATIONS FOR CHIEF ELECTION OFFICERS AND SECRETARIES OF STATE

The choice between on-premises and SaaS depends on factors such as control, up-front costs, scalability requirements, and an agency’s overall IT strategy. Both models have their advantages, and the decision often hinges on specific agency needs and priorities. However, given the role of Chief Election Officials and Secretaries in the electoral process, their decisions have profound implications on the functioning of government and the trust citizens place in the democratic system. The weight of these decisions reflects the unique challenges and responsibilities associated with their roles.

The move from on-premises to SaaS solutions is driven by the desire for cost efficiency, scalability, rapid deployment, enhanced security, and the agility to adapt to evolving electoral dynamics. SaaS technology aligns well with the unique demands of election administration, providing a modern, flexible, and secure approach to managing electoral processes.

1. SHARED EXPERTISE AND TECHNOLOGIES

SaaS offerings are designed to address the common needs and challenges of entire industries. Govtech SaaS developers bring a body of knowledge accumulated through their work with other election offices. This collaborative approach allows agencies to benefit from the collective wisdom of Chief Election Officials and Secretaries throughout the U.S.

2. RAPID DEPLOYMENTS

Unlike traditional custom-built software, SaaS offers a faster and more streamlined implementation process. SaaS applications come with pre-built features that are ready to use, eliminating the need for extensive development and testing.

3. STATE LAW COMPLIANCE

While Election Officials share common duties, each operates according to the unique laws and regulations of their state. SaaS solutions with adaptable architecture can be configured to meet the specific requirements of each office. This ensures that the software aligns with the state’s legal framework, offering a tailored solution without the need for extensive custom coding and development.

4. PUBLIC COMMUNICATION

SaaS solutions can play a crucial role in helping Election Officials offer timely and transparent public communication in the context of election administration by enabling real-time updates and data access. Agencies can provide information on voter registration, polling locations, ballot details, and election results, ensuring that the public receives timely and reliable information.
This same cloud-based functionality offers additional benefits for Election Officials and Secretaries, such as:

- Remote Accessibility
- Collaboration Tools
- Automated Communication Workflows
- Multi-Channel Communication
- Responsive Website and Portals
- Secure Information Sharing
- Interactive Voter Education
- Public Feedback Mechanisms
- Announcement Management

SaaS solutions offer the flexibility to adapt communication strategies based on changing needs. Whether responding to unexpected events or adjusting communication plans during different phases of the election cycle, SaaS platforms support agility in communication.

5. COST

While state-owned software implementations involve significant upfront costs for hardware, software licenses, and infrastructure, SaaS solutions are financially attractive for public agencies with constrained budgets. Cost visibility and control, including fixed subscription fees, multi-year agreements, and predictable renewal pricing, reduce financial uncertainty and can help streamline budget planning processes.

6. VENDOR SUPPORT

SaaS solutions significantly relieve the burden of maintaining staff with specific technical expertise, allowing agencies to focus on utilizing the software rather than managing the technology stack or underlying IT infrastructure. The cloud infrastructure of SaaS providers allows agencies to scale their usage seamlessly, accommodating increased demand without the need to hire and train additional personnel.

SaaS providers should also have dedicated support teams with deep knowledge of their products, ensuring election officials have assistance when needed. Agencies can rely on these teams for issue resolution and guidance which is vital during critical phases of an election.
7. SECURITY MEASURES

Election Officials and Secretaries must navigate the complexities of both physical and cybersecurity to safeguard elections from threats. Decisions regarding technology adoption are critically important in the context of election management where strict adherence to data protection and electoral laws is essential. Cloud-based SaaS solutions eliminate an agency's need to physically secure on-premises locations and shift responsibility for access-control and infrastructure maintenance to third-party cloud service providers. Reputable cloud providers also invest heavily in cybersecurity measures, adhere to industry-leading security standards, and obtain certifications to demonstrate their commitment to both cloud infrastructure and data security.

SaaS providers aim to maintain the highest standards of data security and prevent any unintentional co-mingling of customer data, ensuring the confidentiality and integrity of each state's information. Data is secured and segregated through encryption, multi-factor authentication, role-based access controls, audit trails and logging, secure development practices, user training, and continuous monitoring.

While SaaS solutions relieve organizations of many physical security concerns, it's important to note that cybersecurity responsibilities are still shared. Agencies must remain focused on securing their data, managing user access, and implementing best practices within the SaaS platform. Evaluating the security practices of the chosen SaaS provider and understanding the shared responsibility model is crucial for maintaining a strong overall security posture.

A SOLUTION FOR MODERNIZING ELECTION TECHNOLOGY

While Election Officials may not have immediately embraced SaaS solutions because of security concerns, traditional IT culture, customization requirements, and regulatory compliance, the landscape is evolving and govtech SaaS providers are offering specialized solutions emphasizing security, configuration, and compliance. As technology advances and awareness of the benefits of SaaS grows, election officials may leverage these solutions to offload the responsibility of software maintenance, reducing the burden on internal resources and allowing them to focus on more strategic initiatives. In this new digital era, SaaS emerges as a modern strategy for optimizing the operations of the nation's Chief Election Officials and Secretaries of State.