PILLAR ONE:

A MODERN, SECURE INFRASTRUCTURE ROOTED IN THE CLOUD

nformation technology leaders in government struggle with a common challenge: how to innovate when approximately 75 percent of time and budget are dedicated to simply maintaining existing systems.

Many government IT leaders are turning to the cloud for answers. Cloud-based platforms give agencies the opportunity to drastically reduce spend and free resources to develop, deploy and securely manage applications. Regular upgrades that come with cloud services often improve overall performance and security of software, and add new features and functionality that would take agencies months or more to test and implement using an on-premises system.

Former Kansas Department of Labor CIO William Sanders, now Director of Cloud Platform Strategy for Oracle Public Sector, has witnessed firsthand how rigid on-premise systems can hinder agency progress.

"In December, many companies would need to lay off employees to meet their budgets. Our traditional unemployment systems couldn't keep up with the demand for benefits, especially right before Christmas. The governor's phone would ring off the hook with unhappy citizens trying to submit claim," Sanders said.

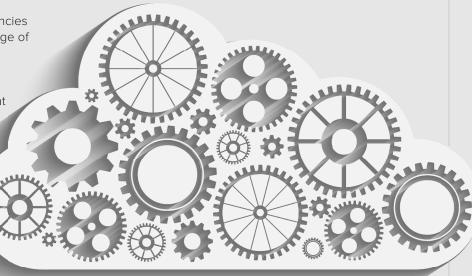
Today, with a cloud-based infrastructure, agencies can easily scale up capacity to meet the deluge of seasonal transactions.

The bottom line: Cloud enables agencies to establish a more modern, secure platform that connects everything; allows employees to better serve constituents; and provides insights that lead to more consistent, rapid and transparent decisions. While there are numerous advantages to adopting cloud, there's not a single "right choice" for every situation. For most agencies, the best option is to choose the most cloud-worthy applications, services and processes, and then select the cloud "as-a-

service" model that makes the most sense.

SaaS: For example, the software-as-a-service (SaaS) model enables immediate access to applications; however, it can also limit an agency's ability to tailor processes to its specific requirements. Core business functions are ideal for SaaS services, but ad-hoc, or agency-specific requirements, may need a more customized approach.

PaaS: The answer for many agencies is platform-as-a-service (PaaS), which can seamlessly integrate legacy applications with the cloud while providing many of the cloud's best features, such as mobility, enhanced security and advanced analytics. Agencies can retain full responsibility for applications, but defer management of the underlying stack (including the supporting technology components) to their service provider. In other words, PaaS allows an agency to pick the building blocks it needs to solve different business problems, then give those blocks to someone else to integrate and service. PaaS also enables agencies to "lift-and-shift" custom in-house applications to the cloud without requiring complex rework to underlying systems.



laaS: Agencies today already have tremendous investments in their infrastructure — largely on-premises. This includes capabilities for storage, compute, database and networking requirements. But all these capabilities are available in the cloud, combining the benefits of public cloud (on-demand, self-service, scalability, payfor-use) with those benefits usually associated with on-premises environments (governance, predictability, control) into a single offering.

These offerings provide agencies choice and along with the operational agility they need to manage a hybrid of on- and off-premises applications and storage. For example, an agency might keep critical, custom-written legacy applications on-premises, while it moves enterprise resource planning (ERP) or other core business applications to the cloud. The ability to choose what makes the most financial and practical sense gives agencies the greatest possible flexibility. The best way to accomplish this is to work with a vendor that offers a broad set of cloud services and understands how to move legacy applications to the cloud.

Many cloud vendors are specialized firms that offer highly targeted SaaS components with limited knowledge of how to integrate them with existing systems. Ideally, a cloud vendor will offer services that can be fully integrated at every level: SaaS, PaaS and IaaS. With an integrated cloud ecosystem, agencies can

reap the full benefits of the cloud while avoiding the perpetual upgrade cycle that occurs when they work with multiple cloud vendors. And with the right cloudbased tools, agencies can manage everything through a single console.

Oracle's approach — a complete cloud. Oracle offers public cloud, managed cloud, private cloud and traditional on-premises deployment models to support agency choice regarding when, where and how they go to the cloud while maintaining the interoperability of platform and infrastructure components. Organizations can optimize their IT organization by running workloads where they run best — on premises or in the cloud — then integrate business processes across these environments and easily migrate workloads between them. In short, agencies can tailor the service and deployment model to match their unique workloads - thereby driving better performance, security and value. With Oracle Cloud, agencies can create modern services, streamline back-office processes, improve employee effectiveness and create new levels of citizen engagement.

"A comprehensive cloud platform is foundational to innovation," Sanders said. "Our modern-day CIOs are no longer focused on 'speeds and feeds'; they must be able to lead the transformation of government and become the linchpin of progress."

HOW TO BUILD A FOUNDATION FOR CLOUD-BASED MODERNIZATION

1. CONSOLIDATE AND STANDARDIZE:

Standardize database platforms, development languages and hardware to enable the flexibility required to move back and forth from on-premise to cloud environments. Agencies can spin workloads up and down from the cloud and integrate data more easily once they've standardized.

2. DETERMINE WORKLOADS:

Determine which workloads — or aspects of workloads — to keep on premises, which to move to a private cloud and which to move to the public cloud.

3. MAKE A MOVE:

Whether it's a test/ development environment, a production environment, a disaster recovery environment, or a new, innovative, cloud-based venture, moving at least one workload to the cloud can start an agency down the path toward modernization.

For more information on Oracle cloud solutions, visit oracle.com/publicsector.

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