How to streamline
modern app development

Agencies should be able to focus on user-centric apps rather than the complexities of the underlying IT

Jeremiah Sanders
Federal Strategist, VMware

MANY GOVERNMENT APPLICATIONS that perform business and mission functions are archaic and cumbersome, require system-unique training, and lead to human error and wasted time. They were built using a one-pass development process that defined system functions at the beginning and did not solicit user feedback to ascertain real-world utility.

By contrast, modern app development frameworks emphasize product thinking and entrepreneurial management. That focus on product fit and customer value has transformed the software industry and made the likes of Facebook, Amazon, Google, Uber, Lyft and Netflix household names.

Modern app development ruthlessly prioritizes the creation of user value (making tasks easier) and user-centered design (making intuitive software we love to use). Essential in both regards is a perpetual software development process that is driven by user-centric context and feedback.

A mission imperative for government

In the commercial world, investment in modern apps is a business imperative, and the companies that focus on it attract the technology world's best talent. In the government, modern app development is a mission imperative that encourages the use of common tools, saves time and money,
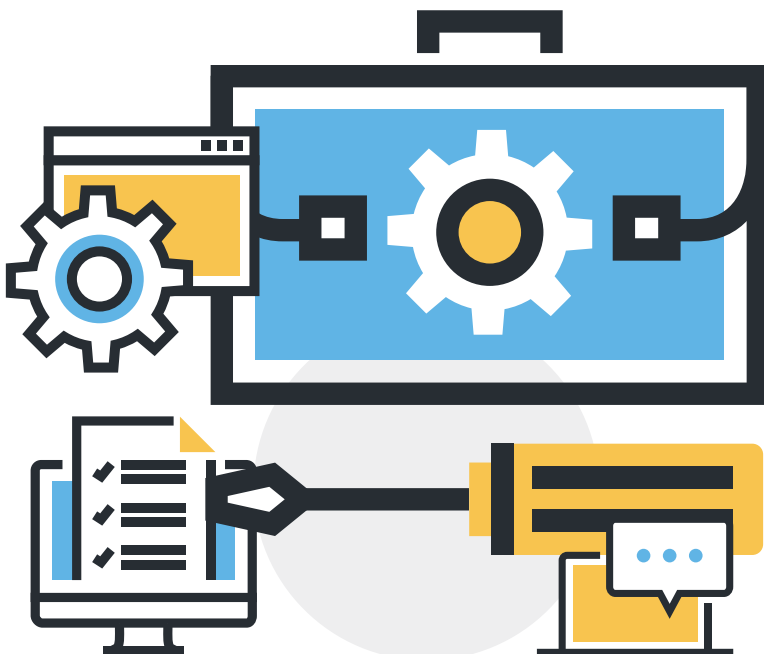
enhances cybersecurity, and improves the citizen experience.

Users of government software — whether they are citizens or agency employees — can become demoralized by the outmoded and onerous legacy systems that perform business or mission functions, especially when software makes every other facet of our lives easier. During my military career, I saw air operations conducted with pen and paper because manual processes were faster than using legacy software, and I know of many young military members whose decision to leave the service was heavily influenced by the lack of software capabilities on the job.

By contrast, the highlight of my military program management career was leading a 300-person workforce that went from not delivering any new capabilities to its user community in 10 years to putting new capabilities directly into warfighters' hands every four hours. We achieved that success by partnering with VMware's Tanzu Labs to build a winning culture and brand called Kessel Run. Software development, workforce productivity and morale skyrocketed as user demands for new capabilities were rapidly and continuously met.
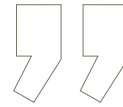
A laser focus on apps and data

Cloud technology delivers the speed and agility that high-performing software organizations need. Therefore, it is critical to partner with a vendor that can provide highly automated service abstraction layers for commercial, on-premises and hybrid

Shutterstock/FCW Staff

"Modern app development is a mission imperative that encourages the use of common tools, **saves time and money, enhances cybersecurity, and improves the citizen experience.**"

clouds. Some companies make it easy to reduce the cost, time and operational complexity of cloud migration by extending existing data center virtualization environments into a public cloud and then moving data center workloads with no downtime, no containerization and no changing of code.

That approach gives agencies a seamless hybrid infrastructure in their data centers and public clouds as a starting point for their

modernization journeys.

Furthermore, commercial shared-services technologies enable government developers and IT operators to be laser focused on what matters — apps and data — by abstracting away the complexities of building, running and managing the underlying IT stack.

At Kessel Run, for example, abstracting infrastructure complexities away from software developers allowed those developers to spend 70% of their time on delivering

new features. Cumulatively, VMware customers average a 32% productivity gain for developers and a 59% lower total cost of ownership for infrastructure.

Those gains are made possible by our portfolio's powerful combination of cloud abstraction and modern software development capabilities. ■

Jeremiah Sanders is federal strategist at VMware.

The cloud for all your apps.

Modernize your app portfolio with VMware Cloud.

carah.io/vmwaremodernapps

Welcome *change*

vmware®