# Swish

**Eager to transcend outmoded ways of serving citizens, agencies look to the private sector.**

# Gaining Experience in User Experience

To improve digital interactions between government and citizens, federal agencies could learn from the private sector, especially from companies that deliver outstanding user experiences.

The Modernizing Government Technology Act requirements of the President's Management Agenda and other government mandates have made improving citizens' online experiences with government a priority. Impediments, however, still exist.  One significant impediment is the complex and cumbersome procurement processes that agencies face when purchasing new, essential technology.  Requests for Information (RFIs), Requests for Proposals (RFPs), evaluations, etc., all slow procurement of technology that is needed for digital transformation.

"The government has a very bureaucratic procurement culture, that is part of a long-standing collection of traditional acquisition processes," says Sean Applegate, chief technology officer at Swish Data, a veteran-owned provider of information technology solutions and services to the federal government.  "That said, we are starting to see efforts to update and speed the process."

## TechFAR Hub and the Digital Services Playbook

TechFAR Hub , for example, highlights flexibilities in the Federal Acquisition Regulation (FAR) that can help agencies implement initiatives in the U.S. Digital Services' Digital Services Playbook – a guide based on private-sector best practices for successfully delivering digital services. FAR is a set of rules governing agencies' acquisition of goods and services issued by the Defense Department, General Services Administration and NASA. TechFAR Hub promotes the use of Agile software development which is a commercially proven practice that involves incremental processes by highly collaborative teams of stakeholders. Agencies adopting Agile have less failures, see value quicker and are easily adaptable to changing needs.

## DevOps speeds development

DevOps, a methodology that brings together Development and Operations teams, has been widely adopted by commercial organizations and is

being recognized by some of the more progressive government agencies. "Agencies are building secure, performance-centric DevOps continuous integration, continuous delivery (CI/CD) pipelines that integrate monitoring and security solutions into development processes," Applegate says. "Changes that make it through the pipeline are applied directly to applications, shortening and speeding up the development cycle."

## Artificial Intelligence and Application Performance Management

Further improvements to DevOps – and therefore digital services delivery – can occur by integrating artificial intelligence (AI) software and application performance management (APM) tools. Doing so ensures that applications perform in accordance with the expectations of users and customers. Moreover, applying AI to APM automates application problem analysis, enabling agencies to more quickly identify and remediate issues.

## Detailed Monitoring

Detailed monitoring of end-user experiences, in the manner of private-sector organizations, helps government agencies to more closely track application performance in the cloud and assess the impact on missions. Examples of benefits include better monitoring of case work – from creation and editing to approval and forwarding – and tracking applications for passports and citizenship. Greater clarity helps agencies respond to application constraints, making it easier to optimize processes.

The insights gained from detailed user monitoring also demonstrate the benefits of acquiring modern digital solutions such as AI and advanced application problem analysis. "Government agencies typically spend a significant portion of their IT budgets on maintaining legacy systems. Data from user monitoring proves the need to better understand the experiences of employees and citizens, while making a strong case to invest in procuring more modern technology solutions," Applegate commented.

## Culture Change

The cultivation of an IT progressive culture is imperative to the advancement of citizens' digital experiences. Agencies have to replace the old, bureaucratic, culture with a generative, goal-oriented mindset. To effectively implement new culture, operations and security teams must collaborate as in the DevOps methodology. Mutually reinforcing the DevOps' pillars of automation and measurement is a proven way to manage teams of disparate members, according to the State of DevOps 2018 Survey conducted by Puppet.

The survey found that among organizations that frequently use all the culture, automation, measurement and sharing elements that are core to DevOps, 47 percent are able to define their own monitoring and alerting criteria for apps and services in production, compared to 2 percent of those that use those elements the least.

"A generative culture typically rewards and encourages change," Applegate says. "Streamlining your change control process and leveraging technology to monitor the changes and validate that they worked can be very beneficial."

## VA putting it all together

U.S. Digital Service's work with the Department of Veterans Affairs illustrates the benefits of employing best practices. Consider Vets.com, which was designed for enhanced user experience and to make it easier for veterans to access and manage VA benefits and health care. An assessment of the site by the Digital Services at Veterans Affairs (DSVA) team found the desired ease of use was lacking.

The site required a login for creating an account, but many vets had trouble remembering their logins with all the credentials they required for other government accounts. In the reengineered version of the site, veterans can use their DoD logins or credentials for My HealtheVet, the site through which they schedule appointments, view health records and refill prescriptions.

The DSVA team also developed a tracking system for veterans who appealed their disability statuses – a process that can take years to adjudicate, according to VA. Additionally, they built a tool for veterans with a dishonorable discharge, making it easier to file an application for a discharge upgrade.

## DoD navigating the ATO process

DoD has made it easier for IT staff to develop and update applications through a centralized repository of containers, according to Nicolas Chaillan, Special Adviser for Cloud Security and DevSecOps to the undersecretary of Defense for acquisition and sustainment. Developers have access to databases and tools that are already approved and accredited for DoD use. They "don't have to spend six to eight months on acquiring an Authority to Operate (ATO)

on those tools," Challain said during a presentation at the Defense Acquisition University.

The software is built on a continuous ATO basis, making it possible for developers to push out new versions of software as often as they'd like without having to get new ATOs every time.

"What we're building is the best-of-breed tools that you need in a software factory to build software, test it, have the cybersecurity baked in and actually run the software in production. This involves monitoring, behavioral analysis, cybersecurity tools and AI tools," he said. "It's foolish to expect DoD programs to succeed without these tools."

## Digital competency

A lack of digital competencies can be detrimental to an agency, according to a recent Economist Intelligence Unit Survey commissioned by Riverbed, a Swish Data partner. Among respondents, 57 percent said their organizations struggle to meet goals because of insufficient digital competencies, while 65 percent say those gaps have hurt user experience.

But as discussed previously, tools exist to ease agencies' transition to IT modernization. DevOps, Agile, AI, automation and detailed user monitoring can free developers and other IT specialists from mundane, rote tasks and enable them to focus on mission-critical work. The VA, for example, streamlined the user experience on Vets.com and the Defense Department is quickening the pace of software deployments.

By adopting a culture that embraces change and coloration and investing in updated systems,

![Swish logo]

government agencies can close the gap between the public and private sectors.

"A lot of this is getting your teams rowing together in a single direction with a top-down government investment that allows you to operate best practices across all of your applications so your teams can work efficiently together," Applegate states.

## Steps to Modernization

**1** Access the maturity of your digital performance management.

**2** Convene a workshop with departmental leads and technical architects to get a single view of end-to-end performance.

**3** Research technology enablers and set a modernization budget.

**4** Train employees on new software to maintain a high level of usability and productivity.

**5** Maintain an open-ended process and encourage feedback.

## About Swish

Swish is a customer-centric, specialized integrator with an engineering first culture. Swish focuses on IT Modernization, Performance and Cybersecurity solutions. Swish strives to bring value to clients through continuous improvement expertise; robust services, superior engineering and creative solutioning.

To Learn more, please visit: **www.swishdata.com**

1420 Spring Hill Road Suite 600 Mclean, VA 22102

**P** 703.635.3324  /  **F** 703.852.7904  /  **E** info@swishdata.com