

In Utah's 'Silicon Slopes,'

A Skills Strategy for State Technology Workers

ith plans to shut down the state government's data center as part of a wide-ranging modernization strategy, 2020 has been a groundbreaking year for Utah's Department of Technology Services (DTS). To meet the state's rapidly changing needs, DTS has focused on its IT workforce, leveraging tools to help employees build new skills and identify areas where additional training could help the agency adapt to the sea change in how the state does business.

"You hear about the talent skills gap all the time," says Michael Hussey, who was appointed as CIO and executive director of DTS in 2015. "We're trying to be creative for our employees, keep some incredible folks, and help fill a void in the skills we need for the state."

Modernization on the 'Silicon Slopes'

As head of DTS, Hussey has watched as growing numbers of technology companies have moved to Utah's populous Wasatch Front in recent years.

"We're trying to create the next Silicon Valley — we've termed it the 'Silicon Slopes," he says.

While Utah's technology boom has been good for the state and its economy, the growing competition for talent has created challenges for state government.

"These companies do a great job recruiting our employees," Hussey says. "We have some great folks who come in, learn what we're doing in the state and then spread their wings."

The state's aggressive move to the cloud has created even greater demand for specific, hard-to-staff skillsets. It also spurred the need to level-set capabilities across teams working for different state departments and projects. But it also gave DTS the opportunity to develop those skills in house, providing new options for veteran employees in the process.

"We have a significant number of COBOL developers, and we knew we wouldn't need COBOL development services after we retire the mainframe," Hussey says. "About three years ago, we went to the group and said, 'This is what the runway looks like."

But DTS didn't just provide its workers a runway. Instead, state leaders developed a skills strategy built around creative approaches to help staff modernize their skills and for managers to more easily identify and nurture existing technology talent.

"Many of our employees are trying to figure out what's next for them," says Hussey. "We provided a vision for what's next and the opportunity to upskill."

A Pathway to Build Skills

As part of its strategy, DTS used two online platforms to provide highly targeted training and identify skill gaps.

With more than 7,000 online courses across more than 850 technologies, Pluralsight's web-based Skills platform offered a range of training and tools to help DTS employees upgrade their skills. To target the skills the department needed most, managers worked with the company to create "channels" of aggregated training content in areas ranging from cloud architecture and AWS to the AngularJS Javascript framework and project management.

The skill-building opportunities in these channels run the full range of learning experiences, from embedded microlearning opportunities and refreshers all the way through comprehensive tutorials and certification programs in key technology areas. One key has been addressing a longstanding barrier to training in the public sector, says Erin Mackin, a Pluralsight customer success manager who has worked closely with DTS.

"There's a fear around visibility that impedes the growth mindset — if I measure my skills, the negative stands out more

than the positive," Mackin says. "The platform focuses on helping people identify their gaps and quickly filling them."

At the same time, DTS used Pluralsight's Flow platform to help managers take a closer look at ongoing projects for potential skill gaps. By analyzing code from projects in progress, managers have targeted additional skill-building for their teams based on the efficiency of the work being done.

"We had managers do the analysis of code that was checked in and suggest training for their IT groups," Hussey says. "It was a way to increase their teams' IQ in the technology stack."

Flow's emphasis on efficiency — along with coaching, mentoring and other insights to help IT staff improve their skills — has become a key part of how managers oversee projects and staff, Hussey says.

"When you're spending millions of dollars on projects, you want to get as efficient as you can," he says. "You can't count lines of code they develop every day — a good developer can do something in 10 lines that another would take 100 to do."

The impact of both platforms has been significant, with most of DTS' 720 employees engaging in skill-building activities. Nearly 20 percent of learners progressed to expert-level ratings in their areas of study, according to Mackin, who credits the department's success on letting managers and workers guide their own learning.

"Technology maturity comes by taking a skilling journey together — not top to bottom, but bottom up and side by side," she says.

The effort to engage the workforce also has had some unexpected benefits. For example, the platform's top user to date has been a DTS receptionist who trained herself in project management and has subsequently shifted roles.

"She wanted to reinvent herself," says Hussey, who has personally explored AngularJS training to better understand changing needs.

"Finding this platform helped people who have done things one way for 20 years to upskill," he says. "We've retained some great talent — dedicated, hardworking folks. We've tried to help them, and it has worked well for us."

What's Next

Even without the pandemic, 2020 would have been a momentous year for DTS with its data center transition. But

when COVID-19 forced state employees to work remotely this spring, the Flow platform also helped address the new challenge of managing a suddenly remote workforce.

The platform's ability to analyze the efficiency of work in progress allowed DTS leaders to understand whether remote staff and contractors are "reworking code over and over or advancing a project," Hussey says. "It also lets you know how they are doing in the telework situation."

An added benefit, Hussey adds, is that yielding insights from analyzing code offers a "more elegant" means of remote workflow management than more intrusive monitoring strategies that track keystrokes or internet usage. With plans to continue telework after DTS moves into new, smaller office space without assigned seating arrangements, the platform will help managers oversee a more mobile workplace over the long term, he says.

That visibility is also allowing DTS to respond to rapidly changing state needs in more agile ways. This includes better supporting homeless populations and safeguarding November's elections.

"From an enterprise perspective, it gives us a lot of visibility, especially as we're slowing down on some projects and others are speeding up," Hussey says.

Finding ways to identify hidden staff strengths will also provide government IT leaders with added agility as they navigate unpredictable times, Hussey says. In Utah, the application to support the homeless population was developed in about two weeks by one programmer — whose expertise was identified by Flow and who was then subsequently placed in a lead development role for the elections project.

"We have discovered brilliance in our organization," Hussey says. "Every other entity can discover the same kind of brilliance by helping employees find ways to transform and pivot."

"One of the things I like most about my job is that what I did yesterday is completely different from what I'll do tomorrow because technology is always transforming — and my employees are too," Hussey adds. "In this new normal, this will allow us to help our employees to connect dots that weren't connected in the past."

This piece was developed and written by the Government Technology Content Studio, with information and input from Plurasight.



Government Technology is about solving problems in state and local government through the smart use of technology. Government Technology is a division of e.Republic, the nation's only media and research company focused exclusively on state and local government and education. www.govtech.com



Pluralsight is the tech workforce development company that helps government agencies keep up with emerging technology, safeguard against cybersecurity threats and modernize legacy IT systems. Using our Skills product, teams can consistently deliver and quickly adopt new tools by building critical tech skills. Our Flow product gives engineering teams actionable data to improve workflow efficiency. For more information about Pluralsight visit www.pluralsight.com/industries/government