Strategies for Developing the New Skills They Need

loud computing has become integral to state and local government operations over the past few years, enabling organizations to quickly empower their remote workforce, deploy digital constituent services, build intelligent workflows and automations, improve data storage and backup capabilities, and more. These successes have shifted organizational mindsets toward a cloud-first approach and spurred additional investments in cloud technology. In a recent symposium, Gartner analysts said that more than 85% of organizations will embrace a cloud-first principle by 2025,¹ and in Gartner's 2022 CIO Survey, 54% of government CIOs indicated "that they expect to allocate additional funding to cloud platforms in 2022."

To keep pace with innovation and maximize investments in cloud technology, government organizations will need an IT team that knows how to correctly, securely and efficiently migrate existing data and processes to the cloud as well as deploy and manage cloud-native, cloud-first solutions. Cloud requires different skillsets than on-premises infrastructure, applications and workloads, and states and local governments are already facing monumental IT staffing and skillset shortages.

"Everybody wants to move to the cloud," says Drew Firment, senior vice president of cloud transformation at A Cloud Guru, an online training platform that offers cloud certification programs and is owned by Pluralsight, a leading workforce development company. "But our State of Cloud report<sup>3</sup> found that only 8% of the workforce has the capability to actually deliver on the promise of cloud computing. As a result, 50% of all IT cloud migrations worldwide are currently delayed up to two years simply because of the lack of skills."

# ► Migrating people, not just technology

While organizations typically devote significant time and money to migrating their applications and other resources to the cloud, they often overlook the importance of "migrating" their talent to the cloud. "You can't achieve an ROI if you migrate technology to the cloud without bringing your team with you," says Firment.

To bring teams up to speed on cloud migration and other cloud skills, proactive organizations are providing IT staff with state-of-the-art online training, including self-paced labs, hands-on experience, simulations, virtual sandboxes and more. These courses help IT teams quickly develop critical technical skills while also fostering a culture of continuous improvement. With the right strategy, these courses improve resilience and agility, ensure proper cloud deployment and management, and reduce re-work and cost overruns. They also help address staff recruitment and retention challenges by reducing the stress associated with learning new skills, enabling individuals to advance in their career, providing opportunities to re-skill non-technical employees and minimizing the need to hire new cloud talent.

# Upskilling and reskilling strategies

Successful IT training starts with leaders who are purposeful about making sure learning is meaningful and that it contributes to the organization's larger mission.

"When you go through an initial engagement with cloud, you can run into a wall," Firment says. "Your early pioneers can only bring you so far. You need that infantry — that critical mass — to fortify your defenses and move forward. That's all about creating a culture, and the organizations that are modeling that are very purposeful about it."

To move IT teams forward at scale while also tailoring experiences to each individual's current aptitude, effective IT training incorporates the following strategies.

### Assess current skills to create a path from "as is" to "to be."

Skills assessments give individuals and IT leaders a sense of where they stand in terms of cloud computing skills. IT leaders can identify overall strengths and gaps on their team bench, evaluate personalized learning recommendations that the assessment process provides, and then prioritize skill development opportunities. Individuals and teams can also track progress over time with ongoing, quantified assessments.

## Become cloud literate. (Cloud certifications are a great place to start.)

Cloud is a culture. As with any culture, there is a language associated with it. Basic cloud literacy is essential for IT team members as well as IT leaders to be able to communicate clearly and grasp core concepts. "There's a different mindset and a different way of working. You have to unlearn the biases of your legacy approaches to start to understand the paradigm shift with cloud computing," says Firment.

Cloud certifications are a great starting point for cloud literacy. Leading cloud providers offer non-technical, entrylevel certifications that encapsulate foundational concepts of cloud computing and provide a basic understanding of how to take advantage of the provider's cloud to solve business problems. By providing a common language, these certifications also help IT teams bond around a cloud culture.

#### Provide hands-on experiential learning.

People learn best — and retain what they learn — when they apply new skills incrementally and regularly in an environment that simulates real-world cloud scenarios. According to Pluralsight's State of Cloud report, 71% of learners prefer daily or weekly learning opportunities, and 64% prefer handson learning to develop and reinforce new skills. Hands-on labs offer bite-sized, personalized learning modules that staff can fit into their workday and even use to solve real work issues "just in time." Virtual sandboxes enable teams to practice their cloud skills and make mistakes without risk.

## Foster a culture of skills development; emphasize cohort-based learning.

Creating a cohort of engaged learners is fundamental to sustaining proficiency, continuous learning and innovation. The cohort proceeds along together and creates critical mass for cloud adoption and success. Certifications help provide a sense of accomplishment and cohesion, Firment says. "But

more importantly, you've built the relationships to create and incubate these communities for sustainable transition."

Accelerator programs are especially impactful within cohorts, where team members can encourage each other. These sprint-based programs typically offer weekly lessons, hands-on projects and other resources to accelerate preparation for cloud and other certifications.

#### Move from cloud literacy to cloud fluency.

Achieving basic cloud certification is the first step to cloud fluency. With basic certification, individuals and IT teams can begin to learn more advanced skills and consume content that helps them keep up with the ever-changing cloud landscape. Here again, a thriving cohort and a culture of continuous learning provides a fertile environment for innovation and change.

# **Getting started: Democratize cloud** education and lead by learning

To migrate their IT team to the cloud, leaders can start with the goal of democratizing education so that everyone can participate in and contribute to cloud success. Firment also encourages leaders within the organization to model continuous learning by getting entry-level cloud certifications.

"Learning should include developers and engineers as well as scrum masters, product managers and technology leaders. It should also include business leaders who need to understand the basic capabilities that exist and how to ask for things differently. With that basic understanding, you begin to understand where your blind spots are and can start making better-informed decisions," says Firment.

This piece was written and produced by the Center for Digital Government Content Studio, with information and input from Pluralsight.

#### **Endnotes**

- 1. https://www.gartner.com/en/newsroom/press-releases/2021-11-10-gartner-says-cloud-will-be-the-centerpiece-of-new-digital-experiences
- 2. https://www.gartner.com/en/newsroom/press-releases/2022-06-13-ww-govt-it-spending-forecast-2022
- 3. https://www.pluralsight.com/resource-center/state-of-cloud
- 4. https://webinars.govtech.com/Upskilling-Your-Team-on-Cloud-141524.html
- 5. https://www.pluralsight.com/resource-center/state-of-cloud



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