Verizon Builds a Cloud-Fluent Organization with the Help of A Cloud Guru on AWS

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- Mahmoud El Assir, SVP & CTO at Verizon

Driving Internal Talent Transformation to Support Cloud Adoption

“Verizon is one of the largest communication technology providers in the world and has always been a leader in next-gen networks that will reshape how society works and plays,” says Chivas Nambiar, executive director of cloud engineering at Verizon. “We maintain this leadership through cutting-edge technology which requires world-class technology talent.” Verizon’s rapid pace of innovation and innate ability to scale are critical to meeting customers’ needs and offering next-generation solutions and innovations.

To gain agility and scalability for its development teams and workloads, Verizon began to explore options for deploying cloud-native software solutions and applications on Amazon Web Services (AWS).

“As a critical international infrastructure provider, Verizon has always built and run large data centers,” says Nambiar. “While we continue to do that for our network data centers and certain limited scenarios, the next generation of IT and software workloads are much better suited to the agile and elastic nature of public clouds.”

To take advantage of the cloud and optimize applications, Verizon’s engineers need to gain cloud fluency, which Nambiar defines as familiarity with how to architect, design, and build cloud-native and cloud-friendly solutions and platforms.

“We working with an operating model in which real-time and scalable cloud infrastructures are available is very different from a fixed capacity infrastructure model. We felt cloud fluency could empower our engineers to be effective in this new model and create a cultural shift around fast experimentation within our IT organization, making them primed and ready to continuously build the future," says Nambiar.

“We knew the backbone of this journey would be dependent on how “cloud fluent” our engineers were. We wanted to build a learning program that would not only grow the cloud capabilities of our engineers but would also create a cultural shift within our entire IT organization to be primed and ready to continuously build the future.”
- Mahmoud El Assir, SVP & CTO at Verizon

Challenges

- Build cloud fluency across the organization
- Get a large portion of its engineering team AWS Certified in a short amount of time

Benefits

- 1,300 Verizon engineers became AWS Certified in seven months
- Newly-gained AWS skills and expertise have helped Verizon experiment with new technologies and solutions
Becoming a Cloud-Fluent Enterprise through Comprehensive Training

“We started with very few public-cloud-aware architects,” says Nambiar. “While these few early adopters were enthusiastic and learned on their own, it was evident that we needed to target the larger mass of the IT organization to drive meaningful progress.” Verizon set an ambitious goal of having 10 percent of all IT employees certified with AWS.

Verizon knew that underpinning its ability to transform on the cloud would be the ability to drive a culture shift within the organization to embrace cloud development and focus on ongoing learning, so they engaged with AWS Partner Network (APN) Advanced Consulting Partner A Cloud Guru to help the team drive such a shift.

“We’re engineers who teach engineers how to engineer on the cloud,” says Drew Firment, SVP of strategic partnerships and business development at A Cloud Guru. “We get it, and we want folks to learn how to consume services to build really great stuff. I think that comes out in our content and our long-term focus. What matters to us is being able to provide content that matters to the individuals at the organizations we engage with. Knowing we’ve helped usher them into a next step in the cloud journey is very rewarding and doing that both individually and at scale is at the core of A Cloud Guru’s mission.”

Working with A Cloud Guru, Verizon designed a learning experience geared toward teaching a large number of employees how to adopt a different mindset while developing a new skillset. A Cloud Guru and Verizon focused the training program on empowering employees to experiment, collaborate, and take on various coaching and teaching roles.

“Using A Cloud Guru as our training partner, we offered employees self-directed training options with bite-sized learning models,” says Nambiar. “By doing so, we were able to provide our community of engineers with an easily consumable yet comprehensive set of training and exam preparation courses. All of these options made the transition much more manageable for our busy engineers.”

Verizon structured its incentive program around recognition. “Our incentives were primarily focused on the ability to achieve industry-recognized certification and internal bragging rights. Certified employees were called out and employees with multiple certifications were recognized and highlighted by senior leadership,” says Nambiar.

A Cloud Guru believes a crucial part of Verizon’s ability to drive its cloud transformation program was the support its executive team provided to the training endeavor and transformation. “I believe that the hallmark of a successful transformation is when an organization has executive buy in,” says Firment. “Verizon’s executive team understood the importance of integrating training as one of the pillars of a cloud center of excellence and knew how important it was for employees to both learn AWS and be able to experiment on AWS to build a successful culture and get employees excited and invested.”

Supporting the Next-Generation of Development

Verizon exceeded its initial training goal and had over 1,300 IT employees receive their AWS Certified Solutions Architect-Associate certifications in just seven months. Verizon also achieved a cultural shift within its engineering organization, encouraging and rewarding learning in a new and continuous way.
“As a result of our training program, we had an application team build an entirely new business model for the used devices marketplace based on their ability to experiment and disrupt incumbents,” says Nambiar. “Once they were able to show the results of their experiments, the business decided to fund and launch the product, going from idea to customer-facing in under five months.”

Another area in which the team has been able to drive innovation is serverless computing. “We had our internal platform teams build a container orchestration model on AWS to help accelerate the migration of workloads to AWS,” says Nambiar. “This wouldn’t have been possible without a deep understanding of the infrastructure and network model in AWS. Further, it enabled our application developers to start using industry-leading technologies such as database platforms-as-a-service and Serverless frameworks.”

With a large portion of its IT organization achieving cloud fluency, Verizon can take full advantage of the reliability, security, performance, and cost benefits provided in the AWS Cloud. “I know our IT employees will be happier and more productive,” says Mahmoud El Assir, SVP & CTO at Verizon. “Cloud adoption isn’t just about cost benefits and performance. It’s about being a technology-led organization with an agile culture that embraces learning and change.”

Learn More

Learn more about AWS Certifications.

A Cloud Guru’s cloud-based technology learning platform provides a comprehensive, up-to-date library of cloud education offerings for all skill levels, including certification courses, skills assessments, hands-on labs, a set of weekly technology-news series by industry experts, and management dashboards that track student progress. A Cloud Guru’s state-of-the-art learning management platform is developed by its in-house cloud engineers and powered by serverless technology that enables its content to effectively scale to more than 700,000 students in over 160 countries.

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