

State of Cloud Learning Report



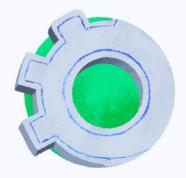


Methodology



3,378,043

hours of A Cloud Guru course engagement data evaluated



6,108

cloud learning administrators representing more than 100,000 on-the-job learners through A Cloud Guru and Linux Academy surveyed



20,000

individual cloud learners, members of A Cloud Guru or Linux Academy surveyed

Job role breakdown among *individual learner* respondents:



Individual Contributor

56%



Team Lead / Manager 26%



Senior Management / C-Level

5%



Job Seeker

7%

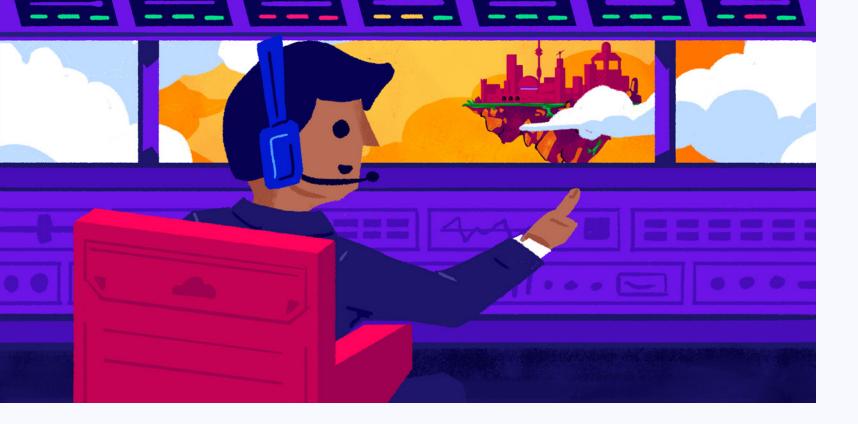


Student / Intern / Volunteer

6%

Job role breakdown among cloud learning *administrators*:

Technical - I am in engineering, dev, systems, etc	41%
L&D - I am in training, learning, employee services, etc	13%
Leadership - I am on the leadership or executive leadership team	46%

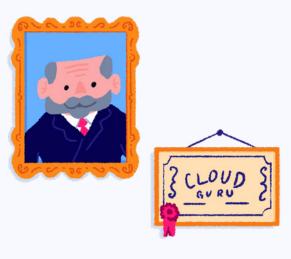


Findings

As cloud adoption grows, demand is rising for skilled cloud professionals. We investigated the most popular cloud learning platforms, the barriers to growth in cloud expertise, and the future of cloud skills as predicted by the industry.

The *power* of cloud learning

Cloud expertise, measured via certifications and hands-on expertise, brings rising value for employers and career advancement for individuals.



How cloud learning helps your career

82% of hiring managers say cloud certifications make a candidate more attractive.

Similarly, 87% of hiring managers value hands-on experience and certifications over a university degree when evaluating candidates.

Those preferences show up in engineers' experiences as well: 52% of individuals say cloud certifications expanded their career opportunities, with more than 80% of those respondents identifying a higher salary as a direct result of cloud certification.



How cloud learning helps your team

97% of cloud leaders believe their organization would function more effectively with a uniform shared basis of cloud knowledge. That's not surprising, given that 71% of leaders surveyed have already seen cloud adoption speed up their time to value for new products and features.

But cloud talent doesn't grow on trees, and 80% of cloud leaders reported finding it easier to upskill existing talent than to hire for new skills. Not surprisingly, 94% of employees are more likely to stay long-term with an employer who invests in their career through skills development.



The *challenges* of cloud learning

Cloud learning doesn't just happen; you need a strategy and a commitment to see it through.

For learners

More than 76% of learners identified "finding time to study" as the biggest barrier to expanding their cloud knowledge, followed by "lack of hands-on opportunities" and "uncertainty about where to start and where to go next".

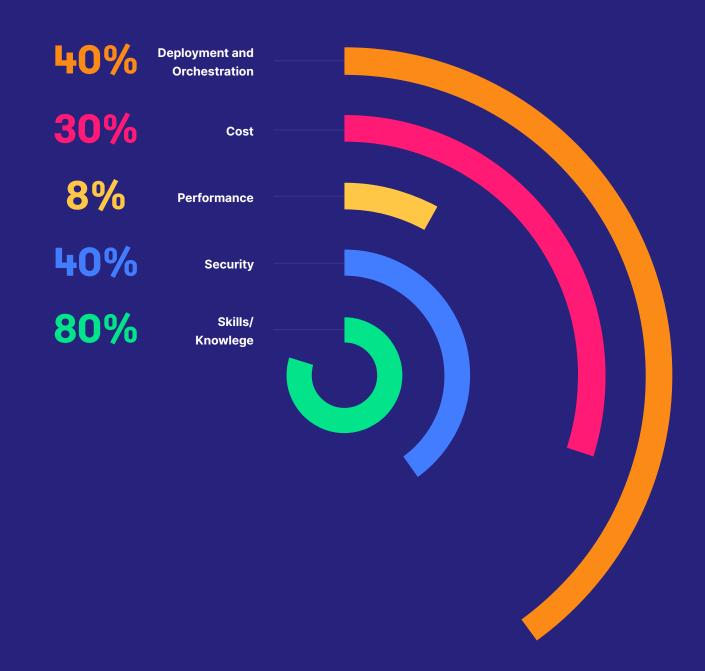
For businesses

Cloud adoption gets nowhere without the people who execute it. More than 80% of cloud leaders identify lack of internal skills and knowledge as a top barrier to cloud success.

And yet 76% of cloud learning administrators say the hardest thing about guiding their people through cloud training is **competing priorities with day-to-day work getting in the way**. Perhaps surprisingly, other complaints such as low buy-in from leadership or individuals tend to rank much lower, with less than 10% of respondents ranking them a top concern. (Translation: everybody wants to do training; it's just about executing an effective plan to make it happen.)

A supermajority of learning administrators identified **online training** and **certification incentives** as their most effective strategies for combating this problem and advancing learning throughout the organization.

BARRIERS TO CLOUD SUCCESS





The *future* of cloud learning

Cloud adoption is only growing, and so is the demand for skilled cloud professionals across all 3 major cloud providers. But what's the line between hype and reality? We looked at ACG's internal data, as well as survey results, to see what cloud learners really care about.

By cloud provider

As shown in the adjacent graph, AWS expertise was most common among our respondents, with more than 80% of respondents having trained on it, followed by Azure and GCP between 30% and 35%.

However, when individuals were asked which cloud providers they planned to train on in future, Azure jumped out to a narrow lead at 54%, followed closely by AWS and GCP.

Similarly, more than 70% of administrators identified AWS as the primary cloud platform used within their organization, with Azure less than 10% and GCP below 5%. However, an almost identical number of administrators confirmed that their organization currently utilizes multiple cloud platforms, implying that Azure or GCP fills a secondary role in about three out of four cloud strategies.

In the meantime, more than 63% of our individual respondents have achieved at least one cloud certification, with more than 50% holding between one and three certs.

FIGURE 1 - CURRENT CLOUD EXPERTISE

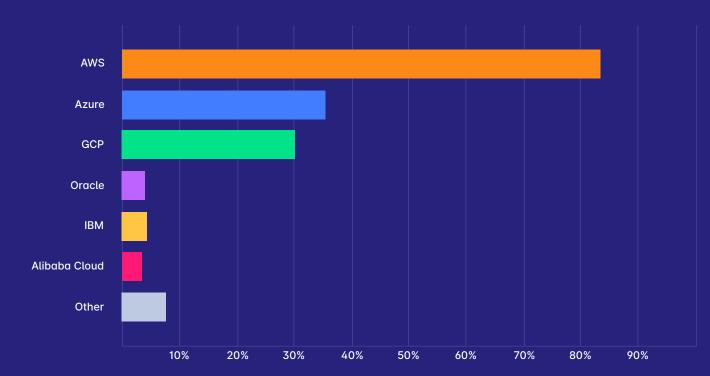
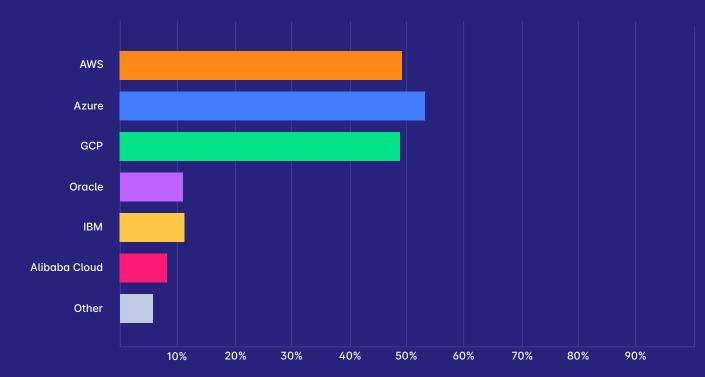


FIGURE 2 - DESIRED CLOUD EXPERTISE



Keep up with the cloud



The *future* of cloud learning (continued)

By technology

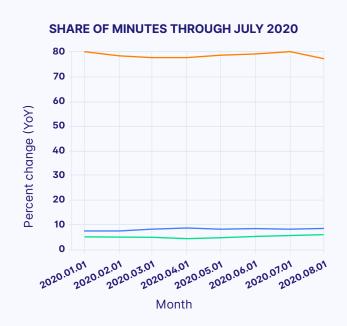
When we dive into our own data, we can also see an immense jump in interest in Microsoft Azure courses. When looking at a snapshot of A Cloud Guru courses spanning Azure, Google Cloud, and AWS, Azure is growing much quicker than the other two.

In fact, quicker might actually be a bit of an understatement. We examined the three-month rolling average of minutes spent on many of our courses and found that interest in Azure in appeared to be growing an **order of magnitude** faster than AWS. In June, the rolling three-month average time spent on Azure learning was up nearly 800% year-over-year, compared to between 50-100% for AWS and Google Cloud.

GROWTH IN TRAINING TIME BY CLOUD PROVIDER 800 700 **Course Type** GCP 600 Percent change (YoY) Azure 500 AWS 400 300 200 100 2020.05.01 Month

Microsoft is investing heavily in promoting Azure as a strong alternative to AWS and GCP. So in some ways, it may be difficult to decouple the actual hard demand for Azure fluency with the excitement stemming from Microsoft's marketing and branding. AWS and GCP have also been strong brands for many years—and still growing steadily at a substantial rate.

However, AWS still dominates the total share of viewing time on the A Cloud Guru platform, with AWS accounting for 76.6% of total view time as of August 2020. We did, however, find that Azure and GCP grew in total share of minutes as we progressed through the third quarter. (This excludes some cloud-agnostic courses, such as ones covering Python.)



The bottom line? There is tremendous interest around Azure, but we believe it still has a long way to go in order to snatch a meaningful share of the total interest in cloud providers. Azure may provide a unique benefit for some companies, but AWS still accounts for most use cases. As a known entity with a history of success, AWS will likely continue to be the top choice for most companies for the foreseeable future.

We can also see the rise of Azure when looking at what our readers are searching for on our platform.

Here are the top 10 search terms for our resources and blog content:

Hottest Cloud Skills	
1	DevOps
2	Kubernetes
3	AWS
4	Terraform
5	Python
6	Docker
7	Azure
8	Linux
9	Ansible
10	RHCSA

based on ACG platform search data

But, to be sure, we're watching Azure closely—as should any company considering migrating to the cloud in the near future.

10 11



The *future* of cloud learning (continued)

By adoption

More than 90% of IT leaders surveyed expect to expand their usage of cloud services over the next 1-3 years. However, only 56% have a comprehensive, actionable plan to skill up their workforce in preparation for this shift.

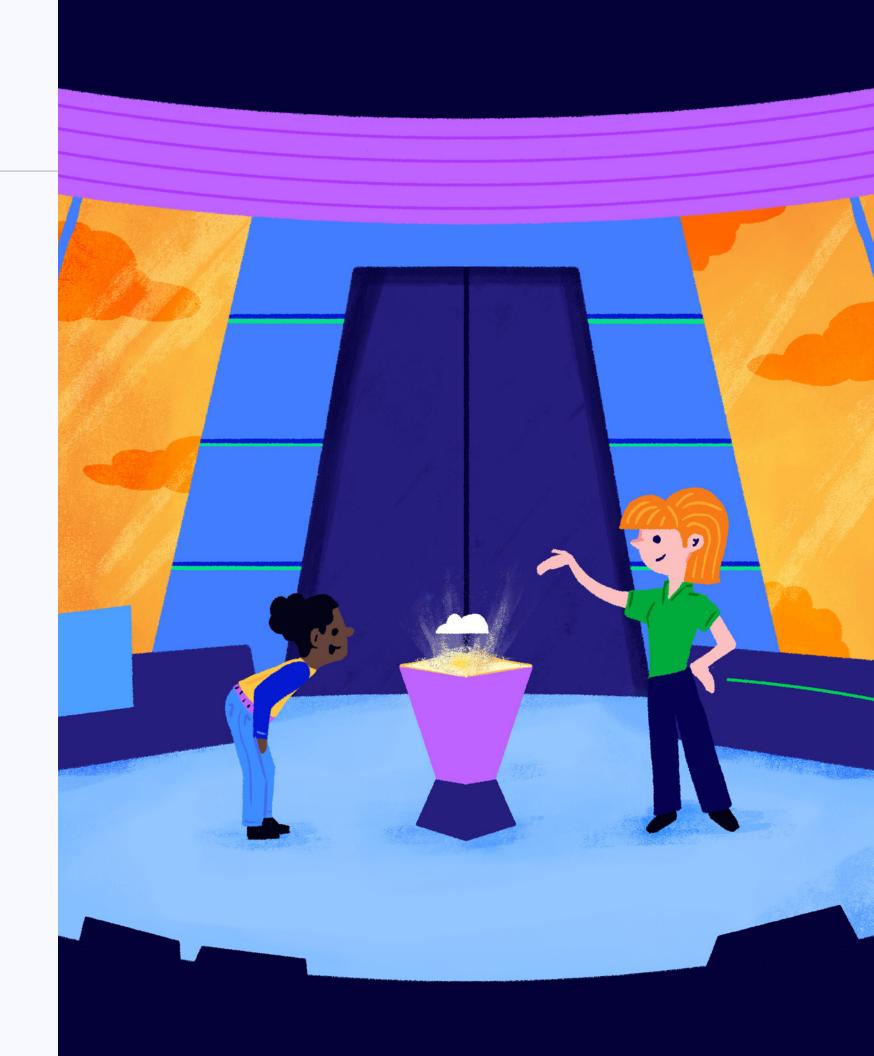
By job prospects

More than 60% of IT leaders see the value of cloud certifications increasing over time, while 90% feel that the value of traditional university credentials for the same positions will diminish or stay the same.

By skill

"DevOps" and "Cloud-native architecture" skills topped our list, with about half of all cloud hiring managers ranking each of these skills as highly in demand on their teams. "Security" ranked third.

Notably, we did not see a statistically significant percentage of hiring managers prioritizing AI/ML skills at this time, despite their prevalence of discussion in the industry.





Takeaways

The Rise of Azure

As the cloud pie grows in size, we're seeing rapidly increased interest in learning across all three major cloud providers. While AWS continues to lead the pack, Azure learning is growing at a rapid rate, and the majority of technology leaders are now expecting to adopt two or more cloud providers as part of their long-term strategy.

Degrees Are Out, Certs are In

A degree is great, but hiring managers in tech want hands-on experience and relevant skills—whatever your background. And in the remote-work future, as most organizations look to expand their cloud footprint, demand for cloud-certified professionals is only increasing.

Education Is The Key

The speed and agility benefits of cloud are undeniable—but you can't achieve them without cloud experts who are empowered to lead the way. With "skills and knowledge" the biggest barrier to most cloud adoption strategies, the time to upskill your team and supercharge your cloud innovation is now.

About A Cloud Guru

A Cloud Guru (ACG) is driven by a simple mission: to teach the world to cloud. We believe people learn best by doing. That's why our in-house cloud experts go to ridiculous lengths to design fresh, engaging, and hands-on learning tools that empower both individuals and organizations to stay ahead of the technology curve. As the world's most comprehensive, hands-on, and effective platform for cloud learning, ACG has enabled more than 2 million learners and 4,000 organizations to achieve a brighter future.



The leading platform for cloud learning

Learn modern tech skills with the latest courses and labs in AWS, Azure, Google Cloud Platform, Linux, and beyond.

