

OF GETTING YOUR PEOPLE

CLOUD CERTIFIED



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Intro to Certs

Cloud certifications. Are they invaluable tickets to cloud awesomeness, or mostly useless pieces of flair? Navigate pretty much any discussion of cloud certs, and you'll find a lot of opinions on both sides of this divide, but few facts. What data you do come across is typically associated with benefits to individual professionals, such as associated salaries and career mobility.

If you're trying to get your business into the cloud or expand your cloud operations, this noise can be less than helpful.

What value do cloud certifications bring to a business? Do they bring any value at all? Why should you invest in training your people? How much will it cost? Is the investment worth it? How can you measure the success of a training program?

These are the questions that matter to a business. And these are the very questions we're setting out to answer.

In this ebook, we'll explore:

- . The many ways cloud certifications and the training that attains them create value for businesses
- The cost of cloud training and the costs of the alternatives
- How to go beyond certification counts and gauge the success of your training initiatives by measuring business outcomes



Certification 101: What Exactly is a Cloud Certification

The top three public cloud providers each describe cloud certifications slightly differently. Per AWS, a certification "validates cloud expertise to help professionals highlight in-demand skills and organizations build effective, innovative teams for cloud initiatives using AWS." Microsoft notes that its role-based Azure certifications "show you are keeping pace with today's technical roles and requirements." And Google Cloud Platform notes that "certifications validate your expertise and show your ability to transform businesses with Google Cloud Technology."

At its core, a cloud certification is simpler than that — it's proof that you passed a certification exam, and by extension proof that you possess a certain level of cloud knowledge and proficiency.

Certs don't grant the holder magical powers or entry into a zany chocolate factory, but the cloud skills they represent create significant value for businesses of all sizes.



That's it.

Cloud skills and where to find them.

Generally, businesses can follow two paths to beef up their cloud skills (or any skills for that matter). You can build, by training and upskilling the employees you have, or you can buy, by hiring new employees who already possess the desired skills.

Businesses have generally leaned toward buying the skills they need by recruiting outside talent, but shifts in the job market are challenging this approach. Record low unemployment is straining recruitment across the board, and particularly in skilled areas like IT. On top of that, cloud's rapid rise and ongoing evolution has created demand that's outpacing the available talent pool. This cloud skills gap, which one report describes as a "full-blown crisis", isn't going away any time soon. IDC's Worldwide CIO Agenda 2019 Predictions assert that at least 30% of high-demand emerging technologies roles will go unfilled through 2022.



According to the OpsRamp Cloud Skills Survey, 94% of IT decision-makers find it somewhat difficult, difficult, or very difficult to hire skilled cloud professionals. In Global Knowledge's 2019 IT Skills and Salary Report, talent recruitment and retention were the top challenges faced by ITDMs.

In summary, buying cloud talent is increasingly unsustainable. Many companies are responding by building talent from within and upskilling their IT teams to operate in the cloud. Organizations as diverse as the United States Air Force and Amazon are even using training to identify talent in unexpected places, from fulfilment centers to aircraft maintenance facilities.



Why Certs?

Certifications act as a proxy for cloud skills.

Gauging cloud skills can be tricky, particularly for larger teams and organizations. On a small team, it may be enough to know that Denise is great with Kubernetes and Rami is the go-to for AWS Cloudfront distribution, but when you're looking across a team of tens, hundreds, or thousands, that kind of granular knowledge just can't be sustained.

Because certifications validate a certain set of skills, they can act as a measure of cloud capability, allowing leaders to broadly assess their talent pool, assign projects, and adjust staffing plans.

Some businesses are even tying certifications to IAM, giving more advanced certification holders greater access within cloud environments.

How are your company's cloud skills?

A Cloud Guru's Management Portal gives you an at-a-glance view of certs achieved and courses completed.

Request a Demo



Certifications help get everyone on the same page.

Self-taught engineers may possess a ton of talent, but their cloud knowledge can often be spiky - deep and nuanced in specific areas they're interested in, but shallow in others. They may also approach tasks and tackle problems in different ways, leading to communication breakdowns and cost inefficiencies.

With certifications, organizations can ensure everyone is working from the same baseline of knowledge and the same best practices.

Furthermore, foundational certifications such as AWS Certified Cloud Practitioner can bring non-technical employees along for the ride and give them the understanding to see how the portions of the business they touch — finance, sales, or marketing — play into the bigger cloud picture.

All of this creates rolling benefits for a business, particularly as a critical mass of engineers get certified. With everyone "speaking the same language", skills begin to reinforce and build on one another. Communication improves. Cloud spend becomes more predictable. Support tickets and the daily grind of putting out fires may diminish, freeing up resources to build and innovate, rather than patch and maintain.



Get cloud-ready faster.

A Cloud Guru's Certification Accelerator lifts everyone to a common base of cloud knowledge quickly and effectively.

Request a Demo



Certs are linked with improved job performance.

Gaining new knowledge and skills leads to improved job performance. Who knew?

According to the Global Knowledge 2019 IT Skills and Salary Report, IT professionals "overwhelmingly report better job effectiveness after achieving a new certification."

Certified Employees — Reported Job Effectiveness

- 52% say their expertise is more sought after within their organization
- 45% have implemented efficiencies
- 43% are faster at performing their job
- 23% say deployments have gone smoother

Performance gains extend beyond self-reported warm fuzzies, as well.

Source: Global Knowledge - 2019 IT Skills and Salary Report

93% of global decision makers "agree that certified employees provided added value above and beyond the cost of certification"

Global Knowledge

2019 IT Skills and Salary Report

Certified Employees Added Value

- Close organizational skill gaps 52%
- Meet client requirements 49%
- Boost productivity 48%
- Troubleshoot issues faster 40%
- Complete projects faster 39%

- Create competitive edge 38%
- Reduce employee turnover 31%
- Deploy products/services quicker 24%
- Make hiring easier 16%

Source: Global Knowledge - 2019 IT Skills and Salary Report



Certifications create positive business value

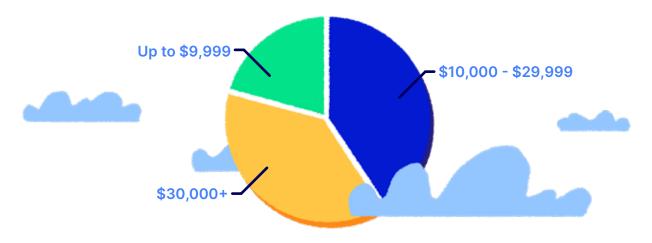
Certified engineers outpace their non-certified peers in a number of key performance areas, but quantifying the value of, say, "troubleshooting issues faster" can be a challenge. In their 2019 IT Skills and Salary Report, Global Knowledge took a stab and asked IT decision makers to estimate the value of their certified employees versus non-certified.

In dollars.

While very much a ballpark estimate, the numbers are instructive.

63% of ITDMs peg the business value of a certified employee over a non-certified employee at more than \$10,000 a year. 22% said the value was far higher, at over \$30,000.

Estimated Annual Economic Benefit Certified Employees Bring to the Organization



While Global Knowledge doesn't break out further insights on that 22%, it seems reasonable to consider they may be more advanced cloud users, and thus realizing greater benefit from their people's more sophisticated cloud skills.

If you extend this added value across entire teams or organizations, the impact that comprehensive training and certification can have becomes apparent. Even taking the more conservative estimate of \$10,000, a team of ten certified engineers would add \$100,000 in business value. A company with 1,000 certified engineers could reap a benefit of \$10 million.

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Budget is one of the main reasons organizations don't fund certification training, but as these numbers illustrate, the return on investment far outweighs the initial cost of training.

Certifications are the foundation of the "comprehensively trained" organization

More and more data is emerging to support the notion that "comprehensively trained" organizations and those with strong learning cultures significantly outperform their peers. This is where we start to find those ballpark numbers in the last section manifesting themselves as tangible business outcomes.

"Comprehensively Trained" Organizations Are:

- 17% more profitable
- 52% more productive
- 56% more likely to be first to market with an innovative product or service

Source: Deloitte - Becoming Irresistible

- 14x more likely to overcome operational control concerns stemming from cloud migration
- 1.8x more likely to resolve cloud security concerns
- 3.7x more likely to overcome IT governance concerns.

Source: IDC - Train to Accelerate Your Cloud Strategy

With cloud, certifications are both the foundation and the natural output of comprehensive training. When you have whole teams, departments, and organizations training, learning, and achieving certifications, individual performance gains combine and amplify, driving better communication and better mission alignment within the company, setting the stage for even greater organization-wide performance.



Certifications help keep cloud skills current.

Cloud certifications expire after a certain amount of time. AWS certifications hold for three years, while Azure and Google Cloud Platform expire after two years.

While this seems inconvenient, it serves a purpose. Cloud platforms are constantly expanding and evolving, and a lot can change in the span of 2-3 years. The requirement to re-certify provides incentive for engineers to keep their skills fresh, rather than allowing their knowledge to grow stale.

This extra bit of incentive also helps talent transformation initiatives maintain momentum over

According to Global Knowledge, engineers largely embrace this sort of ongoing training and certification:

- Over half of certified engineers earned their most recent cert in the last 12 months
- 66% of certified engineers are already pursuing their next or plan to in the next year

Source: Global Knowledge - 2019 IT Skills and Salary Report



Level up those cloud skills.

Our Career Learning Paths guide your people from novice to guru in their specialized career tracks.

Learn More



Invest in Your People

Certifications don't deliver value. Your people do.

Remember, certifications are a proxy for cloud skills. By themselves, they don't create much value. That Google Associate Cloud Engineer certification isn't boosting productivity. That AWS Certified Solutions Architect - Associate certification isn't bringing new products to market faster. The real value is created by your people and the training that levels up their cloud skills.

Ultimately, certifications provide a way to measure the value of those cloud skills. This makes them super handy for setting goals, tracking progress, and broadly assessing skills across teams and organizations. But this handiness can also lead companies to fixate on certifications as the goal. To guote the oft-used business maxim, "you are what you measure."

A healthier path is to consider certifications as just one output of cloud training, and to define additional metrics such as time to innovation, time to market, or reduction in support tickets to gauge the success of your talent transformation programs. While certifications still play a key role as a leading indicator of skill attainment, this more holistic view ensures training serves broader strategic initiatives and business outcomes.

Calculating the cost of cloud training

What does it cost to build your own cloud expertise internally? And is it worth it? There are so many variables in play — training formats, company size, level of organizational commitment, desired outcomes, and more — that it is difficult to point to a single number.

The total cost of cloud training will be different for every company, and it must be weighed against the very real costs of not training.



Whiteboard Advisors estimates that companies spend between \$1,200 and \$1,400 per employee per year on training and development, but recommends a higher bound of between \$4,000 and \$15,000 per employee for more immersive and comprehensive upskilling programs.

Just the training

Of all the costs associated with cloud training, the cost of the training itself is the easiest to calculate.

- The basic cost for an individual to attend a 3-day on-site cloud course is \$1,950.
- For an online cloud training platform, such as A Cloud Guru, the basic cost is around \$500 per seat per year.

At this most basic level, online training is by far the more cost-effective option, saving nearly 75% compared to on-site training.

Logistics costs

On-site training may require venue and catering costs, as well as travel expenses to get any remote employees to the training location. Online training platforms do not.

Administrative costs

Any training initiative will incur some administrative costs, from researching training solutions (hello there!) to assigning and supporting employees. In companies that already have a learning and development team, these costs are already baked in. Otherwise, you'll need to account for the opportunity costs incurred while an employee is pulled from their regular duties.

Opportunity costs

Because this isn't the Matrix, training takes time. And while your employees are learning, they aren't working. It's important to consider this an investment that will pay dividends in the future as increasing cloud expertise drives business outcomes, but it's still an upfront cost that will need to be accounted for.

Certification exam costs

Certification exams aren't free. If you're planning to cover exam fees (and you should), that is one additional line item to consider. Certification exams for the three leading cloud providers range between \$100-\$300.



Swagging the numbers

Again, there are a ton of variables in play, but just to see how things stack up, let's plug some numbers in.

Online Training vs On-site Training Costs

	Online Training	On-site Training
Training	\$492	\$1950
Logistics	\$0	\$1000
Administrative	\$1000	\$1000
Opportunity Cost (50 hours)*	\$2650	\$2650
Cert exam fee	\$200	\$200
Training Total	\$4342	\$6710

^{*}Opportunity cost based on average North American IT salary of \$109,985 as reported by Global Knowledge

Administrative and opportunity costs can vary greatly, so take these numbers with the appropriate grains of salt. Still, they should help you start to get your head around the per employee cost of training and the various line items you need to consider.

When you compare these costs against the two thirds of ITDMs who estimate that certified employees contribute more than \$10,000 in additional business value over non-certified employees, the math for training certainly checks out.

The high cost of not training

"How much will this cost?" is a common question in the business world. But while you consider the cost of cloud training, it's critical to also consider the cost of not training your people.

Going back to the Global Knowledge 2019 IT Skills and Salary Report, 66% of ITDMs claim that skills gaps pose a medium or high risk to business objectives.



Research firm IDC believes that IT skills gaps have forced 90% of companies to "adjust project plans, delay product/service releases, incur costs, or lose revenue", and that these losses total \$390 billion annually. Cushing Anderson, program vice president, IT Education and Certification Research at IDC, doesn't beat around the bush. "IT organizations must have robust strategic skills development plans in place for all critical IT roles."

A somewhat older Rackspace study comes to similar conclusions, with 71% of ITDMs believing their companies had lost revenue due to lacking cloud expertise.

60% of ITDMs believe skills gaps cost their employees somewhere between 3-8 hours per week (Global Knowledge). That adds up to 156 to 416 hours lost per employee, per year, or between \$8,250 and \$22,000 in lost salary per employee, based on the average North American IT salary of \$109,985.

All the data says the same thing — if you're not investing in training your people, you're already losing revenue and productivity to skills gaps. Furthermore, you're already paying an opportunity cost by not preparing your employees to overcome business challenges in the future.

Training vs hiring

While there are costs associated with training your employees in cloud, they're far outweighed by the costs of not training your people.

But what about the cost of training versus hiring?

Whiteboard Advisors estimates that it costs about \$30,000 to recruit and hire a mid-career engineer. If we round our estimated training costs up to somewhere between \$5,000-\$10,000 per employee per year, that still leaves hiring costs 3-6 times higher than building skills internally.

And that doesn't even take into account the time lags associated with hiring:

- On average, it takes at least five weeks to fill an open engineer role
- 80% of ITDMs agree it takes weeks to onboard and train a new hire
- 32% of ITDMs state onboarding and training new hires takes months

Rackspace - The Cost of Cloud Expertise Report - 2017





If you love them, train them

Fear is one of the more common barriers to training. Fear that employees will take their new skills and bolt for higher pay somewhere else. It's an understandable fear. Cynical, but understandable.

Well, it might restore your faith in humanity somewhat to learn that it's just not the case. In fact, it's the opposite of the case. Training and development opportunities are actually a significant reason people stay with an employer, and withholding them can drive some of your best employees away.

Sure, whatever you do, you're going to lose some people. Turnover happens. But the fact that people leave is not as important as understanding why they leave. Global Knowledge asked this exact question in their 2019 IT Skills and Salary Report.

The most-cited factor for leaving a job? A lack of opportunity for growth and development (72%). Desire for a higher salary was a distant second (38%).

This jives with other studies:

- Gallup found that 87% of millennials rank "professional or career growth and development opportunities" as important to them in a job.
- LinkedIn's 2018 Workforce Learning Report found that 94% of employees would stay at a company longer if it invested in their career.

The upshot is clear - employees invest more when employers invest in them. This is particularly true in IT, where constant learning is baked into the job. If you're not training your employees, it might be seen as a lack of investment or commitment, and could actually lower your retention rates.

As Global Knowledge so aptly sums up,

"invest in your people by giving them chances to grow with you and you will position yourself for the greatest chance of success."

Global Knowledge

2019 IT Skills and Salary Report





How do you measure success?

Cloud certifications — and the training that leads to them — deliver value to businesses in a number of ways, from team communication and cohesion to productivity and profitability. And even ongoing, comprehensive training appears to more than pay for itself compared to the alternatives.

But how can you gauge the impact of getting your people cloud certified?

As we noted previously, "you are what you measure". If you're only gauging your success by the number of certifications your people earn, you'll probably find ways to rack up the certs, but there's no guarantee that they'll translate into additional benefits.

Instead, think of certifications as a leading indicator, and consider setting up several additional success metrics.

What could that look like? It really depends on your goals, but here are a few ideas to consider:

Support ticket volume

Centralize cloud teams often have to field a wide variety of support tickets and questions from across their organization. As cloud skills spread throughout teams and departments, a drop in ticket volume can signal that training is yielding results.

Variance from forecast

You know what finance teams love? Unpredictability! They especially love when IT has no idea how to predict cloud spend accurately (kidding - they really, really don't like it). One way to bring finance to your side — focus on better forecasting, and measure how close you came at the end of each quarter.





Time-to-value

Speed is one of cloud's biggest advantages. Measure how well you're taking advantage of it by tracking how long it takes to get a new product or feature from kickoff to delivery.

Mean time to resolve issues (MTTR)

Even the most well-architected cloud system will have its Jurassic Park moments. Recovering quickly and efficiently is what separates a skilled cloud team from a cautionary tale about humanity's hubris. Tracking MTTR can demonstrate advances in cloud skills and tangible business value.

These are just a few possible metrics to gauge the success of cloud training, but give a sense of how far afield you can venture past certifications to measure their value to your company.

Defining success metrics beyond merely gaining certifications or moving a certain number of workloads to the cloud will not only help keep focus on driving cloud adoption, it will also make it easier to demonstrate business value to company leadership.





Sources

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