How to get
the most out
of your cloud
investment

AWS Training and Certification





Contents

4
8
10
12
13

Making the most from your cloud investment

Businesses of all sizes are moving more and more of their IT infrastructure to the cloud. In fact, the cloud allows enterprises to no longer be constrained by legacy infrastructure, regulations relating to data sovereignty and, importantly, fears around the security of customer information.

In the past, enterprises have often adopted cloud infrastructure to cost-effectively scale operations or to introduce business efficiencies and minimise expense. More recently, however, they are finding the cloud's real value is its ability to provide the scaled infrastructure required to support innovations that disrupt markets and create competitive advantage.

But as cloud services become more popular, there is, in turn, a greater demand for people who are properly trained and certified to work with the latest cloud technologies. Unfortunately, an ongoing skills shortage is making it increasingly difficult for many businesses to find the right skills to support their IT infrastructure needs.

There is also a gap between the skill levels of their existing teams and the knowledge required to achieve organisational objectives, according to 68 per cent of IT decision makers who responded to the McKinsey IT-as-a-Service (ITaaS) Survey.1

"Many customers also tell us that those who do not invest in upskilling their staff are at risk of getting left behind," said Andrew Buckley, Amazon Web Services (AWS) head of training and certification, Asia-Pacific, Japan, and China.

"Some effects of the skills shortage can include delays in time to market, increased costs, slower pace of innovation and dissatisfied staff, which can lead to staff retention challenges. Companies that have robust cloud knowledge across the organisation can leverage this to gain market advantages. A strategy for continuous education needs to be led by CIOs who understand the capabilities and offerings which are available via the cloud," Buckley said.



Developing skills to deliver your innovation strategy

Recruiting for expert cloud skills can prove challenging for most enterprises. With increased demand for qualified technical cloud professionals, the pressure on the talent market is already intensifying and, in some cases, the required skills currently don't commonly exist in the market. New hires will also take time to learn the 'ins and outs' of current infrastructure and processes, and recruitment can be expensive and time-consuming.

These factors have precipitated a trend toward training in-house staff on new technologies in order to best leverage their knowledge of existing systems and maximise the return on a cloud investment.

But cloud environments change fast, with new advances being made all the time. In this rapidly evolving landscape, it is becoming crucial to have technical experts on staff who are knowledgeable about cloud systems and infrastructure.

Buckley says with more than 80 per cent of enterprise IT organisations predicted to take up cloud architectures,² market competition for certified cloud architects will only get more intense.

He says businesses are predominantly looking for people with cloud migration skills and capabilities in areas such as DevOps. There is also increased demand in specialist areas such as IoT, machine learning, artificial intelligence, analytics, and databases.

Many organisations agree acquiring these skills is not as straightforward as it has been in the past. Long-term engagement of external consultants can also be expensive when the ongoing fees are compared to the cost of training staff members.

Learn directly from AVVS



AWS Training and Certification helps organisations build the necessary cloud skills to make the transition to the AWS Cloud easier, and ensure they get the most out of their investment

AWS Digital Training offers more than 100 courses built by AWS experts. This free digital training can help companies learn AWS fundamentals, get started with a new service, or deepen AWS expertise at their convenience. Digital courses are generally 10 minutes long and are designed to help build foundational knowledge for dozens of AWS services and solutions.

AWS Classroom Training is taught by AWS experts in their field. Classes are a mix of presentations, hands-on labs, and group discussion, and can take from one to three days. You can work with AWS or an APN Training Partner to build a customised learning plan for your organisation.

AWS Certifications recognise IT professionals with the technical skills and expertise to design, deploy and operate applications and infrastructure on AWS. Earning a certification from a recognised, respected source is an excellent way to validate technical skills and build credibility to lead IT initiatives with AWS technologies. Global Knowledge research shows many positive benefits from employee certification,³ including: faster work performance, gaining sought-after expertise, implemeting system efficiencies and deploying products and services more efficiently.

AWS Academy offers an AWS curriculum for higher education institutions. It's designed to help students develop in-demand cloud computing skills and prepare for industry-recognized AWS Certification. This is key to helping to close the IT skills gap and ensure the future workforce is trained to better help organisations in their cloud adoption.

AWS Educate offers AWS promotional credits, curated content and collaboration tools. One of Australia's leading educational institutions, Royal Melbourne Institute of Technology (RMIT), has more than 1,000 students and educators who are already in the AWS Educate program.

IDC research shows training allows organisations to accelerate cloud adoption, achieve business objectives sooner, and overcome concerns related to cloud adoption.4

According to IDC, comprehensively trained organisations are 80 per cent faster to adopt cloud, 2.7 times more likely to realise cloud can help jump-start innovation, 3.8 times more likely to meet cloud return on investment (ROI) requirements and 4.4 times more likely to overcome operational and performance concerns.

These statistics are further supported by research from Global Knowledge which shows employees in companies with training plans in place are less likely to leave their companies.5

"We recommend that our customers incorporate AWS Certification into their overal education strategy," Buckley said.

"Executives can encourage their staff to get certified in order to feel confident they have the skills required for success with the cloud. AWS Certifications can also help organisations identify skilled professionals to lead IT initiatives with AWS technologies."

With curriculum built by experts at AWS and revised regularly to keep pace with AWS updates, AWS' training gives organisations the confidence that their technical staff are learning the current skills needed to develop transformative business solutions on AWS Cloud.

John Holland engages AVVS to build cloud skills



By May 2018, infrastructure and property group John Holland expects to have moved the majority of its technology infrastructure to the cloud. The company's core financial and delivery systems will be in AWS' infrastructure.

"It's not a typical 'infrastructure-as-a-service [laaS]' environment; we build a lot of our apps and systems internally; our financial platform, our core delivery platforms have been developed in house," said John Holland ClO. Chris Walsh.

"We are now starting to re-platform them so we can begin using the native cloud processes and functionality that AWS offers to put our systems and services closer to our users."

As John Holland completes its move to the cloud and its data centres are switched off, it's vital internal technology staff are provided with the training they need to cope with the change.

The company has set up a 'cloud architecture team' to work with AWS and training consultants to profile staff roles. There are currently 20 staff in the organisation's cloud and network teams, said

"We are building a training and skills uplift program for our cloud associates and network experts every one of our staff members inside ICT will be living and breathing AWS and will go through one of the three streams of AWS Training," he said.



Walsh acknowledges it is a challenge to recruit people who have the right AWS skills due to a mismatch between supply and demand in the market.

But Walsh, says he is building the company's internal capabilities by putting technology staff through AWS Training and Certification, ultimately supplying the market with more highly skilled resources.

"If they happen to leave the business, it benefits the wider market. While we will have a graduate and employee training program specifically for those who have basic cloud skills or no skills, we also now to have a program to get staff upskilled to support us as well as the wider market," he said.

John Holland has now created a 'build factory'. When IT staff make a change to an environment, they can 'push it' through to a test environment and then deploy it to production once they have followed the appropriate process and methodology, Walsh said.

"So changing their mindsets and the way they make changes in production is crucial. The training provided by AWS is certainly helping us on that journey," says Walsh.

Versent teaches customers to 'fish' with cloud certifications



Globally disruptive enterprises such as Netflix and Airbnb are using the AWS cloud extensively to support their growing operations and smaller organisations want to achieve the same level of success. However, these companies often find it hard to recruit the best cloud specialists in a market where skills are scarce.

Working with an AWS Premier Consulting Partner like Versent can bring the right people with the right skills to any type of organisation looking to migrate to the cloud.

"Operations teams inside organisations often have their hands full supporting their existing internal infrastructure, often internal private clouds," said Rowan Udell, Versent practice director, cloud.

"These technical staff don't necessarily have the bandwidth to go out and learn everything about a new platform so organisations beginning to explore the benefits of moving services to the cloud may need specialists to help them," he said.

Udell added organisations overwhelmingly want to move to the cloud but they want to be secure and scalable in how they do it. Versent can recommend training resources so that businesses can learn critical cloud skills and get it right the first time.

"This is where partners come in; Versent has done it successfully many times before with other customers and we have learnt from it." he said. "We will be their cloud team to help them get going and migrate their first few applications or workloads to the cloud. At the same, we upskill their internal people and help them take over; we teach them how to 'fish' and then get out of the way, so they can do their own in-house IT."

Once employees are trained, Versent recommends they get AWS Certified. These certifications validate technical skills so organisations can feel confident their employees have the right skills for their role.

Are IT departments prepared for this change in roles?

"It is a deep mind shift." Udell said. "The cloud changes the way technology staff, particularly developers, think about how they can achieve business objectives.

"When you move to the cloud, particularly AWS, you are effectively given unlimited capacity to do what you want - all those old constraints around ordering hardware, racking and stacking it, go away. If you want it and you need it for good business reasons, you can have it."

"So, it's not so much the technical solution that is going to challenge you, it's integrating workflows with change management procedures.

"This is where we spend a lot of our time, particularly in the early days of working with customers when we focus on DevOps and Agile methodologies. At the end of the day, our recommendations are all customised for a particular company and its culture. Openness to change really dictates how easy or difficult the process will be," Udell said.



Four steps to build your organisation's cloud skills



1. Identify a leader to coordinate your training efforts

Our customers tell us that when a few people start to push the boundaries with AWS technology, it energises and inspires others to emulate their success. Identifying a key person with the right mix of technical skills, influence and business acumen to be your internal evangelist and lead the movement is an important first step.

2. Decide on who in your team should receive at least some level of training

With your leader appointed, it is time to help them identify the specific staff members who will benefit from training across the business units where it will have the most significant impact.

3. Work with AWS or an APN Training Partner on an initial training plan and delivery schedule

Our team will consult with you and ensure we work together on a plan that will efficiently achieve your goals. We will then develop a timeline to deliver on the strategy.

4. Talk to your team about this effort so you can begin to build awareness and buy-in

It is always important to keep the lines of communication open and staff may have questions. Proactively engage your teams on why the training will take place and how it will help individuals and what it

What next?

The AWS Training and Certification Team is ready to help you maximise the return on your cloud investment.

There is no time like now to make an investment start working harder for you. Companies should be looking to educate their staff so they have an in-house team of cloud experts who know the business and infrastructure from the inside out. With the right education strategy, your IT can become more than just the system that supports the business. It can transform into the system that drives the business.

We would love to hear from you and continue the conversation.

Visit www.aws.training to find out more.

References

- 1. McKinsey's IT-as-a-Service (ITaaS) Cloud and Enterprise Cloud Infrastructure Survey 2017 (pg 4)
- 2. McKinsey's IT-as-a-Service (ITaaS) Cloud and Enterprise Cloud Infrastructure Survey 2017 (pg 5)
- 3. 2017 Global Knowledge IT Skills and Salary Report (pg 6)
- 4. IDC 'Train to Accelerate Your Cloud Strategy' (pg 7)
- 5. 2016 Global Knowledge IT Skills and Salary Report (pg 7)



