

Accelerate Your Modernization Journey

Develop skills in designing, building, and managing modern applications



Reinvent how your business delivers value with modern applications

Companies are looking to become more agile so they can innovate and respond to change faster and innovate more rapidly. This requires a different kind of application than what was common years ago.

Applications now need to scale quickly to potentially millions of users, have global availability, manage petabytes if not exabytes of data, and respond in milliseconds. We call these modern applications, and they cover use cases from web and mobile backends, IoT applications, AI/ML workloads, batch processing, PaaS solutions, microservice backends, and more.

Modern applications are built with a combination of these new architecture patterns, operational models, and software delivery processes, and they allow businesses to innovate faster while reducing risk, time to market, and total cost of ownership.

Modern applications create competitive differentiation by enabling rapid innovation. By changing your architectural pattern, operational model, and software delivery process, you can shift resources from standard operations to differentiating activities.

Benefits of modern application development

Faster to Market

By speeding up the release cycle and offloading operational overhead, developers can quickly build new features. Automated test and release processes reduce error rates, so products are market-ready faster.

Increased Innovation

With a modular architecture, changes to any individual application component can be made quickly, and with a lower risk to the whole application, so teams can experiment with new ideas more often.

Improved Reliability

By automating test procedures, and monitoring at every stage of the development lifecycle, modern applications are reliable at deployment. Any issues can be evaluated and addressed in real time.

Reduced Cost

With a pay-for-value pricing model, modern applications reduce the cost of over-provisioning or paying for idle resources. By offloading infrastructure management, maintenance costs are also lower.

A lack of cloud skills impacts performance



of IT decision makers report cloud skills shortages.¹

of companies are most likely to have already migrated or are currently migrating websites and web apps to the cloud.²

There's a skills gap impacting modern application development

Cloud adoption continues to accelerate at a rapid pace. In order to remain competitive and achieve cloud objectives, companies need to know how to close the cloud skills gap, pick up the pace of digitalization, and win business. Companies want to foster an environment in which innovation thrives, so they need to change the way they design, build, and manage applications. This change requires a new set of development and operational skills and practices.

Modern application development practices allow your teams to create robust, reliable, secure, and scalable applications that customers love to use. Unfortunately, many organizations struggle to hire cloud-computing practitioners who can drive agility into application development and help build a thriving enterprise. Today, those IT professionals who can keep pace with the rapid changes in cloud technology are in high demand by organizations eager to fill the widening cloud skills gap.

Sources:

¹ 451 Research, *Demystifying Cloud Transformation: Where Enterprises Should Start*, September 2019.

² 2018 Cloud Computing Survey, IDG.

The background features a dark grey gradient with two sets of concentric circles. One set is centered in the upper left, and the other is in the lower right. The circles are thin and have a slight red-to-yellow gradient. A small, stylized fish is positioned in the center of the left circle, facing towards the top-left.

Accelerate **innovation** by developing **skills**



Training helps you deliver deeper value with confidence

The right training increases your organization's value

You can bridge your employees' skills gap, help build confidence in their skills, and increase their value to your organization through cloud training. While nothing replaces hands-on operations or developer experience in cloud environments, IT professionals in every role can take advantage of self-paced learning and in-depth cloud training to gain a better understanding of cloud technology and enhance modern application development skills.

Training helps build your employees' technical skills and confidence that make them more productive and valuable in the workplace. It's also an excellent way to help your organization stay relevant and keep its competitive edge. Modern application development requires a new way of thinking, working, and collaborating to rapidly produce high-quality software. When an organization gains a strong foundation in cloud services and delivery, it can build more sophisticated solutions in the cloud, which allows it to deliver deeper value to its customers.

The background features a dark blue-grey gradient with two sets of concentric, slightly curved lines in a reddish-brown hue. A small, stylized silhouette of a fish, possibly a koi, is positioned in the lower right area, facing left.

Make your organizations **agile** and **innovative**
through **training** and certification.

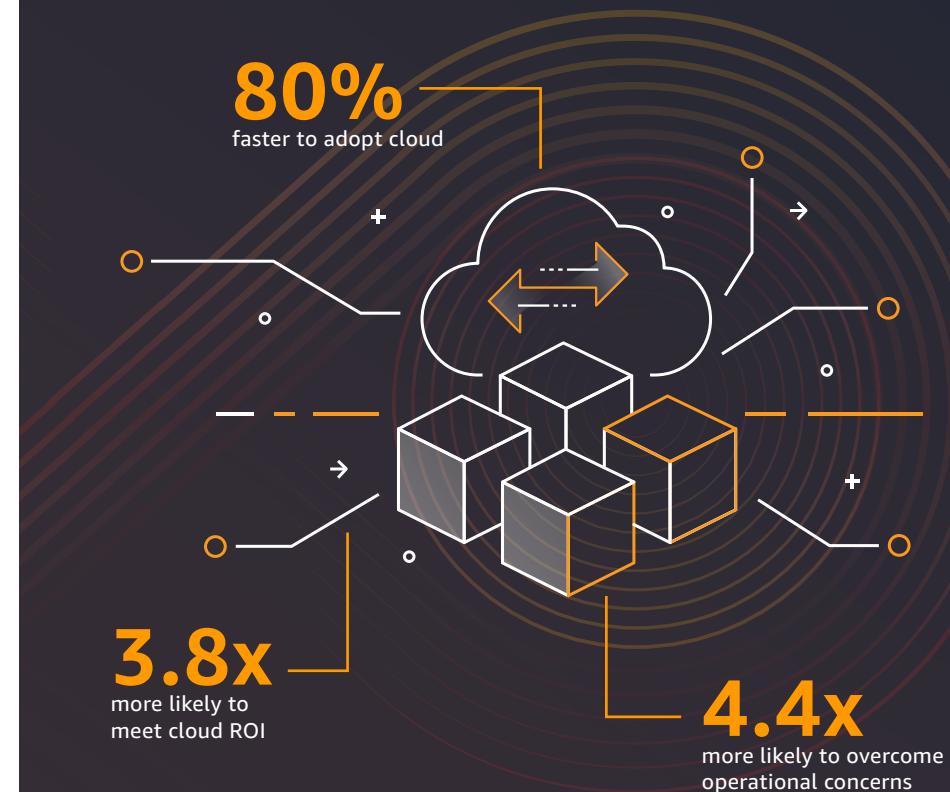
Training the agile, modern organization

Today more than ever, cloud experts are key to innovation in the organization. When companies help up-level their highly capable staff by encouraging training and knowledge sharing, the economic advantages multiply. When individual contributors transform into modern application developers, companies deliver better solutions to market, faster.

But cloud training isn't just for IT professionals. Businesses should adopt a comprehensive training strategy that raises the cloud skills

of the whole organization. Digital and classroom training provide the broader team with the essential knowledge they need to understand modern application development best practices in the cloud. Training an entire organization helps educate staff that will architect and build next-generation, cloud-based solutions. These comprehensively trained organizations are better positioned to innovate in the cloud—but sometimes it can be difficult to convince employers of the value of training.

Comprehensively trained organizations reap benefits





Trained team members use best practices to complete cloud projects more effectively

Enable modern application development with the common language of cloud

Training has profound benefits for all kinds of organizations, but the value of technical training sometimes isn't obvious to employers. They may not see the practical advantages of spending time and money on cloud training for their current staff.

In reality, giving your existing staff a common cloud foundation is the most cost-effective way

to transform your development practices. When you train your entire business, they can work proactively toward modern application development best practices and common goals. Your staff becomes agile and innovative, all while saving your company money and time.

"Training speeds up the innovation process and improves the relationship between IT and line of business."

Peter Loeffler, Siemens Building Technologies

10 reasons business leaders should support cloud training

**1**

Troubleshoot technical problems without outside help

**2**

Increase the reliability and efficiency of your cloud

**3**

Keep IT staff cloud skills up to date

**4**

Provide long-term savings to your organization

**5**

Help IT staff perform their jobs better

**6**

Reduce downtime impact

**7**

Improve the implementation of new technology

**8**

Decrease the time to install and configure solutions

**9**

Elevate levels of service and support to customers and IT end users

**10**

Gain an edge over less-trained organizations

Ready, set, modernize

AWS Training and Certification teaches how AWS services can help organizations and developers build cloud fluency with modern application development skills and offers certifications to validate expertise.

Learners can engage in training, from short online videos to digital curriculum, from classroom courses delivered by instructors in public classes around the world to private, on-site training suited to their needs. Whether they choose courses on AWS serverless applications, Amazon Elastic Container Service (Amazon ECS), or automated continuous integration and continuous delivery (CI/CD), learners can approach their cloud projects with the know-how they need to have.

Modern application development starts with the right DevOps and microarchitecture mindset, and the use of modern tools such as serverless, containers, and automation, as well as natural language processing and machine learning. Learn how to go serverless and create competitive differentiation by focusing on your application instead of your infrastructure.

"We have less outages, our costs are going down, we're getting leaner with the way we use AWS. In that [training] investment we're definitely seeing the payoffs now."

Alan Williams, Enterprise Architect,
Autodesk



Learn best practices in modern application development from the experts at AWS

Start your modern application development journey with AWS Training and Certification



Hands-on experience

The best type of training actually happens on teams, where employees gain the practical knowledge they need to develop and operate in real cloud environments. Three to six months of hands-on experience will give them a solid foundation of working knowledge.



Digital training

With a little time and initiative, learners can enhance their practical cloud knowledge through [**free digital training**](#). These on-demand courses, which vary in length from 10 minutes to several hours, can help one broaden their understanding of specific subjects.



Classroom training

Whether physical or virtual, classroom training offers more in-depth instruction for employees who want to deepen their technical skills. Classes are a mix of presentations, hands-on labs, and group discussions led by experts in their fields.



Self-guided study

Independent learning allows employees to fill in knowledge gaps and learn new topics at their own pace. There's a wide range of [whitepapers](#), [blog posts](#), [videos](#), [webinars](#), [use cases](#), and [peer resources](#) available for IT professionals who want to dive deep into specific technical topics.

Hands-on classroom training for your organization

Developers can dive deep with a mix of presentations, peer discussion, and interactive labs to break down complex topics in real time

Developing on AWS

Intended for intermediate-level software developers

Teaches how to use the AWS SDK to develop secure and scalable cloud applications. Explores how to interact with AWS using code and also learn about key concepts, best practices, and troubleshooting tips. Also teaches how to set up the AWS SDK and developer credentials for Java, C#/.NET, Python, and JavaScript, as well as how to interact with AWS services and develop solutions by using the AWS SDK.

[LEARN MORE](#)

Advanced Developing on AWS

Intended for experienced software developers who are already familiar with AWS services

Teaches learners about advanced development topics such as architecting for a cloud-native environment and deconstructing on-premises legacy applications and repackaging them into cloud-based, cloud-native architectures. Covers how to apply the tenets of the Twelve-Factor Application methodology.

[LEARN MORE](#)

Flexibility to learn at one's own pace

- [Architecting on AWS](#)
- [DevOps Engineering on AWS](#)
- [Architecting Serverless Solutions](#)
- [Deep Dive on AWS Fargate: Building Serverless Containers at Scale](#)
- [Amazon API Gateway for Serverless Applications](#)
- [Getting into the Serverless Mindset](#)
- [Amazon DynamoDB for Serverless Architectures](#)
- [Build and Deploy APIs with a Serverless CI/CD](#)
- [Authenticating Serverless Apps to the Enterprise](#)
- [AWS Lambda Foundations](#)

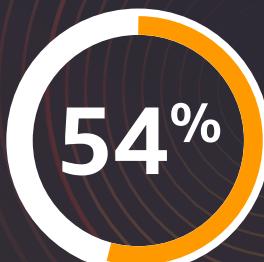


Did you know?



93%

of decision makers agree that certified team members add value that goes beyond the cost of certification.³



54%

of IT decision makers report that AWS Certified professionals are better at meeting client requirements.³



44%

of IT decision makers also report that those same professionals are faster troubleshooters.³

The modern application development journey starts with AWS Training and Certification

Modern application development best practices give your company the agility it needs to innovate faster. But your company needs certified staff who have validated cloud knowledge to succeed. AWS Training and Certification can help your employees change the way they design, build, and manage applications with modern application development. By learning new skills, they can shift resources from standard, undifferentiated operations (such as managing and provisioning infrastructure) to differentiating activities. This will allow them to experiment and innovate more—so they bring their ideas to market, and help you achieve your business goals, faster.

[Learn more about AWS Certification](#)

Validate skills and expertise in modern application development with an AWS Certification

Employees with this industry-leading credential can prove they have the cloud skills to innovate using AWS

AWS Certified Developer – Associate

Intended for developers with one or more years of hands-on experience on AWS

This exam validates an understanding of core AWS services, uses, and basic AWS architecture best practices. Examinees must demonstrate proficiency in developing, deploying, and debugging cloud-based applications using AWS.

[REGISTER](#)

AWS Certified DevOps Engineer – Professional

Intended for DevOps engineers with two or more years of experience on AWS

This exam tests an engineer's experience provisioning, operating, and managing AWS environments. Examinees will show an understanding of how to build highly scalable, available, and self-healing systems on the AWS platform and to design, manage, and maintain tools to automate operational processes.

[REGISTER](#)

The time to act is now

Start your company on the journey of modern application development with the right training. Embrace best operational practices to create competitive differentiation so your organization can deliver more innovative applications, faster.

Get started **today**

