ESG RESEARCH INSIGHTS PAPER

Understanding the Value of AWS Certifications to Organizations

The Multifaceted Business Effect of AWS Certifications

By Mark Bowker, ESG Senior Analyst; and Adam DeMattia, Director of Research

This ESG Research Insights Paper was commissioned by Amazon Web Services (AWS) and is distributed under license from ESG.



Contents

Executive Summary	3
Survey Background	3
Key Findings	3
Introduction	5
How AWS Certification of Staff Helps Improve the Operational Excellence of Cloud Teams	6
Maximizing Productivity and Accelerating Project Completion	8
Mitigating Issues and Enhancing Security	9
How AWS Certifications Empower Cloud Teams to Drive Innovation and Differentiation	12
AWS Certifications Help Builders Build on AWS	12
How Promoting AWS Certifications Helps Organizations Win the Fierce Competition for Talent	14
AWS Certifications Improve Both Recruitment and Retention Efforts	14
Organizations Invest for Success	15
The Bigger Truth	16
Bringing It All Together by Examining Overall Competitive Positioning	16
Research Methodology	17
Defining Two Key Cohorts Compared in This Study: Organizations with Higher Adoption of AWS Certifications	
Approach and Firmographics/Demographics	17



Executive Summary

Use of public cloud has increased dramatically over the past decade, and with good reason. The cloud offers a broad range of benefits relative to legacy infrastructure models, including: faster speed of deployment, nimbler spinning up or down of resources, more innovative services, more flexible cost models, and more. The use of cloud infrastructure also fundamentally changes IT management processes, and teams have to be capable of adapting.

One way organizations can put their staff in the best possible position to navigate this change is by supporting certification achievement, like those offered from AWS. AWS Certifications are an excellent tool to validate that team members have the skills needed to excel in a cloud-first IT environment. Organizations with a large number of AWS Certified staff can be assured their teams have the skills to drive business transformation with AWS. But do we see a link between the prevalence of AWS Certifications within an IT staff and an organization's cloud and business outcomes? To answer this question, AWS commissioned ESG to execute a survey of organizations using AWS today.

Survey Background

IT decision makers¹ at AWS customer organizations who led teams focused on cloud migrations and cloud development projects were recruited to participate in the study. They were asked a series of questions related to the outcomes they've seen at their organization as it adopted AWS. Those respondents at organizations employing AWS Certified staff were asked additional questions to understand whether staff achievement of AWS Certifications provides value. See *Figure 15* for a breakdown of the percentage of AWS Certified staff among respondents. ESG fielded the survey in the first quarter of 2020, and 500 respondents completed the survey. They represented businesses in North America, Western Europe, and Asia. The survey was complemented by 5 in-depth interviews with cloud team leaders to provide additional commentary and real-life anecdotes about the value of AWS Certifications. Additional demographic and firmographic details are presented in the *Research Methodology* section of this report.

Key Findings

ESG's research confirmed that IT decision makers believe validating staff skills with AWS Certifications provides an advantage for their organizations. Among respondents with AWS Certified staff, 97% say their organization's employment of such staff puts their company in a better competitive position to succeed over the next 3-5 years. Why?

- Staff achievement of AWS Certifications bolsters operational advantages including helping organizations **complete cloud projects faster, and improve workload security.** Among respondents with AWS Certified staff:
 - o 90% agree that employing AWS Certified staff has made the cloud team more productive.
 - o 89% agree that employing AWS Certified staff has shortened the time it takes to complete cloud projects.
 - o 86% agree that employing AWS Certified staff has improved the security of cloud workloads.
 - o 89% agree that employing AWS Certified staff enables faster troubleshooting.
 - o 90% say that they trust AWS Certified staff to lead cloud projects more than staff who are not AWS Certified.

¹Respondents holding an IT management title and directly responsible for, or influential in, cloud technology decisions at their organization.



- The research also uncovered new business benefits derived from the achievement of AWS Certifications. For one, staff achievement of AWS Certifications is correlated with innovation, which provides businesses a competitive advantage. These benefits are more dramatic among organizations with higher adoption² of AWS Certification.
 - o 64% of all organizations surveyed reported either a severe or moderate cloud skills gap (see <u>Figure 2</u>). The survey also showed that this cloud skills gap is less severe among organizations with higher adoption of AWS Certification. Only 44% of organizations with a higher adoption of AWS Certifications report a gap. In comparison, 70% of organizations with lower adoption³ of AWS Certifications report a gap. Finally, 72% of organizations with no AWS Certifications report a gap (see <u>Figure 3</u>).
 - o Organizations with higher adoption of AWS Certifications are more than 2x as likely as those with lower adoption of AWS Certifications to drive in excess of 15% of annual revenue from innovative (i.e., recently developed) products and services (see *Figure 10*).
 - o Executive management in organizations with higher adoption of AWS Certifications view the cloud team as a competitive differentiator 4x more frequently than organizations with no AWS Certified staff (48% versus 11%). This is opposed to viewing the cloud team as a service provider, cost center, or business inhibitor (see *Figure 11*).
- Moreover, investing in AWS Certifications promotes staff retention and helps attract talent, which helps organizations close their cloud skills gap. Among respondents with AWS Certified staff:
 - o 93% say supporting AWS Certification of staff improves team recruitment.
 - o 96% say supporting AWS Certification of staff has improved team retention.

These findings, and others, are discussed in detail in the following pages.

² Organizations where >50% of IT staff are AWS Certified. See Research Methodology for detailed definition.

³ Organizations where 50% or less of IT staff are AWS Certified. See Research Methodology for detailed definition.

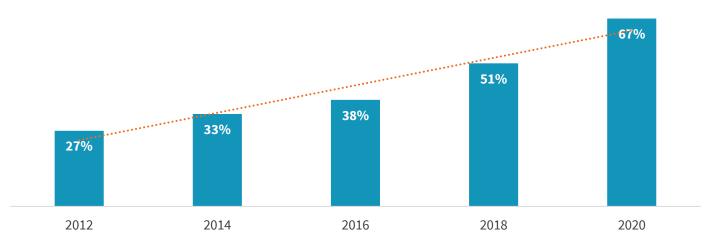


Introduction

Enterprise IT has been transformed over the last decade by the emergence and widespread adoption of public cloud infrastructure. ESG has been tracking organizational adoption of cloud infrastructure over this period of time in its annual technology spending intentions survey, observing that the number of organizations leveraging public cloud infrastructure services like AWS has increased by roughly 2.5x (27% versus 67%) since 2011 (see <u>Figure 1</u>).⁴

Figure 1. The Increasing Adoption of IaaS

Percentage of organizations currently using infrastructure-as-a-service (IaaS), 2012-2020.



Source: Enterprise Strategy Group

Why are organizations flocking to public cloud consumption models for infrastructure? The answer depends on the organization. It could be the speed of deployment, which eliminates the complexity of architecting and sizing infrastructure for 3-5-year time horizons. It may be that the organization seeks the financial flexibility of a monthly OpEx cost model rather than the rigidity of larger capital outlays made less frequently. The business may be in a highly cyclical or unpredictable market, making its need for infrastructure resources difficult to forecast. For these organizations, the ability to spin up or down resources, paying only for what's used, is highly appealing. Additionally, cloud service providers (CSPs) are frequently at the forefront of IT innovation. From virtualization, through containers and serverless functions, to artificial intelligence and machine learning, CSPs are often among the first to market with enterprise-grade solutions. Organizations that prioritize innovation are often drawn to cloud offerings.

While the public cloud offers a number of advantages to organizations, it also represents a fundamental change to IT management processes. This change means that IT teams need to reskill to be effective in an increasingly cloud-centric world. IT administrators need to know less about running a server, storage system, or network appliance, and more about running an automated environment that manages those infrastructure resources. Architects must use their knowledge about applications and requirements to determine the right migration strategy for cloud, from "lift-and-shift" strategies to complete application rewrites native for the cloud. Capacity planners must become nimbler, focusing shifts in infrastructure requirements in real time as opposed to over annual or multi-year time horizons.

⁴ Source: ESG Research Report, 2020 Technology Spending Intentions Survey, February 2020.



One way to gauge staff readiness to thrive in a cloud-based environment is the achievement of certifications. AWS began offering certifications in April 2013, and has continued to expand the breadth and depth of cloud certifications offered for different levels, roles, and specialties. AWS believes offering certifications helps individuals highlight their skills and build confidence, and enables organizations to more efficiently recognize and identify validated expertise. This, in turn, will help organizations see greater success with their AWS initiatives

"I'm so bullish about AWS Certifications because you know you're talking to [a] peer. You know you're talking to somebody who actually understands the technology... AWS Certifications provide a guarantee of a certain level of expertise."

- IT director, financial services, \$91.2B revenue

How AWS Certification of Staff Helps Improve the Operational Excellence of Cloud Teams

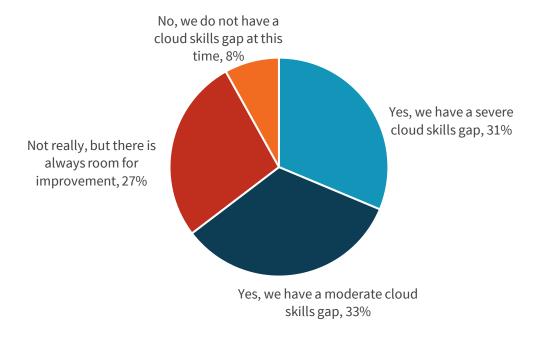
The public cloud offers a new way of provisioning, managing, and troubleshooting infrastructure resources. Organizations can also take many different paths with respect to application re-architecture from lifting and shifting existing workloads with minimal adjustments to rewriting applications from the ground up. When paired with the dramatic rate of cloud adoption among organizations, organizational eagerness to embrace the cloud can potentially outpace its IT team's ability to effectively implement the cloud vision.

The data from this study indicates that organizations are grappling with this phenomenon, with 64% of organizations represented reporting either a severe or moderate cloud skills gap (see *Figure 2*). However, the data also suggests that AWS Certifications can help. Higher adoption of AWS Certifications is positively correlated with having the necessary skills to execute on a company's cloud computing strategy: The majority (56%) of organizations with higher adoption of AWS Certifications (i.e., organizations where >50% of IT staff are AWS Certified⁵) report they do not, or do not really, have a cloud skills gap. This was nearly 2x the rate of organizations with no AWS Certified staff (29%, see *Figure 3*). The following sections outline the ways in which respondents report employing AWS Certified staff improves the cloud team's performance, thereby helping to alleviate their cloud skills gap.

⁵ See Research Methodology for detailed definition.

Figure 2. Percentage of Organizations with a Cloud Skills Gap

Do you believe your company has a "cloud skills gap" (i.e., a lack of knowledge and/or resources that is holding your company back from executing on its cloud computing strategy)? (Percent of all respondents, N=500)

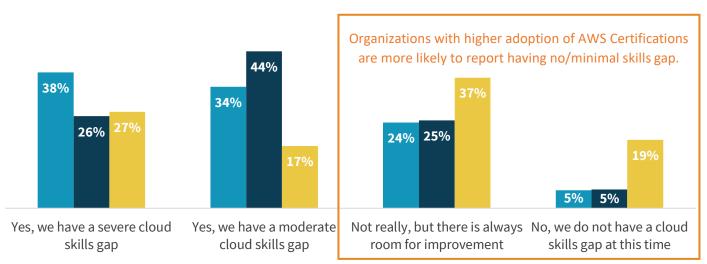


Source: Enterprise Strategy Group

Figure 3. How Cloud Skills Gaps Vary with Certification Adoption

Do you believe your company has a "cloud skills gap" (i.e., a lack of knowledge and/or resources that is holding your company back from executing on its cloud computing strategy)? (Percent of respondents)







Maximizing Productivity and Accelerating Project Completion

Ask an IT or line-of-business executive what the value of the cloud is, and one of the first words out of their mouths will often be "speed." While it is inarguable that infrastructure provisioning speed is accelerated by cloud consumption models, deploying a cloud instance is really just a first step. The end goal is to migrate a workload to the cloud or develop one from the ground up to run on that cloud infrastructure. These application modernization efforts are much more involved than simply spinning up a virtual machine. Teams without the right skills to execute application modernization projects risk extended timelines and budget overages.

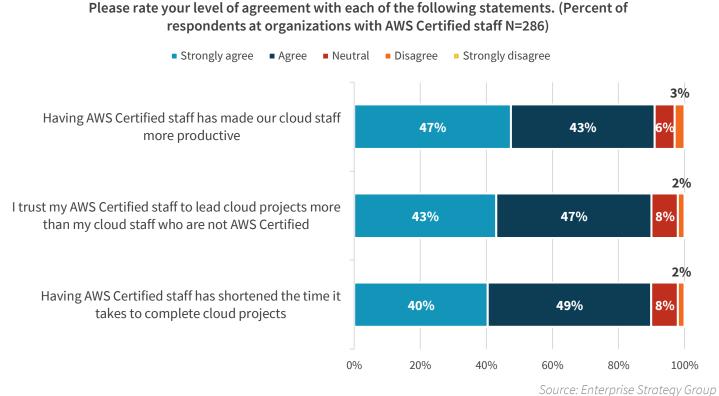
One benefit provided by AWS Certifications, and the learning paths and experience recommended to prepare individuals to

"There is absolutely a difference in productivity and efficiency between [AWS] Certified and non-certified employees. The reason is that the people who have earned a certification have dealt with different scenarios in the abstract, there is a 'conceptual investment' they've made that they can lean on."

- Head of security and privacy, transportation, \$3.2B annual revenue

take the exam, is that they validate that users understand the automated and repeatable ways they can deploy and manage infrastructure and applications on AWS. ESG's research shows that staff who are AWS Certified put these skills to use to drive productivity up and project timelines down. Nine out of ten (90%) organizations with AWS Certified staff agree that having AWS Certified staff has made their cloud staff more productive (see *Figure 4*). Moreover, 89% agree that having AWS Certified staff has shortened the time it takes to complete cloud projects. Consequently, 90% of respondents say that they trust AWS Certified staff to lead cloud projects more than staff who are not AWS Certified.

Figure 4. Effect of AWS Certified Staff on Productivity, Project Completion, and Project Management

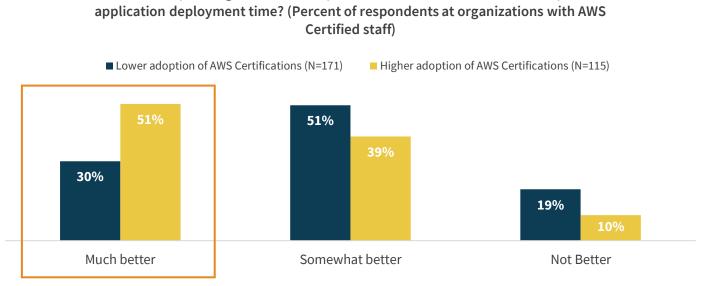




In addition to asking respondents if they see a direct benefit associated with AWS Certifications in the areas of productivity and efficiency, ESG asked respondents to compare the organization's experiences with AWS to on-premises operations in terms of application deployment time. Respondents told us that AWS Certified staff have a positive effect on application deployment time. Specifically, more than four out of five (85%) respondents with AWS Certified staff reported that application deployment times were better, which we interpret as shorter, on AWS. Interestingly, even faster deployment occurs at organizations with higher adoption of AWS Certifications. Organizations with higher adoption of AWS Certifications were much more likely than those with lower adoption (i.e., organizations where 50% or less of IT staff are AWS Certified⁶) to enjoy much better application deployment times (51% versus 30%, see *Figure 5*).

Figure 5. The Correlation Between AWS Certified Staff and Accelerating Application Deployments

Relative to operating workloads on-premises, how has the use of AWS impacted



Source: Enterprise Strategy Group

Mitigating Issues and Enhancing Security

Speed is critical since it allows organizations to innovate and capitalize on time-sensitive market opportunities. However, if increased speed carries with it a higher rate of issues to troubleshoot or increased security risks, many organizations will resist the tradeoff. Employing AWS Certified staff helps organizations eliminate the tradeoff between speed and risk, giving companies the best of both worlds.

Many AWS Certifications test for knowledge about maximizing uptime via efficient issue resolution. Topics like testing recovery procedures, automating change management, monitoring performance, and setting up thresholds that initiate recovery activities are often touched upon. But does the data show that employing AWS Certified staff helps organizations ensure efficient issue resolution when problems arise? The data indicates an emphatic yes: 89% of

"It gives our clients more of a secure feeling that we have people who are AWS Certified. Our clients know we have tried and tested professionals working in the space."

- Senior principal architect, financial services, \$13B annual revenue

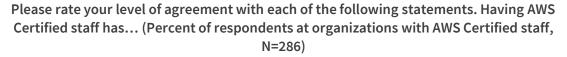
⁶ See Research Methodology for detailed definition.

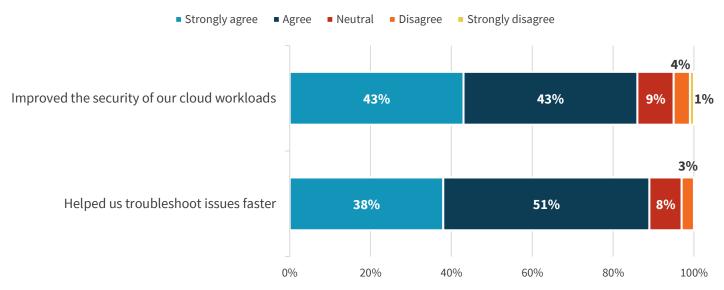


respondents with AWS Certified staff agree that having AWS Certified staff has helped the organization troubleshoot issues faster (see *Figure 6*).

From a security perspective, all AWS Certifications test on objectives related to IT security, such as designing secure access to AWS resources, selecting appropriate data security options, automating responses to security incidents, and applying design principles like "the principle of least privilege" with identity and access management tools. Once again, the data shows that organizations see a payoff from employing AWS Certified individuals with validated security knowledge: 86% agree that AWS Certified staff members have enhanced cloud security at their organization (see <u>Figure 6</u>).

Figure 6. Effect of AWS Certified Staff on Troubleshooting and Security



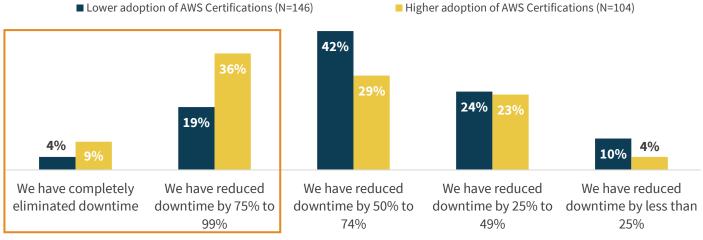


Source: Enterprise Strategy Group

In addition to asking respondents if they see a direct benefit associated with the attainment of AWS Certifications in the areas of troubleshooting and security, ESG asked respondents to compare their organization's availability experience with AWS to on-premises operations. When all respondents were asked how AWS has impacted application uptime, 87% of those with AWS Certified staff reported an improvement over their on-premises experience. However, organizations with higher adoption of AWS Certifications were much more likely than those with lower adoption to experience much more resilient workloads: When respondents were asked to quantify their availability improvements, those at organizations with higher adoption of AWS Certifications were nearly 2x as likely to report a downtime reduction of 75% or more relative to on-premises (see *Figure 7*).

Figure 7. The Correlation Between AWS Certifications and Application Uptime

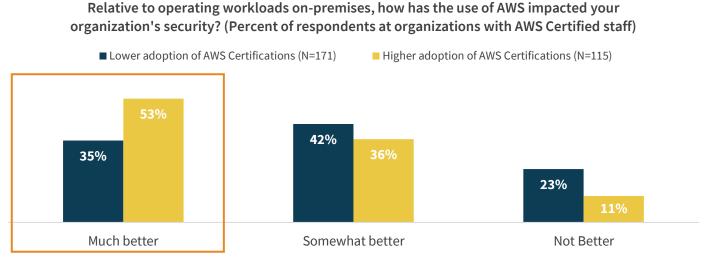
By how much have you typically reduced downtime for workloads running on AWS (compared to running the workload on-premises)? (Percent of respondents at organizations with AWS Certified staff and reporting reduced downtime)



Source: Enterprise Strategy Group

Historically, those in the IT organization have cited concern over security as a barrier to cloud adoption. Cloud consumption models represent a big change, and change implies risk. Many administrators were uncomfortable with the idea that they would no longer have physical control over the infrastructure running their organizations' mission-critical workloads. But as cloud infrastructure started to penetrate organizations' IT environments, this argument has tended to go by the wayside, more a symptom of uncertainty than efficacy. In the last few years, many customers have come to recognize hyperscale data center operators like AWS can often do a better job employing security best practices than their IT staff. Additionally, by offloading some security responsibilities to cloud providers per a shared responsibility model, internal staff are less likely to be overworked. The data reflects this sentiment: 82% of respondents with AWS Certified staff say organizational security is improved on AWS relative to on-premises. Moreover, organizations with higher adoption of AWS Certifications are much more likely than those with lower adoption of AWS Certifications to enjoy much better security (53% versus 35%, see Figure 8).

Figure 8. The Correlation Between AWS Certified Staff and Improved Security



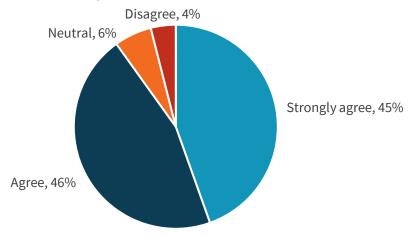


How AWS Certifications Empower Cloud Teams to Drive Innovation and Differentiation

Preparing for a certification exam demands that a user consider diverse use cases for AWS services. In turn, this puts the user in a better position to select and leverage the optimal solution in their real-world environment. At the time of writing, AWS has more than 175 fully featured services, and more are being added all the time. This provides IT staff with a diverse set of tools to design and develop game-changing applications, as evidenced by the many industry-disrupting companies that count themselves among AWS's customers. It also underscores how important it is to have competent staff who can navigate the robust suite of AWS solutions available. The data shows that AWS Certifications help validate that IT staff know what tools are right for the job at hand. When IT staff have the knowledge and skills to optimize application design decisions, companies can improve reliability, security, and end-user experience: nine out of ten (91%) organizations with AWS Certified staff agree that certification achievement has given staff the ability to identify new and different ways to take advantage of AWS services (see *Figure 9*).

Figure 9. Effect of AWS Certified Staff on Team's Ability to Better Utilize the AWS Services Portfolio

Please rate your level of agreement: Having AWS Certified staff has given cloud staff the ability to identify new and different ways to take advantage of AWS services. (Percent of respondents at organizations with AWS Certified staff, N=286)



Source: Enterprise Strategy Group

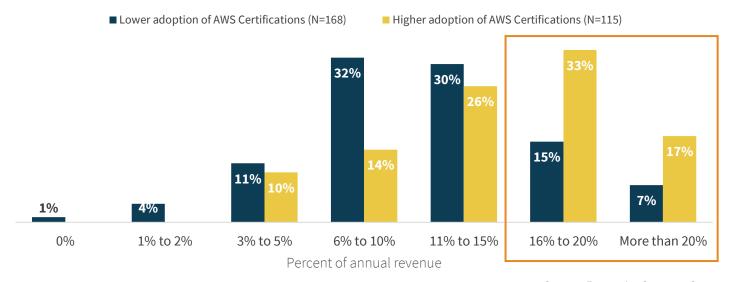
When comparing application user satisfaction on AWS to on-premises, 80% of surveyed AWS customers noted an improvement. This percentage increased to 88% when isolating respondents at organizations with higher adoption of AWS Certifications.

AWS Certifications Help Builders Build on AWS

Builders use AWS technology to reinvent the way business and industries operate. This research shows how staff achievement of AWS Certifications is correlated to organizations' ability to drive innovation. When all respondents were asked to estimate their organization's revenue derived from digital offerings launched within the last two years, there were significant differences based on AWS Certification adoption levels. Organizations with higher adoption of AWS Certifications tended to have more of their revenue tied to innovative channels. Specifically, they were 2x more likely to have more than 15% of annual revenue tied to recently developed digital products, services, and experiences (50% versus 22%, see *Figure 10*). The median annual revenue of organizations represented in this research was \$875M. ESG estimates that organizations with higher adoption of AWS Certifications are driving an average of ~\$131M per year in annual revenue through innovation, a figure 36% higher than organizations with lower adoption of AWS Certifications.

Figure 10. Percentage of Revenue Driven through Innovative Channels

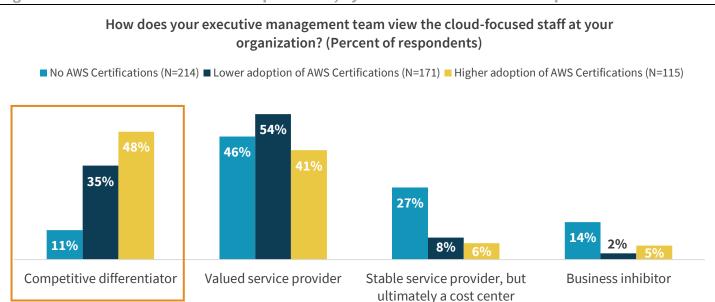
Approximately what percentage of your organization's revenue is derived from digital products/services/experiences launched in the last two years? (Percent of respondents at organizations with AWS Certified staff and knowledgeable about product mix)



Source: Enterprise Strategy Group

The data shows a clear correlation between AWS Certification achievement and the propensity for executives to perceive the cloud team as a competitive differentiator. Respondents from organizations with higher adoption of AWS Certifications are 4x more likely to say that their executive management views the cloud team as a competitive differentiator, compared to organizations with no AWS Certified staff (48% versus 11%, see <u>Figure 11</u>).

Figure 11. Business Executives' Perception of IT, by Staff AWS Certification Adoption Level





How Promoting AWS Certifications Helps Organizations Win the Fierce Competition for Talent

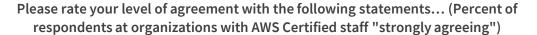
Clearly cloud technology is becoming mainstream, but relative to the broader enterprise IT landscape, cloud infrastructure is still nascent. When you pair cloud technology's rapid adoption with a relatively short time in the market, the result is skill scarcity. So, it is not a surprise that the IT industry is experiencing a cloud skills gap. Cloud-native app developers and experienced cloud architects are in demand. Recruiting, attracting, and retaining top cloud talent is critical for organizations today. The data shows that enhancing the cloud team's capabilities is only one of the benefits of supporting the upskilling of staff and recognizing achievement with AWS Certifications. Benefits related to employee recruitment and retention should also be considered. Supporting staff achievement of AWS Certification can differentiate organizations from other employers.

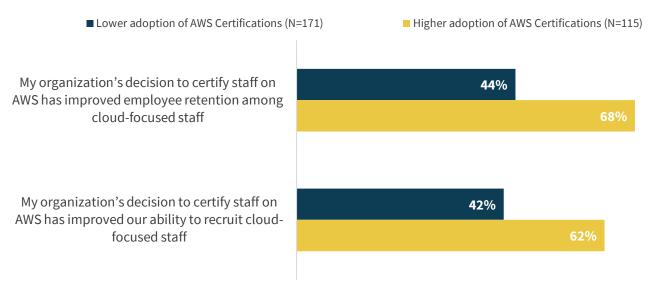
AWS Certifications Improve Both Recruitment and Retention Efforts

IT staff not only works with technology professionally, but many are technology enthusiasts and hobbyists as well. Learning new skills on new technologies motivates and engages them. Providing employees with training opportunities and encouraging them to pursue certifications is one way employers can create an environment that will attract top talent. In fact, 93% of respondents with AWS Certified employees on staff agree that the organization's decision to support employees in earning an AWS Certification has improved the organization's ability to recruit cloud-focused talent. Furthermore, organizations that are supportive towards AWS Certifications are more likely to see a positive impact on recruitment. Three-fifths (62%) of respondents at organizations with higher adoption of AWS Certifications strongly agree that their positive stance on AWS Certification is improving recruitment. Just 42% of respondents at organizations with lower adoption of AWS Certifications strongly agreed (see *Figure 12*).

Some organizations may worry about supporting certifications. That is, by investing in staff development, organizations give their employees in-demand, transferrable skills that could ultimately lead to turnover. However, the research shows the opposite. 96% of respondents with AWS Certified employees on staff agree that the organization's decision to support employees in earning an AWS Certification has improved talent retention. The research also found that organizations that are doing more to encourage achievement of AWS Certifications are more apt to recognize a retention benefit. More than two-thirds (68%) of respondents at organizations with higher adoption of AWS Certifications strongly agreed that their support of AWS Certification is improving retention. Just 44% of respondents at organizations with lower adoption of AWS Certifications strongly agreed (see Figure 12). ESG believes the organizations that support staff in earning an AWS Certification are also likely to foster a culture where employees are valued and where their development matters, thus driving loyalty and retention. Furthermore, as discussed prior, organizations with higher adoption of AWS Certifications tend to be more innovative and develop more revenue-generating digital solutions and experiences for their customers. This means technical teams get to spend more of their time on interesting projects, further driving employee engagement and retention. In this context, supporting AWS Certifications is just one factor, albeit an important one, to minimize turnover.

Figure 12. Belief that AWS Certification Enhances Talent Recruitment and Retention





Source: Enterprise Strategy Group

Organizations Invest for Success

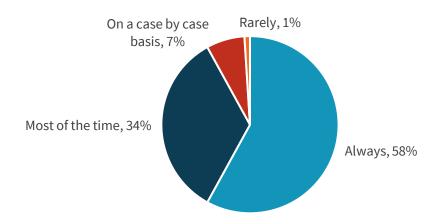
The data shows that encouraging staff to achieve AWS Certifications has a correlation to better recruitment and retention at organizations. However, it is important to note that AWS Certifications are not merely encouraged. Many organizations are also funding individuals' certification exams. More than nine out of ten (92%) respondents said that their organization always or usually pays for their team's AWS Certification exam fees (see *Figure 13*). This is one of the many ways companies can demonstrate a company culture that values its staff, an attribute appealing to prospective employees.

"We fully fund training and certifications. We do an anonymous employee survey every year and for the last two years the biggest area of concern was training and certification. Our employees demanded it and we listened."

- Senior cloud system manager, telecom, \$500M annual revenue

Figure 13. Funding Tendencies of Organizations for AWS Certifications

Generally speaking, does your company fund employees' AWS Certification exam fees? (Percent of respondents at organizations with AWS Certified staff, N=286)



Source: Enterprise Strategy Group

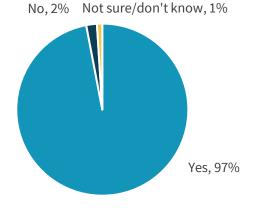
The Bigger Truth

Bringing It All Together by Examining Overall Competitive Positioning

Throughout this report, we've seen how staff achievement of AWS Certifications delivers value to organizations in a variety of ways, spanning IT efficiency, security efficacy, the ability to drive innovation, and support for recruitment and retention efforts. Ultimately, any of these factors could contribute to an organization's overall business success, and IT decision makers are drawing this connection. When asked whether they believe that employing AWS Certified staff will improve the competitive position of their business over the next 3-5 years, an overwhelming 97% reported the affirmative (see *Figure* 14). This research shows that AWS Certified staff can help advance business initiatives through innovation with AWS solutions. Thus, organizations would be well served to identify which AWS Certifications make sense for their staff and their business to help realize these goals.

Figure 14. Assessing Business Confidence

Do you believe your organization's employment of AWS Certified staff put your company in a better competitive position to succeed over the next 3-5 years? (Percent of respondents at organizations with AWS Certified staff, N=286)





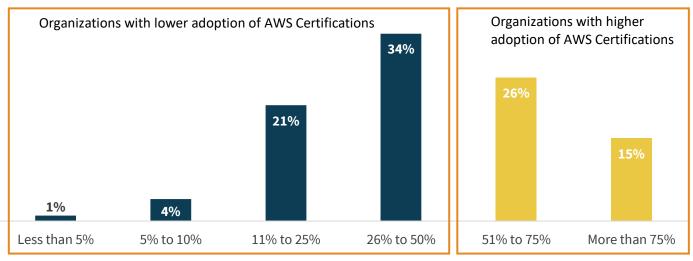
Research Methodology

Defining Two Key Cohorts Compared in This Study: Organizations with Higher Adoption of AWS Certifications versus Lower Adoption of AWS Certifications

Out of a total of N=500 organizations surveyed, the majority (57%, N=286) employ one AWS Certified staff member or more. Those organizations were then grouped into two adoption levels of AWS Certifications (see <u>Figure 15</u>). Organizations where the majority of cloud-focused staff were AWS Certified were considered to be organizations with a higher adoption of AWS Certifications, while organizations where 50% or less of cloud-focused staff hold AWS Certifications were considered to be organizations with a lower adoption of AWS Certifications. In its analysis, ESG compared these two cohorts to understand if, and to what degree, higher levels of AWS Certified staff affect organizations and their success with AWS.

Figure 15. Percentage of Cloud-focused Staff Who Are AWS Certified

Roughly what percentage of cloud-focused staff at your organization are AWS Certified? (Percent of respondents at organizations with AWS Certified staff, N=286)



Source: Enterprise Strategy Group

Approach and Firmographics/Demographics

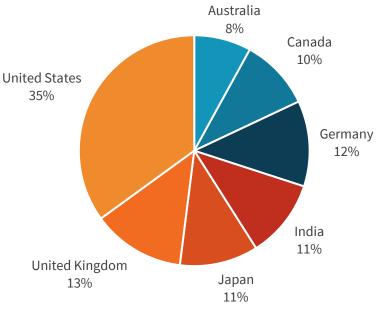
ESG conducted a comprehensive survey among IT executives and managers with responsibility for their organization's cloud strategy and technology decisions. All respondents have a management role as it relates to their organization's "cloud-focused staff." Organizations from various regions were represented including North America (US and Canada; 45% of respondents), Western Europe (Germany and UK; 25%), and Asia-Pacific (Australia, Japan, New Zealand, and India; 30%). Organizations represented skewed toward enterprises, with 73% having 1,000+ employees, and 27% having 500-999 employees. The survey was fielded between January 13, 2020 and February 15, 2020. All respondents were provided an incentive to complete the survey.

After applying screening criteria and data quality control best practices, a final sample of 500 respondents completed the survey. <u>Figure 16-Figure 19</u> detail the demographics and firmographics of the respondent base. Note: Totals in figures and tables throughout this report may not add up to 100% due to rounding.



Figure 16. Respondents' Location





Source: Enterprise Strategy Group

Figure 17. Respondents' Seniority

Which of the following best describes your current responsibility within your organization? (Percent of all respondents, N=500)

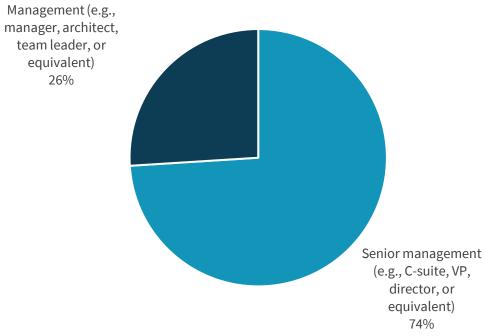
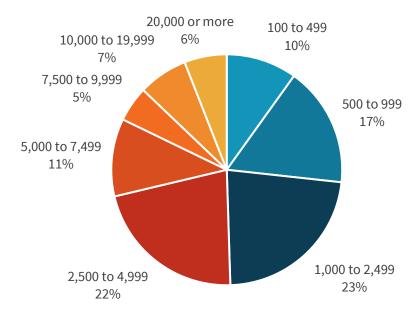




Figure 18. Company Size (Number of Employees)

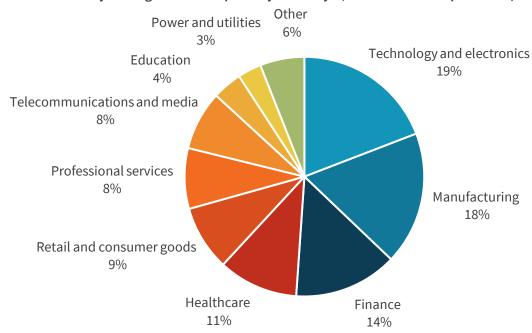
How many total employees does your organization have worldwide? (Percent of all respondents, N=500)



Source: Enterprise Strategy Group

Figure 19. Industries Represented





All trademark names are property of their respective companies. Information contained in this publication has been obtained by sources The Enterprise Strategy Group (ESG) considers to be reliable but is not warranted by ESG. This publication may contain opinions of ESG, which are subject to change. This publication is copyrighted by The Enterprise Strategy Group, Inc. Any reproduction or redistribution of this publication, in whole or in part, whether in hard-copy format, electronically, or otherwise to persons not authorized to receive it, without the express consent of The Enterprise Strategy Group, Inc., is in violation of U.S. copyright law and will be subject to an action for civil damages and, if applicable, criminal prosecution. Should you have any questions, please contact ESG Client Relations at 508.482.0188.



Enterprise Strategy Group is an IT analyst, research, validation, and strategy firm that provides market intelligence and actionable insight to the global IT community.





contact@esg-global.com



508.482.0188