

2023 TECH FORECAST:

Build a recession-proof tech workforce

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Executive summary

In 2022, Pluralsight blind surveyed more than 1,725 tech leaders and technologists to understand how organizations are developing technology skills and where the largest skills gaps exist worldwide. This report combines those insights with user data from the Pluralsight platforms to identify ways to close the largest technology skills gaps.

MAJOR TAKEAWAYS

- The two largest technology skills gaps are cybersecurity and cloud computing.
- Investments in upskilling are not increasing at a rate to close technology skills gaps.
- The next wave of cloud computing innovation is multicloud-as-default, which requires technologists to understand multiple cloud technologies and how they affect organizational security.



Introduction

With the ongoing global pandemic and the potential for a global recession, finding the talent and resources to keep your strategies on track is harder than ever. The solution? Become creators, not consumers, of talent.



The only way to keep up is to find new ways of investing in yourself and your team. In Pluralsight's recently released <u>State of Upskilling</u> and <u>State of Cloud</u> reports, **data showed that the two largest skills gaps for technologists are cybersecurity and cloud computing**. The data from these reports provides a clear path forward: You need on-demand learning to be part of your employees' schedules.

The State of Upskilling and State of Cloud reports provide us with more essential data points we shouldn't forget. Here's a major one: Half of employees consider leaving their jobs every month, but employees are 94% more likely to stay with a company that invests in their skill development.

You can't just invest in your tech. You need to invest in your people. 61% of technologists use on-demand, self-paced upskilling resources.

Haven't read State of Upskilling yet?



Don't wait until your skills gaps become impossible to manage.

Get started with a free trial of Pluralsight Skills or A Cloud Guru today.







Security remains a top skills priority

Hiring may be slowing down, but spending on technology infrastructure isn't. <u>Gartner</u> predicts IT spending will increase to \$4.6 trillion in 2023. Your organization's spending on tech will only increase, making it imperative that you allocate time and budget to upskilling your employees who implement, use, and maintain that tech.

Combine increased investment in IT infrastructure with hiring freezes that leave you short staffed and you have the perfect storm for cyberattacks. It's no surprise that cybersecurity-related courses remain among the most popular. The Attacks, Threats, and Vulnerabilities for CompTIA Security+ course on Pluralsight Skills jumped three spots to become the number one watched course in 2022.



And it makes sense. On one hand, cybersecurity skills make technologists more appealing to hiring managers. On the other, leaders must work around hiring freezes to develop the cybersecurity skills they need with employees they already have. Cybersecurity isn't just an IT problem. **Seven of the top 30 courses across Pluralsight platforms are designed to prepare technologists for security-related certifications,** including CompTIA Security+, AWS Certified Security Specialty, and Azure Security Engineer Associate.

Top Pluralsight Skills courses include:



Attacks, Threats, and Vulnerabilities for CompTIA Security+



Learning the Essentials of CentOS Enterprise Linux 7 Administrator



Terraform — Getting Started



Network Concepts and Protocols



Ethical Hacking: Understanding Ethical Hacking

See for yourself.

Browse the course libraries for Pluralsight Skills and A Cloud Guru.



Mitigate risk with hands-on experiences

Data from State of Upskilling and State of Cloud cite that technologists want hands-on experience to master the necessary skills. **In fact, 62% prefer to learn by hands-on experiences like labs and sandbox environments.** And total cloud labs taken in 2022 jumped nearly 40% from 2021, further proof technologists crave hands-on learning.

If you're not providing access to these types of on-demand tools, you need to be. Otherwise, the talent on your team will seek opportunities at organizations that do.

Top labs include:

- 🐼 Introduction to AWS Identity and Access Management (IAM)
- 🐼 Create and Assume Roles in AWS
- 🐼 Launching an EKS Cluster
- 🐼 Building a Serverless Application Using Step Functions, API Gateway, Lambda, and S3 in AWS
- 🐼 Creating an Auto Scaling Group and Application Load Balancer in AWS
- 🐼 Launch an EC2 Instance in a Virtual Private Cloud (VPC)
- 🐼 Create a Multi-Subnet VPC with Secure Access to Private Servers with Outbound Internet Access
- 🐼 Create a Static Website Using Amazon S3
- Accessing and Using the Azure Portal
- Introducing Amazon S3 (Simple Storage Service)



Check out all the hands-on labs available to individuals and teams here > Hands-on tools are especially important for cloud experts. Cloud environments bring with them a unique set of complexities. Sandboxes, in particular, let technologists get comfortable navigating cloud tools in a controlled environment without worrying about harming operational systems.

Think of hands-on tools as your safety net. They give your team the ability to fail in a safe environment and the experience they need to identify security risks earlier and develop solutions faster.

It's one thing to watch courses, hear from experts, and take certifications. But most technologists learn by doing.

It's true. If an engineer completes an online course and does nothing with their new knowledge, there's a slim chance they'll retain more than 10% of the information. But if they pair those new skills with hands-on experiences like labs and sandboxes, they're likely to remember 100% of what they learned.

Your technologists need hands-on tools to make new skills stick. Leaders want bigger returns on their tech investments. It's a no-brainer. The best decision you can make? Give your teams the time and tools they need to develop in-demand skills and deliver on your org's objectives.



ACG Business Plus customers have access to Custom Cloud Sandboxes that mirror their production environments for in-depth training.



The cloud skills chasm grows

The cybersecurity trend extends into the cloud sphere as more businesses invest in cloud computing strategies. Worldwide spend in cloud computing is expected to reach <u>\$591.8 billion in 2023</u> according to the latest forecast from Gartner—a 20% increase over 2022.

While this growth shows organizations are continuing to invest in cloud computing, it compounds the already extreme skills gap in the cloud industry. Leaders are prioritizing investments in technology more than investments in upskilling, which is widening technology skills gaps instead of closing them.

Learn more about organizational barriers in the <u>State of Cloud</u> report.



Closing the cloud skills chasm

Organizations are all-in on cloud. But if it feels like they forgot something, it's likely the experts who are working to build their solutions. According to State of Cloud, only 8% of technologists claim extensive experience with cloud-related tools, yet 75% of leaders are building new products and features in the cloud by default.

That's not to say that technologists aren't trying to catch up. They spent almost 85,000 days cumulatively in 2022 working towards cloud certifications across all Pluralsight platforms. But



they're not just looking for certifications. Two new skill assessments, Microservices Architecture and DevOps Foundations, made it into the top 10 this year. Technologists are taking it upon themselves to learn other topics critical to the cloud, and they're eager to put in the time. Leaders just need to give them the proper tools and time to expand their skills.

When given the opportunity, technologists take full advantage. Half of all technologists feel their improved cloud skills made the greatest impact in identifying vulnerabilities within technical solutions faster. This highlights the connection between cloud skills and overall organizational security

Most popular skill assessments:

- C#
- Java Fundamentals
- Python Core Language
- JavaScript Core Language
- Managing Source Code with Git
- Microservices Architecture
- Building Web Applications with Angular
- Building Web Applications with React
- DevOps Foundations
- Building Websites with HTML, CSS, and JavaScript

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Looking ahead: Multicloud by default

Getting your technologists skilled quickly is even more important when you consider multicloud environments. According to <u>Gartner</u>, 75% of organizations are deliberately adopting multicloud strategies, an increase from 49% in 2017.

It makes sense that technologists would look to broaden their cloud knowledge past the cloud platforms. In fact, **viewership of provider-agnostic courses**, **like Terraform and Kubernetes**, **increased 100%** across all Pluralsight platforms.

Multicloud by default is the next big wave for organizations. A scary thought when you consider most cloud experts don't have the tools or knowledge to manage these complex solutions that span more and more public cloud providers. Not to mention that multicloud environments create a complex cybersecurity environment most aren't prepared to handle.

Leaders need to empower technologists with the resources and time to boost their cybersecurity and cloud skills to succeed in this new phase of cloud computing.



Conclusion

A global recession is no excuse to stop investing in your talent. It's quite the opposite. **Technologists, especially those with cybersecurity and cloud computing skills, are in higher demand than ever before.** And there's no indication that will change in the near future. The only viable solution is to develop tech skills for yourself and your team.

This is even more critical as leaders shift towards a multicloud-as-default mindset, which requires technologists to have a broad and deep understanding of multiple cloud technologies and the ways those technologies impact overall security. **It's not a one or the other decision anymore. Technologists need to speak to both.**

The only way that's going to happen is if leaders give their technologists the time, space, and resources they need to adequately train themselves for the next wave of technology innovation.

ABOUT PLURALSIGHT

Pluralsight helps organizations around the globe advance their technology workforce. Because the hardest part of building a business isn't building software and technology. It's building up the people who grow your business. We're the only partner who helps leaders build better teams and better products, all at the same time.

Our upskilling and cloud transformation solutions help you create the talent you need, when you need it. Pluralsight Skills and A Cloud Guru deliver expert-authored courses in the latest technologies paired with unlimited access to hands-on labs, sandboxes, and certification prep. Upskilling your teams with Skills and ACG equips your team to execute on strategic objectives that ultimately drive innovation, automation, and efficiency.



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Ready to take the first step in making upskilling a priority?

Contact sales today