



PLURALSIGHT

**2025**

# AI Skills Report

# Executive summary

AI skills are now a baseline requirement for tech professionals. 95% of organizations check for these skills when hiring, with 70% considering them “mandatory” or “highly preferred.” Teams increasingly see these skills as mission-critical—two thirds of companies have had to abandon AI adoption projects due to a lack of AI skills among staff.

However, how many professionals are actually skilled in AI, and how proficient are they, really? To answer these questions, we surveyed 1,200 executives and IT professionals across the U.S. and the U.K.

Our main finding? **The majority of executives and employees exaggerate their AI knowledge, and likely overestimate the AI skills they actually have.**

In this report, you'll get a true look into the state of AI skills across the industry, as well as how corporate AI adoption is impacting career opportunities, job stability, productivity, and more.

## Main takeaways



**79%**

Executives and IT professionals who fake their AI knowledge.



**95%**

Organizations that use AI skills as a hiring factor.



**61%**

Organizations that see using generative AI as “lazy.”



**84%**

Companies likely to replace or outsource jobs if staff don't have the right AI skills.



**65%**

Organizations who have had to abandon AI projects due to a lack of AI skills among staff.



**84%**

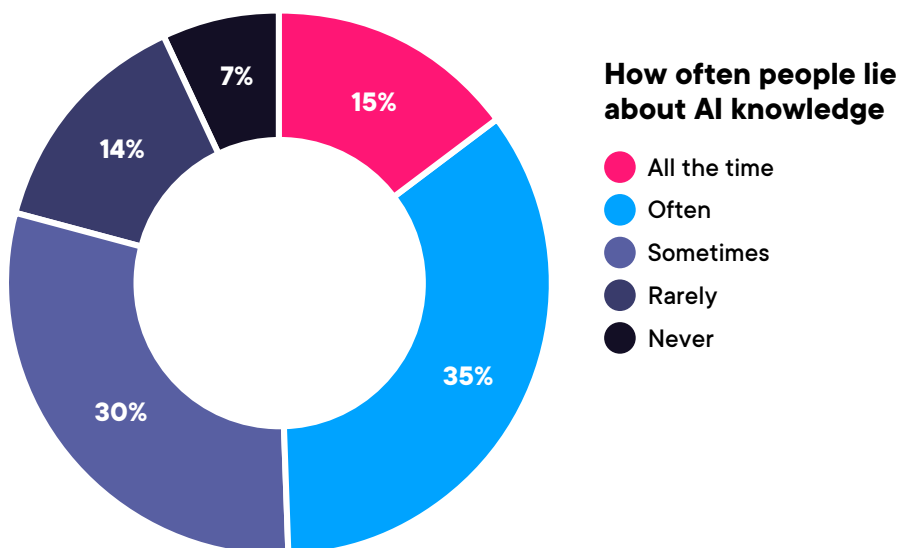
Executives and IT professionals who say using AI has made their lives easier.

## AI skills are misunderstood and outright faked

If you're anxious that everyone seems to know more about AI than you do, here's the good news: 79% of people admit to pretending to know more about AI than they actually do. Your boss is likely to be the biggest faker, with 91% of C-suite executives admitting to exaggerating their AI knowledge.

On the other hand, they're not likely to stay ignorant for long. Over half of companies are offering dedicated training to upskill staff in AI. That means they're pretending for now, but it won't be long before they're truly knowledgeable on the subject.

**91%**  
C-suite executives  
admit to exaggerating  
their AI knowledge.



## Stigma around AI and hidden AI use are common

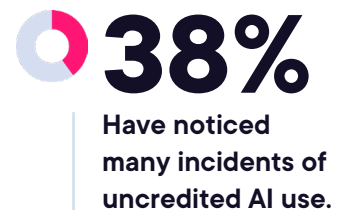
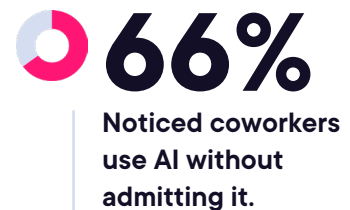
Despite strong demand for staff with AI skills, 61% of respondents said that using generative AI tools for work is seen as “lazy.” C-suite executives have witnessed this perception more often, with 73% working at companies where this idea is prevalent.

With this stigma, workers often use are using AI tools for work projects without giving credit or acknowledgement for its use. Two in three people have noticed coworkers use AI without admitting it, while one in three report hidden AI use being widespread in their workplace.

Why does this matter? As an individual, **it means you’re compared to colleagues that suddenly have a higher output, and you may be expected to keep pace.** It also gives a mistaken impression that nobody is using AI, so there is no urgency to utilize it, when in reality colleagues may be getting AI assistance regularly.

For organizations, this hidden use can also result in Shadow AI: employees using unsanctioned and potentially unsafe AI tools outside of the IT team’s watch. This can result in:

- Security vulnerabilities from unsecured data access to data leaks.
- Information integrity being compromised by unvetted AI products.
- Compliance challenges from accidental sharing of sensitive data with third-party AI platforms without company permission or knowledge.
- Cybersecurity threats from unapproved or unvetted AI tools.
- Inconsistent quality from AI outputs that can harm customer relations or employee reputations.



## The AI skills assessment gap: “Everyone else lacks AI skills, but not me”


Nine in ten IT employees and executives said they had all the skills needed to integrate AI tools into their daily roles. However, when asked about their peers, nearly the same number said a lack of AI skills among their colleagues was the biggest blocker for AI adoption, and two thirds said their organization had to abandon an AI project due to lack of skilled staff.


One potential explanation for this gap is the Dunning-Kruger effect—a well-researched phenomenon where a person’s lack of knowledge and skill in a specific area causes them to greatly overestimate their competence.


If this is the case, then it’s likely that a large percentage of the workforce believe they have greater AI skills than they do because they lack enough knowledge about AI to “know what they don’t know.”

**The solution? Confirm your own skills and those of your staff, especially prior to taking on a new AI adoption project.**

### The AI self-assessment paradox

 **92%** Confident they have the necessary skills to integrate AI tools in their role.

 **88%**  
Believe AI projects are blocked by a lack of AI skills among everyone else.

 **65%**  
Organizations who have had to abandon AI projects due to a lack of AI skills among staff.

 **38%**  
Organizations who have abandoned multiple AI initiatives due to a lack of skilled staff.

## Nearly four in ten companies likely doing dirty deeds with AI

When there isn't enough AI education in a company, there can be another negative consequence: unethical AI use. Unethical AI use can pose a significant business risk, leading to danger to humans, breaches of consumer privacy, illegal AI use, and brand damage.

Thirty-nine percent of C-suite executives say they probably or definitely have shady AI activity going on at their company. It's worth noting that identifying unethical AI use requires a certain level of AI knowledge, meaning much of this activity may fall under the radar or occur unintentionally.

In November 2024, data from Pluralsight's learning platform revealed that while 45,000 people wanted to learn about AI, only 1.8% actively searched how to adopt AI responsibly.



**39%**  
C-suite execs think they have shady AI activity going on.



**1.8%**  
Learners actively search how to adopt AI responsibly.

## In 2025, AI skills are directly tied to job security

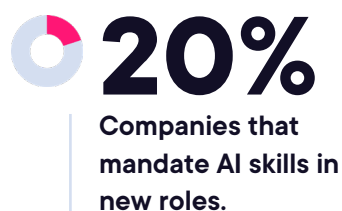
**More jobs are created than lost due to AI. Both employees and employers widely see AI skills as essential.**

Seven out of ten companies now consider AI skills as necessary or strongly desired, with only 5% considering it “not a factor” when hiring. In the U.S. and U.K., the majority of companies said they were “somewhat” or “extremely likely” to replace or outsource talent to successfully deploy AI initiatives, with only 2% ruling out this possibility.

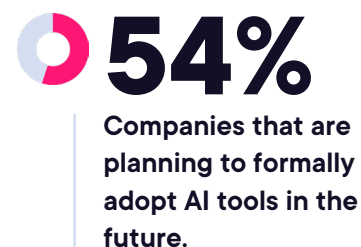
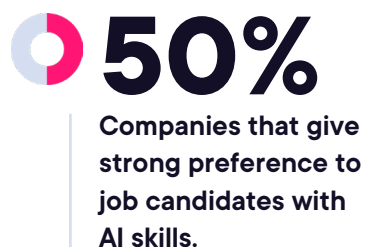
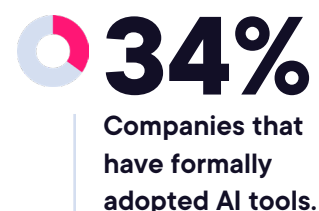
This drive comes from the fact that 86% of organizations have plans to adopt AI tools, or have already adopted them. Even among the small fraction of companies with no plans for AI, many still allow employees to use AI tools on their own. Among all the companies surveyed, only 5% of companies have completely banned AI usage.

Perhaps it’s unsurprising, then, that among executives and tech professionals, there is near unanimous agreement that having AI skills is the “best way” to ensure job security.

### AI’s role in job security



Executives and tech professionals who say AI skills are the top way to ensure job security.



## Nine out of ten people fear companies replacing jobs with AI, despite companies creating more AI-related jobs

Whether you're an executive or tech professional, the fear of having an organization replace your role with an AI runs deep. When it comes to direct replacement, the U.K. workforce is slightly more worried than the US (93% vs 87%).

Most executives and tech professionals believe the skills they use in their daily role will "become obsolete very quickly" because of the same tasks being possible with AI, with 35% stating this is a "strong" possibility.

**However, the reality is that nearly half of companies have actually added AI-related jobs.** This research matches predictions by the World Economic Forum that companies will create 78 million more jobs due to AI than they eliminate by 2030.



**70%**

Believe their job is at-risk due to AI.



**34%**

Feel being replaced by AI is "extremely" or "very" likely.



**91%**

Believe skills will quickly become obsolete because of AI.

**However...**



**49%**

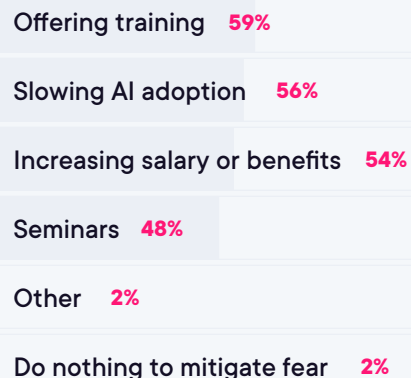
Confident they have the necessary skills to integrate AI tools in their role.



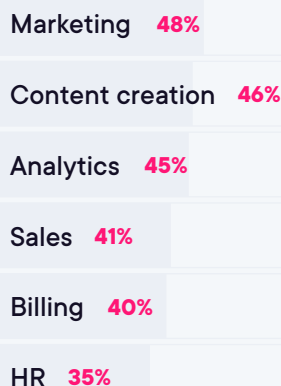
# Upskilling is the #1 solution being used by companies to combat AI-related job anxiety

The majority of organizations are training their existing employees to ensure successful AI adoption, rather than firing and replacing them. And despite most companies in 2025 having some sort of AI initiative in place, most have decided to slow adoption in order to minimize disruption.

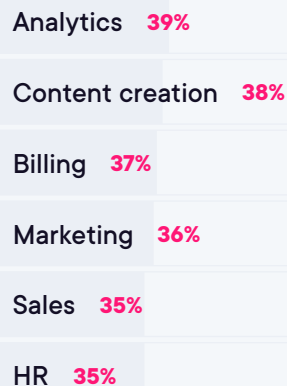
Perhaps the best bit of news for tech professionals is that over half of organizations report they are increasing salary or benefits in response to organizational AI adoption. Only a small percentage (2%) report doing nothing at all to ease concerns.



## The departments expecting the most AI-driven growth in the next five years



## The departments most at-risk from companies replacing them with AI in the next five years



## The entire tech sector is experimenting with AI, with positive results

In 2025, it's hard to find a domain that isn't using AI to augment their existing workloads. And among those who've used it, eight in ten report AI has made their life easier.

Cybersecurity is the most common use case, followed by data, likely because these fields have historically used AI long before generative AI entered the mainstream. However, developers, customer service providers, and anyone creating content have also entered these ranks.

Teams are also using AI to reduce the burden of cloud services management, especially as major cloud providers strive to incorporate AI tools into their services (such as Amazon Q). The wider trend toward AI task automation will likely free up individuals to focus on strategy.

More than half of companies (53%) are currently focused on experimentation over seeking a return on investment. Leaders are more inclined to favor that slow roll, with 67% of C-suite executives happy to investigate use cases over profits.



**53%**

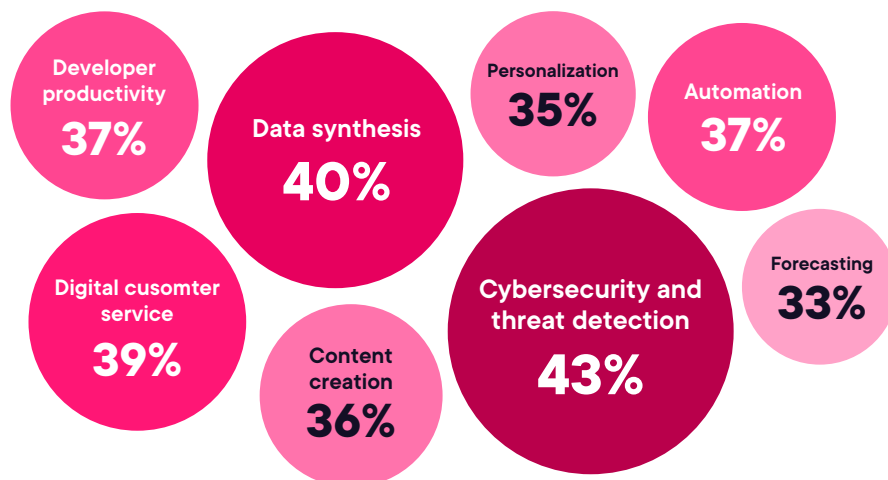
Companies focused on experimentation over ROI.



**67%**

Executives investigating use cases over maximizing profit.

### Where companies are currently using AI



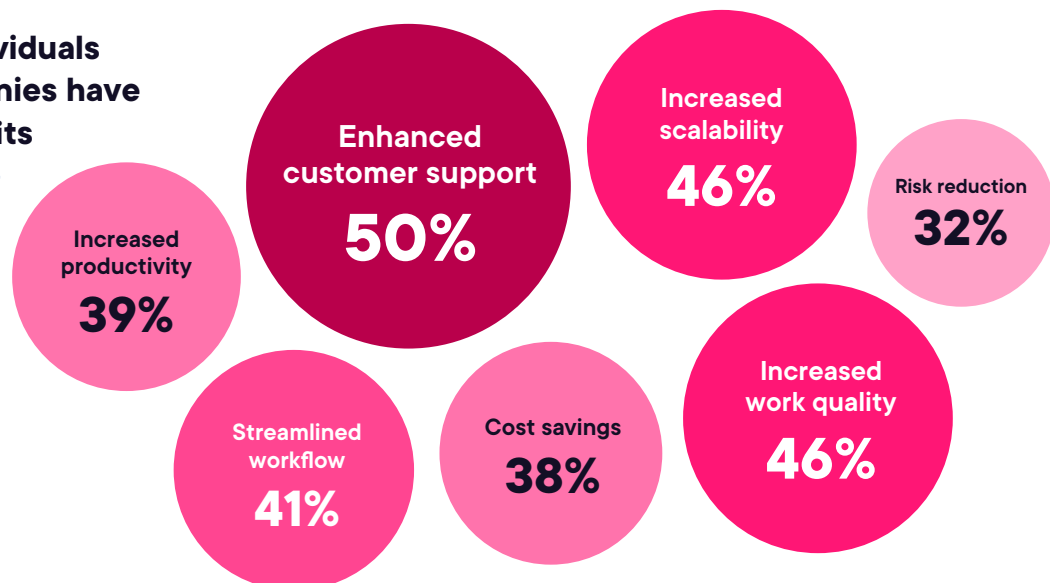
## AI skills individuals and organizations are using right now

AI cloud-services management <b>39%</b>	Machine learning experience <b>36%</b>
Data modeling and analysis <b>38%</b>	Managing data libraries and software frameworks <b>31%</b>
Ethical AI and bias mitigation <b>37%</b>	Retrieval-augmented generation (RAG) <b>29%</b>
Writing AI prompts <b>36%</b>	Natural-language processing (NLP) <b>28%</b>
Using AI to automate tasks <b>36%</b>	

## Companies using AI are seeing the most value across customer support, work quality, and scalability

Eight in ten executives and IT professionals report using AI has made their life easier. Enhanced customer experience is the biggest benefit, followed by improved work quality, scalability, and streamlined workflow.

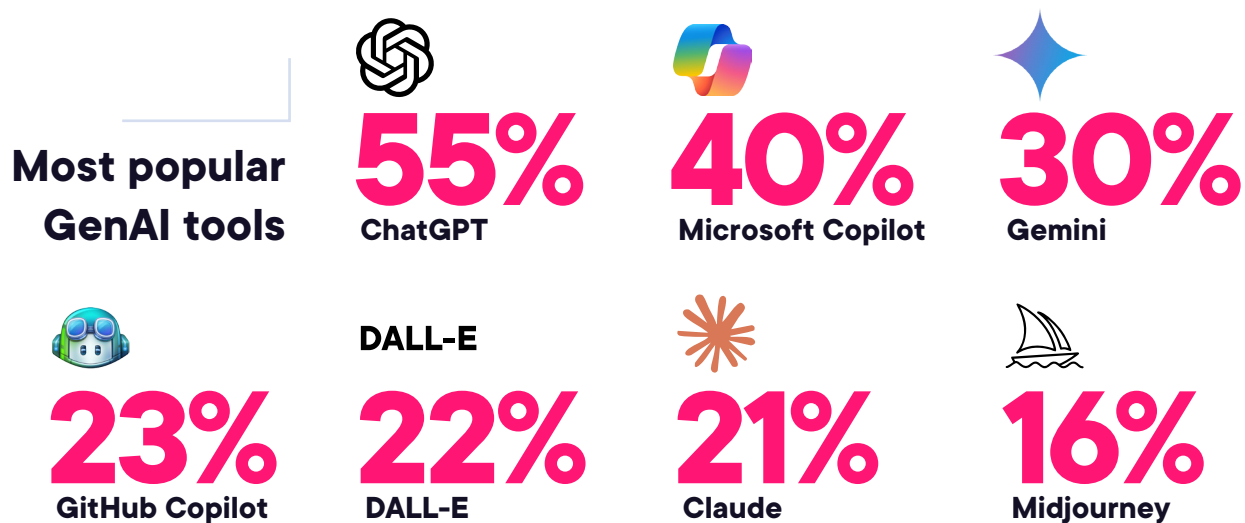
### Where individuals and companies have seen benefits



## Among tech professionals, ChatGPT dominates generative AI tool use, but has strong competition

ChatGPT is used by over half of all tech professionals, likely due to its ease of use and widespread applicability. However, its dominance in the tech sector is hardly unchallenged, with Microsoft Copilot and Google's Gemini also seeing widespread adoption. For tech professionals, this means becoming proficient with any of these is a good career investment.

GitHub Copilot, a dedicated AI code completion and automatic programming tool, remains the most popular industry-specific GenAI product.



## How to solve the problems of AI fakery and build AI skills for success

The data shows that it's common to misrepresent your own AI proficiency, whether intentionally or by accident, and that these skills are essential for career stability and project success. Thankfully, identifying or fixing your own skill gaps—or those of others in your organization—is relatively straightforward, using the right tools.

### First, measure skill proficiency with expert-created assessments, not self-reporting

Many organizations measure the success of their AI upskilling initiatives with self-reporting. This is an inherently flawed process, because it opens the door to all the misrepresentation issues mentioned earlier. Even when you're doing it for your own benefit, it's still hard to gauge yourself against other professionals (who may be lying or hiding their AI use) or “know what you don't know” when it comes to AI.

The best way to solve this is to take an AI skill assessment created by an actual industry expert, which ranks you against other professionals. This has the following benefits:

- It shows you where your peers really are, with none of the fakery.
- It exposes any knowledge gaps you might have, so you can fix them.
- It gives you a tool you can use to track your learning progress.

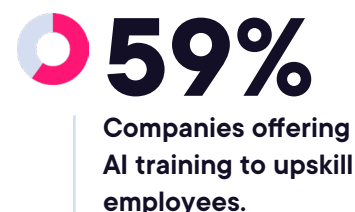
These tools also tend to have learning recommendations for the areas you need improvement in, saving you time in searching for these learning materials.

**If you're a leader, these tools can help you make sure key staff really have mission-critical AI knowledge prior to commencing your project, so you're not set up to fail.**

## Fully embrace any learning opportunities your organization provides—or push for these programs

The silver lining of the majority of organizations considering AI skills to be essential is that 59% of companies are offering AI training to upskill employees, and 48% are offering seminars. Embrace these opportunities to shore up your skills, even if you feel you're AI literate.

If your organization is not actively providing this training, ask if they are willing to pay for it upon request. Alternatively, you may need to invest in your own learning and see this as something you will get a return on in terms of job security and opening up future opportunities.



## Take structured AI courses by verified industry experts

Company-led AI training may not give you the depth of knowledge and skills that you need, especially as a tech professional. The training may cover generative AI use, such as ChatGPT, but not dive into role-specific uses, such as code assistance, data modelling, task automation, or using AI with cloud services.

In these scenarios, it's best to use a **tech skills development** platform, which offers more substantial, on-demand learning options, as well as tools to help test and develop your AI skills. You also want to make sure the content on this platform is both created by an expert and vetted thoroughly by the platform itself.

## **Get hands-on with your learning (in a safe environment)**

Studies show that most people learn best when they're able to get hands-on experience. Getting hands-on with AI tools is a great way to reinforce what you've learned and see if there's anything else you can study up on.

While this approach is fine with safer, generative AI tools, practicing with more advanced AI applications can come with an element of risk. Specifically, if you're toying with models, particularly in cloud-based environments, you can potentially rack up unwanted bills. You also want to experiment in a space where you won't do any damage to anything important.

Sandbox environments and hands-on labs are the best way to learn by doing and get familiar with more advanced applications, while significantly reducing this risk.

## **Once you've learned about the latest in AI, keep checking what's changed**

AI moves at a breakneck pace, and just because you learned about the latest AI tool a year ago does not mean that knowledge is still current. New models and applications regularly hit the market, and regular research helps keep your skills current.

## CONCLUSION

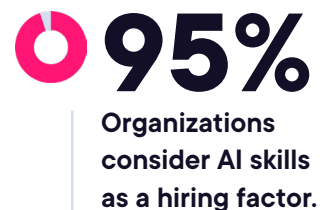
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# Testing and training in AI is your key to success in 2025

AI skills are now a baseline requirement for almost every tech role, with 95% of organizations viewing them as a hiring factor. However, employees and executives often misrepresent, misunderstand, and sometimes outright fake AI skills. And without testing, it's possible to overestimate your own AI skills or those of others.

For organizations, lack of AI skills can make or break AI adoption, which, when successfully in place, results in improved work quality, scalability, productivity, and cost savings.

As a professional or as a leader, it's vital to check your own AI knowledge and that of your team using independent skill assessments. Successful teams will make AI upskilling a professional priority, using structured, expert-led courses, hands-on learning opportunities, and regular research to see what's changed in the AI landscape.







## On-demand learning, skill assessments, labs and sandboxes

Pluralsight is a tech skills development platform that offers all of the tools you need to upskill in AI:

- ✓ Over 6,500+ tech courses, all authored and vetted by industry experts—we admit authors at a 6% acceptance rate, making sure you have the most authoritative, reliable learning materials.
- ✓ Dedicated AI learning pathways for beginners, practitioners, and experts.
- ✓ Skill and Role IQ tests that allow you to test your knowledge against others, with customized course recommendations.
- ✓ Expert-created, hands-on labs and sandbox environments for practical learning.
- ✓ For organizations, partnership services that can provide tailored, team-based live learning.

[Build your AI skills with Pluralsight →](#)

# How we conducted our research

For this report, we partnered with Wakefield Research to understand decision makers’ and practitioners’ perspectives on AI skills, uncover current and future trends, and provide individuals and leaders with the actionable insights they need to achieve success.

We surveyed 1,200 executives (CEOs, CFOs, CIOs, and other VP-level or higher who report to the C-suite) and practitioners (employees working in technology, IT, cloud, cybersecurity, and similar areas) across the U.S. and the U.K.

Position		
Executive	600	50%
IT Professionals	600	50%

Region		
United States	700	58%
United Kingdom	500	42%