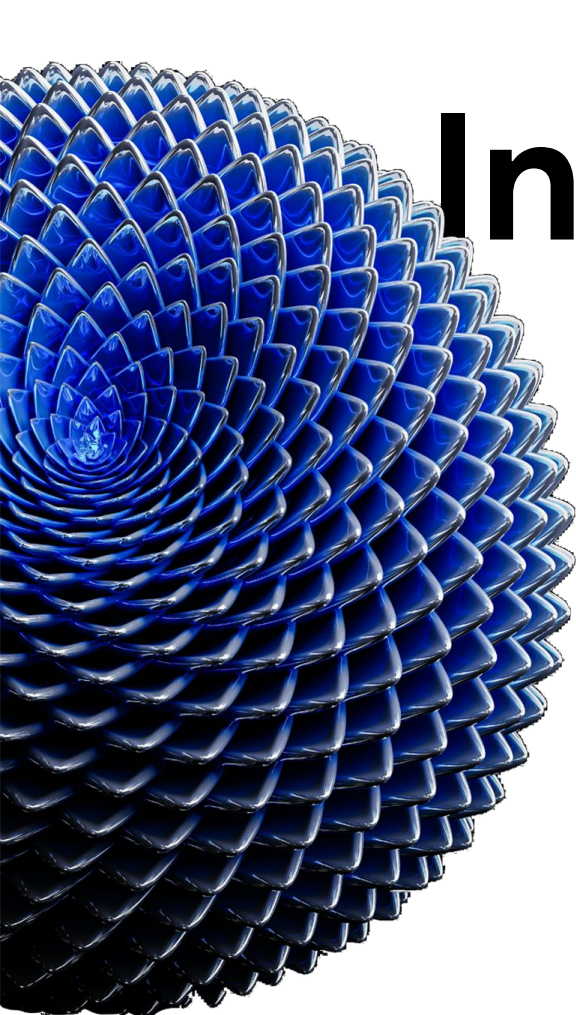




The future of AI and technical learning

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Introduction

It feels like technology has never moved faster. AI is changing everything, the skills gap is widening and it's getting harder for individuals and organizations to keep up. Skills themselves expire faster than ever: **Recent studies indicate the average half-life of a skill has shrunk from 6 years to 2.5 years.***

The people working with AI are the digital architects of the modern world — we depend on them to design, implement and secure the infrastructure that underpins our lives. **Yet they're having trouble building skills quickly enough to stay up to date, particularly in the lightning-fast area of AI.**

IT decision-makers are feeling the skills gap too and know that training is important for career growth and productivity. But they can't always prioritize it, given competing business goals.

To help the industry better understand this skills gap and how to address it, we conducted a global study with thousands of executives, IT leaders, technical practitioners and students. **TL;DR: There's a whole lot of learning to be done and a real lack of solutions to meet everyone's needs** given the breadth of necessary topics and constraints on time, attention and cost.

This paper aims to **envision the future of technical and AI learning, lead the industry in helping people develop skills and shape the future in a positive way.** We've got a ton of insights to share around what learners need, what decision-makers want and how **learning new skills** must evolve as fast as **demand for them is growing.**

Let's dive in

*Sources: [Robert Half survey](#) of more than 1,500 senior technology managers in the U.S., March 30, 2022
[Reskilling in the age of AI](#), Harvard Business Review, September 2023

A universal challenge — and a growing chasm

We spoke with **practitioners** — the folks who use cloud technology on the ground every day, access generative AI tools and services, and rely on technical learning resources and training. We surveyed and interviewed thousands of people around the world who use the cloud to better understand their learning needs — everyone from software developers to data scientists and security professionals to students.

And we talked to **decision-makers** — the folks who make decisions across an organization about technical learning resources and training, as well as cloud technology and AI tools and services. We interviewed both business development managers and IT decision-makers, ranging from C-suite executives to group leaders who have a range of different technical backgrounds.

When it comes to AI and technical training, these groups have a lot in common: a sense of anxiety, a desire to keep up and a hunger to lead.



Above all,
practitioners and
decision-makers
alike agree that the
skills gap is widening
in the face of AI and
on **the topics and**
types of training
needed to close it.





Both practitioners and decision-makers see the importance of closing this gap.

And it's both **mission- and business-critical**: According to our research, skills increase the ability to get hired, get promoted and grow careers — plus, they have a positive impact on productivity, innovation and revenue.

01

The skills gap



Practitioner summary

Stay ahead of the curve with real-world skills and earn credentials that impress

It's no longer enough to be highly proficient in a single platform — and practitioners don't want to play catch-up with the newest technologies.

To future-proof their skills, practitioners are looking for training that is:

- **Hands-on:** practice with real-world scenarios, especially with AI skills
- **Centralized:** easy to access, especially with time constraints and the need to balance learning with work responsibilities
- **Personalized:** specific to their job needs, career paths and organizations
- **Expert-led:** direct from industry experts to provide guidance and mentorship
- **Gamified:** features that encourage engagement and celebrate wins

In addition, practitioners value certifications and documented learning achievements as **essential, verifiable proof points for career progression**. Certified practitioners report more positive impacts on their career from learning resources, **including increased income and faster promotions**.

AI and cloud skills are most in demand

For practitioners, the most pressing topics are artificial intelligence and cloud-specific skills — two key components that drive today's digital world.

Top 5 training topics needed

01

**Artificial
intelligence**

02

**Generative AI
(gen AI)**

03

**Cloud
security**

04

**Cloud
infrastructure**

05

**Cloud
migration**

“The importance of AI is huge! Yes, you get value from LLMs, but you need to optimize, and those models need to be part of the workflow. People need support and training to change their mindsets.”

– Data scientist (U.S.)

Health-care company with fewer than 100 employees

Future-proofing your skills is more critical than ever in the face of AI

Practitioners emphasize the importance of staying ahead and learning the latest technologies, including trends and best practices.

70%

of practitioners say their top career goals for the next 1-2 years are to learn more about AI, ML and gen AI

77%

of practitioners say that technical learning platforms help them stay ahead in the face of AI

“

Cloud and the technology move so fast ... The shelf life of technology is three years, so you need to always be on top and learn the new new things.”

– Data scientist (U.K.)

Manufacturing company with 1,000-4,999 employees

Staying up to date with skills means more income

Key takeaway

Practitioners who keep up with the latest technical skills **report earning more money — especially when they're certified and feeling prepared** to use leading cloud platforms and AI tools.

79%

1.28x

of practitioners increase their income after engaging with technical and cloud learning

is the average reported income change



Practitioners who feel **extremely or very prepared** to use their cloud platform are **significantly more likely to be earning a high-income salary** versus their counterparts who are somewhat or less prepared to use their cloud platform



Certified practitioners are significantly more likely to say that technical and cloud learning led to increased income compared to non-certified practitioners

Credentials demonstrate skills and open doors

Credentials, such as skill badges or certifications, do more than just validate existing expertise — they actively encourage and build these practitioners' specialized abilities, clearly showcase their skill sets and open doors to new professional opportunities.



of practitioners agree that credentials give them **skills to fill in-demand roles**



of practitioners say it is **extremely or very important to share credentials** for their professional success



[Credentials] are a value add, as it gives confidence to your employers and can showcase to everyone that I have expertise in these skills that otherwise would be unknown."

– Engineer and developer (U.S.)
Financial services company with more than 10,000 employees

Skill badges empower learning

Skill badges transform professional development into an engaging, gamified experience allowing practitioners to build incremental mastery toward in-demand skills.

86%

of practitioners with skill badges say that cloud learning resources have **helped them learn AI, gen AI and ML skills**

70%

of practitioners say skill badges have **increased their opportunity for leadership/managerial roles**

“

Skill badges serve as a nice incentive, like leveling up in a computer game, and encourage people to continue on to learn and earn.”

– IT professional (U.S.)

Education company with 100-199 employees

“

Skill badges are fun in the moment and keep people engaged, especially if they are fun [to earn].”

– Data scientist (U.S.)

Health care company with fewer than 100 employees

Certifications drive **career progression**

Practitioners who invest in their learning development and commit to certifications report higher levels of career development, such as faster promotion times.



of certified practitioners feel learning resources have had a **positive impact on their careers** — significantly higher than their peers who are uncertified



of certified practitioners feel **certificates contribute to faster promotion times** — significantly higher than those who are uncertified

“**Certifications are absolutely the benchmark of getting [others] to feel that someone is worthy to get a promotion up to the next tier ... validation of skill sets makes it easier for me to go to finance to say [one of my direct reports] is worthy of a promotion.**”

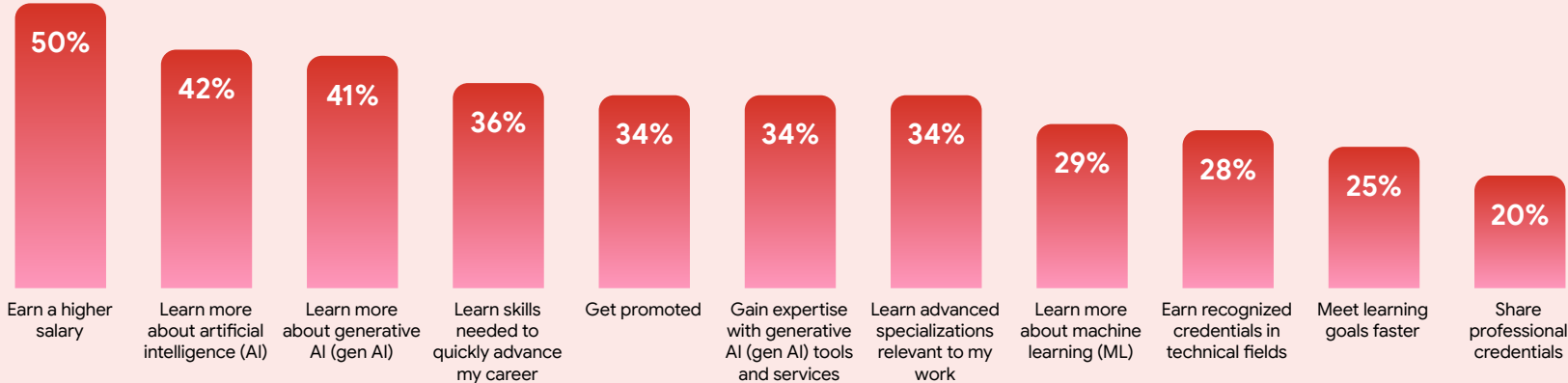
– IT professional (U.K.)

Public infrastructure company with 1,000–4,999 employees

The top goals for practitioners are **twofold**

Half are aiming to earn more, and nearly as many are focused on learning AI. But our research shows the two are intertwined: keeping your skills up to date and earning credentials (particularly in hot topics like AI) drives careers forward and can lead to salary increases.

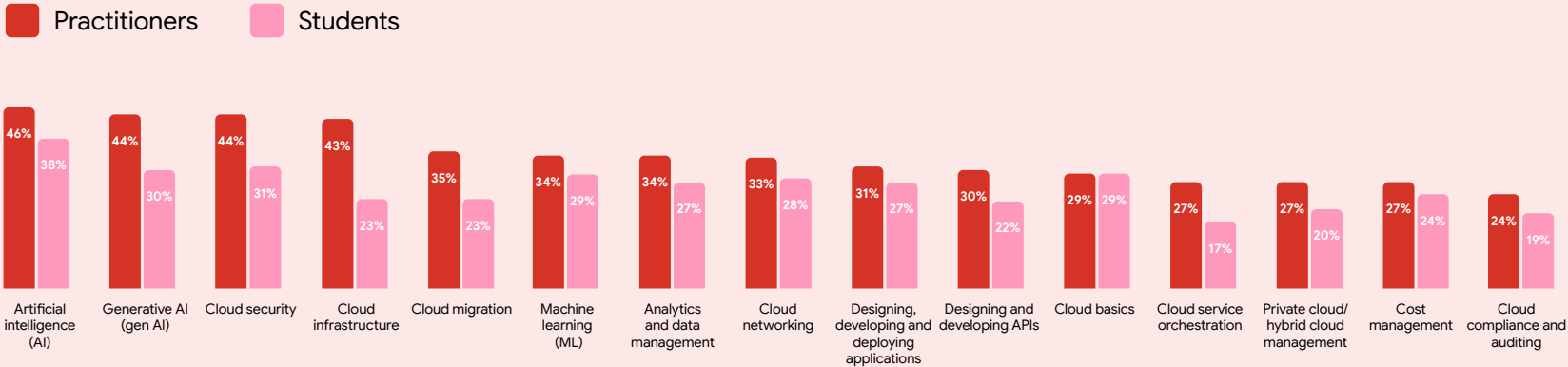
Top professional goals for practitioners



There's demand for a wide range of training topics

The skills that today's practitioners need range from platform- and industry-specific to those in business and management.

Would training on any of the following topics be helpful for you? (Top 15)



For learning, practitioners turn to cloud platforms

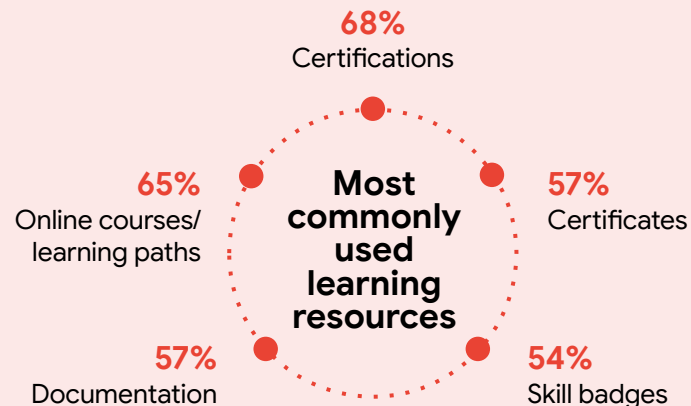
Practitioners turn to cloud learning platforms like AWS, Azure and Google Cloud to learn for their specific needs including **platform offerings**, as well as relevant **job-specific products**, content and tasks.

When do you turn to cloud learning resources to get assistance?



Staying up to date on industry trends is **more popular in Americas (60%)** than in EMEA (50%) and JAPAC (52%)

Practitioners lean into learning paths and credentials



Key takeaway

Practitioners prefer learning methods that offer certifications or documentation of their coursework achievements. For a lot of respondents, these credentials are **verifiable proof points** that practitioners see as **essential to their professional progress**.

However, it can be **tough** to find time for learning

Practitioners know that learning can open doors and create new professional opportunities. But their top barriers to enrollment are **time** and **cost**.

Top 10 barriers to learning



Make learning worth their time with hands-on experience and **relevant** skills

With time in such short supply, every minute counts. Training must be **highly relevant** with **practical, hands-on opportunities, expert guidance** and **easy-to-follow accessibility**.



It's **really hard to find time** to learn new things with all the project deadlines looming.”

– IT professional (U.K.)

Management consulting company with more than 10,000 employees



The challenge [with training], I think, for everyone, and something I've personally experienced, is **understanding its relevance** to my daily activities ... the question is whether it aligns with what I'm looking for and whether I'll actually use it.”

– Security professional (France)

Private infrastructure company with more than 10,000 employees

Time is the #1 barrier

To save time and get what they need fast, practitioners turn to short, snappy videos on channels like YouTube.



of practitioners are going to **social platforms** for cloud learning



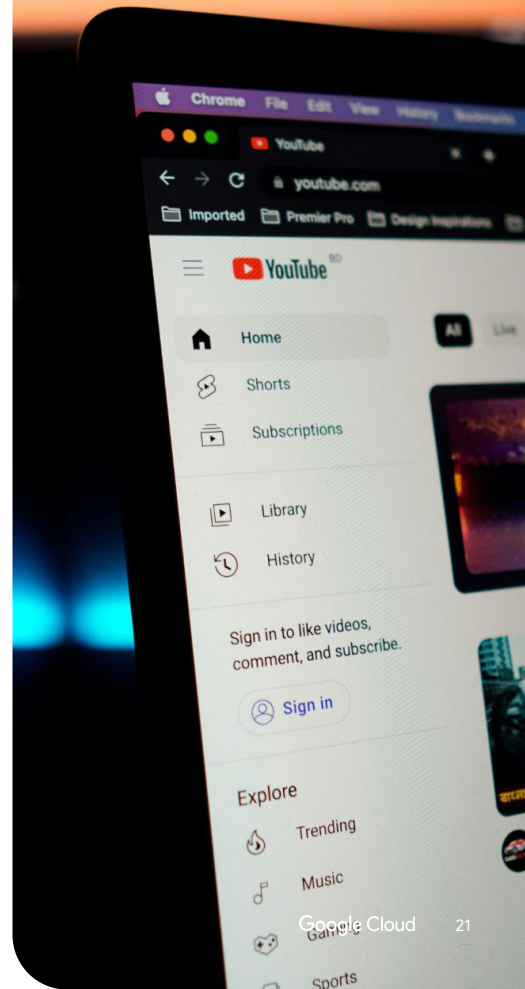
is the **single most popular social platform for learning** with both practitioners and students



Much of our learning needs are ‘just-in-time’ — when you’re in a project and stuck on something — that’s when YouTube or how-tos from other platforms are most helpful.”

– Security professional (U.S.)

Software company with 100-199 employees



Microlearning makes training achievable

Short, focused lessons are approachable and offer a sense of quick accomplishment. Best of all? Bite-sized wins build into a comprehensive skill set or renewed subject mastery.

71%

of learners believe that a microlearning activity should be **under 10 minutes**

“

Microlearning means learning in small, focused parts — something that you can complete in a few minutes without feeling overwhelmed. You pick up one concept or skill at a time, whether it is through a short video, a quick quiz or a brief article. I find it especially helpful when I want to refresh my memory or learn something new.”

– DevOps engineer (India)
Company with 251-1,000 employees

Building **relevant skills** is most motivating

Practitioners will make time to learn — if coursework is relevant to their goals and interests. They're most motivated to build skills that apply to their current roles.

56%

of learners have 30-120 minutes a day to dedicate to learning



50% have 1-5 hours a week to dedicate to learning

90%

of respondents report that they are motivated to engage in training to gain relevant skills



The next two most-cited motivations were earning credentials and preparing for future career opportunities

“

What motivates me most is that I can include these [credentials] on my resume, and they can help me apply for jobs.”

– Big data lead (Peru)
Company with 1,001-5,000 employees

Personalized learning maximizes relevance

Training should be **personalized to learning styles, role and organization** — allowing practitioners to bypass less-relevant material, based on their needs and existing expertise.

49%

of practitioners turn to cloud learning resources to find **content specific to their jobs**

“

I would love to select modules so I'm not wasting time on general information that I don't need ... if you had a high-level topic and could choose to dig a little deeper on it and not have to do the rest of the course.”

– Data scientist (U.S.)
Health care company with more than 10,000 employees

“

A learning-path guide would be great, especially if it was constantly assessing how you were going and then tailored the learning to your strengths and weaknesses.”

– Security professional (Australia/New Zealand)
Financial services company with more than 10,000 employees

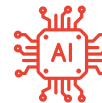
Hands-on training is essential

Practitioners' learning experiences must ensure that they are able to utilize their skills immediately in real-world projects.



71%

of practitioners **prefer hands-on training** when it comes to technical learning



75%

of practitioners prefer **hands-on training** when it comes to **AI skill-building** specifically.



One of the top 5 barriers practitioners face while using cloud learning services **is the lack of hands-on experience**



It would be better if it was more hands-on, so we can touch [things]. Unless you get to do something with your own hands, it is hard to remember.”

– Data scientist (Japan)

Insurance company with more than 10,000 employees

Direct from industry experts

Practitioners prefer to learn directly from experts to get relevant guidance and mentorship, particularly when it comes to AI.

72%

are interested in resources provided by industry experts for trainings on AI

65%

say that industry expert resources are most important to their cloud learning journey

“

In courses, it is **essential to have someone to ask questions.**
In our field, we are used to **checking software documentation and asking questions through research.”**

– IT professional (Brazil)

Financial services company
with more than 10,000 employees

02

The ROI of training



01

Chapter

02

03

04

Decision-maker summary

Invest in skills to boost your bottom line

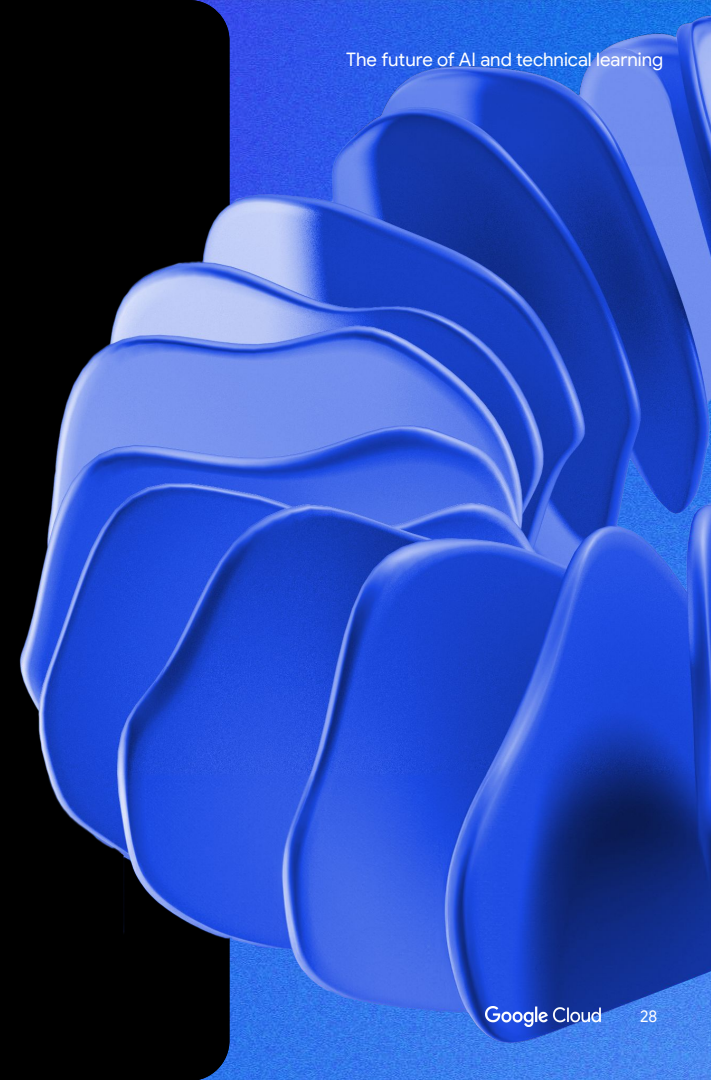
Business leaders recognize a **significant ROI from investing** in training, reporting a boost in revenue, increasing innovation, staying ahead in AI and improving employee productivity.

Despite this, **training isn't always prioritized** among business goals, and the resulting skills gap is **preventing decision-makers from finding skilled new hires and retaining current talent**.

Similar to practitioners, decision-makers are looking for training that is:

- **Hands-on:** proving the ability to apply learning to real-world scenarios
- **Centralized:** easy to access in light of limited budgets and time
- **Personalized:** customizable to job functions and organizational needs
- **Expert-led:** by those who are leading the industry, especially as AI rapidly advances
- **Gamified:** engaging, celebratory and fun with leaderboards and shareable wins

For decision-makers, **certifications play a critical role in addressing the skills gap** by serving as a positive indicator of a person's capabilities and commitment to learning.



The tangible ROI of training

Business leaders recognize that **learning solutions are key in bridging the AI and broader skills gap.**

Investments not only **drive revenue growth** but support other vital business goals like **increased innovation** and **higher employee productivity.**



of decision-makers agree that technical learning resources **increase innovation**



of decision-makers agree that technical learning resources **improve employee productivity**



of organizations surveyed realize an **increase in revenue** since engaging with learning resources

“

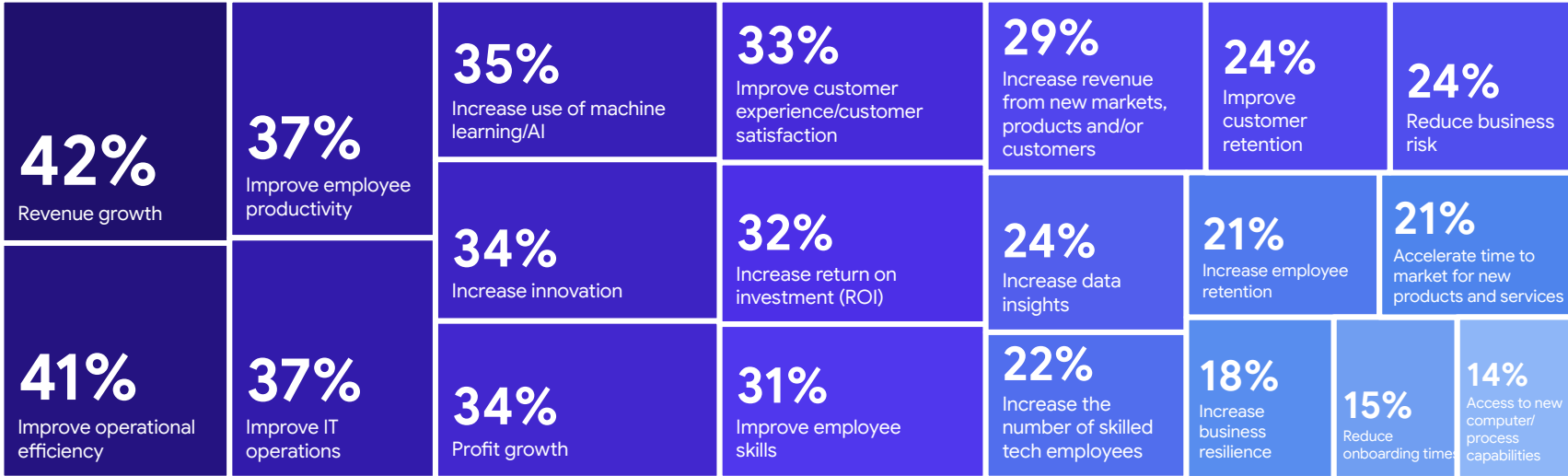
I looked for a technical and functional deep-dive training ... after that we received a 0.6 jobs per technician, per day increase [and saw] a productivity and margin increase.”

– IT C-suite executive (U.K.)
Manufacturing company with more than 10,000 employees

But **competing** priorities often means training takes a back seat

While many organizations recognize the benefits of upskilling employees, concurrent goals like profitability, productivity and incorporating AI tend to take priority.

Decision-makers' top business priorities — many of which are positively impacted by training



Cost and time are the two biggest barriers to investing in training

Countless companies face barriers to deploying skills training across their teams — but the overarching challenge (similar to that of practitioners) is allocating time and resources for people to take courses while they're working.

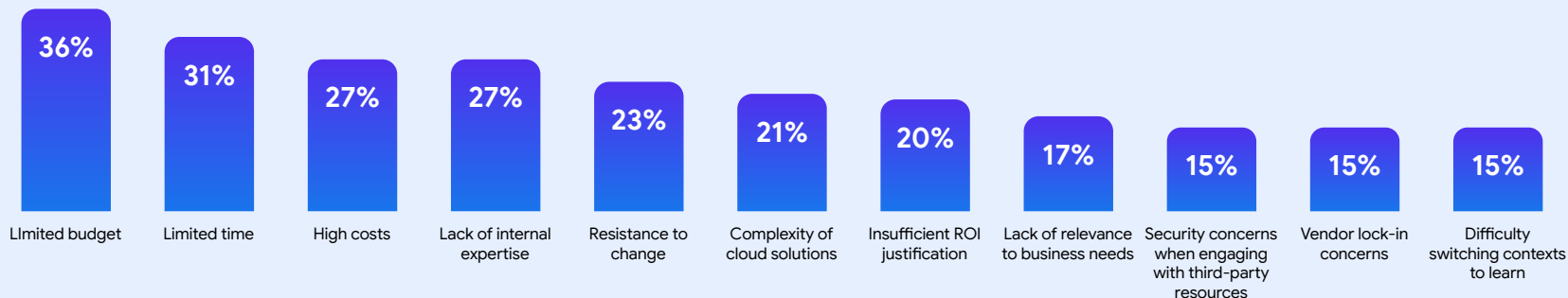


We should mandate more hours and more time to train, which means we will ultimately need more staff. The cost factor isn't the cost of the training ... it is the staff that you need to support environments while people are training."

– IT C-suite executive (U.S.)

Insurance company with 5,000-9,999 employees

Barriers for IT decision-makers when engaging with cloud learning resources



The skills gap has become an industry-wide issue

Closing the skills gap can prevent decision-makers from being stuck in an endless loop of upskilling new employees and retraining current talent.

Top 3 challenges organizations face in achieving business priorities

01.

Finding new hires with sufficient technology skills

02.

Retaining talented employees

03.

Lack of skilled technology employees now or in the next few years

To close the skills gap, **AI is the top priority** at every level



Right now, for me, **it's all about artificial intelligence**. Honestly, integrating it into the workflow can make it incredibly powerful. That's something I'm really looking into more and more and researching.”

– IT systems director (France)
Manufacturing company with 1,000-4,999 employees



AI is absolutely something everybody is quite excited about. It is something we are continuously figuring out how we can use it in our day-to-day work ... how we utilize [AI] is front and center for almost every company right now.”

– Security professional (U.K.)
Manufacturing company with more than 10,000 employees

AI is the #1 training topic, with cloud skills close behind it

Top 5 training topics needed

The broad alignment with what practitioners look for in training indicates that **what serves organizations will also directly benefit individuals.**

01

Artificial intelligence

02

Cloud security

03

Generative AI (gen AI)

04

Cloud infrastructure

05

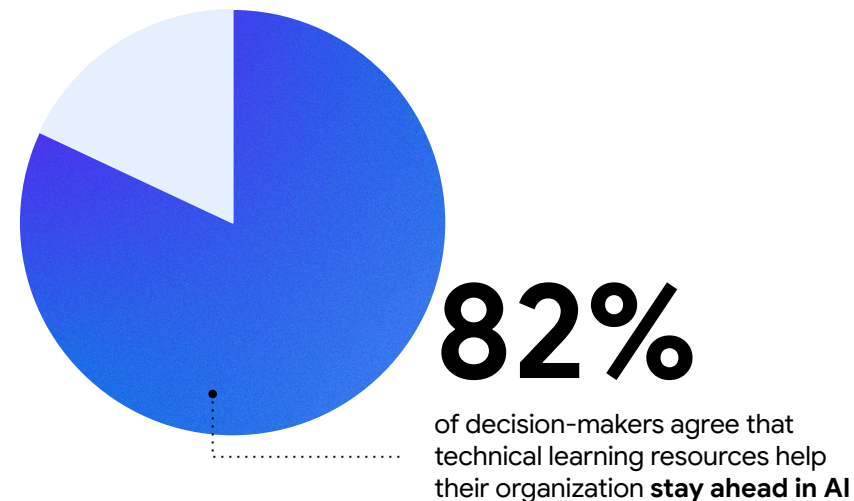
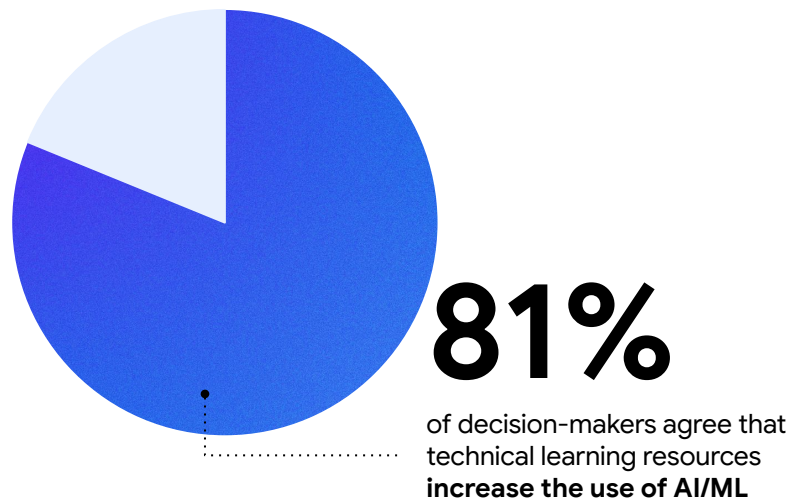
Analytics and data management

Decision-makers are far more likely than students to name **cloud security, compliance, infrastructure and migration** as a priority, indicating a significant gap to be bridged in education

C-suite decision-makers are significantly more likely to say **gen AI** would be helpful than their non C-level counterparts

Training is the only way to close the AI skills gap

Building skills with trusted technical learning platforms directly translates into increased usage of AI and ML and helps these organizations stay ahead of the curve.



Expert-led trainings are particularly **in demand** — whether in person or virtual



Key takeaway

As the forefront of AI keeps advancing, it becomes imperative for practitioners to **learn from those who are leading the industry**

56%

are planning to **invest more in in-person technical training** at their organization's offices

48%

are planning to invest more in **virtual instructor-led training**



Market nuance

Decision-makers in EMEA and APAC are more interested in virtual instructor-led than in-person at offices of the provider relative to other decision-makers

Credentials simplify hiring decisions

91%

of decision-makers are extremely/very likely to **hire new talent with technical and cloud skills** in the next 1-2 years

82%

of decision-makers prefer to recruit and hire **professionals who hold technical and cloud credentials**



Key takeaway

Solving for these topics and types of training would **help decision-makers close the gap between the high bar and the minimum level of skills**



Certificates and certifications give me an idea of what [people] are capable of. When you're comparing two candidates side-by-side ... **you tend to go for the one that has the badges, certifications and qualifications**, as long as all things are equal ... It tells me that they've taken the time to do something and stick to it."

– IT director (U.K.)

Telecommunications company
with 200-599 employees



Certifications don't just validate skills — they underscore hands-on experience

Decision-makers value having proof that candidates have built the skills they claim to know — and can demonstrate how those skills can be applied to benefit the business.

88%

of decision-makers agree that relevant certifications of skills **increase their confidence in a job candidate's knowledge or ability**

82%

of decision-makers say that certifications of technical skills **increase the likelihood a project will be successfully completed on time**

“

If you're academically up to speed, that gives you confidence and the ability to adapt and apply what you've learned. And, if you really understand the technology, you can connect the dots to a business problem when it gets presented to you later on.”

– IT C-suite executive (U.S.)

Health-care company with 1,000-4,999 employees

03

Bridging the gap

01

02

Chapter

03

04



The 5 pillars of AI learning

Learning platforms need to be as future-proof as the skills they're building. More of the same methods won't bridge the skills gap fast enough to meet the rising need. Everyone is pushing for rapid adoption and struggling to find the right talent. There's never been a bigger opportunity for training and skill-building to meet the moment.

The research is clear. To successfully close the AI skills gap, learning platforms must follow 5 pillars of AI and technical learning:



Centralized



Personalized



Expert



Gamified



Hands-on

Centralized

Practitioners are going to a wide range of platforms for different reasons — to discover resources and learn about new industry trends and tools. But this takes a large amount of time that could be better spent on learning. The best bet? All resources discoverable on one platform.

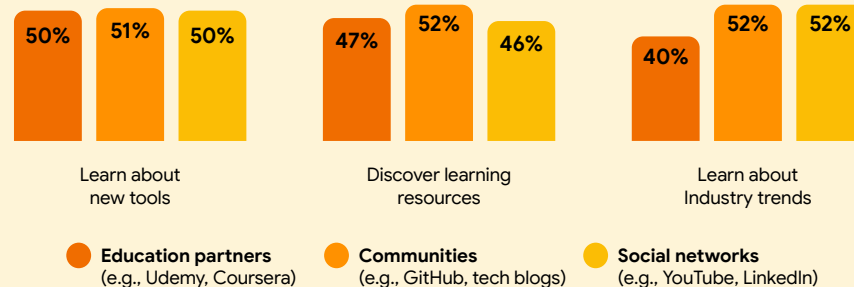


The average learner goes to more than **7 different resources just to learn about cloud technologies and skills.**



It's even more onerous for cloud architects, who are going to 9 different places to learn. Imagine the time savings if they had everything in one place.

Learning locations: where practitioners go for different purposes



I would like a course or training program that isn't different from a Netflix series in terms of approach. Being able to track all the 'episodes' of the series and having the ability to be reminded if we missed one, perhaps because we learned it elsewhere or on another platform."

– C-suite executive (France)

Construction company with 200-599 employees

☆ Personalized

Platforms also need to be customizable for both practitioners and the organizations they're a part of. Platforms that feel customized to companies and specific lines of business like cloud security or data science are more valuable, more efficient and result in a higher return on investment.



Personalization means to have the frequency and content of lessons adjusted to the needs of the individual participant. Someone like me (who is not a practitioner) could have lessons that cover a topic in a broad, but not in-depth way.”

– C-suite executive (Japan)
IT company with 200-599 employees



Motivations to spend on cloud learning

Asked among **practitioners**

Practitioners who **engage with premium learning resources are far more satisfied** than those who only use free resources.

Training personalized for my organization's needs ranked 4th out of 12

IT professionals feel training personalized to their organization is an even greater motivator to spend, ranked tied 2nd out of 12

Asked among **decision-makers**

Training personalized for my organization's needs ranked 2nd out of 11

Customizable training solutions ranked 6th out of 11

Expert

Practitioners want to learn from the experts. They want to feel confident they're hearing from the folks leading the way. Practitioners get an edge in AI when they learn from researchers, engineers, data scientists and more who are on the ground building the latest technologies every day.



[Google are] experts within the field. They offer a lot of insight, and they're clearly leading the way. They're a highly reputable organization, and they value innovation. We can see that within their modules.

We want a personalized experience coming from people who are experts."

– VP of business development (U.S.)

Financial services company with more than 10,000 employees

Gamified

Having fun has meaningful outcomes. It fuels practitioners' motivation to learn. Gamified elements like streaks, celebrations and leaderboards give learners a sense of progress that keeps them engaged. And when they earn shareable achievements like badges or tokens in a high-quality learning environment, research says they're more likely to seek out and complete trainings.



of participants report they are more likely to **complete a training if it includes gamified elements**



Training that causes interaction almost always leads to better retention rates. Just like hands-on labs help retention compared to listening to a lecture, having a game to interact with and work toward goals definitely helps the player retain more knowledge.”

– Cloud support specialist (U.S.)
Company with more than 5,000 employees

Hands-on

Learning platforms need to ensure they're delivering hands-on content, giving users the opportunity to implement their knowledge with real-world business cases — a type of training in which almost all practitioners and decision-makers are looking to invest time.



“Hands-on training ... is just as important as theoretical training. You can never truly know if someone has understood the theory until they're confronted with real-world scenarios.”

– IT C-suite executive (France)

Construction company with 200-599 employees

95%

of **practitioners** plan to **spend more time** or just as much time on hands-on labs

96%

of decision-makers plan to **invest more time** or just as much time on hands-on labs



Cloud architects rank hands-on labs and simulations as one of their top 2 motivations to spend more on cloud learning

39%

of practitioners want hands-on labs **for AI training** specifically

04

The new Google Skills

The future of AI and technical learning

01

02

03

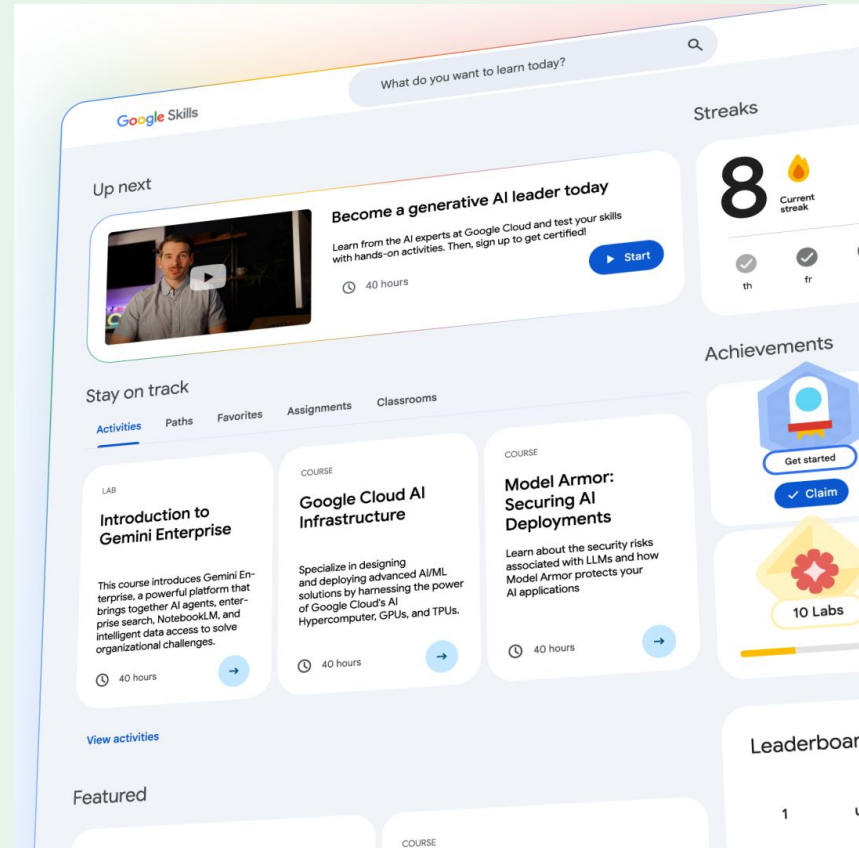
Chapter 04



A new, centralized way to learn

To **overcome the skills gap** in the face of AI, the experts at Grow with Google, DeepMind, Google for Education, Google Cloud and others have joined forces to create Google's new, singular learning platform: Google Skills.

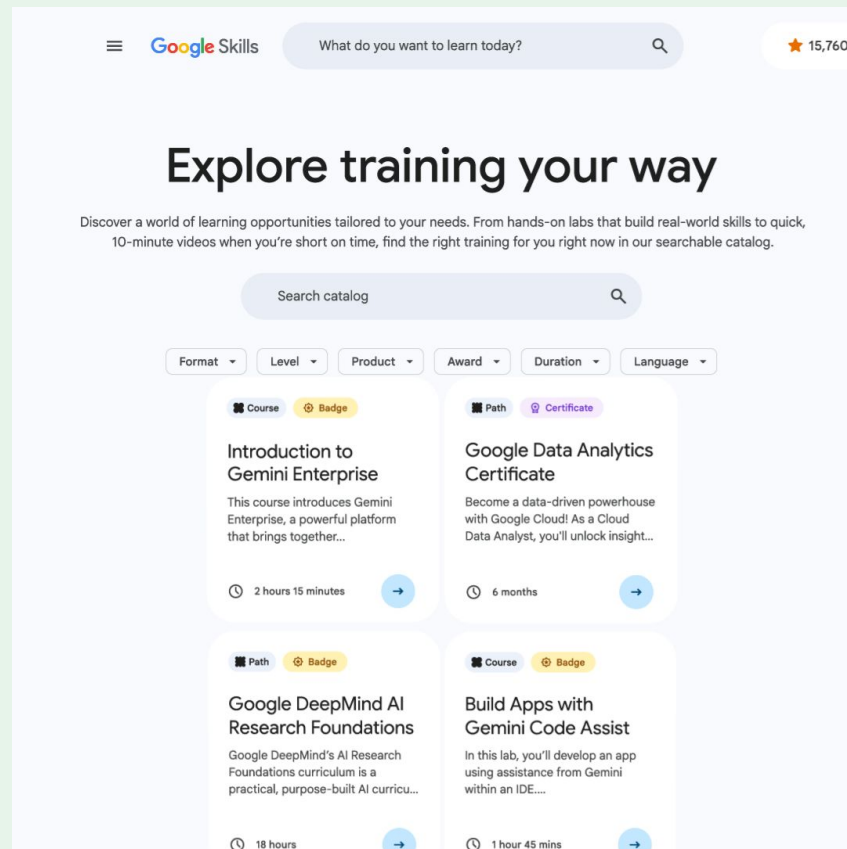
Google is unifying the best of their learning into one fun, engaging platform — the ultimate hub for learning technical and AI skills from the experts.



Personalized learning that's fun

Traditional learning isn't enough to meet the moment. Learning should be **fun, engaging and easy to fit into your schedule**, whether you're an experienced practitioner or just learning the ropes.

New features on Google Skills, like customized leaderboards for your organization and an assigned-learning option, **make sure your teams are learning the specific skills** they need.

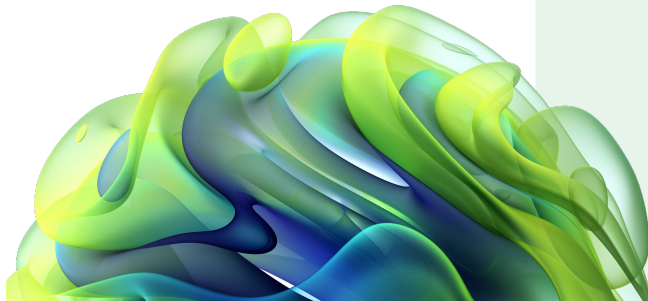


The screenshot displays the Google Skills website. At the top, there's a navigation bar with the Google Skills logo, a search bar with the placeholder text "What do you want to learn today?", and a star icon indicating 15,760 items. Below the navigation bar is a large heading "Explore training your way" followed by a descriptive paragraph: "Discover a world of learning opportunities tailored to your needs. From hands-on labs that build real-world skills to quick, 10-minute videos when you're short on time, find the right training for you right now in our searchable catalog." Below this is a search bar labeled "Search catalog" and a row of filter buttons: "Format", "Level", "Product", "Award", "Duration", and "Language". The main content area features four learning cards. The first card is titled "Introduction to Gemini Enterprise" and is labeled as a "Course" with a "Badge". It describes the course as introducing Gemini Enterprise, a powerful platform that brings together... and shows a duration of "2 hours 15 minutes". The second card is titled "Google Data Analytics Certificate" and is labeled as a "Path" with a "Certificate". It describes becoming a data-driven powerhouse with Google Cloud and shows a duration of "6 months". The third card is titled "Google DeepMind AI Research Foundations" and is labeled as a "Path" with a "Badge". It describes the curriculum as a practical, purpose-built AI curriculum and shows a duration of "18 hours". The fourth card is titled "Build Apps with Gemini Code Assist" and is labeled as a "Course" with a "Badge". It describes developing an app using assistance from Gemini within an IDE and shows a duration of "1 hour 45 mins". Each card has a blue arrow button at the bottom right.

Learning AI from the experts

We're launching new content to help you **learn directly from the world's experts in artificial intelligence**. For example, scientists and engineers from DeepMind are launching seven new courses on AI just for students, educators and universities.

All learners on Google Skills will get **insights and practical tools directly from those who are leading the way** in machine learning and gen AI.



Google DeepMind

Train a Small Language Model

Artificial Intelligence

SKILL BADGE · ADVANCED

Gamified means more learning, better outcomes

Practitioners are more likely to learn when learning is, well, fun.

Google Skills has new **gamified features like leagues** to encourage friendly competition, **achievements to celebrate your wins** and **learning streaks** to spur regular engagement.

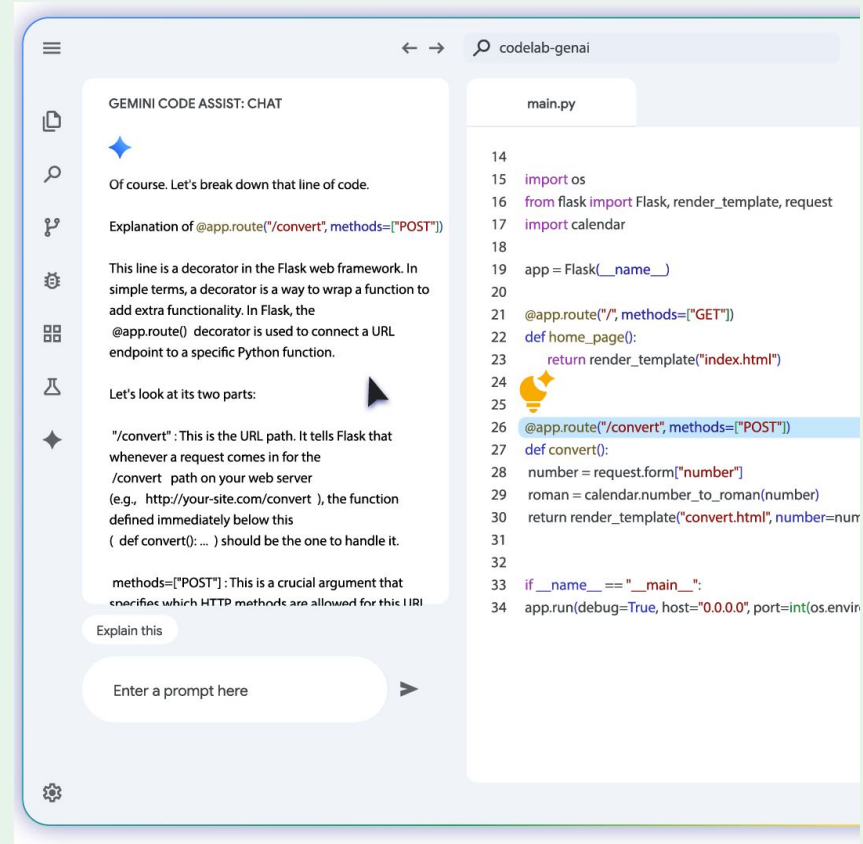
Plus, learners can share achievements like tokens and badges, making their wins along the way that much more rewarding.



Hands-on learning for real-world skills

Building real-world skills with hands-on labs is a must, particularly for technical practitioners. And it's **not enough to learn about AI, we have to learn with it.**

Google Skills now offers **AI-powered labs** for hands-on learning and real-world challenges. For example, our new **Gemini Code Assist-enabled labs** help developers, data scientists and more get tips on coding from Gemini — without leaving the platform.



Get started with the new Google Skills

Start closing the skills gap today.
See what you can do, one skill at a time.

skills.google

Appendix: Study methodology

Quantitative study

20-minute online surveys with:

- Decision-makers n=900
- Practitioners n=901
- Students n=1350

Fielded: 9/16/2024-10/23/2024

Markets included:

U.S., MX, BR, U.K., FR, DE, JP, IN, AU/N.Z.



Qualitative deep dives

60-minute in-depth interviews with:

- Decision-makers n=36
- Practitioners n=74
- Students n=19

Fielded: 10/28/2024-11/20/2024

Markets included:

U.S., BR, U.K., FR, JP, AU/N.Z.



When referenced in this report, “practitioners” refer to respondents who use and access cloud technology, AI tools and services and rely on technical training for their day-to-day work responsibilities.

“Decision-makers” include respondents with decision-making responsibilities for purchasing and deploying technical and cloud skills programs, from management roles to C-suite roles.

The data presented in this report is unweighted, and findings reflect the opinion of survey respondents only.