



The startup guide to generative AI

Make AI work for you. Get to market faster.

Industry leading technology and programs



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Overview

Explore the boundaries of possibility

Promising multiple use cases across every sector of the economy, the adoption of generative AI is limited only by the bounds of our collective creativity. It has the potential to transform customer experiences and employee productivity, accelerate innovation and competitiveness, and fast-track product and service development. The opportunity for startups to innovate on and with gen AI is huge: one estimate puts gen AI's impact on global economic productivity at between \$2.6 trillion and \$4.4 trillion annually¹.

1. McKinsey & Company, [The economic potential of generative AI](#), 2023

At its core, gen AI has four capabilities – **creation, summarization, discovery, and automation** – and tends to excel in four broad applications: chat, search, content generation, and associative reasoning. Even with the seemingly endless applications, the adoption of AI is not without its challenges. The issues founders, leaders, software engineers, and product managers need to wrestle with include:

-  Time to value
-  Access to powerful tensor processing units (TPUs) and graphics processing units (GPUs)
-  Data management, and sovereignty
-  Security and transparency; and
-  Balancing model size with effectiveness and cost. When it comes to gen AI, models matter, of course, but bigger is not always better.

The easy to implement technology creates advantages in bringing value to the market and rapid development. Gen AI shouldn't be just for the experts. We believe in making these tools inclusive, so your entire team can contribute to the AI revolution, regardless of their background while ensuring high quality and performance of the products.

Google Cloud supports your business by delivering complete solutions as Google Cloud's advantage comes from a cohesive end-to-end platform that provides extensive value from data to model and from insights to activation. That's why over 70% of all AI unicorns build on Google Cloud.

Not only do we provide the platform and performance with competitive hardware in our portfolio – the guidance and the guardrails – we also offer a comprehensive support system. This includes access to a vibrant AI community of like-minded innovators and entrepreneurs, growth opportunities, and exclusive foundation grants. **You can find out more about the Google AI Startup Program [here](#).**

Why Google Cloud?

Cohesion, scale, trust, and ease-of-use

End-to-end platform

An interconnected technology value chain

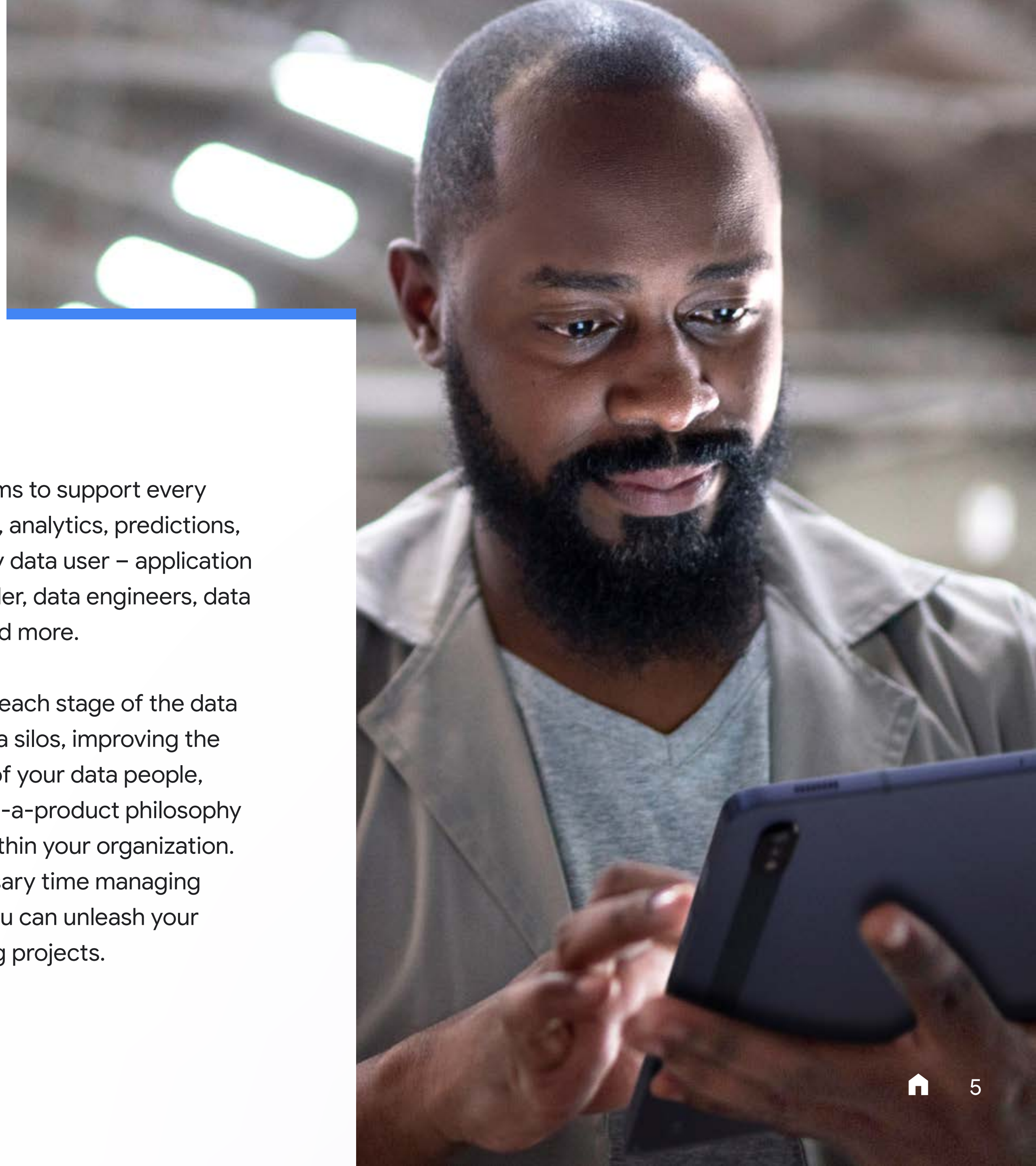
Gen AI solutions aren't built in a vacuum. They require an interconnected, end-to-end platform that provides essential services from data to model to insight activation.

They require infrastructure that is optimized for AI workloads.

And that's what Google Cloud provides: broad value with a unified data and AI platform.

As a result, Google Cloud aims to support every data use case – applications, analytics, predictions, and visualization – and every data user – application developers and system builder, data engineers, data scientists, business users and more.

Crucially, we support you at each stage of the data lifecycle, breaking down data silos, improving the efficiency and productivity of your data people, and fostering both a data-as-a-product philosophy and a data-driven culture within your organization. Rather than spend unnecessary time managing underlying infrastructure, you can unleash your expertise on game-changing projects.



Speed and scale

Ready for business. Your business

To successfully expose the power of AI, scale matters. And scale requires tools and services. That's why we offer different solutions:

Hardware for every AI workload. Drawing on partners like NVIDIA, Intel, AMD, and Arm, we provide customers with the widest range of AI-optimized compute options across TPUs, GPUs, and central processing units (CPUs) for training and serving the most data-intensive models.

Vertex AI. Offers access to Google's large gen AI models so you can test, tune, and deploy them for use in AI-powered applications. Vertex AI allows startups to customise, embed, and interact with foundation models – and to do so without ML expertise. Vertex AI gives you the ability to use the right model for the right job.

Model Garden on Vertex AI. To accelerate creation, Model Garden provides a curated collection of 100+ models including foundation model APIs, open source models, and task-specific models from Google and third parties.

Gemini for Google Workspace. An always-on collaboration, Gemini for Google Workspace delivers the power of gen AI embedded across all Google Workspace apps to make communicating and organizing throughout the day faster, clearer and richer.

DocumentAI. A solutions suite that features pre-trained models for document processing, Workbench for custom models, and Warehouse to search and store.

Contact Center AI. Uses natural language processing to identify call drivers and sentiment that helps contact center managers learn about customer interactions.

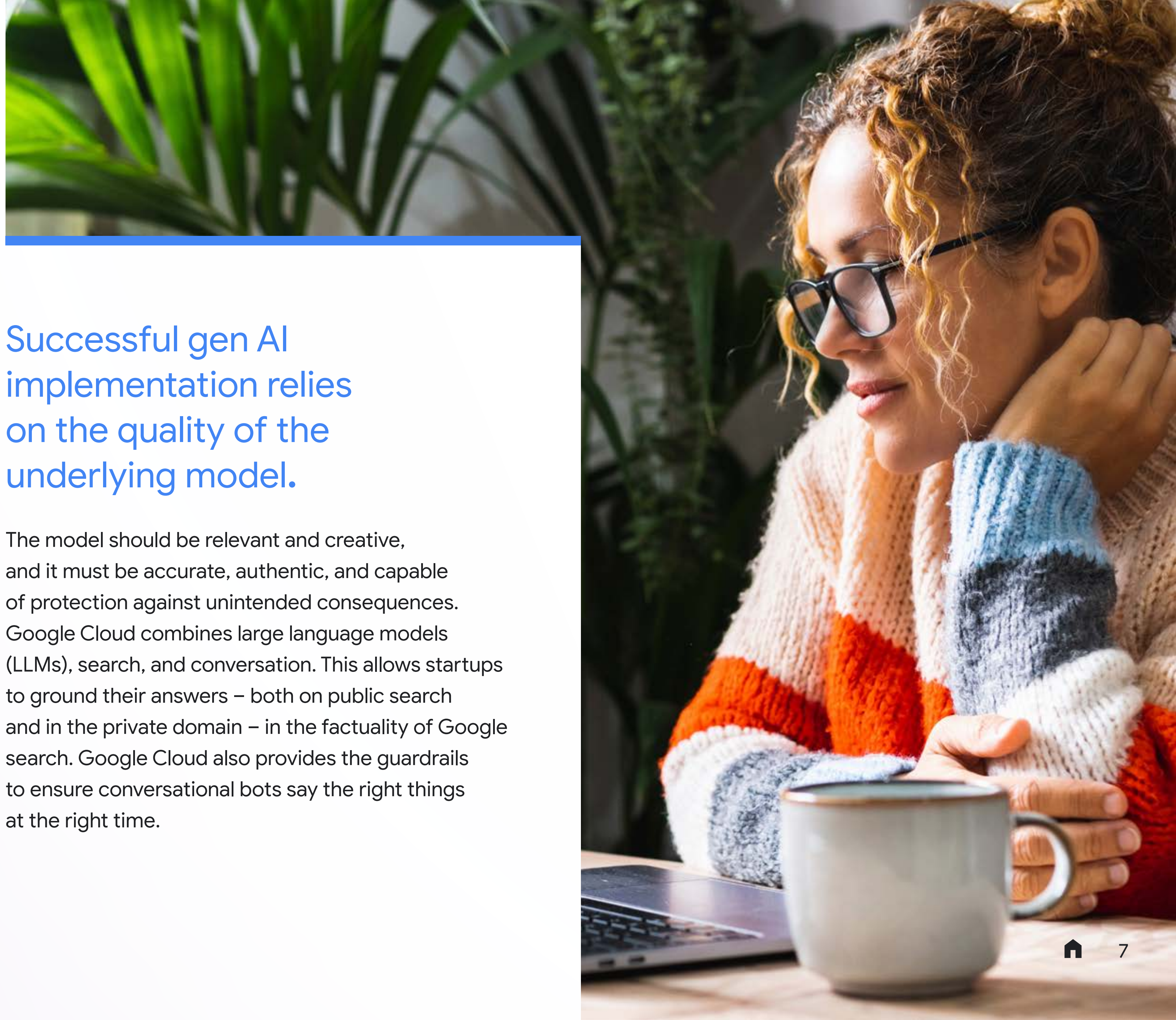
BigQuery and Looker. In addition to gen AI specific tools, Google Cloud provides scale through its range of core services. Notably, these include BigQuery, Google's fully managed, serverless data warehouse that enables scalable analysis over petabytes of data. It also includes Looker, an enterprise platform for business intelligence, data applications, and embedded analytics that helps you explore and share insights in real time.

Trusted Google factuality

Dependable outcomes

Successful gen AI implementation relies on the quality of the underlying model.

The model should be relevant and creative, and it must be accurate, authentic, and capable of protection against unintended consequences. Google Cloud combines large language models (LLMs), search, and conversation. This allows startups to ground their answers – both on public search and in the private domain – in the factuality of Google search. Google Cloud also provides the guardrails to ensure conversational bots say the right things at the right time.





Security, privacy, and guardianship

Responsible AI

Google Cloud provides security at scale so you can manage an array of data and models with a platform that integrates into your existing user security, data management, and entitlements regime. Moreover, Google Cloud ensures that your first, second and third party data is properly governed to prevent leakage and infringement of intellectual property. We are guided by a simple starting principle: your data is your data.

We also help you identify and fine-tune the right data. This in turn provides two benefits. First, it mitigates hallucinations, minimizing invented answers that both sound convincing and are hard to spot. Second, the right data enhances the explainability of AI, avoiding 'black box' solutions and, instead, providing the transparency users expect.

Google Cloud products and product updates are guided by Google's [AI Principles](#), and are focussed on helping companies control their use of IP and data, and to guide an approach to individual privacy. Moreover, Google was first in the industry to publish an [AI/ML Privacy Commitment](#) which outlines our belief that customers should have the highest level of security and control over their data stored in the cloud. By default, and in accordance with [GCP Terms](#) and the [Cloud Data Processing Addendum](#) we do not use customer data to train our models.

Your customer data is only processed according to your instructions.

Ease of use

Out of the box and ready to go



Google Cloud has always provided tools that democratize access, making it as easy as possible to get started. As it is with our broad Google Cloud offer, so it is with gen AI.

This matters because startups tend to struggle to realize value within realistic time scales. Consider, for example, that over 40% of startups take over six months to bring models from concept to live production, and 80% take over three months².

Our solutions help you to get to value at speed. Our solutions provide out of the box tooling and a platform that lets developers embed gen AI into workflows. And as explored above, our Vertex AI platform lets you adopt and adapt existing models according to your business needs. You won't need to be a deep learning expert for every use case.

2. Google Cloud Gen AI Benchmarking Study, July 2023

Use cases

Putting the theory into practise

Gen AI applications are likely to penetrate every industry and every organizational function. McKinsey & Company forecasts that three-quarters (75%) of gen AI's value will be realized across customer operations, marketing and sales, software engineering, and R&D³. From retail to manufacturing, from telecommunications to life sciences and beyond, there's a relevant, pressing, and viable use case.

Here are just a handful of examples



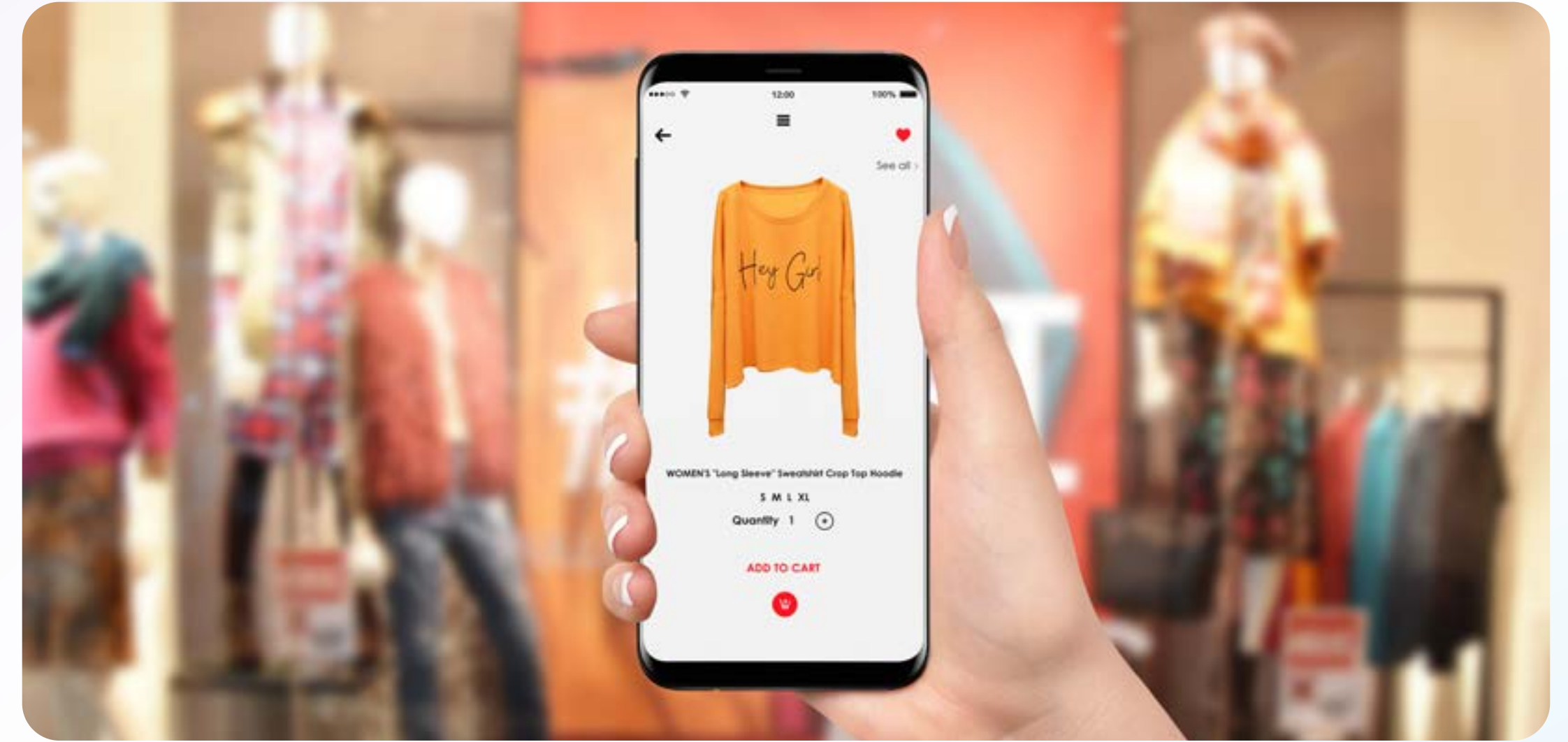


01

Customer service automation

Improving operations

Use large language models (LLMs) and conversational AI to help customers get the answers they need with less human intervention, summarize conversations, and automate more tasks. Examples include recipe suggestions to accompany grocery purchases, assistance with a DIY project, or advice on how a clothes purchase is likely to fit.



02

Search and recommendations

Creating enhanced commerce experiences

Build personalized search and contextual conversational experiences to help your customers have a shopping experience that's customized in real-time. Aid complex fashion searches, support hard-to-find grocery searches, and offer lifestyle-relevant recommendations



03

Document search and synthesis

Driving cost and operational efficiency

Improve large document sets understanding to help identify, summarize, and explain relationships to other documents. Help a relationship manager, for example, identify relevant contract clauses that need to be updated, then use gen AI applications to create tailored communications to notify the customer of the change.



04

Employee knowledge search and productivity

Increasing workforce and operational efficiency

Quickly find the most relevant content via natural language search to reduce hours of manual work. Build this solution for a global HR leader who wants to find out the policy in each region on unused vacation days.

Use cases by industry

Beyond the applications described above, there are a range of potential use cases that are appropriate for specific vertical markets. **Consider, for example:**



Financial Services

- . Financial document search and synthesis
- . Enhanced virtual assistants
- . Capital markets research
- . Regulatory and compliance assistant
- . Personalized financial recommendations



Media and entertainment

- . Media content discovery
- . Creative assistance
- . Internal document and media search
- . Branded consumer interactions
- . Content summarization and metadata



Telecommunications

- . Customer or employee service automation
- . Network planning and operations
- . Advertising and creative content assistance
- . Employee knowledge search
- . Test or code script generation
- . Contract analysis and negotiation



Healthcare and life sciences

- . Digital patient concierge
- . Public and private contextual search
- . Expedite Prior Authorization (PA)
- . Clinical trial report generation



Manufacturing

- . Machine-generated events monitoring
- . Customer service automation
- . Document search and synthesis
- . Product/content catalog discovery
- . Supply chain advisor



Retail and consumer packaged goods

- . Creative assistance
- . Conversational commerce
- . Customer service automation
- . New product development

The offer for early stage startups

Iterate and innovate faster with our AI startup program

If you are an early stage startup, we offer you additional benefits to get started on Google Cloud. Through the Google for Startups Cloud Program, you can now access new benefits for AI startups that give you technology and resources to build easily. Take advantage of our open AI ecosystem and tap into the best of Google's infrastructure, AI products, and foundation models.

Start tier

For pre-seed AI-first startups without funding.

Program benefits

Take advantage of all Google for Startups Cloud Program benefits and additional AI financial and service benefits:

- Up to \$2,000 USD in Google Cloud credits, valid for one year¹
- Apply Google Cloud credits to a [Customer Care](#) plan for unlimited access to technical support
- 12 months of free [Google Workspace Business Plus](#) for new signups²
- Access AI experts. Webinars and live Q&As with Google Cloud AI product managers, engineers, and developer advocates

See additional benefits [here](#)

Eligibility

- Startups that use AI as their core technology to develop their primary products or solutions
- AI startups not yet funded by an institutional investor or foundation
- Founded within the last 5 years
- Not yet received Google Cloud credits (beyond the free trial)

Eligibility at the discretion of Google Cloud

To apply visit

cloud.google.com/startup/apply

[1] Credits can be applied towards [Google Cloud Services](#) and [Select Google Cloud offerings](#), subject to the Google for Startups [Cloud Program-Startup Terms](#).

[2] Company domain must not have been subscribed to a paid Google Workspace plan from within 31 days of applying to the Google for Startups Cloud Program, to the day the benefit is requested.

Acceptance into this program is at the discretion of Google Cloud. We are unable to accept companies that have IPO'd or been acquired, educational institutions, government entities, nonprofits, personal blogs or content, dev shops, consultancies, or agencies, cryptocurrency mining company, or a company distributing tokens contrary to regulatory guidance in your jurisdiction.

*Startup Equity Funding includes typical equity investment vehicles that support startup growth from accredited angel investors, Accelerator, Incubators, and Venture Capital firms. Simple Agreement for Future Equity (SAFE) Agreements and convertible notes are accepted. To support the Web3 community, we will also be accepting verifiable token raises and blockchain foundation grants. Funding via Private Equity, government innovation grants, prize funding, crowdfunding, friends & family funding will not qualify a startup for Scale but will be evaluated for enrollment in Start.

Scale tier

For seed to series A AI-first startups with equity funding.

Program benefits

Take advantage of all Google for Startups Cloud Program benefits and additional AI financial and service benefits:

- Up to \$350,000 USD over 2 years for Google Cloud and Firebase usage covered in:
 - **Year 1:** 100% up to \$250,000 USD in Google Cloud credits¹ (includes standard program credits plus an additional \$150,000 USD for the AI startup program)
 - **Year 2:** 20% up to an additional \$100,000 USD in Google Cloud credits¹
- \$12,000 USD in [Google Cloud Enhanced Support](#) credits for one year
- 12 months of free [Google Workspace Business Plus](#) for new signups²

- Access AI Experts
 - Webinars and live Q&As with Google Cloud AI product managers, engineers, and developer advocates
 - Insight into Google Cloud's latest AI advances and product roadmap
- Get AI training and resources
 - Free access to advanced hands-on learning labs focused on AI and the latest Google Cloud technology
 - Exclusive access for ISV/SaaS startups to [Built with Google Cloud AI](#), including the AI Center of Excellence, tools and training, co-marketing, and amplification on Google Cloud Marketplace
 - Access to architectural guidance and best practices to get started and ramp on AI solutions, including technical deep dives and hands-on workshops

See additional benefits [here](#)

Eligibility

- Startups that use AI as their core technology to develop their primary products or solutions
- Have received equity funding* from seed to series A (if series A, raised within the last 12 months) or common Web3 funding sources
- Founded within the last 10 years
- Not yet received more than \$4,000 in Google Cloud credits

Eligibility at the discretion of Google Cloud

To apply visit

cloud.google.com/startup/apply

[1] Credits can be applied towards [Google Cloud Services](#) and [Select Google Cloud offerings](#), subject to the Google for

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*Startup Equity Funding includes typical equity investment vehicles that support startup growth from accredited angel investors, Accelerator, Incubators, and Venture Capital firms. Simple Agreement for Future Equity (SAFE) Agreements and convertible notes are accepted. To support the Web3 community, we will also be accepting verifiable token raises and blockchain foundation grants. Funding via Private Equity, government innovation grants, prize funding, crowdfunding, friends & family funding will not qualify a startup for Scale but will be evaluated for enrollment in Start.

Let's create

Take advantage of gen AI offers today

At Google Cloud, we help startups innovate faster with enterprise-ready gen AI. We have years of enterprise AI experience behind us. Our path-breaking work in Transformers – open sourced by Google in 2017 – is illustrative of our long-term commitment. Our models are the basis of all gen AI applications seen today.

At Google Cloud we have the tools, the platform, and the community to support your innovation, your inspiration, your game-changing applications. We have the experience, too. We have partnered already with thousands of leading companies and startups such as Wendy's, Canva, Uber, Instacart, Deutsche Bank, ElevenLabs, Replit, and Jasper. All are using our gen AI platform to deliver against their business goals.



Whether you work
for a dedicated AI startup
or are looking to launch
a gen AI project within an
established organization,
Google Cloud is here to help.



To learn more about our
suite of gen AI tools, visit
cloud.google.com/ai/generative-ai



And to apply for our Start Tier
or Scale Tier offers, visit
cloud.google.com/startup/apply