



#### The Top Trends for AI for Business in 2025

In 2024, AI came into sharp focus. Not just for software developers anymore, generative AI has gone mainstream, with everyone from marketers to quality control engineers using it for role-specific use cases and initiatives.

So what's on the AI horizon in 2025? In a recent report, "AI Business Trends 2025," our partner Google Cloud highlights five key developments expected to shape business in 2025:

- Multimodal AI that enhances decision-making and customer interaction
- Al agents that are evolving into sophisticated systems capable of handling complex workflows
- Assistive search that transforms how users interact with information.
- Al-powered customer experience that creates highly personalized and efficient interactions
- Al-enabled threat detection that helps strengthen defenses and overall security

To boost your AI journey in 2025, our team here at <u>Publicis Sapient</u>, a Premier Google Cloud Partner, is ready to help. We support businesses at every stage of their AI adoption, from initial use cases to fully operationalized, AI-powered workflows. Our partnership offers enterprises the services, solutions, and expertise they need to accelerate digital transformation.

We hope you enjoy this complimentary report and are inspired to pursue your 2025 AI initiatives. Have questions or want to learn more? Please <u>visit our website</u> and fill out the contact form. We look forward to connecting with you!

#### **Publicis Sapient**





Real-world challenges Reimagined solutions



This report provides executive leaders with key insights to shape their organization's AI strategy for 2025 and beyond. Within each trend, you will find recommended technical resources that you can share with your teams for deeper understanding.

The five strategic trends in this report were identified based on data insights from an analysis of several notable sources, including: The ROI of Gen AI, a research study by Google Cloud and National Research Group based on our survey of 2,500 global enterprise decision makers; the fastest-growing AI topics in Google Trends around the globe; third-party research and insights; and Google AI thought leaders' insights on current events. We used NotebookLM, one of TIME Magazine's Best Inventions of 2024, to collate these sources and identify the top five trends that will reshape business in 2025.



### Thought leaders





NotebookLM



Gemini



Aashima Gupta
Global Director, Healthcare
Strategy & Solutions,
Google Cloud



Albert Lai Global Director, Media & Entertainment, Google Cloud



Alison Jarris Editorial Lead, Google Cloud



Carrie Tharp
VP, Global Solutions &
Industries, Google Cloud



**Dain Hansen**Director, Global Demand for Google Cloud Marketing



**Logan Kilpatrick**Senior Product Manager,
Google



Matt Anderson Head of Telecoms Industry, Google Cloud



Oliver Parker
Vice President,
Global GTM for Generative Al,
Google Cloud



Paul Roetzer
Founder and CEO,
Marketing Al Institute



Paul Tepfenhart
Director, Global Retail
Strategy & Solutions,
Google Cloud



Praveen Rao
Global Director, Head of
Manufacturing Industry,
Google Cloud



Sarah Kennedy VP, Global Demand & Growth Marketing, Google Cloud



**Shweta Maniar**Global Director, Life Sciences
Strategy & Solutions,
Google Cloud



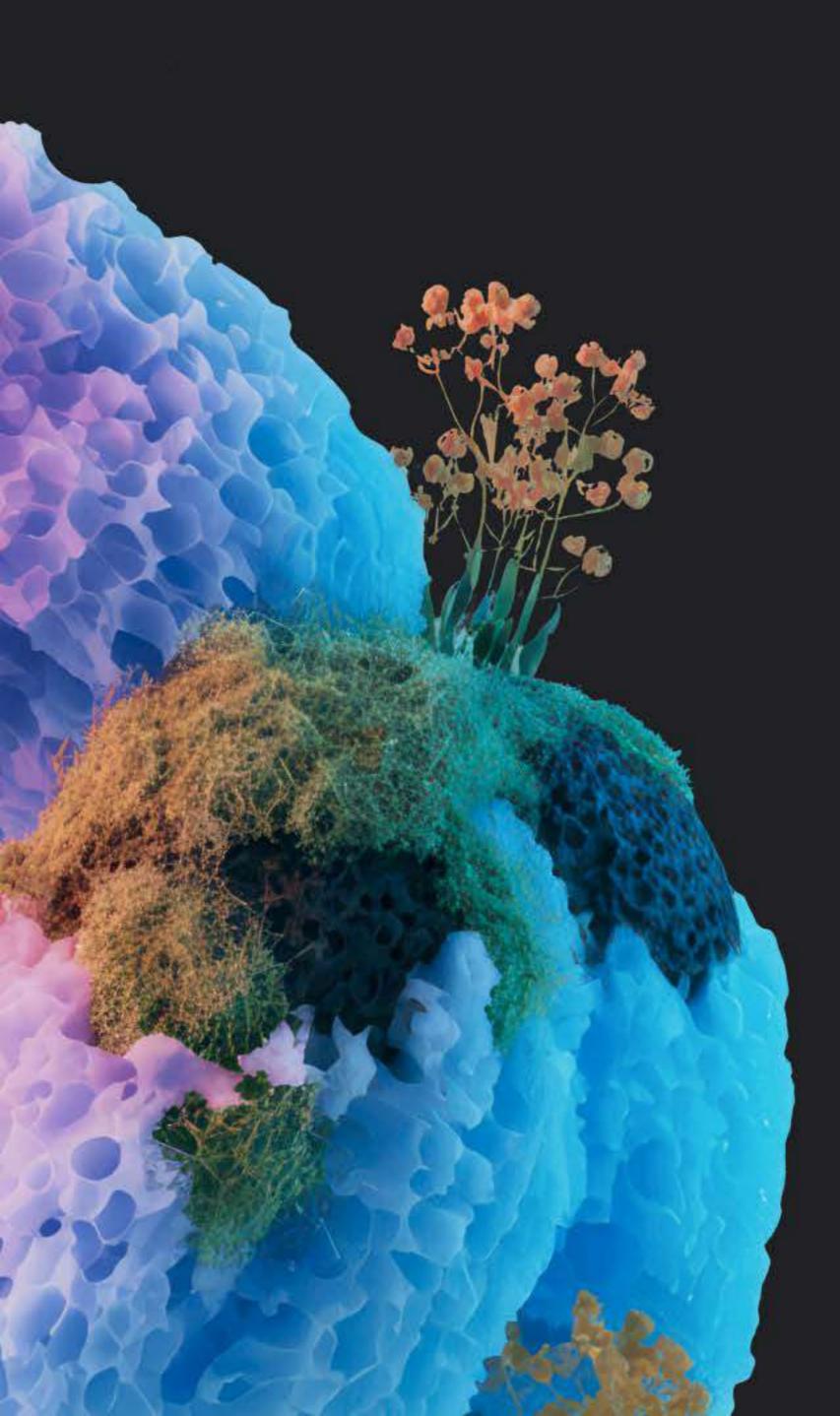
Zac Maufe
Managing Director,
Regulated Industries,
Google Cloud

### Introduction

### How Al has shifted global market dynamics

Al has catalyzed a wave of rapid innovation—and the pace shows no sign of slowing. Its evolving capabilities will continue to drive a radical transformation in how organizations operate, compete, and innovate in 2025.

Before diving into the five Al trends shaping business in 2025, it is important to first understand how Al has impacted today's global market dynamics—and set us on a trajectory for business transformation in the years ahead.



#### Al early adopters dominate the market

Al has profoundly shifted the competitive landscape. Companies that capitalized on it early, particularly those purpose-built for Al, will continue to lead the wave of innovative customer experience offerings this year, gaining market share and getting further out in front of their more traditional competitors.

#### Capital investment in Al has taken off

Driven by rapid improvements in Al models and corporate adoption, Al maturity is becoming a key indicator of economic health, prompting governments to rethink policies, regulations, and even education to support Al-driven growth. Leadership strategies will extend beyond humans, targeting Al agents as both customers and collaborators.



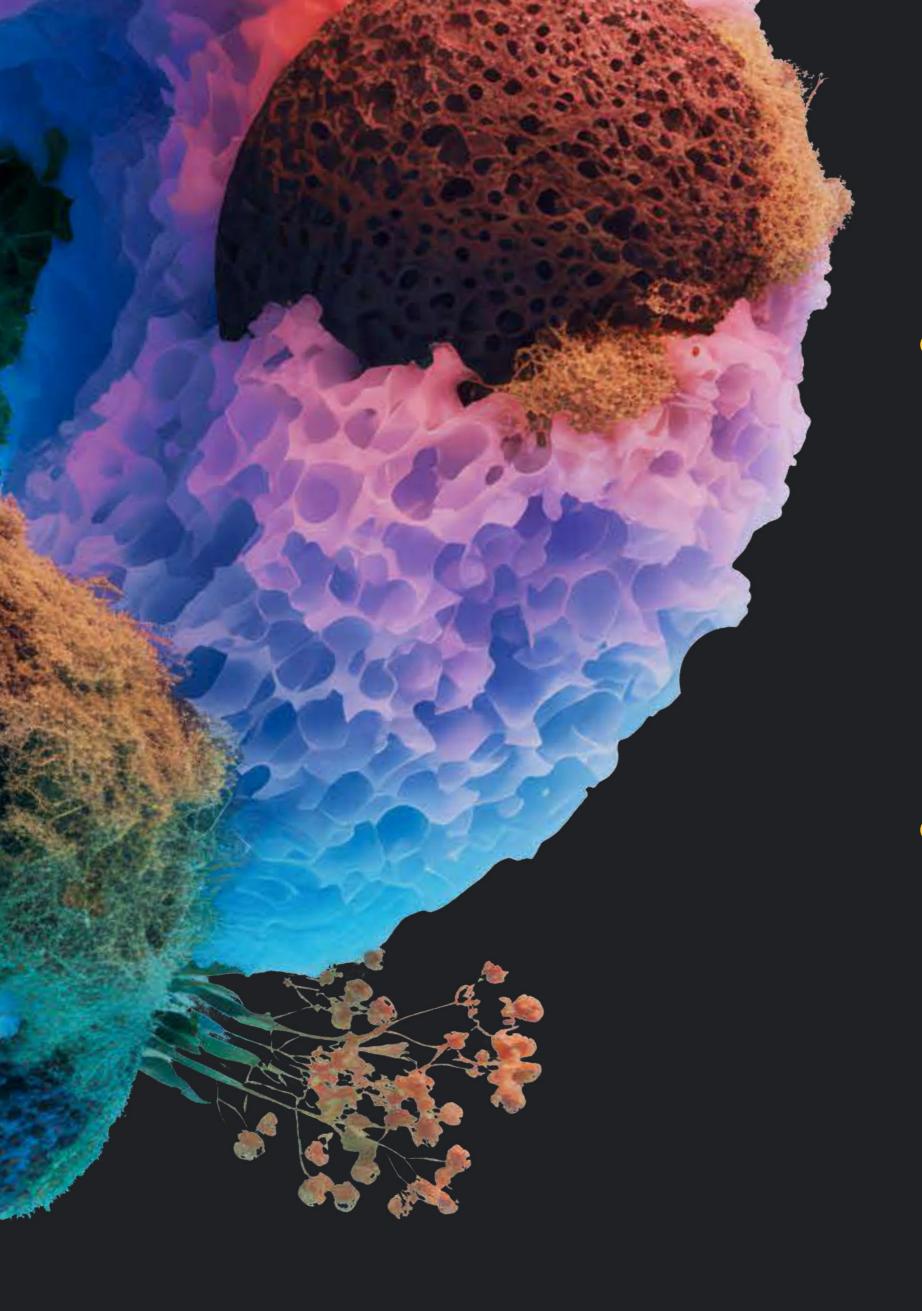
#### Al agents go mainstream

Al agents are driving enormous improvements across every part of the value chain. These software systems, which use Al to pursue goals and complete tasks on behalf of users, are rapidly becoming more sophisticated and precise. The race is on to deliver the highest-quality, lowest-latency features across a myriad of use cases, such as Al agent builders that help developers build and deploy Al faster than ever. Already, technology leaders are laying the foundation for the next phase of Al agent evolution: multi-agent systems (read more about Al agents in Chapter 2).

### Businesses have embraced multimodal LLMs to automate core operations

Over the course of 2025, organizations will shift from experimentation to scaling Al across operations, focusing on measurable outcomes. According to Andreessen Horowitz, the \$250 billion business process outsourcing (BPO) market is ripe for specialized Al automation. They identify two key areas of opportunity: horizontal Al enablers that execute a specific function for a broad range of industries, and vertical automation solutions that build end-to-end workflows tailored to specific industries, such as retail operations or healthcare assistance.<sup>1</sup>

During this phase, organizations have started to establish risk management, security, cost control, and overall governance that are foundational to successful Al adoption at scale.



#### Demand for data center capacity surges

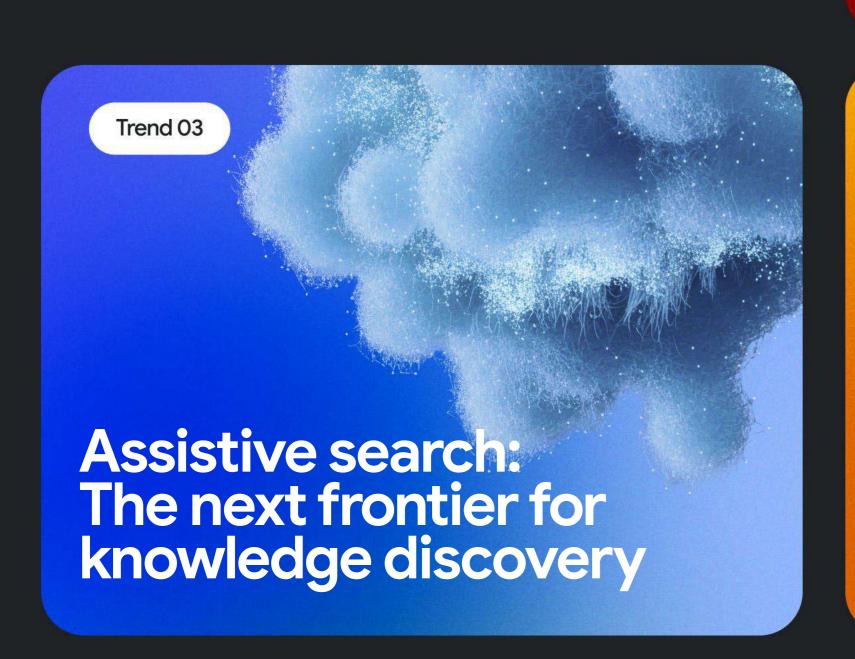
Al adoption in enterprise infrastructure is expected to increase by over 30% by 2026.<sup>2</sup> This rapid adoption rate has created global demand for "Al-ready" data center capacity—in other words, data center space capable of handling the high computational power and power density required for Al workloads. Demand for Al-ready data center capacity is expected to rise at an average rate of 33% per year through 2030,<sup>3</sup> and spending on data centers is expected to double in the next five years.<sup>4</sup>

### Hyperscalers help organizations remove barriers to enterprise Al adoption

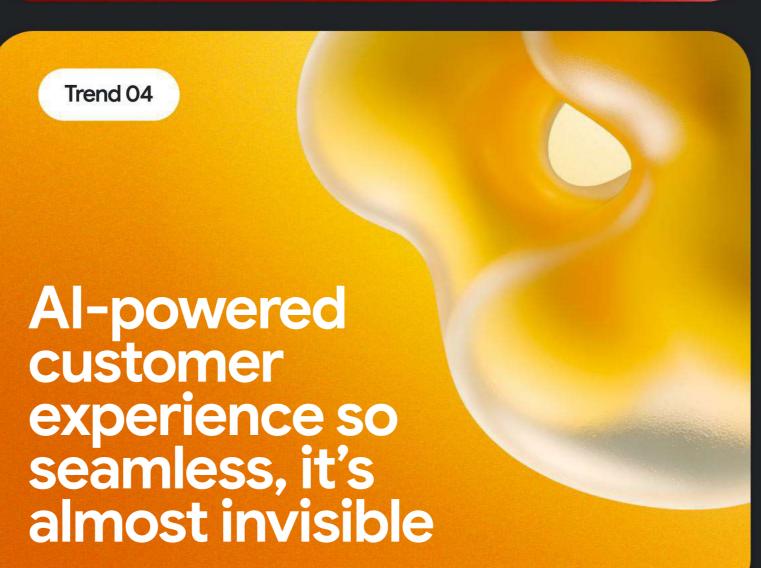
"Hyperscalers" or cloud service providers will help remove barriers to Al innovation by investing in new <u>data centers with Al-optimized infrastructure</u>—including Google's custom-designed TPUs, NVIDIA GPUs, networking, and storage, with specialized elements like optical switching and liquid cooling that improve efficiency for Al workloads.



### Top 5 trends at a glance







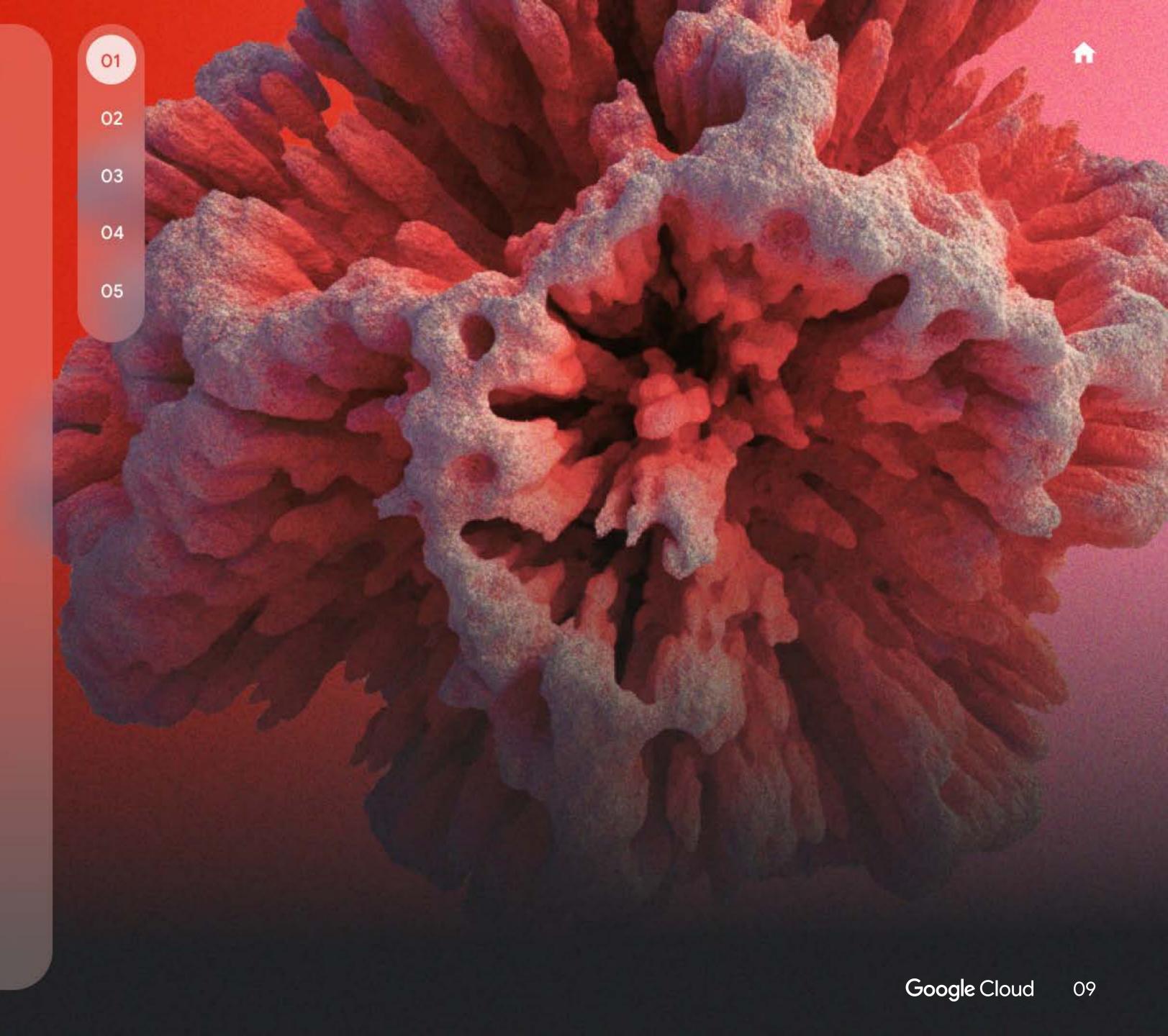




Trend 01

## Multimodal Al unleashes the power of context

3 minute read



## 2025 will be a pivotal year for enterprise Al adoption, driven largely by multimodal learning and the contextual awareness it enables.

Multimodal Al mirrors human learning by also integrating diverse data sources like images, video, and audio in addition to text.<sup>5</sup> While historically, Al interactions often relied upon text-based commands, multimodal unlocks Al's ability to decipher and learn from a much broader range of contextual sources with unprecedented accuracy, producing outputs that are not only more precise but also feel significantly more natural and intuitive.<sup>6</sup>

The technology enables businesses to improve complex data analysis, streamline workflows, and enhance the accessibility of Al-driven insights, making it a crucial tool for future business operations.<sup>7</sup>

Learn more about multimodal Al 🔾

### Multimodal Al is on a rapid growth trajectory

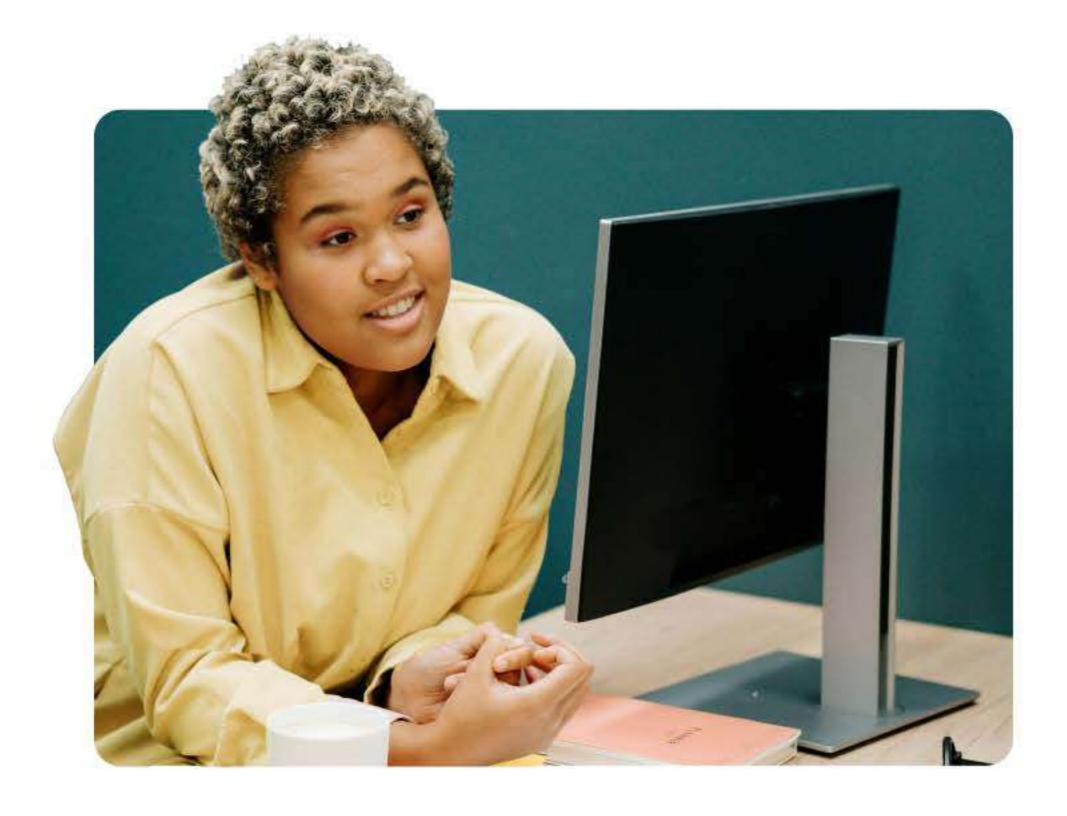
USD
4B
Global multimodal Al market size in 2025

\$98.9B

Global multimodal Al market size by end of 20378

#### A

### The benefits of multimodal Al





### Greater grounding

One of the key advantages of multimodal LLMs is the ability to manage and process diverse forms of data—combining speech, text, images, audio, and video—to improve understanding and response to human commands. It can merge these inputs simultaneously to produce outputs that are grounded in enterprise truth and updated in real-time as information is exchanged and updated.



### Enhanced decision-making

Multimodal AI enables organizations to unlock deeper insights and enhanced data analytics by combining unstructured and structured data. These insights can be used to improve backend efficiency and front-end user experience, especially in sectors like retail, healthcare, and customer service.



### More personalized customer interactions

Multimodal Al's capability to generate personalized customer interactions is another core business benefit. By combining visual, audio, and text-based inputs, virtual assistants become more responsive and accurate—boosting customer satisfaction.



### Trailblazers prove the transformative power of multimodal Al



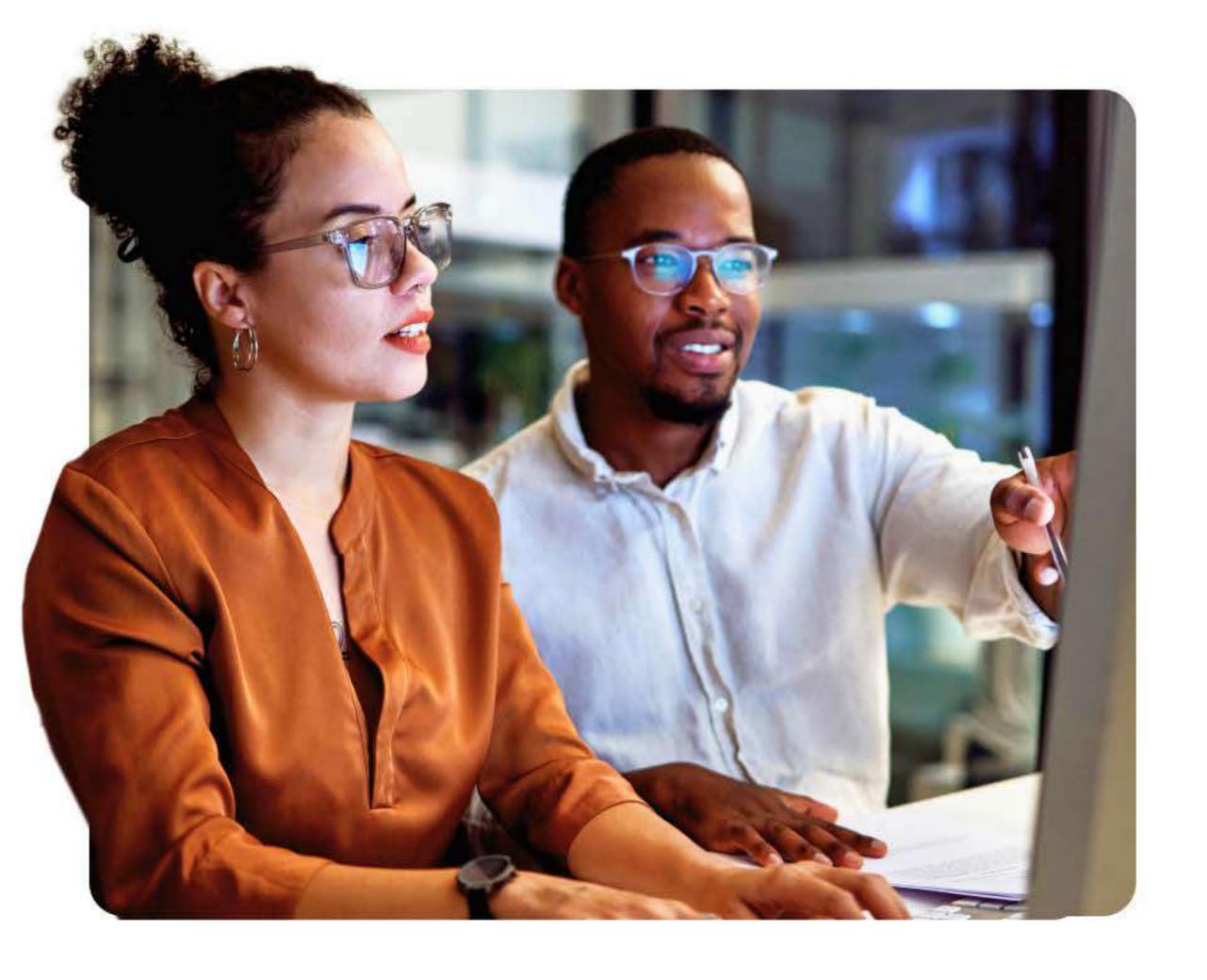
Bayer is working to make it easier for organizations to use Al with medical imaging to transform the growing amounts of data into valuable and impactful insights, saving radiologists time and helping them optimize their important work for the benefit of patients.





Prudential is using Google's MedLM family of language models to simplify and summarize medical claim-related documents, including medical reports and invoices, for quicker approvals and pay-outs.

Read more  $\rightarrow$ 



## The shift towards multimodal Al is not without its challenges

Multimodal Al models require substantial amounts of data for effective training. However, businesses can navigate this challenge by prioritizing Al models known for their high quality and long context capabilities, and those explicitly designed for large-scale production deployments.

Ensuring fairness and eliminating unfair bias in Al models remain paramount, requiring a rigorous focus on responsible Al principles. As demand for responsible Al solutions grows, so do the resources and frameworks available to support organizations on this journey.

### Multimodal Al in 2025

### Industry predictions

### Financial services



We'll continue to see how Al models are used for analyzing multimodal data, such as market commentary videos or central bank livestreams, by considering nonverbal cues like tone of voice, facial expressions, and body language alongside text, to provide a more nuanced understanding of sentiment."



Zac Maufe, Managing Director, Regulated Industries, Google Cloud

#### A

### Manufacturing



We expect that manufacturers will focus on using gen AI to proactively address operational efficiency and maintenance needs. By analyzing multimodal sensor data such as text, videos, noise, and vibrations, potential anomalies leading to equipment failures can be identified before they occur, minimizing downtime and maximizing productivity."



**Praveen Rao**, Global Director, Head of Manufacturing Industry, Google Cloud

### Healthcare and life sciences



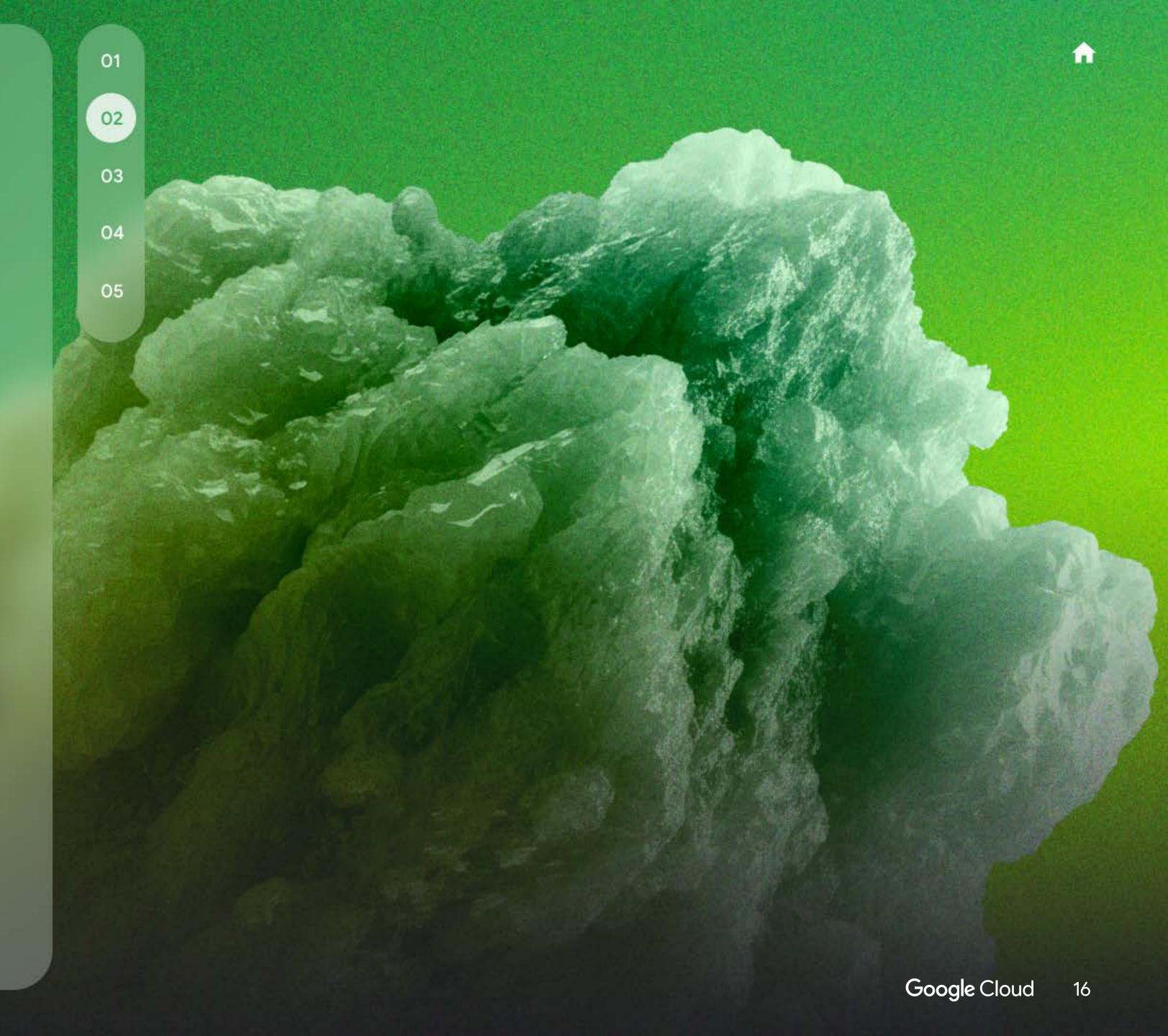
We'll see a rise in the adoption of multimodal Al models to analyze data such as medical records, imaging data, and genomic information to draw insightful summaries, moving closer to the vision of personalized medicine."



**Shweta Maniar**, Global Director, Life Sciences Strategy & Solutions, Google Cloud Trend 02

# Alagents evolve: From chatbots to multi-agent systems

6 minute read



#### Al applications have evolved from chatbots into sophisticated Al agents capable of handling complex workflows. Multi-agent systems are the next phase of evolution.

With its deep intelligence, agentic Al marks a significant departure from traditional software programs. Al agents show reasoning, planning, and memory with a level of autonomy to make decisions, learn, and adapt. Equipped with these capabilities, they can seamlessly manage complex workflows, automate business processes, and support human employees.

Today, many Al applications include multiple agents with human-in-the-loop to address complex workflows. Workers are cultivating new skills to collaborate effectively with these Al agents, combining human creativity with Al's analytical power. A study by Stanford, MIT, and NBER found that access to Al assistance increases worker productivity, as measured by issues resolved per hour, by 15% on average.

The study also found that workers with less experience and skills improved both the speed and quality of their output when assisted by Al agents, while the most experienced and highest-skilled workers saw few gains in speed and a surprising decline in quality.9

The next phase of Al agent technology takes things one step further. Multi-agent systems (MAS) are composed of multiple independent agents that collaborate to achieve a goal or complex workflow beyond the ability of an individual agent. The multiple tasks are coordinated between the agents, as opposed to individual agents that often require human coordination and intervention between tasks. Autonomous ride-hailing service Waymo One is one example in use today.

Learn how Google Cloud's Al agent ecosystem is transforming industries →

Share this paper on agents with your team ->

### Adoption of Al agents is growing

According to a Capgemini survey of 1,100 executives at large enterprises:10

82% 71%

them within the next 3 years

believe Al agents will significantly increase workflow automation and improve customer service satisfaction

10%

already use Al agents







Across our customers, we see a common focus on six types of agents as the first places to realize Al transformation.

#### A

### 01 Customer agents

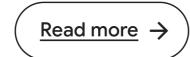
Customer agents deliver personalized customer experiences by understanding customer needs, answering questions, resolving customer issues, or recommending the right products and services. They work seamlessly across channels and can be integrated into product experiences with voice and video to deliver 24/7 customer service and support.

Check out Trend 4 to learn how Google Cloud's Customer Engagement Suite puts multiple agents to work, together with human-in-the-loop, to create Al-powered customer experiences.

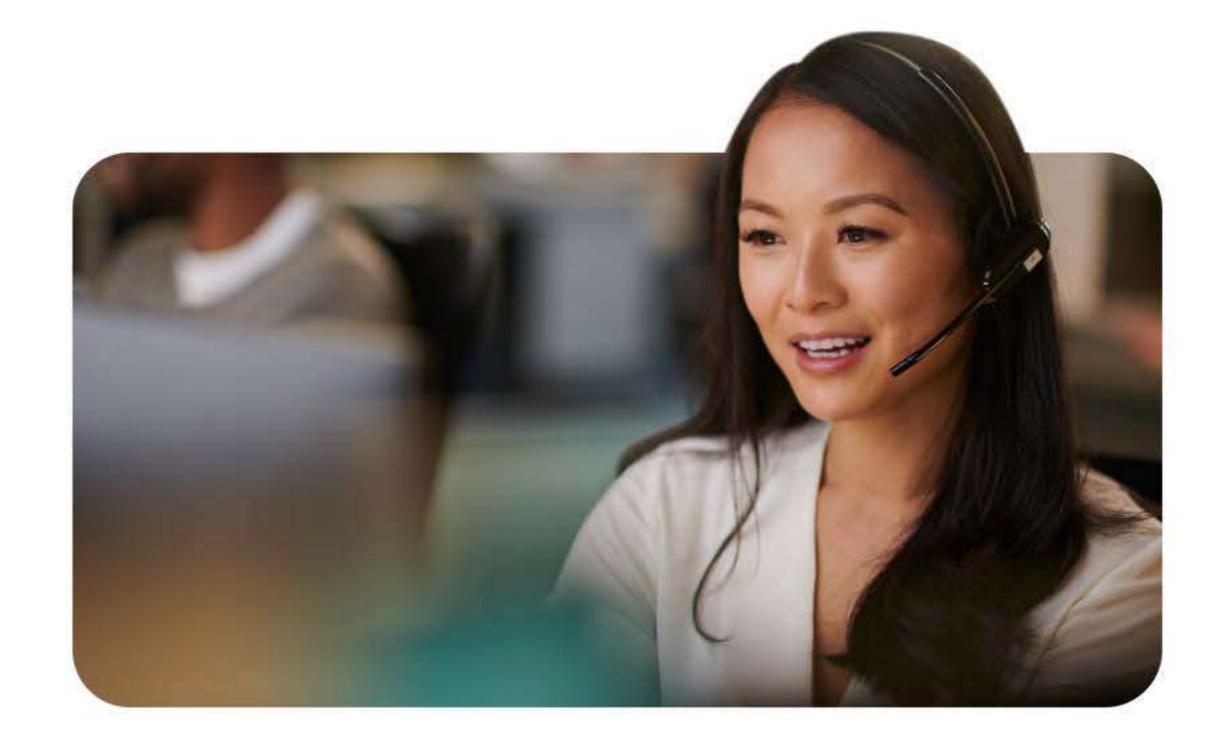
PARTNER HIGHLIGHT







**BrainLogic** builds gen Al products specifically designed for Latin America, using Claude by **Anthropic** on Vertex Al to power its personal Al assistant (Zapia) used by millions.



**Best Buy** is resolving issues up to 90 seconds faster with its gen Al-powered virtual assistants that can help troubleshoot product issues, reschedule order deliveries, and manage subscriptions.



( <u>Watch video</u> →

#### Six types of Al agents

### 02 Employee agents

Employee agents boost productivity by streamlining processes, managing repetitive tasks, answering employee questions, and editing and translating critical communications. Designed to drive efficiency and collaboration, these agents give workers more time back to focus on the human aspect of their work.

PARTNER HIGHLIGHT





**Box** is leveraging Gemini to build the next generation of intelligent content management solutions through summary, analysis and extraction of enterprise content metadata allowing companies to securely and efficiently manage their content.

Woolworths, the leading retailer in Australia, boosts employees' confidence in communications with "Help me write" across Google Workspace products for more than 10,000 administrative employees.



 $\left(\begin{array}{c} \text{Read more} \rightarrow \right)$ 

Elanco, a world leader in animal health, has implemented a gen Al framework, powered by Vertex Al and Gemini, to support critical business processes, such as Pharmacovigilance, Customer Orders, and Clinical Insights. This has resulted in an estimated ROI of \$1.9 million since launching last year.



 $\left(\begin{array}{c} \text{Read more} \rightarrow \end{array}\right)$ 

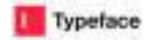
#### A

#### Six types of Al agents

### O3 Creative agents

Built to augment existing design, artistic, and production skills, creative agents can generate content, images, and ideas. They can assist with design, writing, personalization, and campaigns—helping marketing and creative teams to explore and build better creative concepts.

#### PARTNER HIGHLIGHT





**Typeface**, the generative Al platform for enterprise content creation, empowers Fortune 500 brands and enterprise marketers to create multimodal branded content using Gemini and Imagen3.



PODS, working with advertising agency Tombras, used Gemini to create the "World's Smartest Billboard," a campaign on their trucks that could adapt to each neighborhood in New York City. The ads used live feeds of data so they updated in real-time hitting all 299 neighborhoods in just 29 hours creating more than 6,000 headlines.



( <u>Watch video</u> →

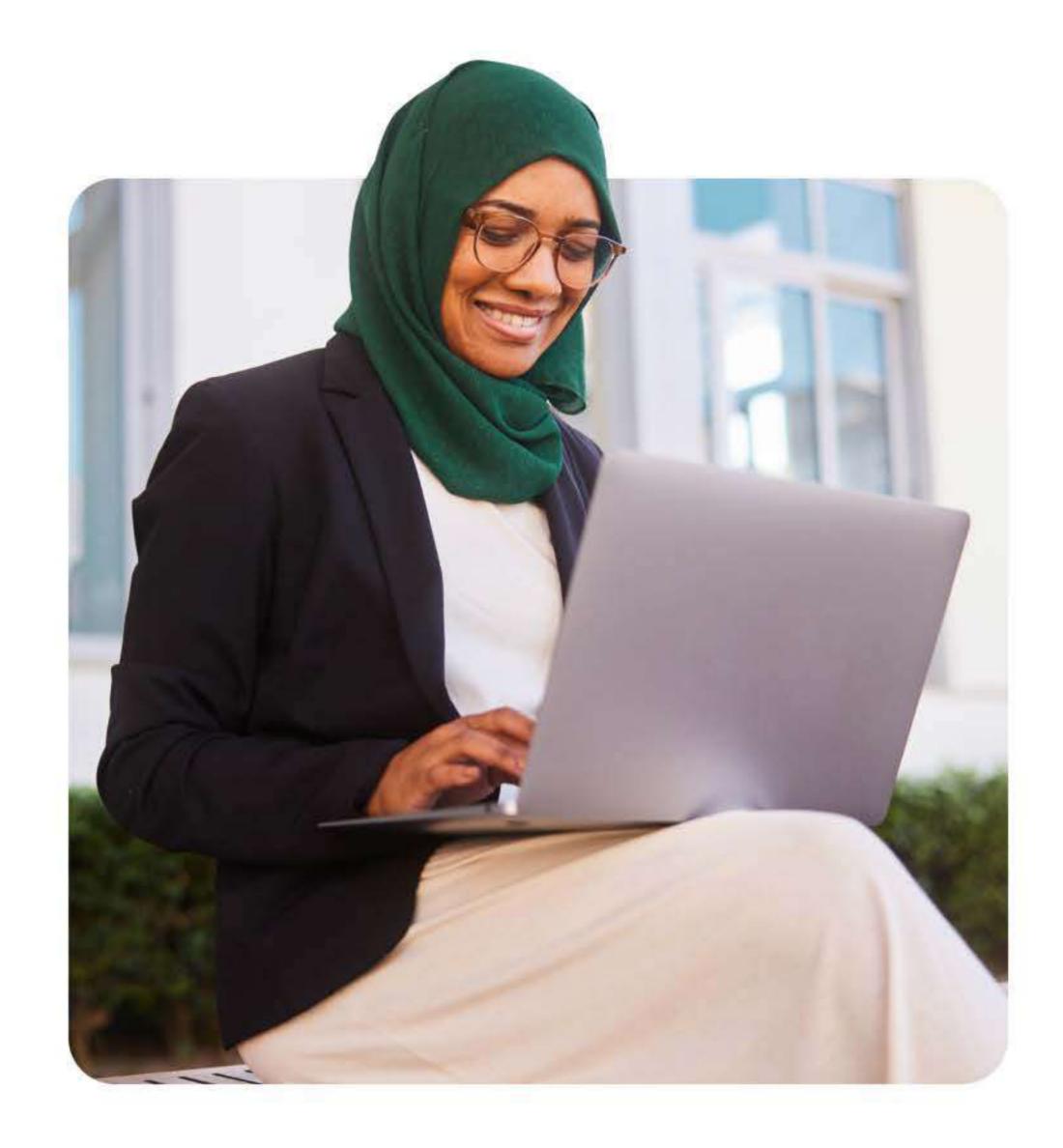
### 04 Data agents

Designed to support research and data analysis, data agents can find and act on meaningful insights from data, all while ensuring the factual integrity of their results. They can even help ask the questions we haven't thought of yet, and then find the answers. It all adds up to deeper insights and more impactful decision-making across the business.

Warner Bros. Discovery built an Al captioning tool with Vertex Al and saw a 50% reduction in overall costs, and an 80% reduction in the time it takes to manually caption a file without the use of machine learning.



<u>Watch video</u> →



#### Six types of Al agents

### 05 Code agents

Code agents help developers and product teams accelerate software development with Al-enabled code generation and coding assistance, and to ramp up on new languages and code bases. A study of 4,867 software developers revealed a 26% increase in the number of weekly tasks completed among developers using an Al-based coding assistant. Specifically, the study highlights a 13.55% increase in the number of code updates and a 38.38% increase in the number of times code was compiled.

There is still work to do to advance Al agents.

The study found that while Al assistants improved productivity among less experienced and lowered-skill members of the workforce, it actually hindered productivity for advanced and highly experienced developers. Bridging this gap will require software developers to play an active role in designing intuitive user experiences.

Share this innovators skills challenge with your technical team  $\rightarrow$ 

PARTNER HIGHLIGHT





**Datadog** LLM Observability offers native integration with Gemini, allowing developers to monitor and improve the performance, accuracy, and security of their applications.

Regnology built its Ticket-to-Code
Writer tool with Gemini 1.5 Pro to
automate the conversion of bug
tickets into actionable code,
significantly streamlining the
software development process.



( Read more  $\rightarrow$ 

**Turing**, an AGI infrastructure company, saw a 33% developer productivity gain while using Gemini Code Assist in their development teams.



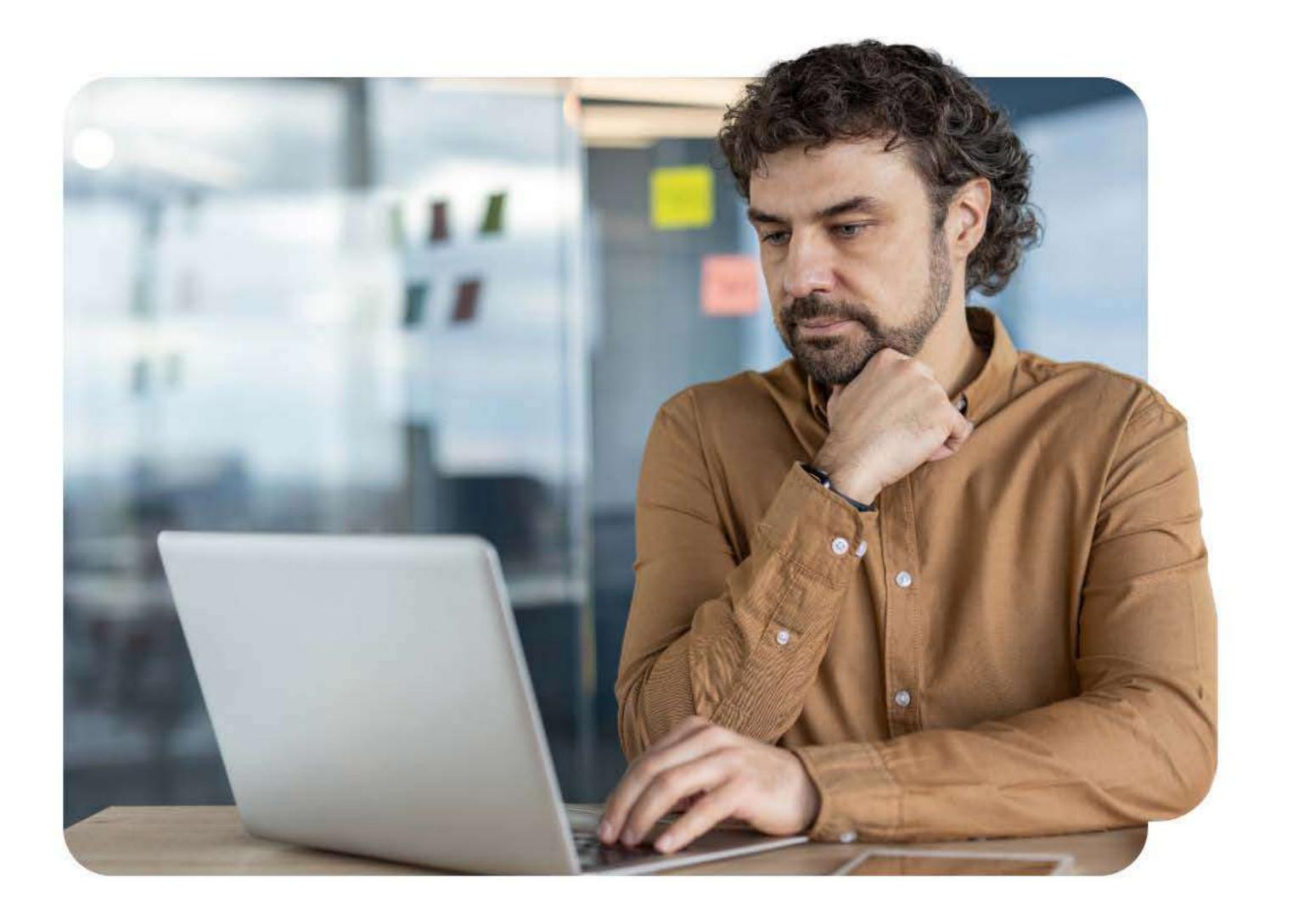
Watch video →

#### A

#### Six types of Al agents

### Oó Security agents

Security agents can strengthen an organization's security posture by mitigating attacks or increasing the speed of investigations. They can also detect new threats and search Mandiant's vast frontline research to understand threat actor behaviors in seconds.



### Al agents in 2025

### Industry predictions

### Retail



We expect retailers will focus on implementing creative agents that can provide assistance to marketing teams, such as generating customer-centric marketing campaigns, copy, and product descriptions, and curating bespoke images and creative content for campaigns and editorial placements."



Paul Tepfenhart, Director, Global Retail Strategy & Solutions, Google Cloud

### Media and entertainment



Content agents have the potential to become the new superpower that media and entertainment companies leverage across the entire media supply chain to streamline the creation of content, to reduce cost and time, to understand and extract insights from content for search and monetization, and to distribute personalized content to global audiences."



Albert Lai, Global Director, Media & Entertainment, Google Cloud

### Telecommunications



The same way as CSPs embraced customer agents, we expect they will extend their use of network agents to help with activities like root cause analysis of outages, capacity planning scenarios, developing and executing test cases for new lab equipment, and training of new field technicians."



Matt Anderson, Head of Telecoms Industry, Google Cloud Trend 03

# Assistive search: The next frontier for knowledge discovery

3 minute read





### Al has changed the way the world discovers information, creating a shift from retrieving to creating knowledge.

As Al breaks free from the confines of traditional text-based queries, search enters a new era—one of intuitive and multi-sensory information discovery.

No longer limited to typing keywords into a search bar, users will engage with Alpowered search tools that can comprehend and respond to images, audio, video, and conversational prompts. This profound shift is driven by the growing accessibility of gen Al and the rapid evolution of multimodal search capabilities, which enable users to seek information in a way that mirrors how they naturally experience the world.

As these advances in search capabilities pick up pace, businesses across industries are reimagining how their users access and interact with information.

<u>Learn more about enterprise search</u> →

### Search takes on a new dimension





### The benefits of Al-powered enterprise search

For enterprises, advanced search tools will drive significant value across the business. Benefits include:

### Faster access to data



Employees can quickly and efficiently find and utilize internal data, boosting productivity and leading to more informed decision-making.

### More advanced and intuitive searches



These intelligent knowledgebases can understand complex queries, processing various data formats (including documents, spreadsheets, and multimedia) to deliver highly relevant information—which in turn helps foster innovation and growth.

### Deeper, Al-powered insights



Integrating AI agents with enterprise search will take knowledge retrieval to the next level. Agents can access and analyze company data, performing complex tasks and providing insightful recommendations.

# There are flow-on benefits for consumers, too. Brands that adopt Al-powered search tools are delivering new levels of service and support to customers.

For example, just beyond Al-powered enterprise search lies the potential for assistive experiences. Users can not only discover precise information through Al search, but can also receive helpful assistance. Al can help the user by refining complex queries, offering contextualized insights, and even triggering actions.

### Leading companies embrace powerful new search capabilities



**Snap** deployed the multimodal capability of Gemini within their "My AI" chatbot and has since seen over 2.5x as much engagement within Snapping to My AI in the United States.

 $\left(\begin{array}{c} \text{Watch video} \rightarrow \end{array}\right)$ 



Mayo Clinic has given thousands of its scientific researchers access to 50 petabytes worth of clinical data through Vertex Al search, accelerating information retrieval across multiple languages.

Read more →



Moody's Corporation is providing its employees with LLMs from Google Cloud that will quickly sift through both public documents and the firm's own database of information to help them write analysis.

 $\underline{\mathsf{Read}\;\mathsf{more}}\;\rightarrow\;$ 



Suzano, the world's largest pulp manufacturer and a leader in sustainable bioeconomics, sought to enhance data access through gen Al. To achieve this, they partnered with Google Cloud to develop Vagalúmen, a solution that enables users to find information within Suzano's cloud-based data sources using natural language.

Read more →

#### A

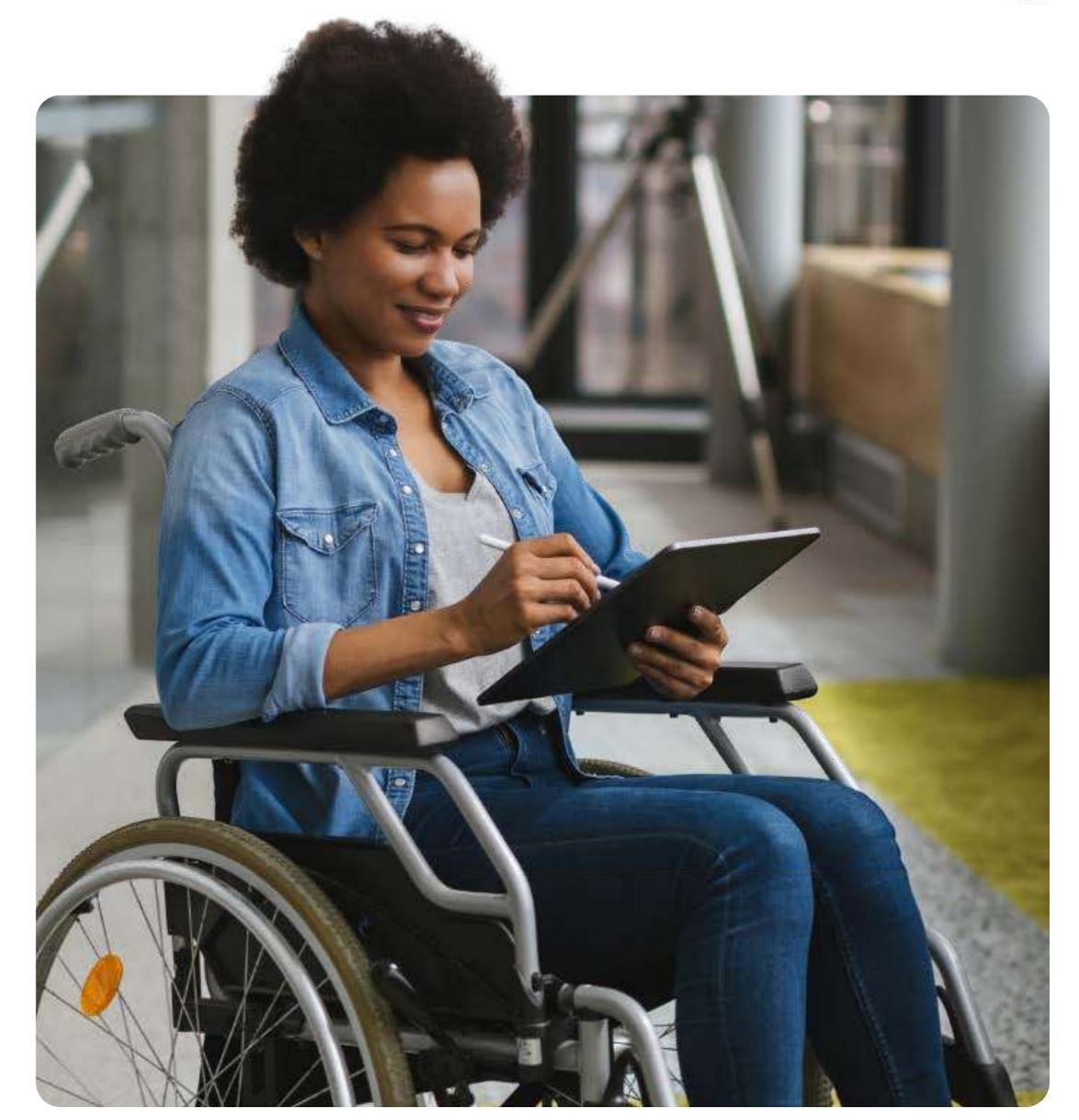
### A new path forward in building enterprise search

Building a good search system is hard.
Before the advent of gen AI, state-of-theart enterprise search systems were
keyword-based. They couldn't understand
the meaning of the indexed content,
user's intent, or search context—causing
irrelevant results and frustrating user
experiences.

Today, owners of legacy search systems have an opportunity to improve search offerings by integrating LLMs. This can be done by generating embeddings for words and phrases, which can then be used to find relevant

results in a vector database through a matching service. It all leads to more accurate and relevant search results, and the ability to handle complex queries that traditional search engines cannot.

But, again, this is hard—and many organizations get stuck in pilot phases. Packaged Google-quality search can solve this challenge for enterprise users by removing the complexity from search systems.



Learn more about RAGs powered by Google Search →

### Al-powered search in 2025

### Industry predictions

### Financial services



We expect to see more financial institutions prioritizing robust internal knowledge search for their employees, tailored to their specific roles. For example, a loan officer would receive different results than a risk analyst when searching for information about a particular loan application."



Zac Maufe, Managing Director, Regulated Industries, Google Cloud

### Retail



We expect gen Al will continue to transform search in retail, allowing customers to find products using natural language, images, or voice commands to deliver higher quality search results."



Paul Tepfenhart, Director, Global Retail Strategy & Solutions, Google Cloud

### Healthcare & life sciences



"We expect to see greater adoption of intuitive, contextual search that understands medical terminology, complex vocabulary, and abbreviations—helping relieve administrative burdens for medical professionals, while improving patient education and research."

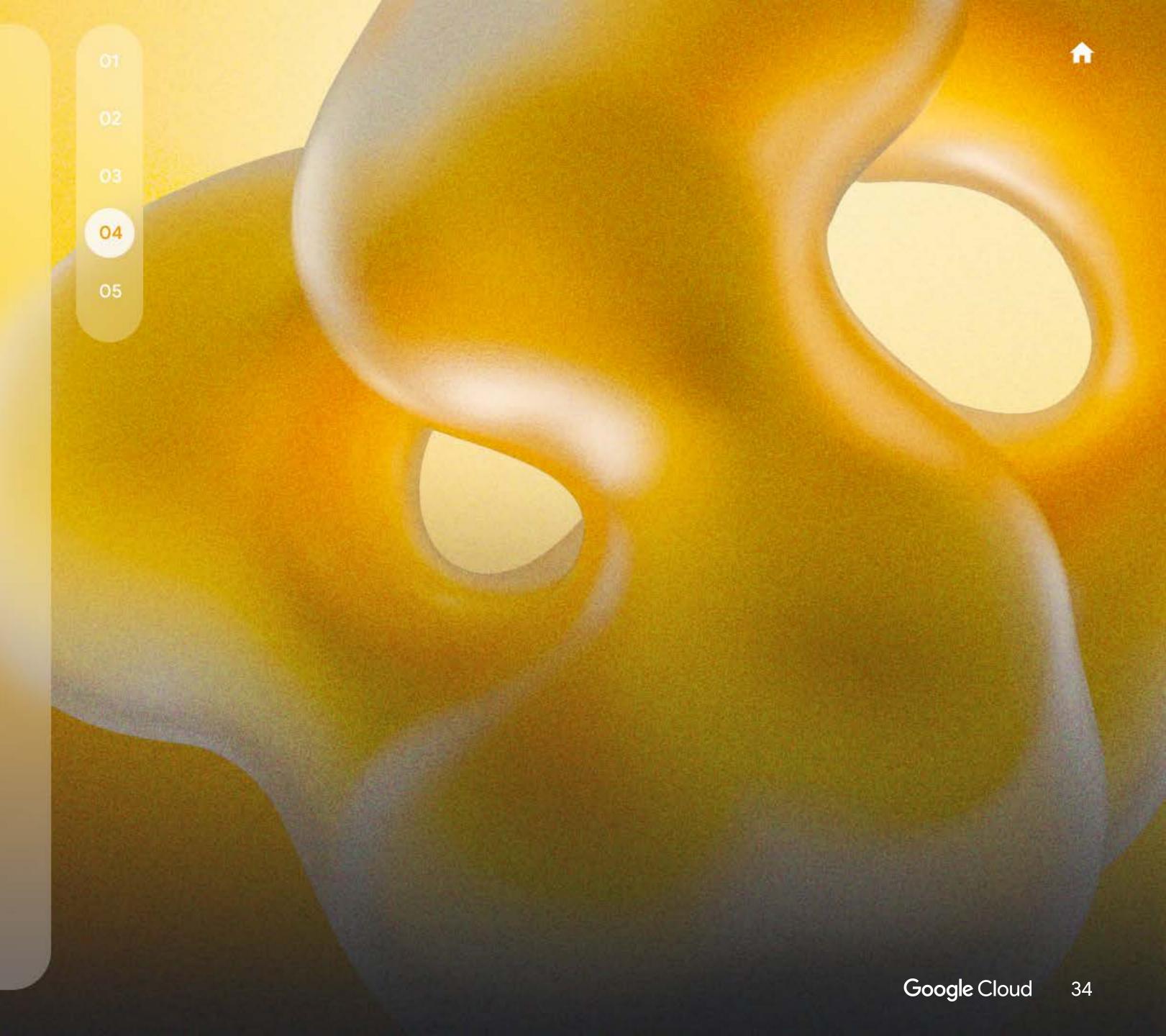


**Aashima Gupta**, Global Director, Healthcare Strategy & Solutions, Google Cloud

Trend 04

# Al-powered customer experience so seamless, it's almost invisible

3 minute read



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Customer engagement applications and enterprise search combine to make customer experience (CX) so seamless, the technology feels invisible.

Just as text-based customer service chatbots were not the final frontier, the real-time conversational insights and speech-based support that exist today are a stepping stone, not the final destination of Al-powered CX. This will be reached when companies can provide customers with precisely what they want: experiences so seamless, personalized, and efficient that issues are resolved without a customer even noticing they have interacted with a company's customer service or support technology.

### CX skyrockets with Al

#1

Customer service and support is the top priority area for new gen Al initiatives, with 55% of organizations rating it important in the next 12 months<sup>13</sup>

70.7%

of executives rate providing internal assistance to employees within their top 3 CX use cases<sup>14</sup>



### Al solves common CX challenges

#### **Customer** support



75% of customers use multiple channels in their ongoing experience.<sup>15</sup>

#### Improvements with AI

Common CX

challenges

Al-powered virtual customer service agents enable consistent omnichannel experiences at every entry point.

#### **Customer** sentiment



Companies with higher customer loyalty scores record 282% (vs 81%) cumulative 10 year shareholder returns. 16 Positive customer sentiment leads to higher customer loyalty.

Al-powered sentiment analysis helps brands gauge customers' opinions by analyzing a range of touchpoints, such as emails, social media posts, and chat interactions, in real-time. Brands can then use the insights to better respond to customer needs.

#### Personalization



71% of consumers expect companies to deliver personalized interactions.<sup>17</sup>

Al-powered insights analyze and learn from user behavior to generate more personalized marketing content and product recommendations. They analyze everything from purchase history and browsing behavior, to social media activity, and are proving to be powerful predictors of customer needs and preferences.

### Al solves common CX challenges

#### Self-service search results



Only 28% of U.S. online adults trust information provided by Al.<sup>18</sup> The issue is compounded by Al-powered chatbots that provide inaccurate responses.

#### **Improvements** with Al

Common CX

challenges

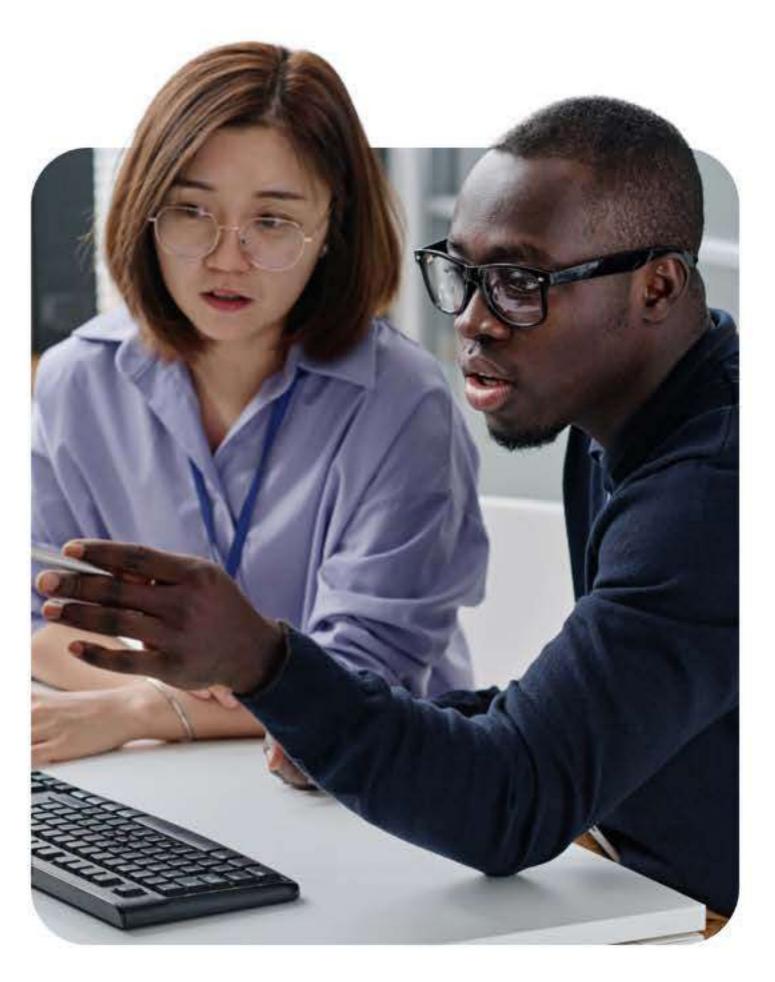
Al-enhanced search can understand complex queries, process various data formats, and deliver highly relevant information. As organizations embed these capabilities into self-service search tools, results will become more accurate and relevant—and trust in these tools will grow.

#### Support content



About 30% of B2C marketing decision-makers globally see data quality management as a major challenge in implementing successful marketing strategies.<sup>19</sup>

Generating and optimizing support content that directly answers the queries of real customers enables teams to turn customer search data into personalized content at scale.



### Across industries, Al-powered CX is on the rise



Alaska Airlines is using gen Al to make planning trips a delightful experience for travelers.

Alaska built a gen Al destination search experience —Careline—that helps guests plan their vacations and land the best flight deals with a single prompt.

 $\frac{\text{Watch the video}}{\text{→}}$ 

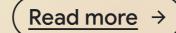


NotCo, a Chilean food technology company known for its plant-based alternatives to animal products, created an Al chatbot available 24/7, so users can simply ask the chatbot questions about sales, inventory, or any other data, and generate reports. This allows NotCo's teams to gain valuable insights in real time, enabling them to make data-driven decisions faster and with more confidence.

Read more →

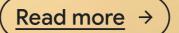


Discover Financial uses
Google Cloud's gen Al to
empower its 10,000 contact
center agents with Al-driven
capabilities, leading to faster
resolution times and better
customer experience.





klook, Asia's leading platform for experiences and travel services, is building organization-wide Al capabilities that will personalize and optimize experiences for customers, partners, and employees, including developers who are using Gemini Code Assist to support testing and generating code for the Klook platform.





KDDI Corporation has developed an advertisement planning tool 'Mori with Gemini' that improves marketing accuracy through a seamless matching of persona data from KDDI and its group company, resulting in significant CTR improvements.

Read more  $\rightarrow$ 

#### Al-powered CX in 2025

## Industry predictions

#### Retail



We expect retailers will expand their gen AI experiments to create more personalized interactions and omnichannel support, such as personal AI stylists, visual representations of the suggested looks, and using gen AI to generate images or videos."



Paul Tepfenhart, Director, Global Retail Strategy & Solutions, Google Cloud

#### Manufacturing



We anticipate a shift from the traditional stock-and-sell sales model to a complex make-to-order sales model. To fuel this shift, manufacturers need to have a robust, real-time view of their operations, unify their IT and OT data, and optimize product design, production, marketing, and customer service."



**Praveen Rao**, Global Director, Head of Manufacturing Industry, Google Cloud

#### Telecommunications



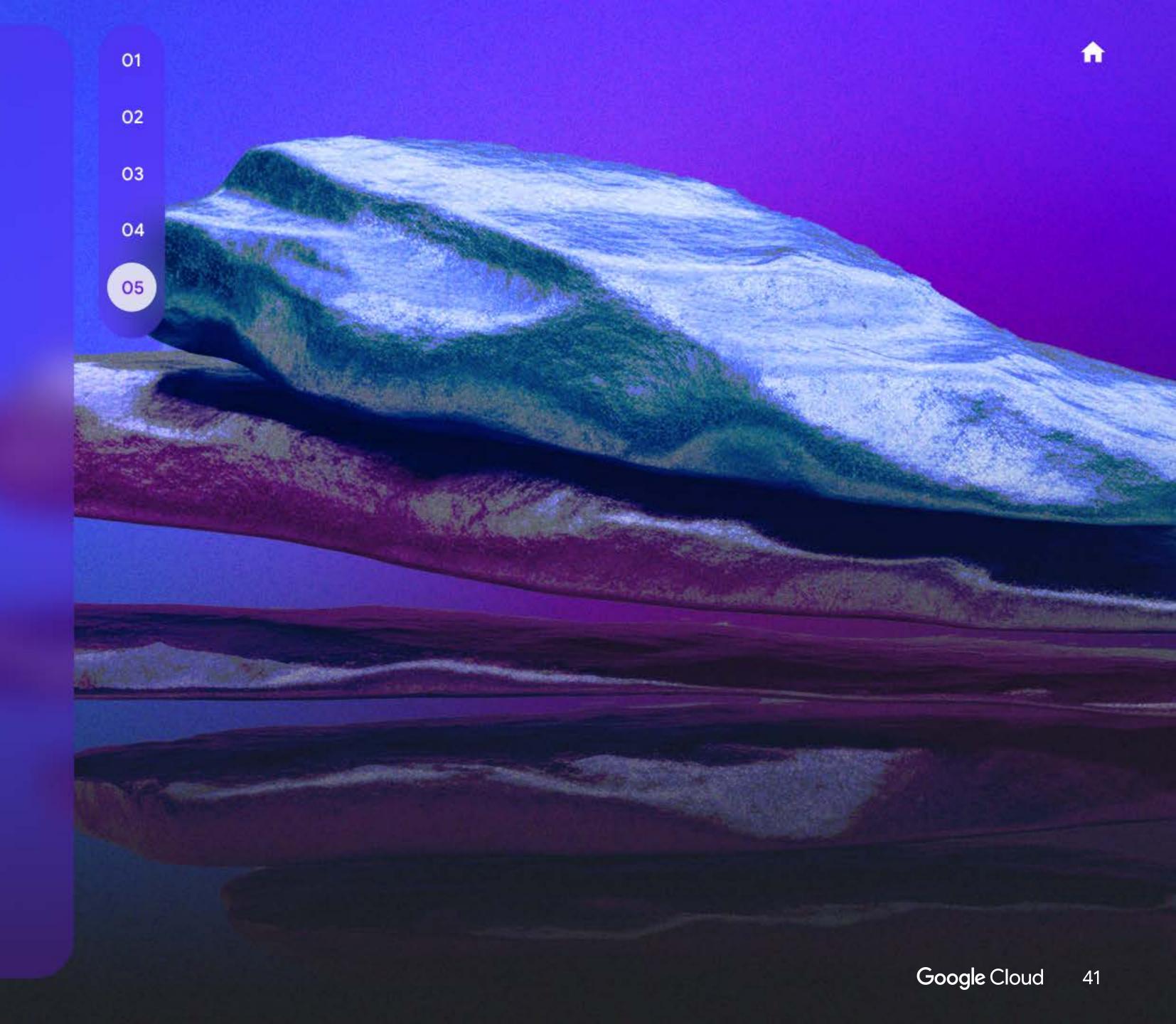
We expect that gen AI will continue to drive more personalized journeys for each unique customer regardless of the channel of engagement. For example, an SMB looking to launch a new branch office could utilize a product and service recommendation agent to define a service bundle for all their connectivity, communication, and point of sale needs."



Matt Anderson, Head of Telecoms Industry, Google Cloud Trend 05

# Security gets tighter—and tougher—with Al

3 minute read





## 2025 is set to be a revolutionary year for Al's adoption into security and privacy best practices.

Al has the potential to become a powerful tool in every security professional's toolkit—helping to bolster security defenses, identify and combat threats, relieve manual work, and speed up responses. No wonder so many organizations are exploring ways to use it. For example, demand for security solutions that fight disinformation is expected to take off this year—with <u>Gartner</u> predicting that by 2028, 50% of enterprises will adopt products, services, or features specifically to address disinformation security use cases, up from less than 5% in 2024.<sup>20</sup>

#### Send this to your technical teams

Take a deeper dive into what Google Cloud Security experts expect with our 2025 Cybersecurity Forecast report. Organizations can't afford complacency in the security space. Failing to secure against emerging threats is more costly than ever before—with the global average cost of a data breach in 2024 increasing 10% over the previous year to reach USD \$4.88 million.<sup>21</sup> Add to this the fact that attackers are using Al to increase the volume and impact of attacks, and it's clear organizations urgently need to put Al-powered security tools to work.

Get Mandiant's special M-Trends report on the <u>latest Al-powered threat intelligence</u> <u>insights</u>.

#### Ready to get started?

Learn how to deploy a security software agent.

## Al is used in novel ways to bolster security

The top use cases for Al in security include:22

21% Rule creation

19% Attack simulation

Compliance violation detection

#### And it's paying off

\$2.2m

19%

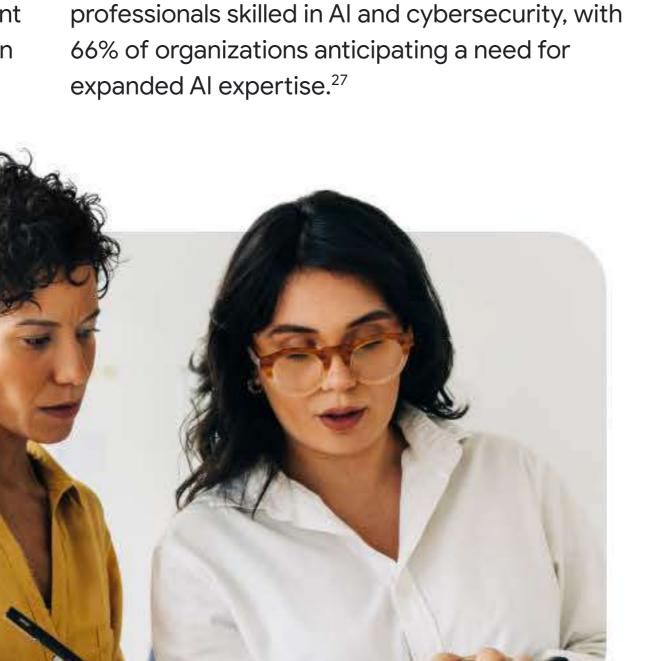
Average reduction in breach costs when organizations apply security Al and automation<sup>23</sup>

#### 1

## The battle between defense and attackers is heating up

Integrating AI into cybersecurity is not without challenges. The biggest one? The predicted 'arms race' between defense mechanisms and AI-driven threats, as adversaries use AI for more sophisticated attacks, including automated phishing and vulnerability exploitation.<sup>24</sup> There has also been an increase in the number of attacks targeting edge devices and platforms that traditionally lack endpoint detection and response solutions, and an increase in 'living off the land' attacks, where adversaries use legitimate processes and protocols to carry out malicious actions.<sup>25</sup>

Another challenge is resourcing. According to <u>CSA and Google Cloud's research</u>, more than a third (33%) of IT and security professionals point to a skills gap and shortage of knowledgeable staff as a challenge to implementing Al in security. Research by <u>SANS Institute</u> found that organizations are increasingly seeking professionals skilled in Al and cybersecurity, with 66% of organizations anticipating a need for expanded Al expertise. 27





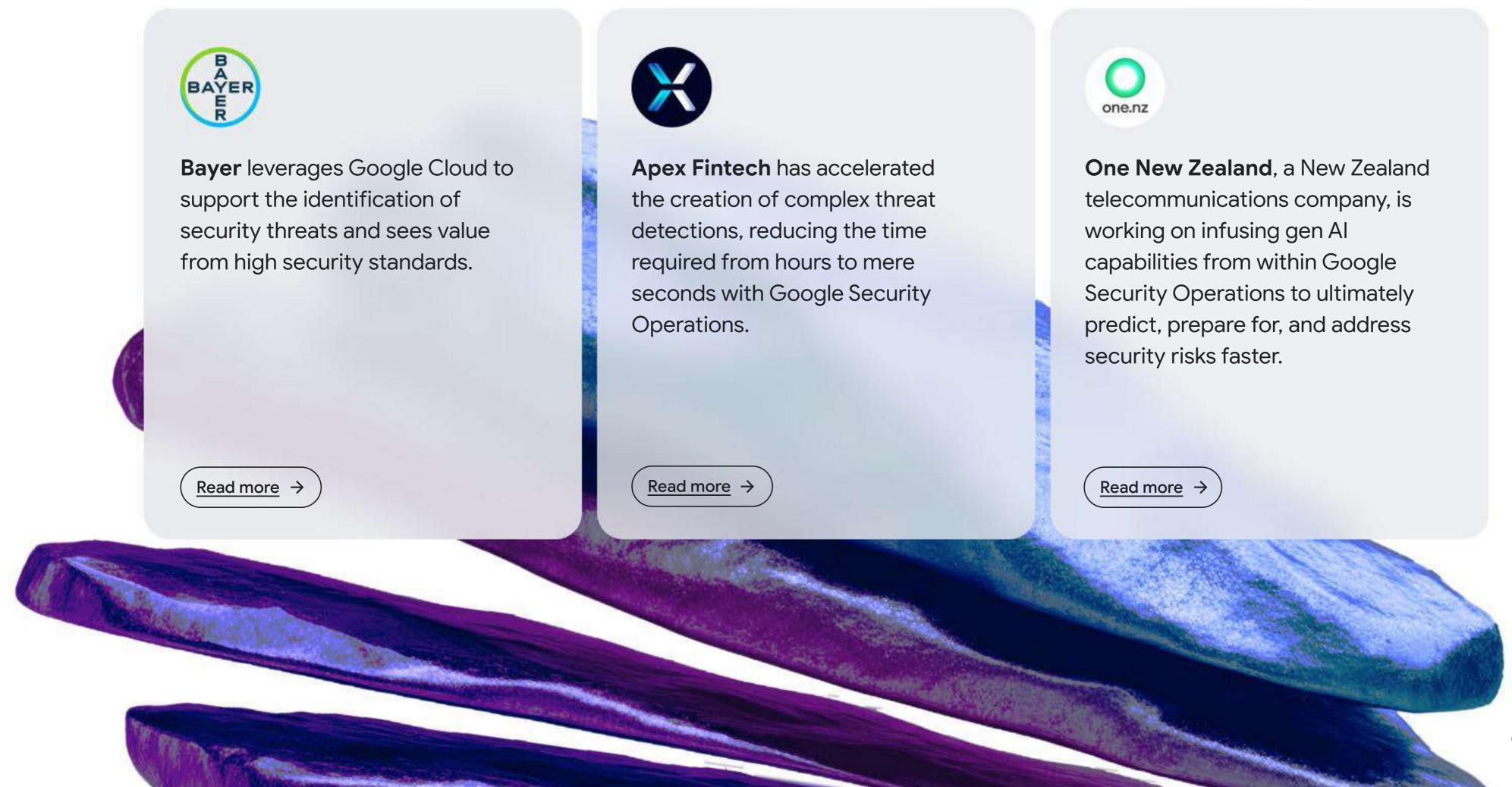
Palo Alto Networks is using Gemini to create a grounded Al assistant for 24/7 security platform support in order to improve agent efficiency and response time. Grounding the assistant in organizational data and security protocols has greatly improved the accuracy of responses.



**Deloitte** helps a number of their companies to search, gather, and understand cybersecurity threat information much faster with Google Threat Intelligence.

#### 1

#### Companies tighten security using Al tools



#### Al-enabled security in 2025

## Industry predictions

#### Financial services



We'll see banks focusing on Alpowered KYC systems with more robust capabilities to detect counterfeit documents and analyze photos for signs of manipulation, such as subtle inconsistencies in movements or lighting."



Zac Maufe, Managing Director, Regulated Industries, Google Cloud

#### Manufacturing



We expect manufacturers to employ Alpowered systems to verify data integrity and detect prompt injection risks, ensuring the authenticity and reliability of data used in training Al-powered robots and machinery. This will involve robust data provenance tracking and anomaly detection to identify inconsistencies and potential risks."



Praveen Rao, Global Director, Head of lanufacturing Industry, Google Cloud

#### Media and entertainment



Synthetic media offers creative possibilities, from reviving iconic figures to creating personalized interactive experiences with celebrities. However, deepfakes have the potential to spread misinformation, violate copyrights, and erode trust in content authenticity. Media and entertainment companies will elevate the responsible use of Al and the tools and models that support it—as a critical industry movement."



Albert Lai, Global Director, Media & Entertainment, Google Cloud

## Conclusion

We've seen how multimodal AI is making interactions more intuitive and natural, paving the way for even richer and more human-like communication experiences.

Al agents are streamlining workflows and boosting productivity, promising a future where human-machine collaboration reaches new heights of efficiency. Al-powered search is revolutionizing knowledge discovery, transforming how we access and interact with information in the enterprise. Al-driven customer experiences are becoming more personalized and seamless, offering a future where businesses can anticipate and cater to individual needs with exceptional accuracy.

And Al security solutions are fortifying defenses against increasingly sophisticated threats, ensuring a safer and more resilient digital landscape for organizations worldwide.

In our fast-evolving era, organizations are using Al to go from concept to impact. By fusing cutting-edge Al with powerful infrastructure, developer tools, data, security, and collaboration solutions, businesses can solve problems in bold and creative ways and reimagine solutions to achieve the previously impossible.

This is the future of Al, and it's closer than you think.



# See what these trends mean for your business.

Contact us

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