

Date: July 23, 2025

Operator

Welcome, everyone. Thank you for standing by for the Alphabet Second Quarter 2025 Earnings Conference Call. [Operator Instructions] I would now like to hand the conference over to your speaker today, Jim Friedland, Head of Investor Relations. Please go ahead.

James Friedland

Thank you. Good afternoon, everyone, and welcome to Alphabet's Second Quarter 2025 Earnings Conference Call. With us today are Sundar Pichai, Philipp Schindler, and Anat Ashkenazi. Now I'll quickly cover the safe harbor. Some of the statements that we make today regarding our business, operations and financial performance may be considered forward-looking. Such statements are based on current expectations and assumptions that are subject to a number of risks and uncertainties. Actual results could differ materially. Please refer to our Forms 10-K and 10-Q, including the risk factors. We undertake no obligation to update any forward-looking statement. During this call, we will present both GAAP and non-GAAP financial measures. A reconciliation of non-GAAP to GAAP measures is included in today's earnings press release, which is distributed and available to the public through our Investor Relations website located at abc.xyz/investor. Our comments will be on year-over-year comparisons unless we state otherwise. And now I'll turn the call over to Sundar.

Sundar Pichai

Thanks, Jim. Good afternoon, everyone. Q2 was a standout quarter for us with robust growth across the company. As you saw at IO, we are leading at the frontier of AI and shipping at an incredible pace. AI is positively impacting every part of the business, driving strong momentum. This quarter, Search delivered double-digit revenue growth. Our new Search features continue to perform well. AI Mode has launched in the U.S. and India and is going well, while AI Overviews now has over 2 billion monthly users across more than 200 countries and territories and 40 languages. I'll give some more details on Search in a moment. We continue to see strong performance in YouTube as well as subscriptions, reflecting great momentum across these high-growth businesses. In the U.S., shorts now earn as much revenue per watch hour as traditional in-stream on YouTube. And in some countries, it now even exceeds in-stream's rate. Cloud had another great quarter of strong growth in revenues, backlog and profitability. Its annual revenue run rate is now more than \$50 billion. We are seeing significant demand for our comprehensive AI product portfolio. Of course, this is all possible because of the long-term investments we have made in our differentiated full stack approach to AI. This spans AI infrastructure, world-class research, models and tooling and our products and platforms that brings AI to people all over the world. I'll briefly touch on the AI stack before turning to quarterly highlights. First, AI infrastructure. We operate the leading global network of AI-optimized data centers and cloud regions. We also offer the industry's widest range of TPUs and GPUs along with storage and software built on top. That's why nearly all GenAI unicorns use Google Cloud. And that's why a growing number, including leading AI research labs like Safe Superintelligence and Physical Intelligence use TPU specifically. Our AI infrastructure investments are crucial to meeting the growth in demand from cloud customers. Next, world-class AI research, including models and tooling. We continue to expand our Gemini 2.5 family of hybrid reasoning models, which provide industry-leading performance in nearly every major benchmark. In addition to improving our popular workhorse model Flash, we debuted an extremely fast flashlight version. We achieved gold medal level performance in the International Math Olympiad using an advanced version of Gemini with DeepThinking. We can't wait to bring DeepThinking to users soon. We have some of the best models available today at every price point. Our 2.5 models have been a catalyst for growth and 9 million developers have now built with Gemini. I also want to mention Veo 3, our state-of-the-art video generation model. It's been a viral hit with people sharing clips created in the Gemini app and with our new AI filmmaking tool Flow. Since May, over 70 million videos have been generated using Veo 3. And we recently introduced a feature in the Gemini app to turn photos into videos, which people absolutely love. It's also rolling out to Google Photos users starting today. Third, our products and platforms. We are bringing AI to all our users and partners through surfaces like Workspace, Chrome and more. The growth in usage has been incredible. At IO in May, we announced that we processed 480 trillion monthly tokens across our surfaces. Since then, we have doubled that number, now processing over 980 trillion monthly tokens, a remarkable increase. The Gemini app now has more than 450 million monthly active users, and we continue to see strong growth in engagement with daily requests growing over 50% from Q1. In June alone, over 50 million people used AI-powered meeting notes in Google Meet. And powered by Veo 3, our new short video product in Workspace called Google Vids reached nearly 1 million monthly active users. This month at Samsung Galaxy Unpacked, we announced new Android and AI features that are available on Samsung's latest devices. And we are really pleased with the growth in subscriptions, which got a boost from our Google AI Pro and Ultra plans. Now some key highlights from Search, Cloud, YouTube and Waymo for the quarter. First up, this is an incredibly exciting moment for Search. We see AI powering an expansion in how people are searching for and accessing information, unlocking completely new kinds of questions you can ask Google. Overall queries and commercial queries on Search continue to grow year-over-year. And our new AI experiences significantly contributed to this increase in usage. We are also seeing that our AI features cause users to search more as they learn that search can meet more of their needs. That's especially true for younger users. Let me go deeper on our new search experiences. We know how popular AI Overviews are because they are now driving over 10% more queries globally for the types of queries that show them, and this growth continues to increase over time. AI Overviews are now powered by Gemini 2.5, delivering the fastest AI responses in the industry. We also saw strong growth in the use of multimodal search, particularly the combination of lens or Circle to Search together with AI overviews. This growth was most pronounced among younger users. Our new end-to-end AI search experience, AI Mode continues to receive very positive feedback, particularly for longer and more complex questions. It's still rolling out, but already has over 100 million monthly active users in the U.S. and India. We plan to keep enhancing the AI Mode experience for users by shipping great features fast. That includes our advanced research tool Deep Search and more personalized responses. Next, Google Cloud. We see strong customer demand, driven by our product differentiation and our comprehensive AI product portfolio. Four stats show this. One, the number of deals over \$250 million, doubling year-over-year; two, in the first half of 2025, we signed the same number of deals over \$1 billion that we did in all of 2024. Three, the number of new GCP customers increased by nearly 28% quarter-over-quarter; four, more than 85,000 enterprises, including LVMH, Salesforce and Singapore's DBS Bank now build with Gemini, driving a 35x growth in Gemini usage year-over-year. Our models have served on our AI infrastructure, which offers industry-leading performance and cost efficiency for both training and inference. Along with our AI accelerators, we introduced new innovations in storage, including Anywhere Cache, which improves inference latency by up to 70% and rapid storage, which delivers a 5x improvement in latency compared to leading hyperscalers. In addition, we have optimized AI software packages, including PyTorch and JAX with full open source supports for various AI training and serving demands. We've also integrated AI agents deeply into each of our cloud products. Wayfair is leveraging our databases integrated with AI to streamline data pipelines and deliver more personalized customer experiences. Vantel is leveraging our Gemini-powered data agents and BigQuery to review and act on product feedback more quickly. Target is using our Gemini-powered threat intelligence and security operations agents to improve cybersecurity. Capgemini is utilizing our AI software engineering agents to deliver higher-quality software faster by automating tasks from code generation to testing. And BBVA says Gemini and Google Workspace is saving employees nearly 3 hours per week by automating repetitive tasks. It's now rolling

it out to 100,000 employees globally. We are also focused on building a flourishing AI agent ecosystem. We introduced an open source agent development kit, which now has over 1 million downloads in less than 4 months. We also introduced Agentspace, an open and interoperable enterprise chat search and agent platform. Gordon Food Service is bringing Agentspace to its U.S. employees, which is enabling better, more efficient decision-making. And over 1 million subscriptions have been booked for Agentspace ahead of its general availability. Turning now to YouTube. Nielsen data shows YouTube has led U.S. streaming watch time for over 2 years. A generation that grew up with YouTube on their devices is now increasingly watching their favorite creators and content on their televisions. That includes billions of sports fans, too. Globally, they consume more than 40 billion hours of sports content on YouTube annually. And in September, we'll stream the NFL's first Friday game of the season, live from Brazil. From sports to shorts, we now average over 200 billion daily views on YouTube Shorts. AI is helping improve our recommendations and auto dubbing, which translates to better returns for creators and brands by dramatically increasing the potential audiences they can reach. And today, we began rolling out a whole draft of new AI tools for creators on YouTube Shorts. Finally, YouTube continues to diversify its subscription options, recently expanding its premium light offerings to 15 new countries with more to come. And lastly, Waymo continues to scale and expand to safely serve more riders in more places. Last month, Waymo launched in Atlanta, more than doubled its Austin service territory and expanded its Los Angeles and San Francisco Bay Area territories by approximately 50%. Waymo also launched teen accounts, starting with riders aged 14 to 17 in Phoenix. Overall, great momentum here. The Waymo driver has now autonomously driven over 100 million miles on public roads. And the team is testing across more than 10 cities this year, including New York and Philadelphia. We hope to serve riders in all 10 in the future. As I said, a standout quarter. A big thank you, as always, to our employees and partners for an amazing Q2. Philipp, over to you.

Philipp Schindler

Thanks, Sundar, and hello, everyone. I'll quickly cover performance for Google Services for the quarter, then structure the rest of my remarks around the great progress we're delivering across search, ads, YouTube and partnerships. Google Services revenues were \$83 billion for the quarter, up 12% year-on-year, driven by strong growth in Search and YouTube, partially offset by year-on-year decline in network revenues. To add some further color to our results. The 12% increase in Search and other revenues was led by growth across all verticals with the largest contributions from retail and financial services. YouTube saw similar performance across verticals. It's 13% growth in advertising revenues was driven by direct response followed by brand. Starting with search and other revenues, which delivered over \$54 billion in revenue for the quarter. Shifts like AI are what propels our industry forward. Gemini's native multimodality is helping bring the offline audio and visual world back into the online world, creating a number of opportunities for Search. Let me share a few examples. Take visual queries. Google Lens search is one of the fastest-growing query types on Search and grew 70% since this time last year. Majority of lens searches are incremental, and we're seeing healthy growth for shopping queries using lens. And you can obviously take this to the next level by moving from image to video-based capabilities like Search Live. And then there's Circle to Search, which is now in over 300 million Android devices. We've been adding capabilities to help people explore complex topics and ask follow-up questions without switching apps. For example, gamers can now use Circle to Search while playing mobile games to see an AI overview or answers. And just last week, we brought in new agentic capability directly into search for all U.S. users with AI-powered calling to local businesses. Finally, shopping, where in Q2, we introduced a virtual trial experience for search labs users in the U.S. Now people can try billions of clothing products on themselves virtually. Early results and engagement have been extremely positive, particularly with Gen Z users and we'll be bringing this functionality to all U.S. users imminently. All these innovations are opening up completely new ways for people to use technology, bringing the off-line world into the online world in ways that simply have not been possible before. Add in our amazing AI translation capabilities and just imagine the possibilities. People can access more content in the language and businesses, large and small, international or local can reach even more customers. I'm excited about how all of these elements will come together and the opportunities ahead of us in Search. Moving to ads where our strategy to reinvent the entire marketing process with AI is delivering value for our customers and our business. Last quarter, we introduced AI Max and Search, a new suite of AI-powered features in existing search campaigns. Advertisers that activate AI Max and Search campaigns typically see 14% more conversions. On media buying, Smart Bidding Exploration, the biggest update to bidding strategy in a decade brings better performance to advertisers by allowing them to bid on a less obvious but potentially higher value queries more often. Campaigns using Smart Bidding Exploration, see a 19% increase in conversions on average. Demand gen continues to drive revenue growth and deliver measurable impact for our customers. As an example, Depop, Etsy's resell clothing marketplace used a short only demand gen campaign to drive new customers to the site. Short drove 80% buyer brand load and double click-through rates versus benchmarks. On creatives, we launched Asset Studio using our latest models to help businesses, large and small, generate creative assets. Small businesses benefit from top quality assets and deployment scaling capabilities, but larger businesses can go faster from proof of concept to launch and resize at lower cost. Over 2 million advertisers now use Google's AI powered asset generation tools to run ads, a 50% increase on this time last year. Turning to YouTube, where we saw continued strong revenue growth driven by direct response followed by brand. YouTube creators are connected to the global site guys and trusted by their audiences like no others. As part of Brand Connect, we launched Creator partnership hub, which allows brands to more easily work with the right creators and tap into cultural moments. We introduced Veo 3, photo to video and generative effects to shorts, making content creation easier and offering unexplored avenues for creativity. We're seeing both the volume and the price of ads and shorts increase, particularly in developed markets. The feed-based nature of the product allows for more ad opportunities on average, and this growth is further supported by ad formats native to shorts, AI-powered ad creative resizing tools, improved ad targeting and the rise in viewer engagement. McDonald's U.S.A. harnessed the influence of YouTube creators to ignite awareness for the Minecraft movie meal. It leveraged YouTube Shorts partnership adds to increase its reach, generating a 3.3x higher view through rate than the industry benchmark. Finally, on CTV where the momentum continues. According to the gauge report by Nielsen, YouTube has been #1 in streaming watch time in the U.S. for more than 2 years, hitting a record high of 12.8% of total TV viewing in June 2025. In the past 12 months, YouTube ads viewed on CTV screens drove over 1 billion conversions. We saw strong growth in retail thanks to CTV shopping ads, which allows viewers to shop directly via QR codes, helping us leverage direct marketing opportunities. As always, I'll wrap up with the momentum we're seeing in partnerships, where our customers increasingly recognize the strength and breadth of Google's ability to help them transform their business with AI. For instance, a new partnership with PayPal will improve the digital commerce experience for their merchants and customers. PayPal will expand its Google Cloud adoption for AI-driven recommendations, transaction processing and enhanced security. The partnership also broadens the availability and functionality of PayPal's payment services and capabilities across a range of Google products. In closing, I'd like to thank Googlers everywhere for their contributions and commitment to our success and to our customers and partners for their continued trust. Anat, over to you.

Anat Ashkenazi

Thank you, Philipp. My comments will focus on year-over-year comparisons for the second quarter unless I state otherwise. I will start with the results at the Alphabet level and will then cover our segment results. I'll end with some commentary on our outlook for the second half of 2025. We had another solid quarter in Q2. Consolidated revenue of \$96.4 billion increased by 14% or 13% in constant currency. Search and YouTube advertising, subscription platforms and devices and Google Cloud each had double-digit revenue growth this quarter reflecting strong momentum across the business. Total cost of revenue was \$39 billion, up 10%. Tech was \$14.7 billion, up 10%; and other cost of revenue was \$24.3 billion, up 10%, with the increase primarily driven by content acquisition costs, largely for YouTube, followed by depreciation. Total operating expenses increased 20% to \$26.1 billion. The biggest driver of growth was expense for legal and other matters, which reflected the impact of \$1.4 billion charge related to a settlement in principle of certain legal matters. R&D investments increased by 16%, primarily

driven by increases in compensation and depreciation expenses. Sales and marketing expenses increased 5%, primarily reflecting an increase in advertising and promotional expenses. Operating income increased 14% this quarter to \$31.3 billion and operating margin was 32.4%. Operating margin benefited from strong revenue growth and continued efficiencies in our expense base, partially offset by the legal charge I mentioned earlier, and a significant increase in depreciation expense. Net income increased 19% to \$28.2 billion, and earnings per share increased 22% to \$2.31. We generated free cash flow of \$5.3 billion in the second quarter and \$66.7 billion for the trailing 12 months. Free cash flow in the second quarter was affected by a sizable sequential increase in CapEx and cash tax payments as we make federal tax payments in the second quarter for both Q1 and Q2. We ended the quarter with \$95 billion in cash and marketable securities. Turning to segment results. Google Services revenues increased 12% to \$82.5 billion reflecting strength in Google Search and YouTube advertising and subscriptions. Google Search and other revenues increased by 12% to \$54.2 billion. Search and other revenues delivered growth across all verticals with the largest contributions coming from retail and financial services. YouTube advertising revenues increased 13% to \$9.8 billion, driven by direct response advertising, followed by brand. Network advertising revenue of \$7.4 billion were down 1%. Subscription platforms and devices revenues increased 20% to \$11.2 billion, primarily reflecting growth in subscription revenues. This growth was driven by YouTube subscription offerings followed by Google One, with the growth in paid subscriptions being the biggest driver of revenue growth. Google Services operating income increased 11% to \$33.1 billion. Operating margin was flat year-on-year at 40.1% as healthy revenue growth and continued efficiency in our expense base were partially offset by the legal charge I mentioned earlier. Turning to the Google Cloud segment, which delivered very strong results this quarter. Revenues increased by 32% to \$13.6 billion in the second quarter, reflecting growth in GCP across core and AI products at the rate that was much higher than cloud's overall revenue growth and growth in Google Workspace, driven by an increase in average revenue per seat and the number of seats. Google Cloud operating income increased to \$2.8 billion, and operating margin increased from 11.3% to 20.7%. The expansion in cloud operating margin was driven by strong revenue performance and continued efficiencies in our expense base partially offset by higher technical infrastructure usage costs, which includes the associated depreciation. As we ramp our AI investments, we continue to focus on driving improvements in productivity and efficiency to offset growth in technical infrastructure-related expenses, particularly from higher depreciation. Google Cloud backlog increased 18% sequentially in Q2 and 38% year-over-year, reaching \$106 billion at the end of the quarter. This growth was driven by strong demand for our products and services from both new and existing customers. As Sundar mentioned, we have signed multiple billion dollar plus deals in the first half of the year. As to our Other Bets in the second quarter, revenue were \$373 million, and operating loss was \$1.2 billion. Within Other Bets, we're allocating more resources to businesses like Waymo, where we see opportunities to create additional value. With respect to CapEx in the second quarter, our CapEx was \$22.4 billion. The vast majority of our CapEx was invested in technical infrastructure with approximately 2/3 of investments in servers and 1/3 in data centers and networking equipment. In Q2, we returned capital to shareholders through repurchase of stock of \$13.6 billion and dividend payments of \$2.5 billion. Turning to our outlook. I would like to provide some commentary on several factors that will impact our business performance in the second half of 2025 as well as an updated outlook for full year CapEx. First, in terms of revenues, we're pleased with the overall momentum we're seeing across the business. At current spot rates, we could see a tailwind to our revenue in Q3. However, volatility in exchange rates could affect the impact of FX on Q3 revenue. As for our segments in Google Services, advertising revenues in the second half of 2025 will be affected by the following: The continued lapping of the strength we experienced in financial service verticals throughout 2024 and year-over-year comparisons will be negatively impacted by the strong spend on U.S. Election in the second half of 2024 and particularly on YouTube. In Cloud, as I mentioned, the demand for our products is high as evidenced by the continued revenue growth and the cloud backlog of \$106 billion. While we have been working hard to increase capacity and have improved the pace of server deployment, we expect to remain in a tight demand supply environment going into 2026. Moving to investments. Given the strong demand for our cloud products and services, we now expect to invest approximately \$85 billion in CapEx in 2025, up from a previous estimate of \$75 billion. Our updated outlook reflects additional investment in servers, the timing of delivery of servers and an acceleration in the pace of data center construction, primarily to meet cloud customer demand. Looking out to 2026, we expect a further increase in CapEx due to the demand we're seeing from customers as well as growth opportunities across the company. We will provide more details on the 2026 CapEx outlook on a future earnings call. In terms of expenses, first, as I mentioned in our previous earnings call, the significant increase in our investments in CapEx over the past few years will continue to put pressure on the P&L, primarily in the form of higher depreciation. In the second quarter, depreciation increased \$1.3 billion year-over-year to \$5 billion, reflecting a growth rate of 35%. Given the recent increase in CapEx investments, we expect the growth rate and depreciation to accelerate further in Q3. Second, as we've previously said, we expect some headcount growth in 2025 in key investment areas. In the third quarter, we expect a sequential increase in total headcount additions due in part to the hiring of new graduates. And third, Q3 will reflect the expense associated with the upcoming August launch of the new Pixel family of products. In conclusion, as you heard from Sundar and Philipp, we're pleased with the momentum in the business and excited about the pace of innovation. Our full stack approach, which combines AI infrastructure, AI research and AI products and platforms position us well to deliver new products and services across the company. We're seeing great momentum with our efforts as demonstrated by the increase in cumulative token processed. Search revenues are seeing healthy growth with features like AI Overviews, AI Mode and Lens, offering new ways for users to access the information. Cloud has reached an annual revenue run rate of more than \$50 billion and is delivering margin expansion while continue to invest to meet customer demand. And YouTube has expanded its addressable market by building new services like shorts which now averages over 200 billion daily views. We're excited to see the value our products and services are bringing to customers and partners around the globe. Now I'll turn it over to the operator, and Sundar and Philipp and I will take your questions.

Operator

[Operator Instructions] Your first question comes from Eric Sheridan with Goldman Sachs.

Eric James Sheridan

Maybe one for Sundar and one for Philipp. Sundar, when you think about the journey you're on with respect to the evolution of products and platforms. How do you think about some of the implications of changed consumer behavior and how investors should think about that from the volume perspective versus the monetization perspective. So I think there's a lot of long-standing dynamics out there about clicks and click monetization that might be very different when you look out over the next 3 to 5 years. And Philipp, when you think about the evolution of YouTube, you made a number of comments there about subscription revenue. I'm just curious how you think about the mix of advertising versus subscription? And what some of your key learnings might have been as the subscription side of the business continues to scale?

Sundar Pichai

Thanks, Eric. I appreciate the question. I don't think looking ahead, based on everything we are seeing, it's -- people are excited about AI. They are adopting it well across our products. For me just in multimodality how people have modified their behavior to include images, both through Lens and Circle to Search seamlessly as part of interacting with Google are early indications that people are going to be adopting through these moments very, very well. I think I'm trying to understand your question in terms of about clicks and click monetization, maybe that's something Philipp can touch on. But overall, we expect as we build out our organic experiences. We have a good understanding of how to continue training on monetization, so that will work well with organic experiences. And -- but we

will lead with the organic experience. So in terms of newer surfaces like Gemini app, et cetera, we'll focus on the organic experience for the near term. But just like we are doing with AI Overviews and with AI Mode over time, we'll be able to bring very, very good commercial experiences there as well. And we think people will adapt to them as they've always done. Maybe Philipp can add more. Philipp?

Philipp Schindler

Yes. So on your question on YouTube subscriptions versus ads, look, I mean we love our ads business. We love our subscription business. YouTube subscriptions are increasingly important for YouTube. We'll definitely continue our long-term focus here. We had a strong growth across the YouTube subscription products, which includes, just to be clear, YouTube TV, YouTube Music and Premium. And I think one common theme for our subscription services in general is offering viewers more choice here. We also have a very deep understanding of the monetization side here. Where are we monetizing more with ads, where can we potentially monetize more with subscriptions. So I think we will continue this as a double tier strategy actively going forward.

Operator

Our next question comes from Doug Anmuth with JPMorgan.

Douglas Till Anmuth

One for Sundar and one for Philipp. Sundar, can you just talk about how you're thinking about your current access to compute even as you spend \$10 billion more this year in CapEx, you also said that you're still in a tight supply environment. So just trying to marry those? And then Philipp, perhaps on search growth, can you talk a little bit about Payclick and pricing growth just within the 12% search growth? And how we should think about volume versus monetization trends going forward?

Sundar Pichai

Doug, on the CapEx stuff, obviously, we are seeing strong momentum across our portfolio and especially in cloud. You are right. It's a tight supply environment. And we are investing more to expand, but there is obviously a time delay between this additional investment will play out in future years. And so that's why both of them are true at the same time. And -- but we are planning ahead, and we are investing and -- but overall, it's exciting to see the traction, particularly in cloud. I think the comprehensiveness of our AI portfolio breadth of our offerings, both providing our models on GPUs and TPUs for our customers. All of that has been really driving demand. And so we are investing to match up to it.

Philipp Schindler

And on your paid click question, look, to be very clear, I think we said this before, we manage the business to drive great outcomes for our users and an attractive ROI for our advertisers. We actually don't manage to pay clicks and CPC targets. Some of the product and policy changes we make actually drive better monetization at the expense of paid clicks. You will actually see in the 10-Q, pay clicks were up 4% year-on-year. But a number of factors affect these metrics from quarter-to-quarter, such as a few examples, advertiser spending, product changes, policy changes, user engagement and so on. So it's really important when it comes to pay clicks and CPCs to avoid drawing like overly broad conclusions solely based on these metrics.

Operator

Our next question comes from Brian Nowak with Morgan Stanley.

Brian Thomas Nowak

I have two. First one, Sundar, there's a lot of discussion about agentic search for commercial activities and agents that can be broadly deployed. Maybe could you just -- from a technology perspective, when you sit down with the engineering teams working on some of these new agentic capabilities that could come, what are some of the predominant technological hurdles they think need to be cleared in order to launch scalable agents for commercial queries, is the first one. And second one, I think in the past, you've updated us on stats on sources of internal efficiency you've seen from GenAI-enabled capabilities. Any updates there? And then any sort of learnings on friction points that also need to be overcome for some of these internal tools for GenAI?

Sundar Pichai

Let me start with the first one on agentic capabilities. Look, overall, we are definitely, in many ways when we built 2.5 -- our series of 2.5 models, particularly with Pro, et cetera. It's the direction where we are investing the most. There's definitely exciting progress, including in the models we haven't fully released yet. And the main gaps we're all trying to do is you're obviously chaining a sequence of events. And so being able to do it reliably the latency compounds, the cost compounds and being able to do it reliably in a way for the users all of this comes together. In each of this, we are making progress, and it all needs to kind of hang together. The good news is we are making robust progress. We think we are at the frontier there. And in all of these areas, when you look back on a 12-month basis, you end up making the models much more efficient for any given capability. So the forward-looking trajectory, I think, will really unlock these agentic experiences. We see the potential being able to do them, but they're a bit slow and costly and takes time, and sometimes are brittle, right? But they're making progress on all of that. And I think that's what will really unlock. And I expect 2026 to be the year in which people kind of use agentic experiences more broadly, right? And so it's an exciting opportunity ahead. On the second part, I think, when you say a source of generalization, I presume you're talking about how we are using all of this internally. Again, given you've asked a question about agents, we are now beginning to roll out agentic coding journeys for our software engineers within the company. And it's been exciting to see just over the last few months, particularly over the last few weeks, people are definitely doing more agentic workflows and software engineering as well internally. And that's a good example of the kind of the same experiences a few months ago, had a lot of friction points, but we are overcoming it and people are beginning to use internally on the coding side as well as in certain other areas of the company as well. So exciting progress. I expect it to be an active area where we will roll out journeys for our users as well. So look forward to it.

Operator

Our next question comes from Michael Nathanson with MoffettNathanson.

Michael Brian Nathanson

Sundar, I have two for you. At IO, you announced a partnership to Warby Parker to develop glasses. So I wonder if you show your view of how important a cycle of new devices will be to further scale AI and do you envision a world in which the more functional are essential to our consumer experience. That's one. And secondly, how does Google Search with AI Mode usage different -- differs, sorry, versus Gemini stand-alone apps. So I'm wondering, are you seeing any differences in usage or the types of consumers who go to the app versus who go to traditional search with AI?

Sundar Pichai

On the first thing, look, I think any time IO changes, you can drive new experiences, including on hardware experiences too. So I think AI will particularly enable. You long had the promise of glasses and other form factors. But I think AI will spur a whole new wave of innovation there. We are super excited about our investment in glasses and found the experiences have taken a dramatic step- up compared to the last iteration. So I think it's been an exciting new emerging category, but I still expect phones to be at the center of the experience for the next 2 to 3 years at least. And so I still think that's going to be phones, would continue to be at the center of the consumer experience. But we are excited about the emerging categories as well. On your second question on AI Mode versus Gemini stand-alone app, broadly, there are some use cases where you can get a great experience in both places, but there are use cases which are very specific. I think where the queries are information-oriented but people really want to rely on the information, but I have the full power of AI. I think AI mode really shines in that. You can go there, and you know it's backed up. The Gemini models are using search deeply as a tool. And so it's on grounded in that search experience. And I think users are responding very positively to it. And whereas the Gemini stand-alone app, you see everything from -- people can have a long conversation of chat just trying to pass time, right, in the Gemini app. You've seen early cases where people may get into it in a therapy like experience, right? So these are all emerging experiences of what people do. And I think this is why I'm glad we have both surfaces and we can innovate in both of these areas. And of course, there will be areas which will be commonly served by both applications. And over time, I think we can make experience more seamless for our users.

Operator

Our next question comes from Mark Shmulik with Bernstein.

Mark Elliott Shmulik

Sundar, it seems there's almost like a daily news report about the AI talent war and high-profile folks moving around which is kind of like your perspective on how you think Google has been doing it both kind of attracting and retaining key AI talent. And Anat, along the similar lines, how do we think about AI-related resourcing costs alongside kind of the step up in capital investments required to go build for AI?

Sundar Pichai

Mark, on the first question, look, I think, we've gone through these moments before. We've obviously always deeply invested in talent, including an AI talent for well over a decade now. And I think we have an extraordinary both breadth and depth of the talent. In my experience, the top people look for a combination of they want to really be at the frontier driving progress. And so the mission and how state-of-the-art, your workers matter. So that's super important to them, access to compute resources and access to your peers, right. Working with the best people in the industry, and it's a combination of all of that and using it to drive impact. And I think we are pretty competitive on all those fronts. And through this moment, we continue to -- I look at the -- both our retention metrics as well as the new talent coming in and both are healthy. I do know individual cases can make headlines, but when we look at numbers deeply, I think we are doing very well through this moment and we'll continue investing in the people and the talent and the compute needed to make sure we are set up for the opportunity ahead. And maybe I'll pass it on to Anat.

Anat Ashkenazi

Yes, on the question on how we integrate this into our overall cost structure. And I've mentioned before, having the benefit of having the full stack includes research, which is our people and one of our most critical resource. So we make sure that we invest appropriately to have the best and brightest minds in the industry sitting here at Google and advancing our innovation to customers. It is part of what you're seeing now in our operating expense line across the organization. But we're also working hard to offset not just growth in investment across the business. But also to ensure that we can allocate research appropriately. So Sundar mentioned earlier, the use of AI tools within the company. So that's another area where we can drive efficiency across the businesses to use these tools internally in terms of how we run the organization. Then we're continuing on the same efforts that I've talked about before with regards to running the company with a high level of discipline, execution and driving efficiency across the business.

Operator

Our next question comes from Ross Sandler with Barclays.

Ross Adam Sandler

Great. If I can ask two, that would be great. So the first one is on Search click-through rates as a driver of monetization. So you guys have done a great job over the past decade of driving better ad relevancy and higher click-through rates in Search. Just curious, as we look forward and we see lower ad impressions per SERP and all these things that are changing with AI overviews and different AI SERP formats. How do you feel about your ability to drive CTR going forward? And then the second question is, it looks like you're now working with OpenAI for some aspect of cloud infrastructure. Just curious how that relationship might expand in the future?

Philipp Schindler

I can make the first one. Look, specifically referring to AI Overviews, if I understood your question correctly, as Sundar mentioned it, they continue to drive higher satisfaction. They continue to drive higher search usage. They're scaling up very nicely and they're actually working for our entire user base now scaled to over 2 billion users in over 200 countries. So very happy with this development. But when it comes specifically to the monetization of it, we talked about it before. We see monetization at approximately the same rate, which gives us actually a really strong base on which we can then innovate and drive actually a more innovative and new and next-generation ad formats. That's how we look at it at this moment in time.

Sundar Pichai

On the second part, with respect to OpenAI, look, we are very excited to be partnering with them on Google Cloud. Google Cloud is an open platform, and we have a strong history of supporting great companies, startups, AI labs, et cetera. So super excited about our partnership there on the cloud side and we look forward to investing more in that relationship and growing in there.

Operator

Our next question comes from Mark Mahaney with Evercore.

Mark Stephen F. Mahaney

Okay. Two questions, please. First, could you just describe maybe Philipp, what you see in terms of the ad environment maybe for the back half of the year maybe versus last year? Does it seem as certain or as uncertain as it was last year, the results seemed pretty strong. Are there any unusual concerns you would have for the back half of the year? And then, Sundar, I want to ask you again about the 2 surfaces approach to Search. And you obviously got some -- you must have some internal metrics that would tell you that that's the optimal way for you to approach the market. But there's -- I'm sure there's a counterargument that just having that unified search and being able to discern the intent of the search, whether it's pure information or commercial, just from the query that, that could give you a material advantage over other offerings in the market. Just talk a little bit about what metrics you've seen that make it -- that make the two surface solutions seem to be optimal.

Philipp Schindler

So let me start. Look, we said our ad business performed strongly in Q2. Give you maybe some vertical color of it in Q2, Search and other performance was led by growth across all verticals. We mentioned the largest contributions from retail and financial services, which was primarily due actually to strength in insurance. We saw health care as a sizable contributor to growth as well. Look, we're only a few weeks into Q3. So I think it's really too early to comment on anything happened in the second half of the year.

Sundar Pichai

And Mark, second part of the question. Look, I think between these 2 surfaces, you're pretty much covering the entire breadth and depth of what humanity can possibly do. So I think the split for 2 surfaces to tackle at this moment. Obviously, you are right, Search is more information focused. And we think of the Gemini app as more your assistant, more personal, proactive and powerful assistant for every aspect of your daily life. And so you can imagine wanting to call deeply or create a long video, et cetera, like those things can be done by the Gemini app today better. Over time, like we've always done, we've gone through these evolutions before, like, as you point out, we can understand user intent better and abstract some of the complexity for our users. At one point, people used to go to -- query separately for text, differently from images, definitely from videos, et cetera, and we kind of made it all seamless with Universal Search. So we have the experience of being able to bring together experiences in a way that makes sense for users and do the heavy lifting for them. But I think when you're in this early stage of new emerging paradigms, I think we want to make sure we can meet them where they -- what they are expecting today. And over time, I think it will give us an opportunity to serve them better. So I think that's how we are thinking about it.

Operator

Our next question comes from Ken Gawrelski with Wells Fargo.

Kenneth James Gawrelski

Two, if I may, please. The first on Cloud, I'm just hoping maybe you could clarify your back half outlook. Given last quarter, you talked about some supply constraints that would ease towards the end of 2025, but yet you put up a really nice acceleration in 2Q. Now you're talking about some supply constraints easing into '26. If you could just clarify a little bit on the back half outlook for cloud given the strong results in 2Q? And then the second is a bigger picture question, which is, in agentic experience, does it democratize the web like Search did 2 decades ago, enabling discovery in the long tail? Or does it lead to more concentration with a smaller group of vertical winners? Would love if you could opine on that.

Anat Ashkenazi

Okay. On your first question on the cloud second half outlook and the comments I previously made on with regards to where we're going to see the capacity increase. So obviously, we're working hard to bring more capacity online, which means data centers and servers that are coming online. And we see more of an increase towards the back end of the year. But we're increasing capacity with every quarter that goes by, as you can see with the growth rates we've had both this quarter and the previous quarter. As Sundar mentioned earlier, this is not the type of investment that's a light switch. It takes time to make this investment. So what you're seeing now is investment we made some time ago, that's now translating to additional capacity coming online, but more of that towards the back end of the year. I will say, it's important as you think about cloud growth, not to think about this in a linear fashion, because the quarter-on-quarter growth rates could depend on the timing of capacity delivery and when that comes online, so that could move a little bit from quarter-to-quarter.

Sundar Pichai

On agentic experience. Look, I think there was an earlier question on the technology aspects of it and how we are making progress. Obviously, there is the value proposition for all the players involved. And I think that's going to be an equally important thing to create the unlock here. And I do think over time, users will it's clear to me as we make progress on the agentic experience, it's going to be a much better experience for users, right? And so you'll find savvier players leaning into these experiences, and that will help them grow and meet this moment. And I think -- so I do think it's an opportunity for some of the players. And so you are right, just like the early days of the web, there are aspects about it, which will expand access, grow the use cases, et cetera. And I think that elements are there. But I do think it's important. It's not just a technology play, but we have to solve the business models for varying players involved. So I think that's going to be an important part of this evolution as well.

Operator

And our last question comes from Justin Post with BAML.

Justin Post

A couple for Sundar. First, it looks like the subscription businesses are all tracking well. And certainly, Gemini 2.5 has got some much good reviews. How are you doing with Gemini subscriptions. I know it's a focus area for the company. And anything you can kind of do to accelerate the consumer subscriptions of Gemini within Google One. And then secondly, just on the course change of CapEx, obviously, a bigger increase, which appears to be because of cloud demand. But just your comments on cloud ROI and I'm sorry, CapEx ROI. What gives you confidence that you're going to get good returns on that spend?

Sundar Pichai

Great. On the first thing on subscriptions, we definitely -- Google One has been an attractive value proposition powered by storage. But with now our AI plans, including both Pro and Ultra and particularly with the 2.5 series of models, we have definitely seen accelerated traction. So it was a very healthy quarter. And so we are definitely excited about the opportunities ahead. And you will find through this moment, I think, we'll be able to drive growth in that area based on our AI offerings. And so it's definitely an area we are both excited by, and we are actually seeing traction, particularly in the last quarter ever since we introduced 2.5 Pro. So we are excited about the trajectory there. On the CapEx on the cloud side, look, I think, we are definitely investing because we are delivering a lot of value through our cloud offerings. And I think it's important to understand as we build more and more of an installed base with Google Cloud. We have very high customer satisfaction. Our churn rates are very low, and we are much more efficient in the investments needed to grow those lines of businesses. So you're seeing all that play out in our margin trajectory, particularly if you look at it annually sequentially over the past few years. And so all that gives us confidence as we are investing in this, we'll be able to have a healthy ROI on our investments. And particularly in this AI moment, there's definitely -- the value we are delivering to the customers is also growing pretty significantly on a forward-looking basis. And so I think all that will help us do well here.

Operator

And that concludes our question-and-answer session for today. I'd like to turn the conference back over to Jim Friedland for any for the remarks.

James Friedland

Thanks, everyone, for joining us today. We look forward to speaking with you again on our third quarter 2025 call. Thank you, and have a good evening.

Operator

Thank you, everyone. This concludes today's conference call. Thank you for participating. You may now disconnect.