

Alphabet Inc. (NASDAQ:GOOG) Q1 2023 Earnings Conference Call April 25, 2023 5:00 PM ET

### **Company Participants**

Jim Friedland - Director, Investor Relations

Sundar Pichai - Chief Executive Officer

Philipp Schindler - Chief Business Officer

Ruth Porat - Chief Financial Officer

### **Conference Call Participants**

Brian Nowak - Morgan Stanley

Doug Anmuth - JPMorgan

Eric Sheridan - Goldman Sachs

Ross Sandler - Barclays

Justin Post - BAML

Michael Nathanson - MoffettNathanson

Mark Mahaney - Evercore

Colin Sebastian - Baird

### **Operator**

Welcome, everyone. Thank you for standing by for the Alphabet First Quarter 2023 Earnings Conference Call. [Operator Instructions] I would now like to hand the conference over to your speaker today, Jim Friedland, Director of Investor Relations. Please go ahead.

### **Jim Friedland**

Thank you. Good afternoon, everyone and welcome to Alphabet's first quarter 2023 earnings conference call. With us today are Sundar Pichai, Philipp Schindler and Ruth Porat.

Now I will quickly cover the Safe Harbor. Some of the statements that we make today regarding our business, operations and financial performance maybe considered forward-looking and such statements involve a number of risks and uncertainties that could cause actual results to differ materially. For more information, please refer to the risk factors discussed in our most recent Form 10-K filed with the SEC.

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](http://abc.xyz/investor). Our comments will be on year-over-year comparisons unless we state otherwise.

And now, I will turn the call over to Sundar.

## **Sundar Pichai**

Thank you, Jim and good afternoon everyone. I am pleased with our business performance in the first quarter with Search performing well and momentum in Cloud. We introduced important product updates anchored in deep computer science and AI. Our North Star is providing the most helpful answers for our users and we see huge opportunities ahead, continuing our long track record of innovation. On Cloud, we continue to be on a long and exciting journey to build that business. Cloud delivered profitability this quarter and we remain focused on long-term value creation here.

Today, I will give an update on the two themes I spoke about last quarter: one, our advancements in AI and how they are driving opportunities in Search and beyond; and two, our efforts to sharpen our focus as a company. Then I will talk about our momentum in Cloud and close with our progress at YouTube.

First, the incredible AI opportunity for consumers, our partners and for our business. I've compared it to the successful transition we made from desktop to mobile computing over a decade ago. Our investments and breakthroughs in AI over the last decade have positioned us well. In our last call, I outlined three areas of opportunity: continuing to develop state-of-the-art large language models and make significant improvements across our products to be more helpful to our users; empowering developers, creators and partners with our tools; and enabling organizations of all sizes to utilize and benefit from our AI advances.

We have made good progress across all three areas. In March, we introduced our experimental conversational AI service called Bard. We have since added our PaLM model to make it even more powerful and Bard can now help people with programming

and software development tasks, including code generation, lots more to come. For developers, we have released our PaLM API alongside our new MakerSuite tool. It provides a simple way to access our large language models and begin building new generative AI applications quickly.

A number of organizations are using our generative AI large language models across Google Cloud platform, Google Workspace and our cybersecurity offerings. For years, we've been focused on making Search even more helpful, from Google Lens to multi-Search to visual exploration in Search, immersive view in Maps, Google Translate, to all the language models powering Search today, we have used AI to open up access to knowledge in powerful ways. We'll continue to incorporate generative AI advances to make Search better in a thoughtful and deliberate way. We'll be guided by data and years of experience about what people want and our high standards for quality. And we'll test and iterate as we go because we know that billions of people trust Google to provide the right information. As it evolves, we'll unlock entirely new experiences in Search and beyond just as camera, voice and translation technologies have all opened entirely new categories of queries and exploration.

AI has also been foundational to our ads business for over a decade. Products like Performance Max used the full power of Google's AI to help advertisers find untapped and incremental conversion opportunities. Philipp will talk more about this in a moment. And as we continue to bring AI to our products, our AI principles and the highest standards of information integrity remain at the core of all our work. As one example, our perspective API helps to identify and reduce the amount of toxic text that language models train on with significant benefits for information quality. This is designed to help ensure the safety of generative AI applications before they are released to the public.

We are proud to have world-class research teams who have been advancing the breakthroughs underpinning this new era of AI. Last week, I announced that we are bringing together the Brain Team in Google Research and DeepMind into one unit. Combining all this talent into 1 focused team, backed by the pooled computational resources of Google, will help accelerate our progress and develop the most capable AI systems safely and responsibly.

On to my second theme, the company's sharpened focus. I spoke last quarter about our commitment to invest responsibly and with discipline and to find areas where we can operate more cost effectively and with greater velocity. We have significant multiyear efforts underway to create savings, such as improving machine utilization and finding more scalable and efficient ways to train and serve machine learning models. We are making our data centers more efficient, redistributing workloads and equipment where

servers aren't being fully used. This is important work as we continue to significantly invest in infrastructure to drive our many AI opportunities. Improving external procurement is another area where data suggests significant savings, and this work is underway. And we are taking concrete steps to manage our real estate portfolio to ensure it meets our current and future needs. We'll continue to use data to determine additional areas for durable savings.

Next, Google Cloud. I'm pleased with the ongoing momentum in Cloud. Our disciplined expansion of our product road map and go-to-market organization has helped to build one of the largest enterprise software companies in the world. We have consistently grown top line revenues and improved annual operating margins, and we continue to do so this quarter. Our growth has come from our deep relationships with large enterprises, a strong partner ecosystem and our product leadership. Over the past 3 years, GCP's annual deal volume has grown nearly 500%, with large deals over \$250 million growing more than 300%. Nearly 60% of the world's 1,000 largest companies are Google Cloud customers, and many leading start-ups and millions of small and medium enterprises use Google Cloud.

We have also built a strong partner ecosystem. Over the last 4 years, the number of Google Cloud Partner certified practitioners around the world has increased more than 15x. The largest global system integrators have built 13 dedicated practices with Google Cloud compared to zero when we started. And today, more than 100,000 companies are part of our Google Cloud Partner Advantage program. Our growth is also driven by our product leadership. We are bringing our generative AI advances to our cloud customers across our cloud portfolio. Our PaLM generative AI models and Vertex AI platform are helping Behavox to identify insider threats, Oxbotica to test its autonomous vehicles and Lightricks to quickly develop text-to-image features.

In Workspace, our new generative AI features are making content creation and collaboration even easier for customers like Standard Industries and Lyft. This builds on our popular AI Bard Workspace tools, Smart Canvas and Translation Hub used by more than 9 million paying customers. Our product leadership also extends to data analytics, which provides customers the ability to consolidate their data and understand it better using AI. New advances in our data cloud enable Ulta Beauty to scale new digital and omnichannel experiences while focusing on customer loyalty; Shopify to bring better search results and personalization using AI; and Mercedes Benz to bring new products to market more quickly. We have introduced generative AI to identify and prioritize cyber threats, automate security workflows and response and help scale cybersecurity teams. Our cloud cybersecurity products helped protect over 30,000 companies, including innovative brands like Broadcom and Europe's Telepass. We are successfully integrating

Mandiant with our products, including Mandiant Threat Intelligence and Breach Analytics.

Our open approach to AI development, coupled with our industry-leading TPUs and best-in-class GPUs from NVIDIA, enable innovative companies to tackle any AI workload with speed and flexibility. AI21 Labs, Replit, Midjourney and many others build and train foundation models and generative AI platforms. We are the only cloud provider to announce availability of NVIDIA's new L4 Tensor Core GPU with the launch of our G2 VMs, which are purpose-built for large inference AI workloads, such as generative AI.

Turning next to YouTube, let me start by thanking Susan Wojcicki for her terrific leadership of YouTube for 9 years. She recently transitioned into an advisory role with Alphabet this quarter with Neal Mohan, a long-time leader at Google and YouTube, becoming the new head of YouTube.

Here are a few highlights from the quarter. YouTube Shorts continues to see strong momentum with Creators. Last year, the number of channels that uploaded to Shorts daily grew over 80%. Those posting weekly on Shorts, saw the majority of new channel subscribers coming from their Shorts post. The living room remained our fastest-growing screen in 2022 in terms of watch time, and we are seeing growth and momentum internationally.

On our subscription business, we rolled out several new updates to YouTube Premium. Premium subscribers can now queue videos on phones and tablets, stream continuously while switching between devices and auto download recommended videos for off-line viewing. And we have great momentum around YouTube TV and YouTube Primetime channels. We have announced pricing for the NFL Sunday Ticket offering, which will help to drive subscriptions, bring new viewers to YouTube's paid and ad-supported experiences and create new opportunities for Creators.

To close across the company, we are excited about helping people, businesses and society reach their full potential with AI. We'll share updates at Google I/O about how we are using AI across our products including our Pixel devices and share some exciting new developments for Android. Thanks to our employees around the world who continue to work hard to advance our mission. After nearly 25 years, the work to organize the world's information and make it accessible and useful is as ever, and I look forward to the work ahead.

Over to you, Philipp.

**Philipp Schindler**

Thanks, Sundar and hey everyone. It's great to be here today. I'll kick off with Google Services' performance in the first quarter, then provide color into our key opportunity areas and then turn it over to Ruth for more on our financial performance.

Google Services revenue of \$62 billion were up 1% year-on-year, including the effect of a modest foreign exchange headwind. In Google Advertising, Search and Other, revenues grew 2% year-over-year, reflecting an increase in the travel and retail verticals, offset partially by a decline in finance as well as in media and entertainment. In YouTube Ads, we saw signs of stabilization and performance, while in network, there was an incremental pullback in advertiser spend. Google Other revenues were up 9% year-over-year, led by strong growth in YouTube subscriptions revenues.

Now let's double-click into the 3 areas I laid out last quarter, where we see clear opportunities for long-term growth in advertising. Number one, Google AI; number two, retail, which cuts across all of our ads products and services; and number three, YouTube. First, Google AI. I've said before, AI has long been an important driver of our business. Advancements are powering our ability to help businesses, big and small, respond in real time to rapidly changing market and consumer shifts and deliver measurable ROI when it's needed most. In Q1, we continue to innovate across our products. Take Core Search, for example. In targeting, we updated search keyword relevance using the latest natural language AI from MUM models to improve the relevance and performance of shown ads when there are multiple overlapping keywords eligible for an auction. In bidding, we improved our Smart Bidding models to bid more accurately based on differences in search ad formats. In other words, bid more effectively depending on how a user wants to engage with an ad. In creatives, we opened our automatically created assets beta to all advertisers in English. ACA generates text assets alongside your responsive search ads and uses AI to help reduce the amount of manual work to keep creatives fresh and relevant to users' query, context and to the advertisers business.

To then unlock Core Search further and maximize conversions across all of Google, we're actively helping more advertisers pair together with Performance Max. Advertisers who use PMax are, on average, achieving over 18% more conversions at a similar CPA. This is up 5 points in just 14 months, thanks to advances in the AI underlying bidding, creatives, search query matching and new formats like YouTube Shorts.

I mentioned earlier that travel was a contributor to growth. In March, we launched PMax for Travel Goals. Now even the smallest total DS can benefit from the expanded reach of hotel ads in PMax. Like family-run Corissia Hotels Group, who drove a 32% increase in revenue and a 26% increase in total direct bookings within just 1 month of using PMax

for travel goals, there's more to come here as we add even more AI part features. Stay tuned for more at Google Marketing Live in May.

Moving on to retail, where we had a solid quarter. Our focus is on three pillars: number one, making Google a core part of shopping journeys for consumers and a valuable place for merchants to connect with users. Number two, empowering more merchants to participate in our free listings and ads experiences; and number three, driving retail performance further with great ads products.

In a macro environment of do more with less, our tools and solutions are proving that we can deliver value for retailers online and omnichannel and drive high-value customers even in challenging times. Caraway, a direct-to-consumer maker of cookware, use target ROAS to uncapped budgets and PMax to optimize and deploy spend across Google inventory for its Q4 Black Friday campaign. PMax drove a 46% increase in revenue and 31% jump in ROAS leading to Caraway's best business day in history and a robust reinvestment in its AI-first strategy for Q1.

For omni-focused retailers, we recently rolled out store sales reporting and bidding in Performance Max for store goals. This is helping retailers go beyond just optimizing to online conversions to also optimize to their stores, reaching and bidding for high-value customers who are more likely to spend in store. Danish Department Store, Magazine, recently used our store sales solution to boost its omnichannel ROAS 128% versus online-only campaigns. Thanks to dynamic in-store values coming from its first-party data, including its high-value customers, magazine can now, with confidence, measure the full impact of its online investments on both e-commerce and physical store revenue.

Turning to YouTube. Creators fuel YouTube success. Across Long Form and Shorts, Music and Podcasts, Vertical and Horizontal, YouTube is where creators are incentivized to make their best work, which means the best content, more of yours and more opportunities for advertisers. As I said last quarter, our creator ecosystem and multi-format strategy will be key drivers of YouTube's long-term growth. And to support this growth, we're focused on, number one, Shorts; number two, engagement on CTV; number three, investing in our subscription offerings; and number four, a longer-term effort to make YouTube more shoppable.

First, Shorts. We're seeing strong watch time growth. Monetization is also progressing nicely. People are engaging and converting on ads across Shorts at increasing rates. Number two, connected TV. As Sundar said we are seeing momentum globally. Viewers

love watching YouTube creators and their favorite content on the large screen. Advertisers are leaning in.

Zooming out more broadly for a second. Across YouTube, we're helping brands benefit from our expansive reach and drive the profitability they are looking for. In one of our largest marketing mix modeling studies to date, YouTube ROI is 40% higher than linear TV and 34% higher than all other online video, according to a customer analysis from January 2020 to March 2022 of Nielsen Compass ROI benchmarks across 16 countries and 19 billion of total media spend measured. This proves YouTube's ability to drive effectiveness at scale.

Next up are subscription offerings. The goal is to be a one-stop shop for multiple types of video content across both ad-supported and Premium services. Our launch of MultiView on YouTube TV and our first-of-its-kind a la carte access for NFL Sunday Ticket are two examples of how we're investing here. Expect more updates over the coming quarters.

Number four, shopping on YouTube. It's still super early days. One highlight. Last year, we brought shopping to more creators and brands by partnering with commerce platforms like Shopify. Now more than 100,000 creators, artists and brands have connected their own stores to their YouTube channels to sell their products. We're excited about the potential ahead.

I'll close with an awesome example of we're bringing the best across Google to our partners to accelerate innovation. Mercedes-Benz, in February, we announced a first-of-a-kind partnership to bring Google Maps platform and YouTube into future Mercedes-Benz vehicles, equipped with its next-gen MBOS operating system. Beyond enabling the luxury automaker to design a customized navigation interface, we will also provide AI and data cloud capabilities to advance their autonomous driving efforts and create an enhanced customer experience.

On that note, a big thank you, first, to our customers and partners for their trust and collaboration; and second, to all Googlers for all of their incredible work this quarter. Ruth, over to you.

## **Ruth Porat**

Thank you, Philipp. Our financial results for the first quarter reflect continued healthy fundamental growth in search and momentum in Cloud. As I go through the discussion today, I will reference some changes to our reporting and disclosures that are covered more fully in the 8-K we filed last week. I will conclude with our outlook.



For the first quarter, our consolidated revenues were \$69.8 billion, up 3% or up 6% in constant currency. Search remained the largest contributor to revenue growth on a constant currency basis. In terms of expenses and profitability, year-on-year comparisons are impacted by three factors: first, the \$2.6 billion in charges we took in the first quarter related to workforce and office space reductions. We provided a table in our earnings release that shows the impact of those charges on cost of revenues and operating expenses. Second, the adjustment we made to the estimated useful lives of servers and certain network equipment at the beginning of 2023. As you can see in our earnings release, the effect for the first quarter was a reduction in depreciation expense of \$988 million. Third, the shift in timing of our annual employee stock-based compensation awards from January to March delays the step-up in SBC from Q1 to Q2. This shift in timing does not affect the total amount of SBC over the full year 2023.

Total cost of revenues was \$30.6 billion, up 3%, driven by other cost of revenues of \$18.9 billion, which was up 7%. The biggest factor of which was compensation costs associated with data centers and other operations and followed by content acquisition costs. Operating expenses were \$21.8 billion, up 19%, with a significant impact from the charges related to workforce and office space reductions. Operating income was \$17.4 billion, down 13%, and our operating margin was 25%. Net income was \$15.1 billion. We delivered free cash flow of \$17.2 billion in the first quarter and \$62 billion for the trailing 12 months. We ended the quarter with \$115 billion in cash and marketable securities.

Turning to our segment results. These were affected by two additional changes outlined in our 8-K filing. First, reflecting the increasing collaboration between DeepMind and Google Services, Google Cloud and Other Bets. As of Q1, DeepMind is reported as part of Alphabet's unallocated corporate costs. And second, beginning in the first quarter, we updated our cost allocation methodologies to provide our business leaders with increased transparency for decision-making. In our filing, we provided a recast of prior period results for the segment for these two changes. The highlights of the year-on-year performance of our segments that I will review reflect these recast results.

Starting with Google Services. Revenues were \$62 billion, up 1%. Google Search and other advertising revenues of \$40.4 billion in the quarter were up 2%. YouTube advertising revenues of \$6.7 billion were down 3%. Network advertising revenues of \$7.5 billion were down 8%. Other revenues were \$7.4 billion, up 9%, reflecting primarily ongoing significant subscriber growth in YouTube TV and YouTube Music Premium. TAC was \$11.7 billion, down 2%, primarily reflecting a mix shift between search and Network. Google Services operating income was \$21.7 billion, down 1%, and the operating margin was 35%.

Turning to the Google Cloud segment. Revenues were \$7.5 billion for the quarter, up 28%. Growth in GCP remained strong across geographies, industries and products. Google Workspace's strong results were driven by increases in both seats and average revenue per seat. Google Cloud had operating income of \$191 million, and the operating margin was 2.6%. As to our Other Bets, for the first quarter, revenues were \$288 million, and the operating loss was \$1.2 billion.

Turning to our outlook for the business. In terms of the operating environment, our results in the first quarter reflected ongoing headwinds due to a challenging economic environment and the outlook remains uncertain. Foreign exchange headwinds have moderated, and we expect less of a foreign exchange headwind in the second quarter based on current spot rates. With respect to Google Services, within advertising, Q1 results reflect the resilience of search with its unique ability to surface demand and deliver measurable ROI. Excluding the impact of foreign exchange, the revenue growth of search was similar to last quarter. In YouTube, we saw signs of stabilization in ad spend on a sequential basis. We continue to prioritize growth in Shorts engagement where we are encouraged by progress in monetization. As to other revenues, in YouTube subscriptions, we are pleased with the significant ongoing subscriber growth in both YouTube Music Premium and YouTube TV. In Play, revenues were down year-on-year, primarily due to the continued impact of foreign exchange in APAC, although results have improved as we lapped the impact from our introduction of fee reductions last year.

Turning to Google Cloud. Our investments in product innovation, our go-to-market organization and our partner ecosystem delivered strong results as customers across industries and geographies increasingly rely on Google Cloud to digitally transform their businesses. That being said, in Q1, we continued to see slower growth of consumption as customers optimized GCP costs reflecting the macro backdrop, which remains uncertain. In terms of operating performance, we remain focused on driving long-term profitable growth in Cloud, while continuing to invest given the substantial opportunity.

Moving to Other Bets. In the first quarter, we similarly worked to refine strategies and prioritize efforts across the portfolio, including reductions to headcount. I will now walk you through an update on our efforts to reengineer our cost base, slowing the pace of operating expense growth while creating capacity for key investment areas, particularly in support of AI across the company. First, as discussed on the fourth quarter call, we have efforts underway in three broad categories; number one, using AI and automation to improve productivity across Alphabet for operational tasks as well as the efficiency of our technical infrastructure; number two, managing our spend with suppliers and vendors more effectively; and number three, continuing to optimize how and where we

work. As we've noted previously, all three work streams are ramping up this year, and we plan to build on these efforts in 2024 and in subsequent years.

Second, with respect to headcount growth. The reported number of employees at the end of the first quarter includes almost all of the employees impacted by the workforce reduction we announced in January. We expect most of the impacted individuals will no longer be reflected in our head count by the end of the second quarter. In terms of the outlook for headcount for the year, as we shared last quarter, we are meaningfully slowing the pace of hiring in 2023, while still investing in priority areas, particularly for top engineering and technical talent.

In terms of our investments in AI, we are excited about the creation of Google DeepMind, combining the Brain Team from Google Research with DeepMind with the goal to accelerate innovation and impact. Beginning in the second quarter of 2023, the costs associated with teams and activities transferred from Google Research will move from Google Services to Google DeepMind within Alphabet's unallocated corporate costs.

Finally, as it relates to CapEx, for 2023, we now expect total CapEx to be modestly higher than in 2022. As discussed last quarter, CapEx this year will include a meaningful increase in technical infrastructure versus a decline in office facilities. We expect the pace of investment in both data center construction and servers to step up in the second quarter and continue to increase throughout the year.

Thank you. Sundar, Philipp and I will now take your questions.

### **Question-and-Answer Session**

#### **Operator**

Thank you. [Operator Instructions] Your first question comes from Brian Nowak of Morgan Stanley. Please go ahead.

#### **Brian Nowak**

Great. Thanks for taking my questions. I have two. First one for Sundar. Sundar, I guess as you think over the course of the next 12 months, I know you have a lot of new AI tools to show us, what new behavior changes or capabilities are you most excited about for users, developers and advertisers as these tools come out? And then the second one for Ruth. Could you talk to us about how much of the AI tools have you incorporated

internally to sort of drive more productivity out of your engineers, your sales force, your G&A? Or is that sort of something to come over the next couple of years? Thanks.

### **Sundar Pichai**

Thanks, Brian. It is an exciting time. I do think we see an opportunity to – across the breadth of what we do at Google to improve our experiences. Obviously, in search, we've been using AI for a while. It's what has really helped lead search and search quality for the past few years using LLMs. We now have a chance to more natively use LLMs. And I think, I think the main way – and by the way, as I said in my remarks, we are going to be deliberate. We're going to – our North Star is getting it right for users. So we will iterate and innovate as we've always done. The main area maybe I'm excited by is we do know from experience that users come back to search, they follow-on. They are engaging back on stuff they already did. And so for us, to use LLMs in a way we can serve those use cases better, I think it's a real opportunity. Obviously, if it's YouTube, the chance to really improve experiences for creators and consumers in terms of how the videos are viewed, etcetera, I think you can expect changes. Workspace, we already have changes rolling out, and it's an area where I think we will see the biggest advances because I think productivity is a strong use case in which generative AI can help. And obviously, on Cloud, this has been an important moment as pretty much every organization is thinking about how to use AI to drive transformation. And so across the board, from start-ups to large companies, they are engaging with us. And so I view it as a point of inflection there as well. Ruth?

### **Ruth Porat**

And then in terms of the second part of your question, AI has been so much a part of what we've been doing for quite some time that there are a number of different ways to answer it. One is, as I noted, we have a number of efficiency efforts underway, and one of them is about using AI and automation to further improve productivity across Alphabet. That being said, we already have AI in a lot of what we do, for example, in the way we operate and run the finance organization, it's helpful in a lot of the analytics that we use. And one of the exciting things for us is the opportunity then to share that with Cloud customers. And Sundar just noted what we are doing within Google Workspace. We obviously all live on Google Workspace. And so that's another example of how we benefit internally from the productivity from AI, but it's also something that's available for users and enterprise customers more broadly. And then finally, one of the areas that we've talked about is the opportunity with our compute capacity and all that we've done there and the infrastructure innovation, which, again, is helpful internally for what we do, but on behalf of our customers.

**Brian Nowak**

Great. Thank you, both.

**Operator**

Thank you. The next question comes from Doug Anmuth of JPMorgan. Please go ahead.

**Doug Anmuth**

Thanks for taking the questions. One for Sundar and then one for Ruth. Sundar, just as you think about integrating Bard into your search products over time, can you just talk more about what percentage of search queries you think would utilize large language model-type responses? And how should we think about the cost of running search on these models relative to today? And then, Ruth, I was just hoping you could follow-up on your comment on CapEx. Maybe if you could help us understand the modest step-up in CapEx relative to 3 months ago? Thank you.

**Sundar Pichai**

Thanks, Doug. Obviously, we have launched Bard as a complementary product to search. But we will be bringing LLM experiences more natively into search as well. I do think, first of all, on – we will be rolling it out in an incremental way so that we can test it, create and innovate. So I think we will approach it that way. I think overall, I think it can apply to a broad range of queries. So I think I'm excited that it can allow us to better help users in a category of queries, maybe in which there was no right answer, and they are more creative, etcetera. So I think those are opportunities. But even in our existing query categories, where we get a chance to do some heavy lifting for the users and use AI to better give – guide them, I think you will see us exploring in those directions as well. It's early days, but I think there is a lot of innovation to come.

On the cost side, we have always – costs of compute has always been a consideration for us. And if anything, I think it's something we have developed extensive experience over many, many years. And so for us, it's a nature of habit to constantly drive efficiencies in hardware, software and models across our fleet. And so this is not new. If anything, the sharper the technology curve is, we get excited by it because I think we have built world-class capabilities in taking that and then driving down cost sequentially and then deploying it at scale across the world. So I think we will take all that into account in terms of how we drive innovation here and – but I'm comfortable with how we will approach it.

**Ruth Porat**

And in terms of CapEx, we do now expect that total CapEx for the year for 2023 will be modestly higher than in 2022. And I tried to point out that we're expecting a step-up in the second quarter, and that will continue to increase throughout the year. And as we discussed last quarter, AI is a key component. It underlies everything that we do, and we're continuing to invest in support of AI, support of our users, advertisers and our Cloud customers, since we are commenting on here. And then as we talked about last quarter, the increase in CapEx for the full year 2023 reflects the sizable increase in technical infrastructure investment, on the flip side, a decline in office facilities relative to last year.

**Doug Anmuth**

Thank you, both.

**Operator**

Thank you. The next question comes from Eric Sheridan from Goldman Sachs. Please go ahead.

**Eric Sheridan**

Thank you so much for taking the questions, I hope everyone on the team as well. Maybe two, if I could. First, on cloud, obviously, one of the dominant themes and you touched upon it is this client optimization theme that's going on broadly in cloud computing. Can you give us a little bit more of your perspective on where we are in terms of the optimization theme broadly in cloud computing as a headwind to either revenue growth or backlog growth compared to the tailwinds of broader long-term consumption growth and possibly the contribution of AI initiatives to cloud computing growth? And then second on YouTube. Obviously, you have seen a lot of success with respect to engagement and consumption on Shorts. Can you give us an update on where we are on monetization trends in Shorts compared to the consumption you have already seen in usage shifts? Thank you so much.

**Ruth Porat**

So, in terms of the cloud question, the point we are trying to underscore is there is uncertainty in the economic environment. And so we saw some headwind from slower growth of consumption with customers really looking to optimize their costs given that macro climate. I will leave the forecasting to you on that. But as both Sundar and I

commented on, really pleased with the momentum that the team has been delivering and the breadth of what they have been working on.

### **Sundar Pichai**

I do think – I would add, that we are leaning into optimization. I mean there is an important moment to help our customers, and we take a long-term view. And so it's definitely an area we are leaning in and trying to help customers make progress in their efficiencies where we can. Philipp?

### **Philipp Schindler**

Yes. On the Shorts side, look, Shorts viewership is growing rapidly. We announced 50 billion plus daily views on the Q4 earnings call, up from 30 billion last spring. We are pleased with our continuing progress in monetization. As I have said earlier, people are engaging and converting on ads across Shorts at increasing rates, closing the gap between Shorts and long form is a top priority for us, as is continuing to build a greater, greater end user experience. Ads on Shorts are now available via video action app, Discovery and Performance Max campaigns and via product feeds. Shorts also are shoppable. Again, we are the only destination where creators can produce all forms of content across multiple formats and screens with multiple ways to make a living. And as Sundar said, last year, the number of channels that uploaded to Shorts daily grew over 80%. And then in February, we brought revenue sharing to Shorts via our YouTube Partner program. Our sustainable revenue sharing model at scale remains pretty unique in the industry, and we continue to see strong greater adoption. So ultimately, our goal is to make YouTube the best places for Shorts viewers and creators. And that's really what we are focused on right now.

### **Eric Sheridan**

Thank you.

### **Operator**

Thank you. The next question comes from Ross Sandler of Barclays. Please go ahead.

### **Ross Sandler**

Hey guys. I will just ask a tough question. Sundar, you came up in the group that structured a lot of the Android partnerships from inception and I believe possibly the iOS agreement as well. So, how do you feel about Alphabet's ability to maintain the unit economics with these partnerships in light of Microsoft's ambitions to increase its

share of paid Search? And Ruth, does this have any impact on your outlook for profitability of overall Alphabet over the long-term? Thank you.

### **Sundar Pichai**

Maybe I will – look, I think the – these dynamics are – have always been around. It's important to remember, as far as I can remember, we have always been in a competitive environment for these deals. And while I can't comment on the specifics of any of our partnership agreements, what has served us well is always, first of all, building the best product possible, focused on giving value to users. And when we work with our partners, we work hard to create a win-win – win-win experience, and ultimately, partners end up choosing us because that's what their users want. And that's always been what's helped Search be widely distributed. So, I think it all starts with continuing to innovate and improve Search and making sure we are leading there. So, I think we have always approached it very robustly over the many, many years, and I am comfortable that we will continue to be able to do so.

### **Ruth Porat**

And then in terms of just longer term profitability, I think I will broaden out your question somewhat because the way we are looking at it is we continue to be committed to investing for growth, and we want to ensure we have overall capacity for growth. And so we have a number of work streams underway to, as we keep describing it, durably reengineer our cost base. And in particular, what we are excited about our long-term opportunities with AI and want to make sure we have the capacity to continue to invest there in the other areas where we see long-term growth in Search and ads, cloud, YouTube, hardware. And so that underscores our efforts to build in additional flexibility. And as we have said repeatedly, we want to ensure that expense growth is not growing out of revenue growth, and that means driving revenue growth and really being as disciplined as we can on these various work streams that we have discussed earlier in this call and last quarter as well to improve our expense growth trajectory.

### **Operator**

Thank you. The next question will come from Justin Post of BAML. Please go ahead.

### **Justin Post**

Great. Thanks a lot. Maybe one for Sundar and one for Ruth. So, you got the cost question on learning language models into Search. Can you talk about revenues? I think on one hand, you will see better relevancy and maybe better results with higher



conversion. But on the other hand, there might be fewer areas for ads or fewer queries because people get answers quickly – more quickly. Are you optimistic on that transition, and maybe give us your thoughts there? And then, Ruth, backing out the one-time charges, it looks like OpEx growth is now 8%, so real progress there. Could you give us a flavor of where you are, you think in your optimization cycle? Thank you.

### **Sundar Pichai**

So, first of all, throughout the years, as we have gone through many, many shifts in Search, and as we evolve Search, I think we have always had a strong grounded approach in terms of how we evolve ads as well. And we do that in a way that makes sense and provide value to users. It – the fundamental drivers here are people are looking for relevant information. And in commercial categories, they find ads to be highly relevant and valuable. And so that's what drives this virtuous cycle. And I don't think the underpinnings of the fact that users want relevant commercial information, they want choice in what they look at, even in areas where we are summarizing and answering, etcetera, users want choice. We care about sending traffic. Advertisers want to reach users. And so all those dynamics, I think which have long served us well remain. And as I said, we will be iterating and testing as we go. And I feel comfortable we will be able to drive innovation here like we have always done.

### **Ruth Porat**

And in terms of our OpEx trajectory, yes, there was the elevated expense in OpEx from the \$2.6 billion in severance and office space charges. There was also a \$988 million benefit from lower depreciation due to the change in useful lives. But that obviously is an ongoing benefit. And there was also, as we noted in our earnings release, a benefit from the shift in timing of stock-based compensation from the first quarter to the second quarter. So, a little bit of complexity there, but core of your question, we remain extremely focused on these various work streams that we have talked about. It starts with the pace of hiring. It goes to the various work streams that both Sundar and I referenced around using AI and automation to improve productivity, all that we are doing with suppliers and vendors to be as efficient as possible, all that we are doing around optimizing how and where we work. You have seen some of those announcements this quarter beyond the workforce reduction, things that we are doing in, for example, office services, and we are executing against each of these various work streams. So, our view is that there is more to do. And as we try to be clear, we are in execution mode. You will see some of the benefit in '23. You will see more of it in '24, and we are going to continue building against it beyond.

**Justin Post**

Great. Thank you.

**Operator**

Thank you. The next question comes from Michael Nathanson of MoffettNathanson. Please go ahead.

**Michael Nathanson**

I have one for Philipp and one for Ruth. Philipp, we are trying to get under the hood on Search advertising and trying to understand changes in demand between sellers of goods and sellers of services. Can you give us any help looking at the service side? Has demand returned back to pre-pandemic levels? And then in terms of goods and e-commerce, have you seen a slowing of demand? Anything you can help us kind of put this – level set it back to maybe pre-pandemic levels to understand services versus goods demand? And then for Ruth, on the terms of efficiency and being more diligent, how does the significantly higher cost of capital impact the way you are managing and evaluating the Other Bets assets? Anything there on how you may be rethinking some of the Other Bets and what are you doing in changing some of the structures about the Other Bets assets? Thanks.

**Ruth Porat**

It was a bit hard to hear you. You were breaking up. So, I think I am going to start and address what I heard as the second question, as we are looking at higher cost of capital in this environment, what – how does that affect the way we are looking at Other Bets. Hopefully, we heard you correctly, it was crackling. Look, I think as we have talked about repeatedly, as it relates to Other Bets, our focus is to use deep technology to drive innovation, and we are very focused on the pace of investment and financial returns. That has been a consistent focus to generate attractive returns. And I think the core operating models and the long-term operating models are going to be the most relevant as we are looking at the returns we can generate. Yes, absolutely mindful of higher cost of capital. But I think its core, we are looking at what's the value creation and the return on those. And as we indicated when we went through the reduction in force, we similarly worked across the Other Bets and some of them as they are on a path to ongoing growth, we were moderating what is the expense trajectory there as we are looking at what's the overall return on invested capital. And we are continuing to work on these to make sure that we are delivering value it. Your point is an important one that's part of a broader question about the underlying operating assumptions.

**Michael Nathanson**

Okay. Philipp, I don't know if you heard the first one?

**Philipp Schindler**

Yes. On the first part, again, it didn't come across quite clearly, but I hope I understood correctly. In Search, revenues grew modestly year-over-year, again, reflecting an increase in the retail and travel verticals, offset partially by decline in finance and media and entertainment. So, excluding the impact of FX performance, it was actually similar to last quarter. The ongoing performance of Search, notwithstanding the headwinds, reflects really Search's resilience with the, I would say, ability of Search to surface demand and deliver a measurable ROI in an uncertain environment. I called out the key verticals in the quarter. There is really no additional color on other verticals. I would say maybe more broadly, what we saw reflects what's being reported elsewhere, and across the headlines, many companies are very focused on shorter term profitability amidst this uncertainty and some pullback at budgets as well.

**Michael Nathanson**

Okay. Thanks. That's clear.

**Operator**

Thank you. The next question comes from Mark Mahaney of Evercore. Please go ahead.

**Mark Mahaney**

Okay. Can I try two questions, please? I think Philipp, you talked about kind of a more of a pullback in network ad revenue versus Search and YouTube. Do you have any thoughts on why that was the case? And then Ruth, the cloud business, even with the accounting changes on this very steady march towards profitability, you turned the corner now. You talked about growing the business for long-term profitability. But are there any reasons why we wouldn't – why they shouldn't be sustainably profitable kind of starting from here as the business continues to scale, or could it be that, that profitability could be wobbly for a while before it's sustainably profitable that segment cloud? Thank you.

**Ruth Porat**

Yes. Why don't I just add, I will take both of those. So, in network, really, it's a continuation of what we talked about last quarter. We saw the ongoing pullback in advertiser spend. And I would contrast that last quarter, we talked about both a pullback

in YouTube and network, and we were pleased that we saw the stabilization in ad spend on a sequential basis in YouTube. We still saw ongoing pullback in network, which tends to be a mix of businesses, as you know well. And then in terms of cloud, I tried to make that clear in my opening comments as well. I think it's a really important question. We are very pleased with the Q1 results. And as both Sundar and I noted, we are intensely focused on all elements of the cost space and the long-term path to attractive profitability. At the same time, I think at the core of your question, and what we were trying to convey is we will continue to invest to support long-term growth, in particular, given the opportunities we see delivering AI capabilities to our customers. So, as I have said in the past, you shouldn't extrapolate from quarter-to-quarter, but we are very pleased to be at this level and are continuing to focus on profitability and long-term value creation here.

**Mark Mahaney**

Okay. Thank you, Ruth.

**Operator**

Thank you. And our last question will come from Colin Sebastian from Baird. Please go ahead.

**Colin Sebastian**

Great. Thank you. Two for me as well. I guess first, Sundar, the consolidation of the AI teams, I think you talked about that helping to accelerate innovation. So, I am curious, specifically with that consolidation, what are the product milestones that we should look out for related to that? And then Philipp, regarding your comments on retail, specifically on shopping and payments, how should we think about that evolving across the platform this year? Maybe similarly, what are some milestones we should look out for on that front? Thank you.

**Sundar Pichai**

Thanks. I am quite excited by bringing the two world-class teams, I think – of both Brain and DeepMind. Their collective accomplishments in AI over the last decade have really set the stage for this moment. And so both getting access to pool talent so that they can work together in a coordinated way and definitely will help us pool our computational resources too, which is going to be critical and will help us build. The core product is obviously building more capable models safely and responsibly and doing it taking into account all the capabilities our customers need, both on the

consumer side and the cloud side and being able to iterate and getting that virtuous cycle going. So, you already have seen us put out PaLM APIs, and we are incorporating PaLM across our products, but we will continue that progress, and we will keep you posted as we do.

### **Philipp Schindler**

So, retail is an important vertical and driver for us, and I called out the year-over-year increase in retail and Search and other. I also talked earlier about the macro climate and how we have established. We can really drive value for retailers, even in challenging times, whether it's online, offline, both. And we are helping them drive their business goals, meet customers wherever they choose to shop, and maybe a little more some key trends here. Retailers are increasingly focused on maintaining margins and driving ROI right now. PMax, broad manage were key levers providing more incremental conversions, while insights on bids and budgets are really helping retailers identify opportunities for growth and efficiencies across our suite of products. I have talked at length on prior calls about omnichannel. Our local and omnichannel solutions are helping bridge the gap here between online and offline by using AI to reach nearby shoppers, promote local inventory, fulfillment options, optimize in-store visits and sales, for example. And then to help really retain loyal customers and acquiring new ones, we have YouTube app deep linking and new customer acquisition goals in PMax are helping here, making checkouts easy with tools like virtual cards on Chrome is obviously important. So, those are just some of the key points. Overall, we are giving retailers really the best, I hope AI-powered tools and solutions to maximize reach and ROI and really create a seamless experience, including, where possible, on the payment side for their customers, and this will continue to be our focus here.

### **Operator**

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

### **Jim Friedland**

Thanks everyone for joining us today. We look forward to speaking with you again on our second quarter 2023 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.

