Alphabet Inc. (NASDAQ:GOOG) Q4 2022 Earnings Conference Call February 2, 2023 4:30 PM ET

Company Participants

Jim Friedland - Director of Investor Relations

Sundar Pichai - Chief Executive Officer

Philipp Schindler - Senior Vice President & Chief Business Officer

Ruth Porat - Chief Financial Officer

Conference Call Participants

Brian Nowak - Morgan Stanley

Michael Nathanson - MoffettNathanson

Douglas Anmuth - JPMorgan

Eric Sheridan - Goldman Sachs

Justin Post - Bank of America

Ross Sandler - Barclays

Mark Mahaney - Evercore ISI

Brent Thill - Jefferies

Operator

Welcome, everyone. Thank you for standing by for the Alphabet Fourth Quarter 2022 Earnings Conference Call. At this time all participants are in a listen-only mode. After the speaker presentation, there will be a question-and-answer session. [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 fourth quarter 2022 earnings conference call. With us today are Sundar Pichai, Philipp Schindler and Ruth Porat.

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, 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 forms 10-K and 10-Q filed with the SEC, including our upcoming Form 10-K filing for the year ended December 31, 2022.

During this call, we'll 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

Thank you, Jim, and good afternoon, everyone. It's clear that after a period of significant acceleration in digital spending during the pandemic, the macroeconomic climate has become more challenging. We continue to have an extraordinary business and provide immensely valuable services for people and our partners.

For example, during the World Cup Final on December 18, Google Search saw its highest query per second volume of all time. And beyond our advertising business, we have strong momentum in Cloud, YouTube subscriptions and hardware.

However, our revenues this quarter were impacted by pullbacks in advertiser spend and the impact of foreign exchange. I'll focus on two major things today in a bit more detail, and then I'll give a shorter-than-usual quarterly snapshot from across our business.

First, how we unlock the incredible opportunities AI enables for consumers, our partners and for our business; and second, how we focus our investments and make necessary decisions as a company to get there.

First, the AI opportunity ahead. AI is the most profound technology we are working on today. Our talented researchers, infrastructure and technology make us extremely well positioned, as AI reaches an inflection point.

More than six years ago, I first spoke about Google being an AI-first company. Since then, we have been a leader in developing AI. In fact, our Transformer’s research project and our field-defining paper in 2017, as well as our path-breaking work in diffusion models are now the basis of many of the generative AI applications you're starting to see today.

Translating these kinds of technical leaps into products that help billions of people is what our company has always thrived on. Everyone working on the various projects underway is excited. We'll pursue this work boldly, but with a deep sense of responsibility, with our AI principles and the highest standards of information integrity at the core of all our work. We have been preparing for this moment since early last year, and you're going to see a lot from us in the coming few months across three big areas of opportunity; first, large models. We published extensively about LaMDA and PaLM, the industry's largest, most sophisticated model plus extensive work at DeepMind.

In the coming weeks and months, we'll make these language models available, starting with LaMDA, so that people can engage directly with them. This will help us continue to get feedback, test, and safely improve them. These models are particularly amazing for composing, constructing, and summarizing. They will become even more useful for people as they provide up-to-date more factual information.

And in Search, language models like BERT and MUM have improved searches for four years now, enabling significant ranking improvements and multimodal search like Google Nets. Very soon, people will be able to interact directly with our newest, most powerful language models as a companion to Search in experimental and innovative ways. Stay tuned.

Second, we'll provide new tools and APIs for developers, creators, and partners. This will empower them to innovate and build their own applications and discover new possibilities with AI on top of our language, multimodal, and other AI models.

Third, our AI is a powerful enabler for businesses and organizations of all sizes and we have much more to come here. There's a few flavors of this. Google Cloud is making our technological leadership in AI available to customers via our Cloud AI platform, including infrastructure and tools for developers and data scientists like Vertex AI.

We also offer specific AI solutions for sectors like manufacturing, life sciences and retail and will continue to roll out more. Workspace users benefit from AI-powered features like Smart Canvas for collaboration and Smart Compose for creation. And we are working to bring large language models to Gmail and Docs. We'll also make available other helpful generative capabilities from coding to design and more. And for our advertising partners, Philipp will discuss in detail how AI is powering dramatic campaign improvements and value-adding features for them.

Of course, in addition to all this, AI also continues to improve Google's other products dramatically. And we'll continue our work with others outside Google, including joint research collaborations to develop AI responsibly and to apply AI to tackle society's greatest challenges and opportunities.

For example, DeepMind's protein database of all 200 million proteins known to science have now been used by 1 million biologists around the world. We continue to invest in AI across the board, and Google AI and DeepMind are integral to a bright AI-first future.

Over the past few years, DeepMind has been increasingly working across groups within Google and the other bets and to reflect that progress, we'll be making a financial reporting change that Ruth will share more about in her comments. We are just at the beginning of our AI journey and the best is yet to come.

The second thing I wanted to discuss is our sharpened focus. We are committed to investing responsibly with great discipline and defining areas where we can operate more cost effectively.

We are focused on methodically building financially sustainable, vibrant growing businesses across Alphabet. For example, we are working to improve the economics and hardware as we focus more intently on the Pixel line and our overall cost structure there. Cloud remains very focused on its path to profitability. And there are many opportunities to build on our progress at YouTube over the years, starting with Shorts monetization.

Overall, I see this as an important journey to reengineer the company's cost base in a durable way. There are several dimensions already underway, including prioritization of our product investments across Google and other bets. It also includes a careful focus on our hiring needs, reflecting these priorities, as well as efficiencies in our technical infrastructure and productivity improvements from our AI tools.

As part of this, we did a rigorous review across product areas and functions to ensure that our people and roles are aligned with our highest priorities as a company and we announced a reduction in our workforce. I'm grateful to Googlers leaving us for all of their contributions and their hard work to help people and businesses everywhere.

Let me give a few quick updates from across the business this quarter. Just this week, we started bringing revenue sharing to YouTube Shorts, which is now averaging over 50 billion daily views, up from the 30 billion I announced on the Q1 2022 call. This will reward creators and help improve the Shorts experience for everyone.

Our subscription business continues to grow, with YouTube Music and Premium surpassing 80 million subscribers, including triallers. Together with YouTube Primetime channel subscriptions and YouTube TV, we have good momentum here. YouTube's NFL Sunday Ticket will accelerate that by helping to drive subscriptions, bring new viewers to YouTube's paid and ad-supported experiences and create new opportunities for creators.

Turning to hardware. Many outlets and reviewers named Pixel 7 Pro, the phone of the year. Features like Magic Eraser and Photo Unblur are incredible and help differentiate Pixel from others. 2022's Pixel 6A, 7 and 7 Pro are the best-selling generation of phones we have ever launched. And we gained share in every market we operate in this year.

Next, Google Cloud. We see continued momentum with Q4 revenue growing 32%. Our differentiated products and focused go-to-market strategy continue to drive customer momentum, beginning with real-time data, analytics and AI. Customers are increasingly choosing BigQuery because we unify data lakes, data warehouses and advanced AI/ML into one system and now analyze over 110 terabytes of data per second. Customers like Kroger can analyze data in multiple clouds without moving data in most cases, and MSCI processes unstructured and structured data at scale.

In infrastructure, our global network and an advanced TPU v4 AI supercomputer helped Snap triple the throughput for its business critical ad ranking workload, while significantly lowering cost.

Our machine learning infrastructure with cloud TPU v4 Pods can run large-scale training workloads up to 80% faster than alternatives according to third-party benchmarks, which is helping customers like Bayer accelerate drug discovery. Our reliability advantages and open edge cloud power the mission-critical 5G network of Telefonica Germany.

As I mentioned, our suite of AI/ML solutions across verticals are a key differentiator. We helped Wells Fargo automate the customer service experience for mobile users and HCA continually improve the quality of patient care. In 2022, Mandiant, which we are now integrating, helped over 1,800 customers prepare for or recover from the most critical cybersecurity incidents.

In Workspace, the innovations mentioned earlier are helping drive new wins and expansions across geographies. In Other Bets, from Calico to Weibo, we are focused on investing sustainably across the portfolio and creating good business. Verily, for example, has recently honed its strategy and structure to more clearly focus its product development.

To close, we are all standing on the cusp of an era of amazing opportunities. We are going to be bold, responsible and focused as we move into it. A healthy disregard for the impossible has been core to our company culture from the very beginning. When I look around Google today, I see that same spirit and energy driving our efforts. Thanks to our employees, our partners and people everywhere who use our services. I'm excited for what's next.

Over to you, Philipp.

Philipp Schindler

Thanks, Sundar. Hello, everyone. It's good to be with you all. I'll start today with our Google Services performance in the fourth quarter and then dive deeper into our priority areas. Google Services revenues of $68 billion were down 2% year-on-year, negatively affected by sizable foreign exchange headwind. In Google advertising, Search and Other revenues were down 2% year-over-year, and YouTube Ads and Network had high single-digit revenue declines. Google Other revenues were up 8% year-over-year, with strong growth in YouTube, non-advertising and hardware revenues, offset by a decrease in Play revenues.

I'll highlight two other factors that affected our Ads business in Q4. Ruth will provide more detail. In Search and Other, revenues grew moderately year-over-year, excluding the impact of FX, reflecting an increase in retail and travel, offset partially by a decline in finance. At the same time, we saw further pullback in spend by some advertisers in Search in Q4 versus Q3.

In YouTube and Network, the year-over-year revenue declines were due to a broadening of pullbacks in advertiser spend in the fourth quarter. I'll now zoom out to share more broadly where we're investing and see clear opportunities for long-term growth.

First, Google AI. It's important to recognize that our advertising business has obviously benefited over the past decade from the transition to mobile. More recently, we had outsized growth in advertising revenues during the pandemic, with 2022 advertising revenues $90 billion higher than in 2019.

Going forward, we are focused on growing revenues on top of this higher base through AI-driven innovation. Sundar highlighted the incredible opportunities underway with AI and the transformative impact it will have on businesses. Already, breakthroughs in everything from natural language understanding to generative AI are fueling our ability to deliver results that drive meaningful performance for advertisers and are useful to users.

Take smart bidding, which uses AI to predict future ad conversions and their value, helping businesses stay agile and responsive to rapid shifts in demand. In 2022, AI advances boosted bidding performance, allowing us to move advertiser outcomes down the funnel to drive better ROI and use budgets more efficiently.

In search query matching, large language models like MUM matched advertiser office to user quarries. This understanding of human intent of language, combined with advances in bidding prediction, are why business can see an average of 35% more conversions when they upgrade exact match keywords to broad match in campaigns that use a target CPA.

Google AI also underlies our creative products, like tech suggestions in Google ads and creative optimization and responsive search ads. We're excited to start testing our automatically created assets better, which uses AI to generate headlines and descriptions for search creative seamlessly once advertisers opt in.

Then of course, there's Performance Max, which offers the best combination of our AI-powered systems to our customers. But we're not stopping here, and these examples aren't exhaustive. AI has been foundational to our ads business for the last decade, and we'll continue to bring cutting-edge advances to our products to help businesses and users.

Number two, retail. Our foundation for delivering value over the long term includes three pillars: first, we are on a multi-year mission to make Google a core part of shopping journeys for consumers and a valuable place for merchants to connect with users. This means constantly improving our consumer experiences, starting with a more visual, immersive, browsable search.

Second, we're empowering more merchants to participate in our free listings and ad experiences. In 2022, we saw an uptick in merchants, particularly SMBs and product inventory coming on to Google, adding more value for merchants remains a top priority.

Third, to drive retail performance further, we focus on great ads products, from automation and insights to bidding tools and omnichannel solutions to AI-powered campaigns like PMax, we're helping retailers hit their goals and connect with customers no matter where or when they shop.

Two quick insights on PMax, which we upgraded the majority of advertisers to from smart shopping campaigns last year. First, advertisers on average see a 12% uplift from SSC to PMax. Second, it was a success story during the holidays in Cyber Five, its ability to scale and adapt to changing traffic over a volatile peak retail season drove strong results for many retailers, particularly mid-market advertisers.

Moving on to YouTube. Despite ongoing revenue headwinds in Q4, we're confident in YouTube's long-term trajectory. Here's how we think about our strategy. It all starts with a creator ecosystem. Creators are the lifeblood of YouTube.

In 2022, more people created content on YouTube than ever before, long-form, short-form, audio, podcast, music, live streams. What sets YouTube apart is, we give creators more ways to create content and connect with fans and more ways to earn money than any other platform.

More creators means more content, means more viewers, which leads to more opportunities for advertisers. The creator ecosystem and our multi-format strategy will continue to drive YouTube's long-term growth.

And to support that growth, we're focused on: number one, ramping Shorts; number two, accelerating engagement on a large screen, number three, investing in our subscription offerings; and number four, a long-term effort to make YouTube more shoppable.

First, Shorts. Viewership is growing rapidly, as Sundar said, 50 billion-plus daily views. We're also still pleased with our continuing progress in early monetization. On the creator side, it's been impressive to see the innovative ways creators are using Shorts to introduce their content and extend existing channels.

We're focused on providing creators with the best content creation and monetization tools, new, richer features and analytics capabilities that help individualize and optimize their content strategies. It's early days for Shorts, but we're confident the runway is long.

Next, connected TV, where users are increasingly watching their favorite creators on the big screen at home. According to Nielsen, YouTube is the leader in US streaming watch time. Advertisers are leaning in. With AI-powered solutions, we're helping brands deliver efficient reach and ROI and address pain points like frequency and measurement.

Then there's our subscription offerings. It's clear the future of online video is about helping users seamlessly discover and watch content across ad-supported and premium services. Our goal is to be a one-stop shop for multiple types of video content. That's why we first offered Music and Premium, where 80 million-plus paid subscribers and trialers enjoy their favorite content and music ads-free.

We then expanded into YouTube TV, significantly improving on the legacy television experience. And then last fall, Primetime Channels launched, making streaming subscription services available on YouTube on an à la carte basis.

Given the potential we see in our subscription offerings, we recently announced a multiyear agreement to distribute NFL Sunday Ticket. As Sundar highlighted, we're excited about the opportunities this will open up.

Lastly is our focus on shoppable YouTube. It's still nascent, but we see lots of potential and making it easier for people to shop from the creators, brands, and content they love.

I'll close with something I've said many times before. Our success is only possible because of our customers and partners. The reality is we only do well when they do well. Since our earliest days, our revenue share models have been structured around ROI for our partners from Play developers and online publishers to YouTube creators, artists and media orgs around the world.

Over the last three years, I'm proud to share that we've contributed more than $200 billion to these ecosystems. We remain as committed as ever to fueling the next generation of businesses, media companies and creativity on the web.

On that note, a big thank you to our partners and customers for their ongoing collaboration and trust and to Googlers for their energy, focus, and dedication to helping our users, customers and partners succeed, especially through these tougher times.

Ruth, over to you.

Ruth Porat

Thank you, Philipp. For the full year 2022, Alphabet delivered revenues of $283 billion, up 10% versus 2021 and up 14% on a constant currency basis, adding $37 billion to revenues, excluding the impact of foreign exchange.

I will briefly cover the main points of our fourth quarter results and then turn to our outlook to give you more context for Sundar's comments on how we're focused on investing for growth as well as on reengineering our cost base for long-term success.

For the fourth quarter, our consolidated revenues were $76 billion, up 1% or up 7% in constant currency. Search remained the largest contributor to revenue growth on a constant currency basis. Our total cost of revenues was $35.3 billion, up 7%. Other cost of revenues of $22.4 billion were up 15%. The increase was driven by two factors; first, hardware costs due primarily to $1.2 billion in inventory related charges, and secondarily, to strong unit sales. The charges reflect ongoing pricing pressures and changes in expected future inventory needs.

Second, costs associated with data centers and other operations. Operating expenses were $22.5 billion, up 10%, reflecting an increase in R&D expenses, primarily driven by headcount growth, followed by an increase in G&A expenses, primarily reflecting an increase in charges related to accrued legal matters. These increases were partially offset by a decline in sales and marketing expenses, primarily due to lower advertising and promotional spend.

Operating income was $18.2 billion, down 17% versus last year, and our operating margin was 24%. Net income was $13.6 billion. We delivered free cash flow of $16 billion in the fourth quarter and $60 billion in 2022. We ended the year with $114 billion in cash and marketable securities. We also repurchased a total of $59 billion of our Class A and Class C shares in 2022.

Turning to our segment results, starting with Google Services. Revenues were $67.8 billion, down 2%. Google Search and other advertising revenues of $42.6 billion in the quarter were down 2%. Search delivered moderate underlying growth in Q4, absent the impact of currency movements on reported results. YouTube advertising revenues of $8 billion were down 8%. Network advertising revenues of $8.5 billion were down 9%.

Other revenues were $8.8 billion, up 8%, reflecting several factors; first, significant subscriber growth in YouTube Music Premium and YouTube TV; second, strong growth in hardware revenues, primarily from the Pixel family. Offsetting growth in these two areas was a year-on-year decline in Play revenues, reflecting a particularly large foreign exchange headwind in APAC, as well as the impact of reductions of Play Store fees. TAC was $12.9 billion, down 4%. Google Services operating income was $21.1 billion, down 19%, and the operating margin was 31%.

Turning to the Google Cloud segment. Revenues were $7.3 billion for the quarter, up 32%. Revenue growth in GCP was again greater than Google Cloud, reflecting strength in both infrastructure and platform services. Google Workspace's strong results were driven by increases in both seats and average revenue per seat. In Q4, we saw slower growth of consumption as customers optimized GCP costs, reflecting the macro backdrop. Google Cloud had an operating loss of $480 million. As to our Other Bets, for the full year 2022, revenues were $1.1 billion and the operating loss was $6.1 billion.

Turning to our outlook for the business. In 2022, our year-on-year revenue growth was affected by a number of challenges. First, we faced very tough comps, given the outsized recovery in 2021 from the impact of the pandemic. Second, foreign exchange headwinds grew throughout the year. And third, we were operating against the backdrop of a more challenging economic climate that also impacted many of our customers, and which remains ongoing.

Within Google Services, we are focused on investing in the opportunities we see for long-term revenue growth. First, within advertising, we are focused on using advances in AI to drive new and better experiences for users and search, as well as to deliver better measurement, higher ROI and tools for more compelling creative content to advertisers.

In YouTube, we are prioritizing continued growth in Shorts engagement and monetization, while also working on other initiatives across our ad-supported products. As to our outlook for other revenues, in Play, 2022 results reflected the particularly sizable impact from foreign exchange, lapping the uplift in user activity during the pandemic and the impact from the fee reductions we introduced.

We remain optimistic about the longer term prospects for mobile apps and gaming, although remain more cautious near term, given industry trends. With YouTube subscriptions, we're optimistic about building on its momentum across YouTube Music Premium, YouTube TV and Primetime Channels. In hardware, we continue to make sizable investments, particularly to support innovation across our Pixel family, while working to drive greater focus and cost efficiencies across the portfolio.

For Google Cloud, we remain excited about the long-term market opportunity and the trajectory of the business. Enterprises and governments are increasingly turning to us for their digital transformation initiatives across verticals and geographies. While investing for growth, we remain very focused on Google Cloud's path to profitability.

In terms of Other Bets, as Sundar mentioned, we will be making a financial reporting change as it relates to DeepMind. To reflect the increasing DeepMind collaboration with Google Services, Google Cloud and Other Bets, beginning in the first quarter, DeepMind will no longer be reported in Other Bets and will be reported as part of Alphabet's corporate costs.

I'll now walk you through the key elements of our efforts to deliver a durable reengineering of our cost base in order to slow the pace of operating expense growth.

We expect the impact will become more visible in 2024. First, with respect to Alphabet headcount, we are meaningfully slowing the pace of hiring in 2023, while still investing in priority areas. In Q4, we added 3,455 people. As in prior quarters, the majority of hires were for technical roles.

With respect to our recent announcement that we are reducing our workforce by approximately 12,000 roles, most of the impact will be seen in Q1. We will take a severance charge of $1.9 billion to $2.3 billion, which will be reported in corporate costs. We will continue hiring in priority areas with a particular focus on top engineering and technical talent as well as on the global footprint of our talent.

Second, we have a longer term effort underway to reengineer our cost base in three broad categories; first, using AI and automation to improve productivity across Alphabet for operational tasks, as well as the efficiency of our technical infrastructure; second, managing our spend with suppliers and vendors more effectively; and third, optimizing how and where we work.

In the first quarter of 2023, we expect to incur approximately $500 million of costs related to exiting leases to align our office space with our adjusted global headcount look. This will be reflected in corporate costs. We will continue to optimize our real estate footprint.

Turning to CapEx. For 2023, we expect total CapEx to be generally in line with 2022, with an increase in technical infrastructure versus a decline in office facilities. Our ongoing investment in technical infrastructure is obviously a critical component of supporting our long-term growth opportunities.

Finally, I will point you to our earnings release in which we noted that we adjusted the estimated useful lives of servers and certain network equipment starting in Q1 2023. We expect these changes will favorably impact our 2023 operating results by approximately $3.4 billion for assets and service as of year-end 2022.

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

Question-and-Answer Session

Operator

Thank you. [Operator Instructions] And our first question comes from Brian Nowak with Morgan Stanley. Your line is open.

Brian Nowak

Thanks for taking my questions. I have two, the first one around AI and sort of the cost of AI. I appreciate all the color about all the AI tools that are to come. I guess, first question is, how should we think about the potential impact on CapEx and the higher compute intensity of these AI tools to come, potentially impacting margins over the next couple of years?

And then the second one, Ruth, I really appreciate the conversation about long-term efforts underway to improve efficiency. How should we think about potential impacts of those efforts in 2023 and in 2024? Have you sort of run any sizes of what types of savings we could see roll through the P&L over that period? Thanks.

Ruth Porat

Thanks for the question. So starting on your question about AI and CapEx. As I think Sundar and Philipp both noted, AI is already incorporated in many of our products, products like Performance Max and Smart Bidding and Cloud, as Sundar said. It is more compute-intensive, but also opens up many more services and products for our users, for creators, for advertisers.

That being said, we're very focused on further optimizing the cost of compute, and that's across all elements, data center, servers and our supply chain. So we're continuing to invest with a keen lens on the return on that capital.

And as I indicated in opening comments, when we look at CapEx for 2023, we do expect it's going to be generally in line with 2022 with an important mix shift. We're increasing our investments in technical infrastructure. And that's not just for AI. That's to support investments across Alphabet, in particular in Cloud as well. And at the same time, we're meaningfully decreasing our CapEx for office facilities.

And then, with respect to the overall efficiency opportunities, yes, very keen focus on the three areas that I noted, the -- and one of the key elements of it is using AI and automation to improve productivity and efficiency of our technical infrastructure.

We noted that we want to be focused and that we are focused on durable improvements to our expense base. And that's because if you go through the items, the work streams that we have in flight, they take longer to implement, execute. They're in process now, and they continue to build on themselves and continue to provide added upside as we go through time, which is why I indicated you would see more of an impact on 2024 than in 2023. But we're continuing to work through them.

Brian Nowak

Great. Thanks, Ruth.

Operator

And our next question comes from Michael Nathanson with MoffettNathanson.

Michael Nathanson

Thanks. I have two. For Sundar and Philipp, you both mentioned the NFL in your remarks and the opportunities it opens up. Can you comment and help us define, what do you see is that longer-term opportunity? Why is it so critical to have the NFL? Is this the first of many sports deals to be had? So anything just help us, why this is so important to you? And then just, Philipp, you've said in the past about the scaling of monetization, YouTube Shorts. What are the sticky factors? What's taking you the time to really bring advertisers on? I wonder some of the things you've seen in terms that you've solved to make this a more quickly monetizable product? Thank you.

Philipp Schindler

Yeah. Thank you so much for the question. We think there is a lot of great opportunities to differentiate the user and creator experience, with our unique capabilities. It basically means that, every YouTube viewer, who is interested in the NFL can now have one-click access to the full offering of Sunday Ticket, as an add-on package on YouTube TV subscription, and as a stand-alone offering on Primetime Channels. This will be the first time that Sunday Ticket is actually available a la carte for fans.

On YouTube TV, we're building the ability for subscribers to, for example, watch multiple screens at once. And on YouTube CTV, we'll be adding new features specific to the Sunday Ticket experience like comments, chats, polls, and so on. On the creator side, imagine all the innovative ways they can create with exclusive NFL content, behind-the-scenes event access and so on. And we're really excited to see, what they'll do across long-form, shorts, live streams and more.

On your second question, on the Shorts side, as I said earlier, viewership is growing rapidly, 50 billion-plus daily views, up from 30 billion last spring. We're still pleased with our continuing progress in monetization. Closing the gap between Shorts and long-form is a big priority for us, as is, of course, continuing to build a great creator and user experience, which we're paying a lot of attention to.

As on Shorts are now available, it gives you a bit of a sign for the progress. We have video action, app discovery, Performance Max campaigns and via product feed shorts are also shoppable. And again, we're the only destination where creators can produce all forms of content, across multiple formats, across multiple screens and really with multiple ways to make a living. And Sundar shared just yesterday, we brought revenue sharing to Shorts via our YouTube Partner Program. Ultimately, our goal is to make YouTube the best place for Shorts and creators. And that's really what our focus is at the moment.

Operator

And our next question comes from Douglas Anmuth with JPMorgan. Your line is open.

Douglas Anmuth

Thanks for taking the questions. One for Sundar and one for Ruth. For Sundar, can you just talk more about how you can bring the AI products to market with the principles and integrity that you talked about and how you can do that without kind of sacrificing quality or trust along the way?

And then, Ruth, clearly, the language around reengineering the cost structure in a durable way and everything that went along with it is different than what we've heard in the past. Is there any way at all to help us quantify how you're thinking about these efforts? Thanks.

Sundar Pichai

Thanks, Doug. On the AI side, it is a really exciting time. I think we've been investing for a while, and it's clear that the market is ready. Consumers are interested in trying out new experiences. I think I feel comfortable with all the investments we have made in making sure we can develop AI responsibly. And we'll be careful.

We'll be launching -- we’ll -- more as labs products in certain cases, beta features in certain cases and just slowly scaling up from there. Obviously, we need to make sure we're iterating in public, these models will keep getting better, so the field is fast changing. The serving costs will need to be improved.

So I view it as very, very early days, but we are committed to putting our experiences, both in terms of new products and experiences, actually bringing direct LLM experiences in Search, making APIs available for developers and enterprises and learn from there and iterate like we've always done. So I'm looking forward to it.

Ruth Porat

And then on your second question, when we talk about being focused on delivering sustainable financial value, that obviously means that expense growth cannot be growing ahead of revenue growth. And we're focused on revenue upside, as well as durable changes to the expense base to really ensure we have the capacity to invest in that growth.

And clearly, the emphasis of revenue growth, there's a lot that's exciting ahead of us within Google Services, all of the AI advancements that are improving advertiser ROI and the search user experience. And more broadly, as we've talked about across the key product areas.

And then very importantly, on expense growth, we have a very strong commitment to, we can’t keep emphasizing, durably reengineer our cost base, and that will benefit all of the segments across Alphabet.

And the key components, slowing the pace of hiring as a starting point, product prioritization across Google, as Sundar said, is key, improving economics in hardware as we focus intently on the Pixel line and cost structure, then using AI and automation to improve productivity for operational tasks, as well as for the efficiency of our technical infrastructure, where we have a number of work streams.

Managing our spend, as I said, with suppliers and vendors and then optimizing how and where we work, and you saw part of that with the real estate consolidation, given the slower headcount growth.

All of those not only benefit Google Services, but many of those similarly drive greater efficiency across Alphabet. And so, as we've said, in Cloud, we remain very focused on the path to profitability. That's a revenue and margin driver. And then with Other Bets, we're similarly focused on investing sustainably.

And so, to go back to it, it's the durable nature of change in some of the elements that I've talked about here where work is ongoing, you start to see impacting in 2023 but to really get full year run rate and the benefit of it, there is work ongoing. And that's why we've emphasized this notion of it comes in and then really you see the run rate in 2024.

Douglas Anmuth

That’s helpful. Thank you, both.

Operator

Our next question is from Eric Sheridan of Goldman Sachs. Your line is open.

Eric Sheridan

Thank you so much. Maybe two, if I could. Sundar, for you, continuing on the AI theme, how do you think philosophically about capturing the opportunity set that you see in front of you, given all the investments you've made over the last five-plus years that we've been talking about going back to a lot of Google I/Os versus potentially disrupt the user experience or the monetization arc in your existing product set and striking the right balance between the opportunity set and being disruptive to yourself when you think about looking forward over the next couple of years?

And then, Ruth, maybe just following on some of the questions and debates on the cost structure. Obviously, Other Bets is an area where the losses continue to be sort of higher than what some of us think from the outside looking in. But then you showed some improvement in the losses in the Cloud division this quarter. How should we be thinking about the rationalization of the cost structure and aligning costs with opportunity sets across some of the divisions of Alphabet when you think for the medium to long term? Thanks so much.

Sundar Pichai

Thanks, Eric. Look, I do think, first of all, we made such a foundational technology and we've been investing not just in terms of research, but actually getting it all production scale-ready. We had already deployed. If you look at the impact, things like BERT and MUM had on search quality, making search multi-modal, driving the usage of products like Google Lens. I feel like we've been scaling up well.

In Google Cloud today with Vertex AI, we'd already been bringing AI APIs to enterprises, and they're on a pretty healthy growth path. So we do see secular opportunities ahead, both in terms of putting these APIs out, making sure every developer, every organization in the world can use it. And as I said earlier, we are in very, very early days and I think there's a lot of room ahead.

In terms of Search too, now that we can integrate more direct LLM type experiences in Search, I think it will help us expand and serve new types of use cases, generative use cases. And so I think I see this as a chance to rethink and re-imagine and drive Search to solve more use cases for our users as well. So again, early days, you will see us be bold, put things out, get feedback and iterate and make things better.

Ruth Porat

And then in terms of your question about Other Bets investment levels, so as we've talked about in prior calls, our goal for Other Bets is to use our deep technology investments to drive innovation with real potential for value creation. And at the same time, we are very focused on the overall pace of investment and the financial returns. And so what we're really looking at here are what are the opportunities for monetization and commercialization. As I've said on prior calls, there is no monolithic approach across the portfolio, but we are very focused on whether – what's the pace of investment opportunities for monetization and commercialization.

And just a bit more with respect to the DeepMind move, to be very clear, we consolidate in Other Bets into Google only when that bet supports products and services within Google or for Alphabet broadly. And you saw us do that, some time ago when we moved Chronicle as an example into combining with our Cloud business and really the cybersecurity offering that is now in Cloud, and that was very effective.

With AI, this is obviously an Alphabet strategic priority, and we see huge opportunity ahead, and DeepMind's research is core to that future across the product areas in Alphabet portfolio. And so this reporting change reflects the strategic focus in DeepMind, the support of each one of our segments, and that's why I indicated that beginning Q1, DeepMind financials will be reported within our corporate cost segment.

Eric Sheridan

Thanks so much.

Operator

Our next question is from Justin Post with Bank of America Merrill Lynch. Your line is open.

Justin Post

Thank you for taking my question. Just digging into Search, low single-digit growth ex-FX. Can you talk about the pressures there, volume versus pricing or CPCs? What's really driving the slowdown? It's almost back to 2009 recession levels. Just think about that. And then any signs that we're near a bottom? Any stabilization in growth rates you can talk about or how your outlook is for 2023 on that? Thank you.

Ruth Porat

So overall, as we've indicated, we remain very excited about all that we're doing in Search, the utility for all of us. And so that's why you've heard so many comments about the application of AI and what that means for the ongoing opportunity. You had a number of different questions in there. I think one was on volumes. In the 10-K that we'll be filing shortly, you'll see that for the full year 2022, CPCs were down 1% versus last year. And as we've talked about in prior quarters, the change in CPCs can reflect a number of different factors; geographic mix, property mix, all sorts of things. Clicks were up 10% in 2022, reflecting a number of factors, including increased engagement, primarily on mobile devices and improvements in ad formats.

But I think overall, we're really excited about what we see ahead. We're not going to predict the global environment. We did say the challenging backdrop is ongoing, and you can see that but we're very focused on what we can control. And I think most important and what we're really excited about here is innovation to help advertisers overall and our cost reengineering that really gets us to align this long-term sustainable value creation.

Justin Post

Thank you.

Operator

Our next question is from Ross Sandler with Barclays. Your line is open.

Ross Sandler

Yeah. Just a question on the hardware business. Pixel's doing quite well, but it seems like there have been issues around other areas with this inventory write-down. So could maybe you guys just talk about, in your mind, the strategic importance of having the wide range of hardware products that you have in that segment as it relates to your overall AI initiatives? Thanks a lot.

Sundar Pichai

Thanks, Ross. First of all, very, very pleased with how Pixel has performed through a challenging macro environment. Look, I think our computing portfolio is incredibly important. It's what allows us to -- for us to invest and drive innovation forward. You have to put it all together as a product and ship it. And I think it ends up playing a very, very big role in guiding the ecosystem as well.

And increasingly, I think users are thinking beyond phones and thinking through a holistic ecosystem. To give one example, us undertaking Pixel Watch and, as part of that, integrating Fitbit and bringing it to our ecosystem as well, partnering closely with

Samsung on wearables. The combination is what has driven over a 300% increase in actives on Android watches ecosystem.

So, just to give you a context on that. So, we are very thoughtful about how we are approaching this area. And as Ruth mentioned, across all these areas, too, we are working to drive greater focus and cost efficiencies in the portfolio.

Obviously, we work through a challenging supply chain environment as well as a challenging environment on the demand side. And so we'll continue focusing on improving all of this in a durable way.

Operator

Our next question comes from Mark Mahaney with Evercore ISI. Your line is open.

Mark Mahaney

Hey I'll just ask one question on, Ruth, you mentioned a couple of times, getting Google Cloud to profitability. And just talk through how that gets done. You had almost 40% growth in Google Cloud. The operating loss level stayed about the same from 2021 to 2022, so the growth is there.

What are the factors that need to be solved in order to get pretty nice profitability out of that segment sort of anywhere akin to what Azure and AWS have been able to show over the years? Thank you.

Ruth Porat

Thanks for the question. So, as we've talked about on prior calls, with Google Cloud, we've really been investing ahead of our revenues, given the growth and the opportunity overall and the desire to ensure that we're equipped, able to support customers across segments around the globe. And so there's been meaningful investment to position ourselves to really have the momentum that the team has continued to deliver.

That being said, they are, as both Sundar and I have noted, extremely focused on the path to profitability in every element of that and some of the items that I noted that benefit Alphabet generally most certainly are relevant here for Cloud as well, everything from our efficiency with our technical infrastructure, which we're very excited about, all the efforts that they're doing there and more broadly.

So, this has been really to ensure, first and foremost, given the scale of the opportunity and the speed with which it's moving that we're positioned to be present with our customers, to provide them with the analytics, the skills, the capabilities that are needed to build for long-term growth.

And we're at a position now where we've meaningfully closed the gap to profitability but still are working through as we continue to invest for growth while narrowing what this is on our march to profitability.

Mark Mahaney

Thank you, Ruth.

Operator

And our last question comes from Brent Thill with Jefferies. Your line is open.

Brent Thill

Good afternoon, Ruth, can you give us a sense of what you're seeing in Q1? Is this year a little more seasonal than historic? Are you observing any different patterns just over one month into of the year? Can you give us any color in terms of how you're framing this quarter?

Ruth Porat

So I think as you know well, we don't tend to -- we don't provide exit run rates. What we tried to do is give you the context within which we're approaching the overall business and the priorities that we have as we're looking at revenue upside and the growth levers there as well as how to reengineer our expense base to deliver attractive returns. So not really much to add to the comments that you've heard today, and we're continuing to execute across each one of the elements we discussed.

Brent Thill

Thank you.

Operator

Thank you. And that concludes our question-and-answer session for today. I'd 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 first 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.