Operator

Ladies and gentlemen, thank you for standing by, and welcome to the Alphabet Second Quarter 2020 Earnings Conference Call. [Operator Instructions]. I'd now like to hand the conference over to your speaker today, Jim Friedland, Director of Investor Relations. Please go ahead.

James Friedland

Thank you. Good afternoon, everyone, and welcome to Alphabet's second quarter 2020 earnings conference call. With us today are Sundar Pichai 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, including the effect of the COVID-19 pandemic on those areas, 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 most recent Form 10-K filed with the SEC and in our Form 10-Q for the quarter ended June 30, 2020 expected to be filed with the SEC later today.

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. And now I'll turn the call over to Sundar.

Sundar Pichai

Thank you, Jim, and thank you, everyone, for joining in. It's certainly been a busy week, and I'm glad to be here. I hope everyone is staying safe and well. All of us at Google continue to send our deepest gratitude to everyone on the front lines of the pandemic all around the world. I also want to personally thank all our employees who continue to work so hard to make sure our products and services are available for everyone right now. People looking for important health information, hard-hit businesses working to inform customers about opening hours or delivery options or teachers connecting to their students. The macroeconomic environment caused by the pandemic created headwinds for our business. Our revenue declined on a reported basis and is flat year-over-year on a fixed FX basis. Like other companies, this quarter, we saw the early signs of stabilization as users return to commercial activity online. This is true across most of our advertising verticals and geographies. Of course, the economic climate remains fragile.

One thing I'd like to call out is our continuing journey to invest in and grow new businesses. We delivered strong growth in our non-ads revenues particularly from Cloud, Google Play and YouTube subscriptions. This, in turn, is helping our partners, developers and creators earn revenue and deliver valuable services to people. We are focused on the steps to build long-term value with these opportunities.

Today, I'll review the quarter by walking through the 4 key areas for 2020 that you heard me mention over the last several quarters: creating the most helpful products for everyone; providing the most trusted experiences for our users; executing at scale; and creating sustainable value.

First, creating the most helpful products for everyone. This has been especially important during this time. We are focused on providing locally relevant, helpful and authoritative information about COVID in over 70 languages in 200 countries. This has been an enormous effort across search and all our products. YouTube, for example, engage with public health officials in over 90 countries and services panels with locally relevant information in response to COVID-19 queries.

On Google Maps and Search, we now display more than 12,000 COVID-19 testing centers across 20 countries, working with local governments and data providers to source accurate and helpful information. Using our technical capabilities, we are helping people find more information about local businesses such as takeout, curbside, updated hours, donations, gift cards and virtual services.

With more kids at home, Google Play launched a special kids tab with only teacher-approved apps and YouTube has seen traction with learn at home as well as a virtual summer camp for kids called Camp YouTube, plus a virtual commencement series.

To help Indian Internet users, we announced a Google for India Digitization Fund. Through this effort, we'll invest approximately $10 billion over the next 5 to 7 years to accelerate and participate in India's burgeoning digital economy. We'll enable information in local languages and apply technology and AI to important areas like health, education and agriculture. Jio platforms is the first partnership agreement in the fund and will work with them to help millions of users in India become owners of smartphones.

Second, providing trusted experiences for our users. Doing even more to protect users' privacy, keep information safe and provide high-quality information was a key focus this quarter. In one important update, we now set people's location history and web in-app activity to delete automatically after 18 months as the default. We also integrated password checkup into our core security checkup to help people detect any instance of their online accounts being compromised. More than 100 million people have used it. Android 11 Beta launched this quarter with many new features to help people better manage their connected devices. It contains a significant focus on privacy and security, including more granular control over app permissions and restrictions on app's usage of background location. Our exposure notifications API for Android and iOS, developed with Apple, launched this quarter. It's designed to empower public health agencies to create apps to help fight the spread of COVID with the strongest user privacy safeguards.

As of today, authorities have rolled out official apps in 12 countries to alert people that they were in contact with another person who tested positive for the virus and that they should isolate and get tested. We expect several more apps to launch in the next week or 2, including the first state apps in the U.S. We are also focused on election security efforts around the globe, whether it's removing coordinated foreign influence operations, prevent hacking and phishing attempts or enforcing our political ad policies that require transparency and prohibit narrow micro targeting.

Moving on now to executing at scale. All businesses are adjusting to work-from-home and we are no exception. While building products across distributed teams was new for us, this experience allowed us to make good use of our infrastructure investments and productivity tools. G Suite products, in particular, Google Meet have been absolutely critical, and we quickly reengineered it and made it available widely to help millions of other businesses and organizations connect and collaborate.

One area where we have executed really well to improve the user and merchant experience in the last year is shopping. We know that we and merchants face incredible competition for consumer attention and wallets. We are helping merchants lower their costs and improve their reach in a few ways. They can now list their products for free on the Google Shopping tab and on Search helping them drive more traffic and making our results more comprehensive and useful. We also recently announced that sellers on Buy on Google will no longer pay us a commission fee. Plus, we are giving retailers more choice by opening our platform to third-party providers, starting with PayPal and Shopify. Shopping ads also continue to be a great tool for merchants with new visual features for retailers such as smart shopping campaigns that let customers know about free shipping. We are continually adding more ways for advertisers to reach shoppers.

Now let me talk about our fourth area, building sustainable value, which is all about driving business value for our partners and investing smartly in new areas. In our advertising business, our focus is on helping businesses find customers as they work to rebuild and recover. We gave search advisers the ability to add high-quality images to their ads, helping shoppers quickly see products to consider and take action faster. We added features to make video ads more easily shoppable and browsable on YouTube as more businesses are shifting to online to offset physical store closures. For SMBs, we are proud that so many are taking advantage of new features, including Smart Campaigns to reach new online audiences and promoted pins on Google Maps to let customers know that their businesses are open. And to empower businesses to understand in an easy and visual way, what products people are searching for, during the special circumstances that COVID-19 has created. The rising retail categories, too, surfaces fast-growing product-related categories.

As I mentioned earlier, beyond advertising revenue, we see good traction in areas such as YouTube subscriptions, Google Play and Cloud. YouTube Premium Music and TV subscriptions performed well during the quarter. We are seeing strong demand for these services and are adding content regularly, including many Viacom networks like BET and Comedy Central. In Q2, Google Play app and game downloads were up more than 35% year-over-year, which means that revenue for developers continue to grow.

Let me go a bit deeper on Cloud. In the first half of 2020, technology and innovation proved to be a significant recovery mechanism for businesses. Those who are shifting to digital and embracing the spirit to innovate are evolving and growing. Our commitment to bringing innovative products to market, building and scaling our go-to-market organization, and strengthening our partner network helped us continue to meet the growing needs of our customers this quarter. We see 2 distinct trends as businesses embrace the future of work.

First, the future of business will be more digital. Customers are choosing Google Cloud to either lower their cost by improving operating efficiency or to drive innovation through digital transformation. Brands like Keurig Dr. Pepper, Deutsche Bank, Lowe's, Telefónica, Orange and Group Renault. And we are helping many government agencies deliver care for their citizens, including the states of Oklahoma and New York here in the U.S., and Italy and Spain in Europe.

Second, the future of work will be more collaborative. Virtual collaboration is critical in order to adapt and succeed in the changing global landscape. In Q2, we saw continued demand from customers using G Suite to help their employees work from home, including Wipro in India and expanded our relationship with the state of Arizona here in the U.S. Our customers are using G Suite tools across industries in new ways, whether it be financial advisers working with clients, doctors and nurses turning to telemedicine or teachers educating students with remote learning. In Q2, we peaked at more than 600 million Meet participants in a single week. As one example, PwC employees reached nearly 10 million hours of video conferencing in Google Meet in a single month. To make collaboration easier for everyone, we introduced an integrated workspace for Gmail, Chat, Meet and Drive on mobile and desktop. Our Cloud product strategy is differentiated and our investments in direct sales and indirect distribution are beginning to deliver results.

Before I move to Other Bets, I want to note that our hardware team continues to make good progress, and I'm excited by the new upcoming devices we have coming this fall.

And finally, in our Other Bets. Waymo announced that Fiat Chrysler automobiles will work with Waymo as its strategic partner for L4 autonomous technology across our full portfolio. We also entered into a partnership agreement with Volvo Car Group to work together to integrate the Waymo driver into an all-new electric vehicle platform for ride-hailing services. Finally, Waymo closed its externally-led investment round, bringing the total funding to $3.2 billion, which includes investment from Alphabet. And Wing's drone delivery service started delivering library books to students in Virginia.

In closing, it's an important and uncertain time in the world. We are all grappling with the pandemic and a struggling economy, while also reckoning with centuries of injustice that affect our Black communities every day. John Lewis' funeral today provides a timely reminder of the struggle. In June, we announced a significant package of commitments to help our Black+ community internally at Google as well as the wider Black community. This included product experiences that matter to Black users, including the option for business owners to identify their business as Black-owned in Google Maps and search. We also announced $175 million economic opportunity package to support Black business owners, start-up founders, job seekers and developers. In addition to YouTube's $100 million fund to amplify Black creators and orders. We commit to contributing to long-term meaningful change, both externally and within Google. And with that, I'll now turn it over to Ruth.

Ruth Porat

Thanks, Sundar. We are cautiously encouraged by our results for the second quarter, although mindful of the fragile global economic environment. Our advertising revenues gradually improved through the quarter, and our non-advertising revenue lines maintained their strong performance particularly Google Cloud and Play. I will begin with a review of the quarter on a consolidated basis for Alphabet, focusing on year-over-year changes. I will then review results for Google, followed by Other Bets and conclude with outlook. Sundar and I will then take your questions.

Starting with consolidated Alphabet results, our total revenues in the second quarter were $38.3 billion, down 2% year-on-year and flat in constant currency. Year-on-year declines in our advertising revenues from Search and Network were offset by growth in Google Other and Google Cloud revenues. Details of Alphabet's consolidated revenues by geographic region are available in our earnings press release. Across each region, we saw a gradual improvement in revenues in the quarter with some differences reflecting product mix. In terms of the foreign exchange impact, exchange rate movements resulted in approximately a 2% headwind to reported revenues.

Regarding our key expense lines. On a consolidated basis, total cost of revenues, including TAC, was $18.6 billion, up 7% year-on-year. Other cost of revenues on a consolidated basis was $11.9 billion, up 18% year-over-year primarily driven by Google-related expenses. The biggest factors here again this quarter were costs associated with our data centers and other operations, including depreciation and then content acquisition costs primarily driven by content costs for YouTube TV and our paid YouTube Music and premium subscription services, followed by costs for YouTube's advertising-supported content.

Operating expenses were $13.4 billion, up 7% year-on-year. Headcount growth was the largest driver of year-on-year growth for both R&D and G&A. Secondarily, the increase in G&A reflects contributions mainly for COVID response and reserves for estimated credit losses of our customers. The year-on-year decline in sales and marketing expenses was due to lower advertising and promotional spend as we paused or rescheduled campaigns and pivoted to digital formats for flagship events. All 3 categories benefited from lower T&E expenses. Stock-based compensation totaled $3.3 billion. Headcount was up 4,450 from the first quarter. Again, the majority of new hires were engineers and product managers. In terms of product areas, the most sizable headcount increases were again in Google Cloud for both technical and sales roles.

Operating income was $6.4 billion, down 30% year-over-year, and our operating margin in the quarter was 17%. Other income and expense was $1.9 billion, which primarily reflects an unrealized increase in the market value of equity securities. We provide more detail on the line items within OI&E in our earnings press release.

Our effective tax rate was 15.9%. Net income was $7 billion, and earnings per diluted share were $10.13.

Turning now to CapEx and operating cash flow. Cash CapEx for the quarter was $5.4 billion, which I will discuss in the Google segment results. Operating cash flow was $14 billion with free cash flow of $8.6 billion. We repurchased $6.9 billion of our shares. We ended the quarter with cash and marketable securities of approximately $121 billion.

Let me now turn to our segment financial results. Starting with our Google segment. Revenues were $38 billion, down 2% year-over-year. I'll now go through the individual advertising revenue lines. Starting with Google Search and other advertising revenues. We generated $21.3 billion in revenues in the quarter, down 10% year-over-year in the aggregate with improvement as the quarter progressed. We saw a gradual return in user search activity to more commercial topics throughout the quarter followed by an increase in spending by advertisers. This resulted in an improvement in year-on-year search revenue trends during the quarter with Search revenues essentially flat to last year by the end of June.

YouTube advertising revenues were $3.8 billion, up 6% year-on-year driven by ongoing substantial growth in direct response offset by a continued decline in brand advertising, which then moderated toward the end of the quarter.

Network advertising revenues were $4.7 billion, down 10% year-on-year with trends improving somewhat toward the end of the quarter as advertisers spend began to return.

Turning to Google Cloud, including GCP and G Suite. Revenues were $3 billion for the second quarter, up 43% year-over-year. GCP maintained the strong level of revenue growth it delivered in the first quarter, and its revenue growth was again meaningfully above cloud overall. GCP growth was again led by our infrastructure offerings and our data and analytics platform. Overall, the lower Google Cloud revenue growth in the second quarter relative to the first quarter reflects the fact that G Suite lapped a price increase that was introduced in April last year. G suite maintained healthy growth in average revenue per seat as well as in seat growth, which does not include customers who took advantage of our free trials as they shifted their employees to work-from-home.

Other revenues were $5.1 billion, up 26% year-over-year primarily driven by growth in Play and YouTube non-advertising revenues. Within Play, app revenues in the second quarter benefited from the impact of very strong growth in the number of active buyers with more people at home looking for entertainment. Within YouTube subscription revenues, we continue to benefit from subscriber growth across its various offerings. Total traffic acquisition costs were $6.7 billion or 22% of total advertising revenues and down 8% year-over-year. Total TAC, as a percentage of total advertising revenues, was up slightly year-over-year.

Google operating income was $7.6 billion, down 26% versus last year, and the operating margin was 20%. Google accrued CapEx for the quarter was $4.8 billion, reflecting investments in servers, data centers and office facilities.

Moving on to the performance of Other Bets. For the second quarter, revenues were $148 million primarily generated by Fiber and Verily. The operating loss was $1.1 billion.

Let me end with our outlook. As I said earlier, ads revenue gradually improved during the quarter across Search, YouTube and network. However, we believe it is premature to gauge the durability of recent trends, given the obvious uncertainty of the global macro environment.

As we discussed on last quarter's earnings call, global macroeconomic performance has tended to be correlated with ad spend and is a key signal to monitor. Over the long term, we remain optimistic about the underlying strength of our business. In terms of Google Cloud, we are pleased with the traction we're having with large customers who are making multiyear commitments with us. This is reflected in the strength of our backlog, which ended the quarter at $14.8 billion, substantially all of which relates to Google Cloud. This performance is a result of the investments we are making into the cloud go-to-market organization. Google Play's Q2 results reflect growth in the number of new buyers with accelerated adoption as people stayed home. Performance also reflects the significant investments we have made in the ecosystem to support developers and users, such as successful promotion and adoption of our partners' apps and games in new locales around the world and expanding the availability of local forms of digital payments.

Moving on to profitability. The decline in our Search revenues put significant pressure on profitability, which was further impacted by our ongoing investments for long-term growth. As I discussed last quarter, much of our expense base, both in cost of revenues and OpEx is not directly correlated with changes in revenues. For example, although TAC and content acquisition costs are obviously tied to revenues, there's a sizable percentage of items in other cost of revenues that are generally less variable in nature, such as depreciation and operations costs of our technical infrastructure as well as for activities like customer support and content review. We remain focused on the user and customer experience, and we'll continue to invest to support our products. .

With respect to operating expenses, although we still expect the pace of headcount growth to decelerate somewhat in 2020, we're continuing to hire aggressively in priority areas like cloud. We still expect that headcount additions will be seasonally higher in Q3 as we bring on new graduates. Consistent with prior years, we expect sales and marketing expenses to be more heavily weighted to the back half of the year, in part to support product launches and the holiday season.

Turning to CapEx. We continue to expect a modest decrease in the level of total CapEx in 2020 compared with last year. This is particularly due to our decision to slow the pace at which we acquire office buildings in the near term as we focus on reimagining the optimal work environment. This also reflects the slower pace of ground-up construction for both our office facilities and data centers due to COVID-19. In terms of technical infrastructure, as we discussed last quarter, we anticipate investment to remain at roughly the same level as in 2019 with relatively more spend on servers than on data center construction and benefiting from our ongoing focus on server efficiency. With respect to capital allocation, our primary use of capital continues to be, to support organic growth in our businesses followed by retaining flexibility for acquisitions and investments. We complement these growth drivers with a return of capital. As we indicated in our press release today, our Board has authorized the repurchase of up to an additional $28 billion of our Class C stock. Thank you, and Sundar and I will now take your questions.

Question-and-Answer Session

Operator

[Operator Instructions]. And our first question comes from the line of Eric Sheridan from UBS.

Eric Sheridan

Maybe two, if I can, for Sundar. One, on the commerce initiatives, a lot of announcements from the company in the quarter, moving towards sort of commission-free and amplifying both the advertising and e-commerce efforts. I want to understand some of the moves you're making strategically and how you think that positions you broadly against, obviously, an e-commerce landscape that's seeing a lot of pulled forward penetration given the current environment. And second on YouTube, obviously, a fairly volatile brand advertising environment and TV advertising remains in flux. What are the opportunities both in the U.S. and globally to go after sort of TV ad budgets under the YouTube umbrella?

Sundar Pichai

On Shopping, I spoke a little bit in my remarks, but really excited at the potential there. The team has been executing very well. Overall, users come to Google a lot to find the products they are looking for, but we see an opportunity to invest and make the experience better. Sometimes the journeys may fail because they don't find what they're looking for. So we want to make sure it's comprehensive.

Next when people find what they like, we want to make it simple for them to transact. And so working on that end-to-end experience has been a big focus. And obviously, making sure for merchants, really making sure we are open to business for merchants, and we are giving value to them has been the focus. The early indications are that users are responding positively, both in terms of user engagement and more importantly, giving value back to merchants for their investment there. So in some ways, it's a return to our first principles. We want to ensure that Google is the best place for merchants to connect with users. And so I'm excited by it, and you'll continue to see us focus in this area.

The second was on YouTube brand. Obviously, YouTube has been doing well in terms of engagement and watch time. And so we see a long-term opportunity there. We've had strength on direct response as well through this quarter. But on brand, which was your question, we are obviously investing not just in YouTube main product, YouTube TV as well. And so areas where we can offer a bundle, advertisers are interested in streaming, and so bringing that bundle together, especially to advertisers and upfronts through YouTube Select is a big opportunity as well. So we are focused on that.

Operator

And our next question comes from Doug Anmuth from JPMorgan.

Douglas Anmuth

I have two. Just first, Ruth, curious if you can just talk about the cost structure a little bit more. We know you'll continue to invest to drive growth over the long term. Just curious how you're thinking about it as the top line starts to recover more hopefully over coming quarters. And then secondly, I know you said that search trends were flat to last year by the end of June. Just curious if there's anything you could add in terms of what you've seen more recently over the last month as well.

Ruth Porat

Thanks for this, Doug. So in terms of cost structure, as we talked about last quarter, we have been focused on taking steps to enhance efficiency in the near term. And that being said, as Sundar and I both noted, what you're seeing is the fact that we do remain focused on investing for the long term. So sort of breaking that down in cost of revenues, while TAC and content acquisition costs are obviously tied to revenues, there is a sizable percentage of other cost of revenues that are not directly correlated with revenue growth, as I noted in opening comments, and we are very focused on the user experience and the overall ecosystem. So we are investing to make sure that we're supporting our products so they remain reliable in all environments.

And then in OpEx, much of our operating expense is generally less variable and not necessarily correlating to revenues in the near term. So in terms of a couple of the items, although we do continue to expect the year-on-year headcount growth rate to decelerate, as I noted, we are hiring aggressively in priority areas like Cloud. And so we're taking near-term steps to enhance efficiency but still investing for the long term. So we're trying to make sure that we're getting those tradeoffs right. And as I noted, we do expect the year-on-year headcount growth rate in 2020 to be down somewhat from the 20% year-on-year rate last year, and that's even adjusting for 2 items that put upward pressure on headcount growth. The first, we're moving certain customer support roles from third-party vendors to Google's in-house operation center. That is actually OpEx neutral, but does increase reported spend. And then second, the pending acquisition of Fitbit. So we're trying to navigate it appropriately.

In terms of your second question, in terms of search trends and what we saw throughout the quarter, I would say that following a rough end to the first quarter, ads revenue gradually improved in the quarter, not only in Search, but YouTube and Network. And so for Search, we ended March at a midteens percentage decline in year-on-year revenues. And then as we progressed through the second quarter, we saw a gradual return in user search activity to more commercial topics, and then that was followed by an increase in spending by advertisers. So that resulted in a gradual improvement in year-on-year Search revenue trends in the second quarter. We ended basically flat to last year by the end of June and you know to carry it forward, although we're pleased that ads revenue gradually improved throughout the quarter.

As I said, we do believe it's premature to say, they were out of the woods given the fragile nature of the macro environment. And as you're aware, ad spend does tend to be correlated with macroeconomic performance. And so the macro backdrop will continue to be a key signal to monitor. But to your question, based on our estimates from the end of June through last quarter, there has been a modest improvement in July.

Operator

And our next question comes from Heather Bellini from Goldman Sachs.

Heather Bellini

I just wanted to ask a question on -- two questions related to Google Cloud, if I could. One, Sundar, I was wondering if you could share with us how you've seen the change in pace of customers migrating workloads to the cloud given COVID? And I'm also wondering if you could share with us kind of the puts and takes, and Microsoft talked about this a little bit last week with their Azure business, but for those that have accelerated workload migration to the cloud, how much has that offset the impacted industries or companies that you might be serving where they're seeing lower utilization than what they normally do of cloud capacity? So if you can kind of talk about the puts and takes to the growth as well, that would be great.

Sundar Pichai

Thanks, Heather. Overall, from my vantage point, obviously with Google Cloud, we've been investing to scale up, especially on the people side, on engineering, go-to-market and then, obviously on our investment side with data centers, cloud regions and so on. And so for me, it's been good to see as we are scaling up, we are executing more effectively. I've been personally involved in many, many conversations last quarter. We had many large customers come on to cloud, big telco deals and banking deals, Deutsche Bank, as an example. So overall, I felt the momentum was strong. Generally, felt like things were continuing well through the course. Felt like more a secular interest in our digital transformation companies are deeply thinking long term and planning for us. So overall, I felt at the moment, almost there. And I felt our execution as we are scaling up. Obviously, we are scaling up a lot. And so it's -- the combination is working well.

Your second question in terms of puts and takes. Overall, I think there are -- I won't -- I don't know whether there's anything significant worth for me highlighting. Obviously, you are right to point out that it doesn't affect everyone the same, but nothing significant for me to highlight here today.

Operator

And our next question comes from Brian Nowak from Morgan Stanley.

Brian Nowak

I have two. The first one, Sundar, we try to always figure out changes in consumer behavior. I guess as you have sort of been studying what people have been doing through shelter-in-place and from the way things are changing from a consumer perspective, talk to us about areas you're most focused on, investing in and driving your teams to create new products to really help consumers with their changing habits. And then the second one, Ruth, I know as we sort of we look ahead with potentially a larger percentage of the workforce, work remote or work from home, without looking for quantification, maybe just talk to us about some puts and takes to areas where you could see either efficiency or higher potential costs from a larger percentage of the workforce being remote over the long term.

Sundar Pichai

Yes. On the first one, when there is -- the shift to online is profound. We see people engaging a lot, doing newer things than they did before. People's interests have -- are broadening, I would say, across the board. And so for example, we are -- for me, I'm looking at different types of user journeys and making sure each of them is getting deeper and better. So for example, in Google, as people have started coming for more health-related information, how is that experience working, thinking about that for the long-term and investing in it. I obviously spoke about Shopping earlier, and that's been a big focus for us. Education in general. And when we think through small, medium businesses and bigger companies thinking through collaboration, where G Suites' potential is, the investments we are undertaking, all that is very exciting to me.

But I would say cutting underneath all that, maybe while we didn't talk about it, really focused on our AI teams doing the investments they need, evolving our next-generation TPUs and the team's building better models and better algorithms. All that, I think, our ability to do more things is something I'm really interested in and focused on as well. So that's something I'm excited about -- for the longer term.

Ruth Porat

And then in terms of your question about work-from-home, I think it's a great point because it obviously feeds so much into a lot of the product work that we're doing in Cloud through G Suite, et cetera. So that's where I would actually start, but I appreciate what you're asking is how are we looking at our own cost base. And we called that out last quarter, in particular, with respect to CapEx, and you can sort of see it here this quarter. The main change in CapEx has really been we slowed the pace on the office facilities front. And what we're looking at is really how to reimagine what the workplace will look like. We continue to be very much focused on the fact that place and space are important. We believe in collaboration. Serendipity is key to innovation. So we do view space in office as important and are very focused on what does that mean over the long term.

We've actually opened quite a number of our offices, in fact, in 40 countries and do hope to reopen in many more. But your question to what does it mean for overall cost structure, we're looking at that with the place you see it now is in our CapEx, and the way we've been looking at it and our indication that we do expect 2020 will be lower CapEx on the facility side as a result.

Operator

And our next question comes from Brent Thill from Jefferies.

Brent Thill

I was just curious if you could just comment in terms of some of the near-term business trends and anything that's changed as you've gone through the month of July versus what you saw in June?

Ruth Porat

Sure. I already commented on that with respect to Search, but to broaden it a bit more, and again, this is based on estimates from the end of June through last week. So for YouTube, we ended March with a year-on-year growth rate in the high single digits, and that's reflecting a substantial headwind from brand. The headwind from brand moderated modestly at the end of the second quarter, and then we saw a further improvement in July. Direct response has been consistently strong.

For Network, revenues improved toward the end of the second quarter, and we have seen a further slight improvement in July. Obviously, 3 weeks is not a quarter, but that's based on the estimates here from the end of June. And then as Sundar and I both said, when you look at, for example, Cloud, it has maintained its strength consistently. And I'd say that with a business that's growing at this pace, it's really much more about a secular trend to the move to cloud. So really nothing to comment on there.

Operator

And our next question comes from Justin Post from Bank of America.

Justin Post

Great. Sundar, I don't know how much you can comment on the regulatory environment, but it's obviously top of mind with the hearing yesterday. Maybe just characterize it for Google right now. And are you seeing any progress with the regulatory environment? And then secondly, we saw the YouTube TV price increase, a pretty interesting business model. But longer term, do you see that as really strategically important for the YouTube brand? Or do you think you can have a really profitable business on that?

Sundar Pichai

On the regulatory front, we've obviously been operating under scrutiny for a while, and we realize, at our scale, that's appropriate. And we've engaged constructively across jurisdictions. And from my standpoint, I'm confident in the approach we take, our focus on users and in the evidence in almost all areas we operate in. We expand choice or overall lower prices. And it's -- overall, there's a very fast pace of innovation. So it's dynamic and competitive.

Having said that, obviously, we will operate based on the rules. And so to the extent there are any areas where we need to adapt, we will. And as a company, I think we will be, I think, being flexible around those things is important, I think. I think the scrutiny is going to be here for a while, and so we are committed to working through it. On the second question around YouTube TV, yes, there is -- I mean, it's a good question. I spoke earlier about even from a brand and how people think about it, they are interested in streaming. So as YouTube TV gets more scale, I think we will see more opportunities there. We are obviously still in the early stages of building out the product. And just recently, we've added a bunch of new channels and making sure it's working well.

In the U.S., the TV market is a big part of the advertising market, too. So overall, if we can invest here and scale up, I think the synergies with YouTube will become more meaningful over time. And so excited the traction the product is getting. But still too early.

Operator

And our next question comes from Kevin Rippey from Evercore.

Kevin Rippey

This one is for Sundar. I was hoping you might be able to expand on the earlier comment you made about the AI strategy. I'm particularly wondering, if there's been things over the past 5 months since the pandemic began, that you thought an expansion of a very high strategy or an evolution of the past strategy might be able to solve for whether that relates to commercialization or monetization or really anything across the business. Just really, really curious.

Sundar Pichai

An area which -- first of all, across the board, the progress is steep. So I'm very happy with the pace at which our R&D on AI is progressing. And for me, it's important that we are state-of-the-art as a company, and we are leading. And to me, I'm excited at the pace at which our engineering and R&D teams are working both across Google and DeepMind. So I'm excited about it. Specifically, we are making good progress in areas like language understanding. And you saw some improvements last year, significant improvements with BERT and Search. But BERT took us a few years to get there. But things like that, I see more stuff in the future. And so excited by it.

An area where I think we are still under-tapped vis-à-vis potential is definitely Cloud. We see the potential there. But -- and I think it's a bit related to Heather's question, too. I think companies are thinking about migrating workloads and so on. But the longer run opportunity of actually using AI to truly have business solutions for you for whatever industry you are in, that feels like there's a lot of potential, and we are still very early there. And so part of it is, for us, connecting the dots internally and bringing it as solutions to our users. We have done it in certain product areas, but I see there's a bigger opportunity in the future.

Operator

And our next question comes from Ross Sandler from Barclays.

Ross Sandler

Great. I just had two questions. First, on YouTube subscription. So can you talk about the size of that area of the business relative to that $15 billion? We had it at about 15% of total YouTube revenue. And then how is the faster growth in that area relative to advertising impacting your long-term profitability goals at YouTube? And then the second question is on Search. So it sounds like the flat exit run rate year-on-year is pretty encouraging. If we strip out travel, I'm guessing it's well above that. So how would you characterize the query growth versus just the ad auction dynamics outside of travel across the other categories? Are we back to pre-COVID levels in those areas?

Ruth Porat

So in terms of the first question, we haven't broken out the specifics within the YouTube subscription revenues. YouTube subscriptions are in Other revenues, it's not in advertising revenues. And overall, as we think about the opportunity -- our view is -- and we talked about this when we were launching the subscription product, it was really responsive to what we were hearing from users. And as we look at it, music is a key part of the overall YouTube experience. It's an important component of watch time. And what we found is that users wanted -- they wanted choice and some wanted a premium YouTube experience with ad-free viewing and the ability to download songs and videos. And that was really the impetus.

In addition, YouTube Premium provides additional revenue streams for music labels and publishers. So for example, in 2019, YouTube paid the music industry over $3 billion. And what we've done is meaningfully ramp our geographic presence from 5 countries in the beginning of 2018 to 94 countries today. And earlier this year, we announced that YouTube Premium had more than 20 million paid subscribers, up more than 60% versus the prior year. So our subscriber numbers have continued to grow there, and it really was driven by the goal to give users choice.

Operator

And our next question comes from Colin Sebastian from Baird.

Colin Sebastian

I guess maybe a follow-up to the earlier question on commerce. Beyond the marketplace functionality and some of the free year promotional transactions, I wonder how some of the other initiatives are going to play a role. And things I'm thinking specifically are, were you focused before on Google Checkout and Maps and some of the assistant functionality, how those may play a changing role in commerce on the Google platform.

Sundar Pichai

Yes. Great question. I think the bar is to have that super simple experience, which is delightful and that you have peace of mind and satisfaction in terms of getting the product and being able to return it and so on. So the end-to-end funnel matters a lot. And part of the reason why through the changes, a couple of things we have done. As you saw, we changed and we removed the commission for merchants to be on the platform. And part of it is by removing that. They can take that and invest in, be it shipping, be it delivery, be it the customer experience. And so that matters, matters I think in the overall experience.

And from our standpoint, the Buy on Google experience is something which deeply investing in. Obviously, our integrations with PayPal, our investments are underlying it to make sure for a lot of users that it's as close to a one-click experience as possible is a big part of the investment as well.

Operator

And our final question comes from the line of Mark Mahaney from RBC.

Mark Mahaney

I want to ask a broad question about Google. Google's place or position, whatever, in online retail. And I asked this because Google has also -- obviously been central. Search has been central, but also YouTube has been central to commerce, online commerce for the last 20 years. We've gone through this pandemic where there's a real inflection point. We see it in Amazon's results. We see it in Shopify's results. And I'm not sure I see it in Google's results. So just talk about how you think, broadly, Google is positioned for what's really been like a 2 or 3 year pull-forward in accelerated ramp up of online retail demand. And are you positioned the way you want to be positioned now? Are there things you need to make to the -- changes you needed to make the products and services to be better positioned?

Sundar Pichai

Obviously, I think as a company, our strength comes from the diverse categories in which we serve users, right? And it's not just product, it's services, it's wide areas, including areas like travel. So it's diversified. And -- but it also means through a pandemic, there are areas of strength, but there are areas of -- areas where you get impacted as well. So I think that's what is reflected in what you see. On e-commerce, you're right, direct e-commerce providers are seeing a big inflection point. But in it are essential categories like groceries and stuff, which are built in, which we don't directly play in. But to us, the reason we are doing this long-term focused effort on shopping with the new leadership team is to precisely make sure as a platform, we are improving and as the shift continues, Google continues to be an important place by which people come and participate in those journeys.

So long run, I see a growth opportunity with related to what we are investing in there as well. Not just through Search, but a Search in the Shopping investments we are making, but in YouTube, and also helping retailers on the cloud side. It's an area where there's naturally a lot of interest to work -- to partner with Google, and so we see that as a big opportunity as well.