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Alphabet Q2 2017 Earnings Call
July 24, 2017

Candice (Operator): Good day, ladies and gentlemen and welcome to the Alphabet second quarter 2017 earnings call. At this time, all participants are in a listen-only mode. Later, we will conduct a question-and-answer session, and instructions will follow at that time. If anyone should require operator assistance, please press star, then zero, on your touch-tone telephone. I'd now like to turn the conference over to Ellen West, Head of Investor Relations. Please go ahead.

Ellen West, VP Investor Relations: Thank you. Good afternoon, everyone, and welcome to Alphabet's second quarter 2017 earnings conference call. With us today are Ruth Porat and Sundar Pichai. Now I'll quickly cover the safe harbor. Some of the statements that we make today may be considered forward-looking, including statements regarding our future investments, our long-term growth and innovation, the expected performance of our businesses, and our expected level of capital expenditures. These 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 Form 10-K for 2016 filed with the SEC. Any forward-looking statements that we make are based on assumptions as of today, and we undertake no obligation to update them.

During this call, we will present both GAAP and non-GAAP financial measures. A reconciliation of GAAP to non-GAAP measures is included in today's earnings press release. As you know, we distribute our earnings release through our Investor Relations website located at [abc.xyz/investor](#). This call is also being webcast from our IR website where a replay of the call will be available later today. And now I'll turn the call over to Ruth.

Ruth Porat, CFO Alphabet and Google: Thanks, Ellen. Our revenues of \$26 billion in the second quarter demonstrate the ongoing momentum in our businesses, with broad-based strength globally. Revenues were up 21% year-on-year, and up 23% in constant currency. Advertising revenues benefitted from the strong performance in Sites, which was led in particular, by tremendous results in mobile search, with a strong contribution from YouTube. Healthy growth in Network revenues was driven by our programmatic business. We also had substantial growth in Other Revenues from Cloud, Play and Hardware.

Our outline for today's call is: first, I'll review the quarter on a consolidated basis for Alphabet, focusing on year-over-year changes. I will review our results on a GAAP basis, which include the impact of stock-based compensation. The European Commission fine of \$2.7 billion U.S. dollars is reflected in our GAAP results, with the fine displayed as a separate line item for clarity. In order to assist with comparing this quarter's results to prior periods, we are also providing

operating income, net income and EPS results that exclude the impact of the fine. The fine is not reflected in our segment results. Second, I will review results for Google, and then Other Bets. Finally, I will conclude with our outlook. Sundar will then discuss our business and product highlights for the quarter, after which we will take questions.

I will start with a summary of Alphabet's consolidated financial performance for the quarter: Total revenues were \$26 billion, up 21% year-over-year. We realized a negative currency impact on our revenues year-over-year of \$364 million, or \$361 million after the benefits of our hedging program. Holding currency constant to the prior period, our total revenues grew 23% year-over-year. Turning to Alphabet revenues by geography, you can see that our performance was strong in all regions. US revenues were up 23% year-over-year to \$12.3 billion. EMEA revenues were \$8.5 billion, up 14% year-over-year reflecting weakness in the British pound and the Euro; revenues were up 21% in fixed FX terms. APAC revenues were \$3.7 billion, up 28% versus last year and up 27% in fixed FX terms. Other Americas revenues, which include results from Canada and Latin America, were \$1.4 billion, up 31% versus last year in both reported and fixed FX terms.

On a consolidated basis, total costs of revenues, including TAC, which I'll discuss in the Google segment results, were \$10.4 billion, up 28% year-on-year. Other cost of revenues on a consolidated basis was \$5.3 billion, up 27% year-over-year, primarily driven by Google-related expenses, specifically: costs associated with operating our data centers, including depreciation; content-acquisition costs — primarily for YouTube; and Hardware related costs.

Operating expenses, including the impact of the EC fine, were \$11.5 billion. Excluding the impact of the EC fine, operating expenses were \$8.8 billion in the quarter, up 18% year-over-year.

Year-on-year expense growth reflects the change in the timing of our annual equity refresh cycle from the third quarter to the first quarter of each year. As discussed previously, this affects the quarterly pace of stock-based compensation in 2017 but not the overall size of the expense for the year. In order to transition to the new timing, we made a one-time, half-year grant in Q1 of this year which is reflected in elevated year-on-year expense growth in Q2. As a result, stock-based compensation totalled \$2 billion, up 33% year-over-year.

Headcount at the end of the quarter was 75,606, up 1,614 people from last quarter. Consistent with prior quarters, the vast majority of new hires were engineers and product managers. In terms of product areas, the most sizable headcount additions were once again made in Cloud for both technical and sales roles, consistent with the priority we place on this business.

Operating income was \$4.1 billion. Excluding the impact of the EC fine, operating income was \$6.9 billion, up 15% versus last year and the operating margin was 26%. Other income and expense was \$245 million. We provide more detail on the line items within OI&E in our earnings press release. Our effective tax rate was 19.5% for the second quarter. Net income was \$3.5

billion and earnings per diluted share were \$5.01. Excluding the impact of the EC fine, net income was \$6.3 billion and earnings per diluted share were \$8.90.

Turning now to capex and operating cash flow. Cash capex for the quarter was \$2.8 billion. Operating cash flow was \$7.4 billion with free cash flow of \$4.6 billion. We ended the quarter with cash and marketable securities of \$94.7 billion, of which approximately \$57.9 billion, or 61%, is held overseas.

Let me now turn to our segment financial results.

Starting with the Google segment. Revenues were \$25.8 billion, up 21% year-over-year. In terms of the revenue detail, Google Sites revenues were \$18.4 billion in the quarter, up 20% year-over-year. The biggest contributors to growth again this quarter were mobile search and YouTube. Network revenues were \$4.2 billion, up 13% year-on-year, reflecting the ongoing strength of programmatic and AdMob.

Other Revenues for Google were \$3.1 billion, up 42% year-over-year. We have been talking about our bigger investment areas within Google, and you can see the momentum here, reflecting contributions from our newer revenue streams again this quarter, on top of the ongoing strength in Play. Specifically, Cloud continues to benefit from the ongoing investments in our go-to-market and product efforts. Hardware continues to grow at a healthy pace year-on-year, with the extension of our product line geographically, particularly Google Home and Wifi. The dollar impact to growth was more muted than in prior quarters, reflecting seasonality.

Finally, we continue to provide monetization metrics to give you a sense of the price and volume dynamics of our advertising businesses. You can find the details in our earnings press release.

Total Traffic Acquisition Costs were \$5.1 billion, or 22% of Total Advertising Revenues, and up 28% year-over-year. The increase in both Sites TAC as a percentage of Sites Revenue as well as Network TAC as a percentage of Network Revenues continues to reflect the fact that our strongest growth areas — namely mobile search and programmatic — carry higher TAC. Total TAC as a percentage of Total Advertising Revenues was up year-over-year as a result of an increase in the Sites TAC rate driven by the shift to mobile which was again partially offset by a favorable revenue mix shift from Network to Sites, which carries lower TAC.

Google stock-based compensation totalled \$1.9 billion for the quarter, up 40% year-over-year. Operating income including the impact of SBC was \$7.8 billion, up 12% versus last year, and the operating margin was 30%. Accrued Capex for the quarter was \$2.8 billion, reflecting investments in production equipment, facilities and data center construction.

A couple of Google reminders for the third quarter. Headcount additions tend to be seasonally high in Q3, because that is when we bring on new graduates. In addition, please keep in mind

that our marketing costs are typically weighted more heavily toward the back half of the year due to the holiday season, particularly as we promote our Made by Google line of hardware products.

Let me now turn and talk about Other Bets. For the second quarter, Other Bets revenues were \$248 million, primarily generated by Nest, Fiber and Verily. Operating loss, including the impact of SBC, was \$772 million for the second quarter. Other Bets accrued capex was \$151 million, primarily reflecting a reduced investment in Fiber due to the pause in expansion we announced in 3Q16.

We're pleased with our progress across Other Bets. A couple of updates. Nest continues to drive ongoing product expansion such as our recent introduction of the indoor security camera, Nest Cam IQ, as well as geographic expansion, both of which support its position as the leading brand in the connected home. In life sciences, in addition to our progress at Verily, Calico has focused its efforts on the basic mechanisms of aging and three aging-related diseases representing the leading causes of death. Calico has established more than 20 active collaborations with other life sciences companies and academic institutions. With Loon, we recently demonstrated the technology in Peru by successfully delivering basic Internet connectivity to tens of thousands of people affected by the tragic floods there. We worked in partnership with the Peruvian government and Telefonica. And our progress with Waymo continues nicely, as is reflected in the rider program in Phoenix and our recently announced partnerships with Lyft and Avis.

Let me wrap-up. Almost two years after the creation of Alphabet, we see the benefits of our focus within Google and Other Bets and are pleased with the opportunities we have for sustained revenue and earnings growth.

We are obviously very happy with the ongoing strength in ads revenue, particularly in Search. Our compelling secular trends continue to drive user adoption and engagement with mobile devices. Our engineering and machine learning acumen enables us to build better experiences for users and advertisers.

We continue to see increasing contributions from our growing non-ads revenue businesses. Play continues to be a strong contributor. In addition, we have been making big bets within Google focused on Cloud, Hardware and subscription businesses in YouTube, in order to better serve customers while also building additional and differentiated revenue streams. These businesses are consistent with, and complementary to, our core capabilities and leverage our infrastructure, distribution and engineering. We believe we have a compelling runway here.

Longer-term, we see great opportunity in the businesses we are building in Other Bets. These businesses reflect the incredible engineering talent across Alphabet — most notably in machine learning.

Our revenue growth and Alphabet structure give us both the opportunity and confidence to invest in our businesses for the long-term. We are doing that, while being very deliberate about the focus, scale and pace of investments and remain committed to being conscientious in our use of all resources. We're increasing investment in areas where we see the most potential, scaling back in others and sharpening our organizational effectiveness to make the most of the resources available.

Thank you and let me now turn the call over to Sundar.

Sundar Pichai, CEO Google: Thanks, Ruth. We had a phenomenal quarter. Google continues to lead the shift to AI-driven computing. We're working to make this incredible technology available to everyone around the world. It's our focus on infusing our products and platforms with the power of machine learning and AI that's driving our success.

Today I'll spend time talking about the areas where we're confidently investing for the future. First, the incredible momentum we're seeing in some of our core products, powered by machine learning. Next, an update on three of our most promising bets — YouTube, Cloud and our Hardware businesses. And I'll conclude with the strong performance of our computing and advertising platforms.

To start, our core products and the AI powering them.

Google has always been about using deep computer science and insights to solve some of the world's most complex problems. People are no longer only using a keyboard, mouse, and multi-touch, but are also using emerging inputs like voice and camera to ask questions and get things done in the real world. We are seeing this in the way people interact with the Google Assistant, which is already now available on more than 100 million devices since launching last year, and there's more to come since we released an Assistant SDK that will enable a wide range of new hardware devices which will include the Google Assistant. We now have more than 70 home automation partners on the Assistant on Google Home and phones, including Honeywell, Logitech and LG, so you can do everyday things around the house using your voice.

At Google I/O, we announced Google Lens, available later this year. Lens is a set of vision-based computing capabilities that can understand what you're looking at and help you take action based on that information. So, for example, if you saw a poster for your favorite band, you would be able to take a picture and get relevant information, and buy tickets to their next concert. In Search, a great feature we launched this quarter in the U.S. is Job Search, to make looking for a job easier — for everyone, no matter what line of work you're in. Many of these products that make people's lives easier are being powered by machine learning. One focus area for us this quarter has been enabling our machine learning algorithms to learn — and improve our products much faster. One such research initiative, AutoML, enables us to pursue approaches to automate the design of machine learning models.

Our ability to rapidly deploy the best machine learning in all of our products enabled us this quarter to launch all sorts of new smart features — to help moderate comments, suggest smart replies in Gmail, and improve translations. We rolled out new machine learning features in Google Maps, YouTube, Gmail and Google Photos, which now has more than 500 million monthly users who back up 1.2 billion photos and videos every day.

I was also pleased that DeepMind's AlphaGo team was in Beijing [correction: Wuzhen, China] for the Future of Go Summit, where AlphaGo played against the #1 world player, Ke Jie. Since playing AlphaGo, Ke Jie has been on a 20 game winning streak — he's said playing AlphaGo has fundamentally changed his understanding of the game. It's remarkable to see AI have such a profound effect on one of the world's oldest, most strategic games. It can have the same impact in so many fields — from medicine to science to energy usage and more.

Now, let's move to some of our biggest bets.

First, YouTube. YouTube now has 1.5 billion monthly viewers, and people watch, on average, 60 minutes a day on their phones and tablets. That's incredible, and it helps thousands of passionate video creators make money. The fastest growing screen for YouTube is in the living room. YouTube watchtime on TV screens has nearly doubled year-on-year. This quarter we unveiled six new ad-supported YouTube Originals from celebrities including Ellen DeGeneres and Kevin Hart, and YouTube creators like Rhett and Link. Advertiser feedback on these new shows has been extremely positive. Last week, our live TV service, YouTube TV, added ten new metro areas across America, tripling the markets where it's available, in just 4 months.

And to our next big bet with great momentum, Google Cloud. Google Cloud Platform, GCP, continues to experience impressive growth across products, sectors and geographies — and increasingly with large enterprise customers in regulated sectors. To be more specific about our momentum with big customers: in Q2, the number of new deals we closed worth more than half a million dollars is three times what it was last year. Responding to the growth in existing and new customers around the world, we continue to invest in data centers to provide them the fastest, most reliable service. We opened new Google Cloud regions in Northern Virginia, Singapore, Sydney and London. We also continue to build out our partnerships. In Q2, we announced an expansion of our partnership with SAP, and a new partnership with Nutanix to integrate their products with GCP, so customers can run workloads in hybrid environments — on-prem and in the cloud — using containers and Kubernetes.

Now let's talk about our Hardware business. Sales of our new family of hardware continue to be encouraging and we're making good progress bringing these devices to more people. Google Home is now available in four countries: the U.S., Canada, Australia and the UK. And we've announced it's coming to France and Germany in early August. The Pixel phone continues to be really popular, and Google Wifi just launched in Canada, Germany and France to glowing reviews. Every day I hear of people who love this product and how it has made Wi-Fi work much better in their homes.

Shifting gears, our computing and advertising platforms are driving great results for our partners.

There are now more than 2 billion monthly active Android devices around the world. It's really humbling so many people choose Android. We're seeing a number of hardware makers launching devices to positive reviews, including the Samsung Galaxy S8 and the LG G6. At Google I/O this quarter, we gave developers early access to Android O, which will focus on vitals like battery life and performance. And Google Play continues to be a vital distribution platform for developers. An incredible 82 billion apps were downloaded from Google Play in the last year alone. That's 11 apps for every person on Earth. We continue to work on the next generation of computing platforms — virtual and augmented reality. By the end of this year, there will be 11 Daydream-ready devices on the market, from manufacturers like Samsung, LG, Motorola and ASUS.

Turning to our advertising platforms.

Here too, machine learning is critical to helping advertisers and app developers analyze data in real time, to reach consumers with more useful ads and measure campaign effectiveness. At Google Marketing Next this quarter, we launched Google Attribution, a comprehensive measurement tool that allows marketers to measure the impact of their campaigns across devices and channels, all in one place with no additional cost.

We also launched new ad formats and bidding features in Universal App Campaigns to help developers grow their user base across Google Play, Search, YouTube, Gmail and the Display Network. At Google I/O in 2016, we announced we had driven 2 billion app installs. Today, that number is more than 5 billion. That's amazing growth. With 90% of transactions still happening offline, we want to help consumers find what they're looking for in brick-and-mortar stores. Our store visits technology is instrumental in understanding customer behavior that starts online and ends in store. Today, our Store Visits measurement is the largest program of its kind, and we've now measured over 5 billion store visits in 17 countries. This quarter we also brought local ads and Store Visits measurement to video.

Speaking of video, we're seeing continued success with bumper ads, our 6 second ad format. Both brands and viewers love the format as it's the ideal length to capture attention. L'Oreal, Hasbro, Xbox, Clinique and Neutrogena have all seen great success with bumpers. And Google Preferred continues to grow. We now have hundreds of brands buying Google Preferred in the U.S., nearly triple the number since it launched 3 years ago. We're not just helping large brands, we're also helping millions of small businesses get online and grow. Every month, Google helps drive 100 billion visits to business websites, and creates more than 3 billion direct connections between businesses and their customers. These interactions drive huge economic opportunities and growth for small businesses. Last month, to increase these opportunities, we launched an easy way for millions of small businesses to create a free, simple,

mobile-optimized website. Small businesses can do it on a mobile phone in under 10 minutes, using the listing information already available on Google Search and Maps.

And finally, helping publishers grow their revenues remains a huge focus for us. We're using the power of automation and machine learning to improve our auction algorithms for publishers. The 50 improvements we've made since 2016 are generating 15% more revenue for publishers using DoubleClick Ad Exchange. Those are the highlights from the second quarter.

This week will be another highlight for me. I'm going to Africa for a "Google for Nigeria" event to announce new products for Nigeria and Sub-Saharan Africa. I'm looking forward to seeing first hand how technology and Google's products can make a real difference in people's lives.

I want to express a very sincere thank you to every Googler who worked tirelessly this quarter to bring all of our technology and products to the world. And to everyone listening, thank you and I hope you're enjoying starting the week off with us. And now, back to Ruth.

Ruth Porat, CFO Alphabet and Google: Thank you, Sundar. We will now take your questions.

Candice (Operator): Ladies and gentlemen on the phone lines, if you would like to ask a question at this time, you may press star, followed by the number 1 key on your touch-tone telephone. If your question has been answered or you wish to remove yourself from the queue, you may press the pound key. Once again, that's star 1 to ask a question at this time. And our first question comes from John Blackledge — I'm sorry. Our first question comes from Eric Sheridan of UBS. Your line is now open.

Eric Sheridan (UBS): Thanks for taking the question. Maybe a big-picture question directed to Sundar. As you think about the Google Assistant and what it can do medium- to long-term, maybe talk a little bit about how the Assistant as a product could narrow the gap between consumption and utility inside your products versus monetization over time with a specific focus, I'd love to hear about local in particular. Thanks so much.

Sundar Pichai, CEO Google: It's a good question. You know, when I think about, you know, we have — we are very focused over the long term to making sure the Assistant can actually help people get things done in the real world, and so obviously when you think about it from that standpoint, local becomes important. You know, over time — you know, just like when the transition happened from desktop to mobile, you know, people's bar for what they expect increased. They wanted more answers. They wanted more immediate gratification, right? And that's a continuum, and I think — I think you'll see the trends. And so over time, we are laser focused on making sure we can deliver against those experiences, and I think local, and our particular strength over time, both in terms of the expertise we have built in local as well as our investment in Maps, is hopefully paying off.

Candice (Operator): Thank you. And our next question comes from Doug Anmuth of JP Morgan. Your line is now open.

Doug Anmuth (JP Morgan): Great. Thanks for taking the question. First, one for Ruth. I was just hoping you could help us understand at least qualitatively how core margins for the advertising business are trending within the Google segment. And then Sundar, just on the Cloud business, I know you talked about four new regions being built out. Can you just talk about your strategy in building out that Cloud infrastructure, how we should think about it in terms of building out extra capacity or whether it's more in line with near-term demand? Thanks.

Ruth Porat, CFO Alphabet and Google: Thanks. So starting with your margin question, look, as we've — as we've often said, we're focused on revenue and operating income dollar growth and not on operating margins. We have strong positions in healthy growing areas and are adding really exciting additional growth areas, and that's what we mean when we discuss driving long-term revenue and earnings growth. You know, to get a little more specific, the gross margin this quarter obviously reflects our product mix shift, and although the cost of sales is higher as a percentage of revenues, these costs are associated with high-growth product areas that enable us to create value for all of our stakeholders. And then, on the opex side, the second quarter reflects a number of factors. First, I think really to your question on an over-time point, you can see the impact of the timing shift in the equity refresh which we discussed previously. Now, as a reminder, that does abate in the back half of the year but you can see it here in the — in the second quarter. And then what you're also seeing in opex growth is the investments in areas that we've spelled out. So for example, in R&D, you can see the impact of the headcount increases in our priority areas, particularly Cloud and machine learning. And marketing spend, similarly reflects the strategic priority areas we've delineated, particularly, Hardware and YouTube subscription. But as I said in my opening comments, we're increasing investment in areas where we see the most potential, we're scaling it back in others, we're focused on organizational effectiveness to make the most of all of our resources, and all of that really underpins the goal to sustain both revenue and earnings growth over the longer term.

Doug Anmuth (JP Morgan): Thanks. That's helpful.

Candice (Operator): Thank you. And our next question comes from Heather Bellini of Goldman Sachs. Your line is now open.

Heather Bellini (Goldman): Thank you very much. I was just wondering, Sundar, you mentioned some of the strength you're seeing in GCP, and I was just wondering if you could share with us, when you do win, is there any commonality around the type of workloads that people are choosing you for? And can you share with us any updates on the go-to-market and kind of how you feel about where you've come over the last year, but even more importantly, what do you need to do to get it where you need it to be over the next 12 months? Thank you.

Sundar Pichai, CEO Google: Thanks, Heather. I'll also take Doug's question on the

infrastructure, too, and do it together, since they're related to Cloud. Overall, you know, when we think about our infrastructure, obviously we are serving Cloud as well as our internal products which are seeing tremendous growth as well. In terms of serving Cloud customers, you know, we are — you know, we are world-class in availability and being reliable, and we — you know, and those are, you know, things we — you know, we want to stay best in class. So we're clearly planning for that and — you know, and — and planning ahead for infrastructure and we have been consistently doing that.

Heather, in terms of your question about workloads and stuff, you know, we are actually seeing, you know, quite a diverse set of use cases across sectors and industries and geographies, and so, you know — you know, I would say, you know, the breadth of what we have seen has really surprised me. In terms of go-to-market, you know, I shared an update on last — on it last quarter. Not sure there's much more interesting to add. We are continuing to do it well. We are scaling up. And, you know, all the teams and the structure Diane has put in place is beginning to work well. And we are continuing to hire and scale all of this up as quickly as we can.

Candice (Operator): Thank you.

Heather Bellini (Goldman): Thank you.

Candice (Operator): And our next question comes from Mark Mahaney of RBC Capital Markets. Your line is now open.

Mark Mahaney (RBC): I'm going to try two questions, please. First, one on TAC. You know, Ruth, the factors that cause — have been causing TAC to rise, seem, you know, relatively structural. The outsized growth of mobile and the rise of programmatic. So there's no particular reason to think that we should see anything other than gradual increase in TAC as a percentage of both O&O and Network revenue going forward. So are there any — any reasons why that wouldn't be the case in the, you know, next year or two?

And then Sundar, I thought one of the more interesting innovations or — that was — that kind of came out of Google I/O was visual search, and could you just talk about, you know, the — the — maybe a little bit the roadmap for that, or the extent to which — how long it will take us to actually see that broadly in the market and, you know, what you — what you think the appetite or how do you think that will change the way people search for products in the future, the ability to, you know, also search, you know, visually through your phone? Thank you.

Ruth Porat, CFO Alphabet and Google: So on the first question, there are obviously a number of factors that affect Sites TAC. We've talked about them over time. You know, the primary driver again this quarter, as you note in your question, was the strong growth in mobile and the fact that more mobile searches are subject to TAC. But the increase in Sites TAC year-over-year, I think what I would stress is it really provides another lens on just how strong our mobile business is. You know, there are other factors that affect the TAC rate, including the

mix of paid versus organic traffic, as well as changes in partner mix and agreement terms, but I think, you know, the — the main point of your question here is we do continue to expect Sites TAC to increase but our focus remains on growing profit dollars and I'd go back to my comment — we're just really pleased with the strength of our mobile business, which is benefiting profit dollars even as the TAC percentage increases. And, you know, programmatic, you know, kind of a very similar answer, which is, we're pleased to have a strong position in a growing area.

Sundar Pichai, CEO Google: And, you know, on questions around visual search, you know, when we think about Google Lens, we think about it as a set of capabilities which we'll roll out across many different products but we'll mainly starting getting it in the hands of our users in Q4. You know, I think early days, we — we want to — we want to make sure it works well for use cases, where it can, and bet on the long-term trends in computer vision as we make progress there. I also think, you know, there are cases where pulling out a phone and looking at it is a bit cumbersome and so over time as form factors emerge, you know, where it's more natural for you to look at and input that into computing, it will get used more. Overall, you know, for humans, the way they see, you know, visual input, it's a very high bandwidth way of communicating, and so it's important that we bring that in computing. So long run, I'm very bullish on it, but, you know, we're going to roll this out slowly and thoughtfully.

Mark Mahaney (RBC): Thank you, Sundar. Thank you, Ruth.

Candice (Operator): Thank you. And our next question comes from Peter Stabler of Wells Fargo Securities. Your line is now open.

Peter Stabler (Wells Fargo): Thanks much for the question. One for Sundar. At Marketing Next, your team unveiled new ways that Google is leveraging consumer intent signals across your billion-user-plus platforms. It seems that some of the walls between product data silos are being lowered a bit, and one of the obvious gains that Sridhar highlighted was search personalization. Wondering if you could speak broadly to the opportunity of looking at data from a targeting perspective more holistically across platforms. Thanks so much.

Sundar Pichai, CEO Google: You know, I think it's important we've always felt, you know, as marketers when they — when they spend and — you know, and try to reach users, the more we can give them visibility about how their spend is working and they can attribute, you know, across all the stages of the funnel, I think — I think that will really help make everything work well. So, you know, we've always taken that long-term view and — you know, and everything we do, you know, be it Store Visits, which we did a while ago, or more recently at Google Marketing Next we talked about Google Attribution as well, you know, so all that starts adding up and I think pushes in this right long-term direction. And there's more work to be done, but I think as users use everything across multiple products and devices in a thoughtful way, I think making all of this work well, we see it as a, you know, opportunity ahead of us.

Peter Stabler (Wells Fargo): Thanks, Sundar.

Candice (Operator): Thank you. And our next question comes from Brian Nowak of Morgan Stanley. Your line is now open.

Brian Nowak (Morgan Stanley): Thanks for taking my question today. I have two. The first one, you've talked about micro moments throughout the course of the year, micro moments on mobile. I was wondering could you give us a couple examples of micro moments or Search verticals where you've really seen an increase in your monetization over the last year? And Sundar, as you look out across all the Search verticals, what are the two biggest one or two use cases you still see to improve the overall relevancy of Search results and potential monetization?

Sundar Pichai, CEO Google: You know, on the first one, you know, I'd probably be — rather than be very specific, you know, anytime people are looking to buy, find, go, do things — you know, you could be looking for a local pizza, you could be buying — you know, we see queries like "jeans near me" and people are looking for jeans next to them, so these are all very, very specific things, and in all of — all of these cases, we have found we've been able to impact the experience for both users and advertisers. So I think that applies generally broadly. In terms of all the verticals, I think there are a lot of opportunities. Local has been, you know, an area of strength for us. We've seen a lot of traction and, you know, I continue to think as a vertical, you know, given the assets we've built up over the years, we can — we can continue to invest more and do better for our users.

Brian Nowak (Morgan Stanley): Thanks.

Candice (Operator): Thank you. And our next question comes from Ross Sandler of Barclays. Your line is now open.

Ross Sandler (Barclays): Great. I had two questions for Sundar. First is, you mentioned the 15% yield improvement on publisher yield through DoubleClick from machine learning. Is there a comparable stat inside of Google owned and operated Search or YouTube? After implementing machine learning you saw yield improvement of 'X'? I'd be curious to hear that. And then the second question is: as we look out into the future and you guys mentioned 2 billion Android actives at I/O, and you just mentioned 11 apps per user in your prepared remarks. If Google is forced to unbundle their own apps from Android in the future, what's the strategy to ensure that Maps and YouTube and Search, you know, get distribution and Android doesn't kind of go the way of China and other markets? I'd be curious to hear that. Thank you.

Sundar Pichai, CEO Google: Let me take the first one first. On machine learning, you know, we definitely — you know, machine learning, we've been using it on Search. You know, RankBrain has become one of the important signals, in addition to the many other signals in Search, and so definitely has had an impact. Same on YouTube across the board. You know, I don't have any specific metrics to give, but we definitely are seeing impact and — and we think

we are in the early days of the impact we can see. In terms of Android, you know, we are obviously thoughtfully, you know, building Android out and scaling it out and, you know, we offer our apps as part of it. You know — you know, OEMs get to distribute other apps as well. We think, you know, it's a very open market, open ecosystem, works well for everyone involved. And, you know, I — I expect that to continue. And — you know, and a lot of our products which are successful on Android happen to be successful outside of Android as well, including on the Web. These are products generally used by billions of users, and by now, you know, we have worked hard to earn that trust and scale, and so, you know, I'm confident we can continue scaling those up.

Candice (Operator): Thank you. And our next question comes from Dan Salmon of BMO Capital Markets. Your line is now open.

Dan Salmon (BMO Capital): Hey, good afternoon, everyone. Sundar, I think the last update we heard publicly on promoted places on Maps was in December when you announced that you'd be beginning some limited tests. I don't think there's been any public comment from the company since then, and quite frankly, we haven't heard a whole lot anecdotally about it either, so I was just hoping for a quick update on that product. Thank you.

Sundar Pichai, CEO Google: You know, overall, I mean, it's an area where we are still like really focused on, you know, improving the consumer experience. I think — you know — we are evolving Maps to be a lot more beyond just driving directions, and users are responding to it, and — and I think, you know, we are in the process of making all that work better. And also, we've also focused in terms of what we see as local opportunity within Search as well. But we'll continue testing and evolving. I think, you know, we want to make sure we get the consumer experience right before — before we invest more on promoted opportunities on Maps.

Dan Salmon (BMO Capital): Thank you.

Candice (Operator): Thank you. And our next question comes from Justin Post of [clarification: Bank of America] Merrill Lynch. Your line is now open.

Justin Post (Bank of America Merrill Lynch): Great. A few for Ruth. First, I wonder if you could comment at all on the Cloud business profitability, medium- or long-term, how you're thinking about that. Second, I'll go ahead and take a shot at the EC decision lately. It clearly is material for financials. How are you thinking about approaching that decision, and does that impact any of your other advertising businesses as far as innovation? And then finally, any thoughts on verticals that were — that were strong this quarter that supported the organic revenue growth? Thank you.

Ruth Porat, CFO Alphabet and Google: So on — as you know, we don't — we don't break out by product. You know, I'll add a bit more color on Cloud. We're clearly excited about the opportunity we have here and it does continue to drive sizeable revenue growth, as I said in my

opening comments, as did Sundar, and we are seeing momentum in the business. I think the comment that Sundar made about the number of new deals over \$500,000 increasing three times year-on-year gives you an indication of the momentum in the business. It's obviously not a financial forecast but it does display the traction we're having with Cloud in the market, and GCP remains one of the fastest growing businesses across Alphabet. G Suite continues to have strong growth. So we're really pleased with — with what that means for both the longer-term trends and the profitability. We do believe that from, you know, the many years of investment we've already made in things like technical infrastructure and security, which operate with tremendous efficiency, that provides us with a benefit, but near term we're investing meaningfully in sales and engineering, service, support, continuing to expand out regions, you know, to make sure that we're delivering the best experience for our enterprise customers, and that's what we're really focused on.

You know, in terms of — I think your second question was the EC. There's really not much of an update there. We're still early in our analysis of the decision and the right next steps, and we do have time to notify the Commission of proposed remedies as well as to implement changes. You know, the main thing is we're very focused on helping users and advertisers and are reviewing our options. It's an ongoing legal matter so there's not much more to comment on on that one.

And then the third question was —

Justin Post (Bank of America Merrill Lynch): On verticals that were strong?

Ruth Porat, CFO Alphabet and Google: Yeah. In terms of — you know, I think that what you're trying to get at here on what are we seeing in particular with — with Sites revenue, and there's not any one thing to call out, whether it's by vertical or steps that we're taking, and that's really what I would point you to more. I think it's an important point that we're very excited about the opportunities here, given both the underlying secular trends broadly with mobile — Sundar has talked a lot about that — but also all that we're able to layer on top of it, just given the engineering acumen here. And we talked about this on prior calls. It's true again here this quarter that no one change has been driving the results, and so what you're seeing is the combined benefit of a number of changes we've made. It's really this maniacal focus on all elements of the user and advertiser experience, and nothing to call out by vertical.

Justin Post (Bank of America Merrill Lynch): Thank you, Ruth.

Ruth Porat, CFO Alphabet and Google: Thank you.

Candice (Operator): Thank you. And our next question comes from Mark May of Citi. Your line is now open.

Mark May (Citi): Thanks for taking my questions. I think the first one is for Sundar. Data, of

course, is a key differentiator in digital advertising. I was hoping that maybe you could talk about how you've changed your use of Google Search data recently in areas outside of Search and how that is or might impact the effectiveness of advertising on channels like YouTube and others, you know, outside of Search. And then Ruth, in your prepared remarks you mentioned tremendous growth in Mobile Search in the quarter. I think that's a more emphatic statement than in recent quarters. Hoping that maybe you could provide more color on some of the areas where you're seeing the change in growth trajectory coming from within Mobile Search. Thanks.

Sundar Pichai, CEO Google: On your first question, you know, obviously, you know, we — we do these things with the foremost thing being making sure we do the right things for user privacy, but within our — within our own products, you know, we are trying to help users get a better experience across on the consumer side and the advertising side, and I think there is — there is opportunity there. And so, you know, we'll be thoughtful as we move forward.

Ruth Porat, CFO Alphabet and Google: And then on Mobile Search, we — you know, I think what you're hearing is we're really pleased with the ongoing efforts there, and as I've — as I just said, there was no one change that really drove this. What's extraordinary about the team is with the focus on users and advertisers, what — you know, what is it that is most useful. Sundar spoke about some of them with local, but it's really, again — it's a lot of small incremental efforts that, in the aggregate, continue to enable us to benefit from what's a really nice underlying secular trend here, and — and that's — that's what we're seeing in the results again.

Candice (Operator): Thank you. And our next question comes from —

Mark May (Citi): Nothing around — are you listening to this? There's nothing around like geography or platforms or...

Ruth Porat, CFO Alphabet and Google: I'm not sure if that was directed to me or — but in terms of geography, I think one of — hopefully one of the benefits of the way we've recast the data here last quarter was so you can actually get a bit more insight into what's going on around the globe, and that's why I made the comment that we're having really broad strength globally. You can see it in each one of the regions here. U.S. continues to deliver strong growth, engagement across products. If you look at EMEA, you know, on a fixed FX basis, up 21%. You can see the same in APAC, the same in other Americas. So, yes, there is broad-based strength across — across geographies and I think, you know, as — I'm not calling out one particular area because the — what you're seeing here is the secular trend. I've used that term a couple of times now. And we're continuing to benefit from that around the globe and we're continuing to benefit from, on top of that, the efforts of our team.

Candice (Operator): Thank you. And our next question comes from Stephen Ju of Credit Suisse. Your line is now open.

Stephen Ju (Credit Suisse): Okay. Thank you. So Sundar, I'm just wondering if you can give us some sense of advertiser adoption, particularly among your retail clients for the Store Visit product, as it seems like there is still a large opportunity to drive offline purchasing. And Ruth, can you give us some sense of any headwinds you might be seeing in your streams of revenue away from Play or GCP in the L&O revenue line as we're just not that accustomed to seeing a sequentially flat revenue line there. Thanks.

Sundar Pichai, CEO Google: Okay. I spoke about it in my opening remarks but I — you know, since Store Visits Measurement was announced three years ago, advertisers have measured over 5 billion store visits globally, and I think, you know, we are — you know, we have just barely scratched the surface. At our Marketing Next in May, we announced that the Store Visits Measurement will also roll out for YouTube TrueView campaigns, and we'll be rolling out Store Sales Measurement in the coming months so advertisers can actually measure in-store revenue in addition to Store Visits delivered by Search and shopping ads.

So we've had, you know, good proof points. Advertisers who have used it — you know, for example, Virgin Holidays used it, factored in Store Sales Measurements, and they realized their Search campaigns generate double the profit compared to looking at online KPIs alone. So I think there's a lot of opportunity there, and — and, you know — and so, you know, we'll do — we'll do more there over time.

Ruth Porat, CFO Alphabet and Google: And then you asked on the Other Revenue line. It was up nicely again this quarter, up 42% year-on-year, and that obviously includes the impact of FX. It's obviously a mix of businesses, including some of our bigger investment areas, most notably Cloud and Hardware. And as I said at the outset, Play continues to perform really well. I think if you are asking about the quarter-on-quarter sequential you noted, we're talking about a mix of businesses that have different characteristics, and to state the obvious, Play is more hit-driven, it's highly seasonal, Hardware is also seasonal, so, you know, the year-on-year provides a better sense of the dynamics of the business, and that's what you can see in this line up year-on-year really nicely this quarter.

Stephen Ju (Credit Suisse): Okay. Thank you.

Ruth Porat, CFO Alphabet and Google: Thank you.

Candice (Operator): Thank you. And our next question comes from Colin Sebastian of Robert Baird. Your line is now open.

Colin Sebastian (RW Baird): Thank you. Maybe just one question for Sundar. I wonder if you could update us on your thoughts regarding the convergence of Chrome and Android operating systems, and in particular, I'm curious whether the emergence of Google Assistant and voice as a corollary across devices is a reason to move forward with more integration between the two platforms. Thanks.

Sundar Pichai, CEO Google: Look, I'm — I mean, I — we've been thoughtfully doing it, you know, putting users first and, you know, I'm excited at how Android apps are coming to Chromebooks, and we see there is a great opportunity and I think that will help us deliver the — you know, deliver a very compelling experience. And we just have started doing it this year, and I expect it to really get momentum as we go through to next year. So, you know, that's an example of convergence and I think that will work really well, and so —

And in terms of products like Google Assistant and voice, you know, I think we will make sure for users it doesn't matter. And that they work across every platform they use, including our platforms as well as other people's platforms. So, you know, we think about making sure our services reach as many users as possible, and so we are working on that as well.

Colin Sebastian (RW Baird): Thank you.

Candice (Operator): Thank you. And our final question comes from the line of John Blackledge of Cowen and Company. Your line is now open.

John Blackledge (Cowen): Great. Two questions. So for Sundar or Ruth, within Cloud, could you talk about your view of G Suite's enterprise penetration right now, kind of key drivers of adoption longer term, and if you view it as a potential differentiator for Google Cloud versus other large competitors? And then within YouTube, 60 minutes per day of viewing on phones and tablets is obviously incredible at that scale. Any thoughts on, you know, kind of what could drive further material viewing or engagement growth over time? Thank you.

Sundar Pichai, CEO Google: You know, maybe on YouTube, I would say, you know, YouTube is one of those products which, you know, is scaling really well globally, just like Search did, and, you know, we are seeing real strong growth on mobile and we're seeing real strong growth for YouTube on emerging markets as well. And we are seeing real strong growth on television. So if I look at YouTube on mobile, on emerging markets, on larger screens, they all look like newer opportunities, and so I think — I think there's a lot more growth ahead.

And on Cloud, you know, I think we've kind of answered it. You know — you know, obviously we see differentiated strengths in machine learning, data analytics, security, and reliability, and the combination of not just GCP, G Suite working together with GCP, you know, we are seeing increasing win rates and adoption across enterprise customers.

And I also think all the investments we're doing in terms of broadening our ecosystem, including the newer partnerships with the companies I mentioned earlier, that should begin to pay off. And overall, the return on investment from the hiring and region expansion we are doing. So I think we are — we are set up incredibly well and look forward to the momentum ahead.

Candice (Operator): Thank you. And that concludes our question-and-answer session for

today. I'd like to turn the conference back over to Ellen West for any closing remarks.

Ellen West, VP Investor Relations: Thanks, everyone, for joining us today. We look forward to speaking with you again on our third quarter 2017 call. Thank you and have a good day.

Candice (Operator): Ladies and gentlemen, thank you for participating in today's conference. This does conclude the program. You may all disconnect. Everyone have a great day.