

## **Operator**

Good day, ladies and gentlemen and welcome to the Alphabet Third 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.

I'd now like to turn the conference over to Ellen West, Head of Investor Relations. Please go ahead.

## **Ellen West - Alphabet, Inc.**

Thank you. Good afternoon, everyone and welcome to Alphabet's third 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](http://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 hand the call over to Ruth.

## **Ruth Porat - Alphabet, Inc.**

Thanks, Ellen. We had a terrific quarter. Revenues of 27.8 billion were up 24% year-on-year, and also up 24% in constant currency. Advertising revenues benefited from strong performance in sites, which was powered by tremendous results in mobile search. Healthy growth in network revenues was again led by our programmatic business. We also benefited from substantial growth in other revenues from cloud, play and hardware.

Our outline for today's call is, first, I'll view the quarter on a consolidated basis for Alphabet, focusing on year-over-year changes. Next, I will review results for Google and then Other Bets. Finally, I will conclude with our outlook. Sundar will then discuss business and product highlights for the quarter, after which we will take your questions.

Let me start with a summary of Alphabet's consolidated financial performance for the quarter. Total revenues were \$27.8 billion, up 24% year-over-year. We realized a positive currency impact on our revenues year-over-year of \$255 million or \$64 million after the impact of our hedging program. Holding currency constant to the prior period, our total revenues grew 24% year-over-year.

Turning to Alphabet revenues by geography; performance was strong in all regions. U.S. revenues were \$12.9 billion, up 21% year-over-year. EMEA revenues were \$9.1 billion, up 23% year-over-year in both reported and fixed FX terms. APAC revenues were \$4.2 billion, up 29% versus last year and up 31% in fixed FX terms. Other Americas revenues were \$1.5 billion, up 33% year-over-year and up 32% in fixed FX terms.

On a consolidated basis, total cost of revenues, including TAC, which I'll discuss in the Google segment results, were \$11.1 billion, up 28% year-on-year. Other cost of revenues on a consolidated basis was \$5.6 billion, up 25% 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 were \$8.8 billion, up 11% year-over-year. The year-on-year expense growth in part 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 change in SBC grant timing affects the quarterly pace of stock-based compensation in 2017, with elevated year-on-year expense growth in the first half of the year, but benefits the year-on-year comparisons for Q3 and Q4.

Stock-based compensation totaled \$1.8 billion. Headcount at the end of the quarter was 78,101, up 2,495 people from last quarter. As in prior quarters, the vast majority of new hires were engineers and product managers. In terms of product areas, the most sizable head count 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 \$7.8 billion, up 35% versus last year, and the operating margin was 28%. Other income and expense was \$197 million.

We provide more detail on the line items within OI&E in our earnings press release. Our effective tax rate was 15.6% for the third quarter. Net income was \$6.7 billion and earnings per diluted share were \$9.57.

Turning now to CapEx and operating cash flow. Cash CapEx for the quarter was \$3.5 billion. Operating cash flow was \$9.9 billion with free cash flow of \$6.3 billion. We ended the quarter with cash and marketable securities of \$100.1 billion, of which approximately \$60.5 billion or 60% is held overseas.

Let me now turn to our segment financial results, starting with the Google segment. Revenues were \$27.5 billion, up 23% year-over-year. In terms of the revenue detail, Google sites revenues were \$19.7 billion in the quarter, up 23% year-over-year, led again by mobile search, complemented by desktop search and strong performance from YouTube.

Network revenues were \$4.3 billion, up 16% year-on-year, reflecting the ongoing momentum of programmatic and AdMob. Other revenues for Google were \$3.4 billion, up 40% year-over-year, fueled by cloud, play and hardware. 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 \$5.5 billion or 23% of total advertising revenues and up 32% year-over-year. The increase in sites TAC as a percentage of sites revenues 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, reflecting an increase in the sites TAC rate, which was modestly offset by a favorable revenue mix shift from network to sites. The increase in the sites TAC rate year-over-year was driven by changes in partner agreements and the ongoing shift to mobile, which carries higher TAC because more mobile searches are channeled through paid access points.

Google's stock-based compensation totaled \$1.7 billion for the quarter, up 2% year-over-year. Operating income including the impact of SBC was \$8.7 billion, up 29% versus last year and the operating margin was 32%. Accrued CapEx for the quarter was \$3.6 billion, reflecting investments in production equipment, facilities and data center construction.

Let me now turn and talk about Other Bets. For the third quarter, Other Bets revenues were \$302 million, primarily generated by Nest, Fiber, and Verily. Operating loss including the impact of SBC was \$812 million for the third quarter.

Other Bets accrued CapEx was \$77 million, primarily reflecting a reduced investment in Fiber, due to the pause in expansion we announced in 3Q 2016. We're pleased with our progress across Other Bets.

A couple of updates; Nest continues to drive ongoing product expansion with a number of notable launches including the Nest Thermostat E, which is offered at a lower price point than the Nest Learning Thermostat. Nest also announced a home security solution that includes the Nest Secure alarm system, Nest Hello video doorbell, the Nest Cam IQ outdoor security camera and corresponding software and services.

Waymo continues to expand its geographic presence and announced this morning that it will commence winter testing in Michigan to build on our progress to-date addressing the challenge of autonomous driving in cold weather, particularly with snow, sleet and ice. Michigan is the sixth state where Waymo is testing its self-driving vehicles. Over the last eight years, Waymo's cars have self-driven in more than 20 cities.

With Loon, we were pleased to announce just last week that the team is collaborating with AT&T to deliver emergency Internet service to the hardest hit parts of Puerto Rico.

Let me close with some observations on the quarter and our longer-term outlook. First, in terms of revenues, results this quarter again reflect our relentless focus on innovation, which is growing our advertising revenues. I frequently highlight our culture of innovation.

In that regard, the most important point is that we are data driven with an extraordinary team of engineers, product managers and designers, who constantly challenge assumptions and run thousands of experiments annually to enhance user and advertiser experiences. This approach enables us to find new opportunities given that the way consumers seek information continues to evolve. Our teams work relentlessly to anticipate and adapt to the expanding capabilities of both software and hardware.

Further, our culture of innovation is building our non-advertising revenue streams in cloud, play and hardware. Earlier this month, for example, we launched our expanded line of hardware products, bringing the best AI software and hardware together and building on the first generation of Made by Google products we introduced last year. Longer-term, we remain excited about the opportunities in our Other Bets with ongoing progress.

Second, with respect to profitability, we continue to remain focused on long-term dollar growth versus margins. Pressure in our total cost of revenues reflects our product mix shift with a number of our higher growth businesses also carrying higher cost of revenues. In our advertising businesses, TAC

continues to increase as our highest growth areas, mobile search and programmatic, carry higher TAC.

We expect sites TAC to continue to increase as a percentage of sites revenue. As we've frequently stated, we remain focused on profit dollar growth, and these areas are additive to our growth.

The other cost of revenues associated with our non-advertising businesses is also affected by product mix. In the fourth quarter in particular, the impact of our growing hardware line will be more accentuated given the early stage of this business and holiday seasonality.

On operating expenses, we remain committed to investing to support our growing product areas. The more modest OpEx growth in Q3 reflects both the timing of stock-based compensation and the timing of sales and marketing spend, with the reality that not all investments fall neatly into a single calendar quarter.

In particular, we're committed to sales and marketing investments in Q4 for the important holiday season. The most significant uptick in marketing will be to support our new expanded hardware line, which was just announced at the beginning of the fourth quarter. In addition, we are investing to support YouTube and our other platforms.

Third, as to CapEx, we continue to invest to support business momentum, including increased compute power from machine learning, which is an asset across Alphabet as well as to support cloud, search and YouTube growth.

In conclusion, a great quarter. Thank you. And let me now turn the call over to Sundar.

### **Sundar Pichai - Alphabet, Inc.**

Thank you, Ruth. We had another great quarter. I've been really proud of the progress this quarter, launching popular new products and continuing to grow our business in new areas. It's been particularly exciting to see our early bet on artificial intelligence pay off and go from a research project to something that can solve new problems for a billion people a day.

Even though we are in the early days of AI, we are already rethinking how to build products around machine learning. It's a new paradigm compared to mobile-first software, and I'm thrilled how Google is leading the way.

Consumers can already experience how AI allows them to interact with computing more naturally than ever before. Computers are adapting to people rather than people needing to adapt to computers.

Fundamental to this experience is Google Search and our Assistant. We introduced Assistant last year and it continues to get better every day, helping people get things done in the real world. Walmart and Target have recently integrated with Google Home, which means you can order everyday items from them much more easily.

500 million people now use the machine learning smarts of Google Photos to manage and share their memories. That billion plus people using Google Maps now get thoughtfully contextual information like how to find parking where they are going. And businesses are seeing how AI can help them grow.

Our open-source software, TensorFlow, is allowing anyone to use machine learning to solve problems even in industries like agriculture. Researchers recently use TensorFlow to make smartphones able to identify disease in cassava plants, a major food source in the developing world.

We made TensorFlow open-source and free because we fundamentally believe in creating computing platforms that developers can customize and build on. I'm really pleased with the way our computing platforms, like Android and Chrome, have continued to grow, enabling great experiences for people all over the world and powering devices for more than 1,000 brands worldwide.

This quarter, we released the latest operating system, Android 8.0, and released a preview of ARCore, which brings augmented reality to existing Android phones. Last week, we announced a partnership with Samsung to bring ARCore to all Galaxy devices.

Even though it's been an incredible busy few years and technology is moving rapidly, at our core, we remain an information company. Our mission to provide useful information to people in every corner of the world is unchanged. We care deeply about the quality of information we provide and constantly work to get this right. As technology evolves, we have to evolve with it to ensure quality information can flourish.

Our teams are making a big effort to support journalists and other people who produce high-quality information around the world. We are supporting publishers as they decide the right approach to free articles and subscription content. We are moving away from first click free to a more flexible model of content sampling. And we are working with publishers to build a frictionless payment solutions for subscriptions that can help them grow revenues and find new readers.

As new threats arise, we are committed to protecting journalists and media organizations from hacking and denial-of-service attacks. For example, we

just launched the advanced production program for Google accounts, which is designed to protect the accounts of those most at risk of targeted attacks, including journalists and other public figures. To wrap up my overview, I'm thrilled with how Google is solving big problems and making products that billions of people use every day.

Now let's review our three big bets, starting with YouTube. YouTube continues to see phenomenal growth as the premier global destination where people go to watch video. Three of the key areas we are focused on are; strengthening the existing community, continuing to drive growth and expanding our subscriptions business.

On the community side, we are helping create meaningful interactions that bring creators and fans closer together. This quarter, we launched a new feature that lets viewers share videos directly in the app. So the minute you see a video from a creator you love, you can share the fun with friends and family. We're also seeing significant growth in other areas.

As I mentioned in the last earnings call, YouTube now has over 1.5 billion users. On average, these users spend 60 minutes a day on mobile. But this growth isn't just happening on desktop and mobile. YouTube now gets over 100 million hours of watch time in the living room every day, and that's up 70% in the past year alone.

We are continuing to invest in new subscription based monetization models. YouTube Red, our first foray into the subscription market, is on track to release over 40 original shows this year and YouTube TV, our live TV subscription service, continues to expand into new markets. It now covers two-thirds of U.S. households and is available in 15 metro areas.

Now on to Google Cloud; we continue to make progress winning over enterprise customers. Customers tell us they are switching to Google Cloud Platform because of our prowess in data analytics and machine learning, our commitment to being an open platform with tools like Kubernetes, which runs in both cloud and hybrid environments and our leadership in security.

Just yesterday we announced a new partnership at Cisco. We are collaborating on an open solution that gives customers an easy approach to the cloud, enabling them to run apps that span both on-prem environments and Google Cloud Platform. G Suites, our collaboration and productivity applications are leading the industry. We have made improvements to drive, docs and Gmail launching new features to help teams work better together.

Nielsen recently moved to G Suite and said it's a great productivity and collaboration tool for their modern workforce. All of these things are driving momentum with customers and partners. Companies like Kohls, PayPal,

Rolls-Royce Marine in Europe and popular messaging app, Hike in India, moved to Google Cloud. We also announced a new partnership with Marketo and expanded our relationship with Pivotal and VMware. To support our growing global customer base, we introduced two new regions in the quarter in São Paulo and Frankfurt and continue to grow our go-to-market team.

Next, our hardware business. Earlier this month, we launched our second-generation family of Made by Google hardware products built with AI at the core. Last year, we focused on building the foundation to launch a line of devices Made by Google. This year, we are focused on bringing together the best AI software and hardware to give people a great user experience.

For example, the new Google Home Max is a smart speaker powered by the Assistant. It has AI-based smart sound, which adapts the audio experience to the user's environment context and preferences.

The new Pixel 2 has the world's best smartphone camera and a useful feature where you can summon the Google Assistant by just squeezing the phone. To get these devices in people's hands, we are also focused on scaling our go-to-market strategy. We are investing more in marketing. We're launching in more countries and we are offering these devices in more retailers, and we are already seeing results. Pre-orders of Pixel on day one this year were more than double what they were last.

Also this quarter, we signed a deal with HTC in Taiwan that will help accelerate our hardware business by bringing on a team of talented engineers. This deal lays the foundation for our continued efforts next year. And our advertising platforms continue to drive great results for our partners. While mobile has given rise to an unprecedented amount of data and complexity for advertisers, we think that machine learning will help it make – will help make it easier for advertisers to reach consumers. But even as we give advertisers incredible scale and reach across our ad platforms, we know consumer attention is scarce. That's why we are pleased YouTube ads continue to deliver the highest viewability rates in the industry.

YouTube now has a 95% ad viewability rate, which is significantly higher than the average 66% viewability rate of other video ads. We continue to see the industry shift to six second bumper ads and so greater adoption this quarter from brands like Bear, Ben & Jerry's, Louis Vuitton and Volvo. And Google continues to be the platform of choice to help small business owners get online and grow their business.

On our last earnings call, I mentioned a free website builder for small businesses. During the quarter, more than 1 million small businesses used it to build up websites, helping many of them get online for the first time. We



also introduced local post, which allows small business owners to easily post their latest updates like upcoming events, special offers and new arrivals, right on Google Search in Maps.

Our commitment to both large and small advertisers shows how we build products that all businesses can succeed in. That mission also has a geographical dimension, and I wanted to say a word about the momentum we are seeing in Asia.

Our revenues are up significantly in the region, driven by great results we are driving for existing and new advertisers. That holds true across developed markets like Japan and emerging markets like the Philippines and Vietnam, all of which have seen the number of active advertisers grow by 25% or more in the past 12 months. And this growth is bringing tremendous benefits to our partners there.

In the past three years, we have paid out more than \$24 billion to our publisher, creator and app developer partners in Asia Pacific. And to help millions of people, we are building products specifically designed for local markets in Asia.

In India last month, we launched Tez, a mobile payments and commerce app that already has more than 7.5 million users who have made more than 30 million transactions. I'm really excited about the potential this brings for India's mostly cash-based economy.

As I said at the start, it's been a great quarter for Google. Just two weeks ago, I was in Pittsburgh launching our new Grow with Google initiative, which provides digital skills to millions of people and economic opportunity to countless businesses. It was amazing to see firsthand the transformative impact that information is having in schools, in the workplace and for local business.

As I said then, I remain a technology optimist, not only because I believe in technology, but because I believe in people. I want to thank all the Googlers who continue to work so hard to advance our mission and to help people everywhere. Thank you.

**Ellen West - Alphabet, Inc.**

Thank you, Sundar. And we will now take your questions.

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

**Operator**

And our first question comes from the line of Eric Sheridan of UBS. Your line is now open.

**Eric J. Sheridan - UBS Securities LLC**

Thanks for taking the question. Maybe two, if I can. One, we've seen a lot of partnership announcements intra-quarter on the e-commerce side with Google Express and voice assisted shopping on Google Home. Wanted to understand better your ambitions in e-commerce as a marketplace or a platform and how that might also feed back into the advertising business?

Second question would be about the cash on the balance sheet and sort of how philosophically you think about deploying that cash against either shareholder returns or some of the big opportunities you laid out today? Thank you.

**Sundar Pichai - Alphabet, Inc.**

Maybe I'll take the first question and give it to Ruth on the cash question. We are very excited about the partnerships we are getting here with large retailers, and we are seeing traction globally. We've obviously partnered with them through our advertising products.

But with shopping, especially as we move on to making shopping more seamless across mobile and newer computing categories like Google Home, I think there's tremendous interest here.

So we are just getting started. And I think you will see us make a lot more progress and have a lot more announcements. And I think we are going to be relentlessly focused on making the buying experience much more seamless for users. So there's a lot more to come.

**Ruth Porat - Alphabet, Inc.**

So in terms of your second question. There was really no change from the approach we've talked about previously as we think about capital allocation. The priority is organic, as you said in your question. We have a host of really exciting opportunities and ensuring that we're investing to support long-term growth remains number one.

The second is strategic, continuing to add on where it makes sense. We're pleased to have added on HTC this quarter. Acquisitions have obviously been an important part of our history. And then the third is the return of capital and no change or update there in terms of how we think about that.

**Eric J. Sheridan - UBS Securities LLC**

Thank you.

**Operator**

Thank you. And our next question comes from Mark Mahaney of RBC Capital Markets. Your line is now open.

**Mark Mahaney - RBC Capital Markets LLC**

Great, thanks. Two questions, please. Sundar, you talked about APAC. You called out Asia. And we noticed that too, that that year-over-year growth rate was higher than – it was the highest, at least since you've been disclosing that. And you provided some of what's, but any whys behind why that growth is accelerating? Is that something that has just naturally reached the tipping point? Is there something different that Alphabet/Google has done in Asia to accelerate that growth?

And then, Ruth, can I ask you. You talked about the factors driving TAC and you mentioned changes in partner agreements. Is there any way you could give us any more color? Did you just renew some major partner agreements and there's nothing of that magnitude into next year? Or should we just assume that this is just part of operations, there was nothing major recent, you could have major ones coming up? Just something to help us qualify – I don't you think you'd used that language before – what that indicated? Thanks a lot.

**Sundar Pichai - Alphabet, Inc.**

The Asia question, largely, I think we've been laying a foundation for a very, very long time. Our products are very heavily used there. And so we've worked hard to build a user base and then the mobile transformation is a secular shift there. That's definitely driving accelerated growth. And it creates a virtuous cycle. We see new advertisers coming on.

We are investing more in Asia as well in addition to our go-to-market teams. We are building out great product and engineering teams. That's what has led us to improve core products like Search, Maps, YouTube, et cetera, to work better in those regions. And also launched region-specific products like Google Tez in India. So I think, overall, that's creating a good virtuous cycle and I'm looking forward to having more momentum there.

**Ruth Porat - Alphabet, Inc.**

And on your TAC question, as I indicated in the opening comments. There are a couple of drivers here. One is changes in partner agreements. And I think the main point is we're very pleased with our strong partnerships

across the mobile ecosystem. And the other was the ongoing shift to mobile, which we've talked about a lot and the fact that it carries higher TAC because more mobile searches are channeled through paid access points.

I think the most important point is that what you're seeing is we have a very healthy mobile business, search business and it is growing substantially and our focus remains on long-term revenue and profit dollar growth.

**Mark Mahaney - RBC Capital Markets LLC**

Okay. Thank you.

**Operator**

Thank you. And our next question comes from Douglas Anmuth of JPMorgan. Your line is now open.

**Douglas T. Anmuth - JPMorgan Securities LLC**

Thanks for taking the question. I had two. First, Ruth, you talked about the ongoing advertising innovation, and it's pretty clear that that's happening in mobile, which seems like it probably accelerated in the quarter. So I was hoping if you could comment on that. But then also, how do you think about where you are in terms of optimization on mobile relative to desktop? And then just second on YouTube. I was hoping you could comment on the extent to which you're seeing marketers return to the platform post the brand safety issues of 2Q and for a few of those who may not be back on yet, what are they looking for to fully return? Thanks.

**Ruth Porat - Alphabet, Inc.**

So it felt like a number of calls talked about the fact that there was no one item that was driving the momentum we saw in our sites revenue, and that was the point of giving you a bit more color here. We are really pleased with the momentum in the business, excited about the opportunities we have given the ongoing strong underlying secular trend, but wanted to give you more color on what do we mean by a culture of innovation, and that's really why I tried to get into a bit more about the rigor of the process.

And one of the key points is that we do have the opportunity, and we anchor this indeed, that we're constantly challenging assumptions. We're running a lot of experiments to enhance user and advertiser experience. And the approach continues to be productive, especially because the line of inquiry evolves as user behavior evolves. And so what users wanted in the earlier days of smartphones when screens were smaller is obviously, very different from expectations users have today. Each quarter, the ads team introduces

more than 100 enhancements out of a much larger pool of assumptions that they've tested. Machine learning is at the center of our processes and systems. And we do remain excited about the potential.

Desktop, I commented on. We are pleased with the ongoing strength of the business. It delivered solid revenue growth that remains an important form factor for certain more complex tasks. We've talked about that in prior quarters. Things like planning vacations or assessing insurance options. And so I think with the strength here underscores the importance of desktop for many users in many task, notwithstanding, the growing utility of mobile for users.

And then in terms of YouTube, I think you asked it. Well, we've been doing a lot to protect the ecosystems and do the right things for advertisers and users and content creators and the overwhelming majority of advertisers never left and those who did, many are already back on the platform.

**Douglas T. Anmuth - JPMorgan Securities LLC**

Thank you, Ruth.

**Operator**

Thank you. And our next question comes from Heather Bellini of Goldman Sachs. Your line is now open.

**Heather Bellini - Goldman Sachs & Co. LLC**

Thank you so much. Sundar, I was wondering if you could share with us your thoughts on voice search. And I guess, in particular, how do you think about maintaining Google fleet as the way we search changes, and as we see increasing adoption of these voice-enabled digital assistance in the home? And part of it, I guess, I'm also wondering about is how do you think about your relationships with the partners? And if the device base broadens out, does your leverage with the partners change? Thank you.

**Sundar Pichai - Alphabet, Inc.**

It's a good question, Heather. Voice, it's important to remember, voice is one input. When you look at how customers interact, they obviously are interacting more and more naturally, seamlessly across a set of screens, computing works and context for them. And even then when they asked voice queries, the response always what they need is not voice alone. Think about walking into a store and if you could only ask using voice and the person has to reply in voice what all is in the store. So that model applies.

So we expect a lot of continual experiences across screens, across modalities. So it's a big opportunity. I think it's opening up newer ways in which we are working with partners. I spoke earlier about the kind of experiences we are now able to drive at Walmart and Target, which we could have done a year before. Thanks to voice, how we are using it in the Google Assistant and how we are driving these partnerships.

So there's a lot of excitement about how we can do all of this differently. So we are using this as a good way to rethink everything we are doing with the caveat that voice still, overall, is an emerging category compared to how users use our products. So there's a lot of room ahead.

**Heather Bellini - Goldman Sachs & Co. LLC**

Thank you.

**Operator**

Thank you. And our next question comes from Justin Post of Merrill Lynch. Your line is now open.

**Justin Post - Bank of America Merrill Lynch**

Hey, I like to – maybe discuss a couple of your growth businesses. First, on cloud. Maybe you could talk about some of the wins you're seeing and why people are necessarily choosing Google and the momentum there?

And then, secondly, on the hardware business. It feels a little confusing on what your real goal is there. Is that to build a real independent separate hardware business? And how the Android relationships are going around that? Thank you.

**Sundar Pichai - Alphabet, Inc.**

First on cloud. Effectively, we are seeing strong momentum. And we already hear from customers that we have outstanding technology. So the reason we win deals in many cases is because we have superior technology and people also see the room ahead, thanks to a lead in machine learning. And that's an area where I think we'll continue to drive advantage. The main area where we need to get better is to scale our go-to-market and be in more places to effectively get more customers. And we are doing that a few different ways, Diane and team have really skilled our global sales force. But more importantly, I think we are striking a lot of important partnerships with leading technology vendors to scale and reach more customers.

And so be the partnership at Cisco that we announced or, in this quarter, we also teamed up with Pivotal and VMware. And earlier the year, you saw us partner with SAP. And all of this help customers more easily run their apps, both on-prem and in the cloud. And we are doing this all in an open way with Kubernetes. So that's the overall strategy, and I think that's really beginning to pay off. And you will see us scale across all these dimensions for cloud in the year ahead.

In terms of hardware, we are very seriously committed to making hardware. Few reasons. Hardware is – the intersection of hardware and software is how you drive computing forward. And historically, hardware has been maybe a single device business. For a long while, it was PCs then maybe plus smartphones. But you're clearly entering an era where you're going to have different types of computing experiences. And so to do that and to stitch it all together across, I think it's important we thoughtfully put our opinion forward. We're equally committed to working with the ecosystems and we provide the same basis on both sides, be it Android or Chrome. And it's going really well.

Our close partnership this quarter across a set of Android partners. You see great momentum at the recently launched Samsung Note 8. We announced ARCore on Samsung devices. So we have strong momentum there as well. So we're committed to pushing forward hard on all these areas.

**Justin Post - Bank of America Merrill Lynch**

Thank you.

**Operator**

Thank you. And our next question comes from Ross Sandler of Barclays. Your line is now open.

**Ross Sandler - Barclays Capital, Inc.**

Hi. I had a question for either Sundar or Ruth. It's just a philosophical question on TAC. So as the mobile search market matures, particularly in the Western markets, the question is, why does Google feel like it needs to pay any TAC to partners at all? Is the lesson learned from the Firefox, desktop partner loss a couple of years ago was that you didn't lose any revenue and you stopped paying TAC on that agreement, why wouldn't the same logic apply to mobile search? If not now, at some point in the future?

**Sundar Pichai - Alphabet, Inc.**

Look, I mean, first of all, we have a lot of experience in this area. We've been doing distribution deals for our search for well over a decade and I personally been involved all the way from the toolbar in the Chrome days. So by now, first of all, we want to construct a win-win construct. So we always want to construct in which we do better when our partners to better. And so doing TAC well aligns us in that way and, historically, it has driven a lot of growth. And so it's a model we understand. We understand the key economics behind it. And so we are very thoughtful about how we drive it forward. So we are driving it forward in a way in which we know it's going to give strong both revenue and earnings growth. And so I think we are pretty comfortable with how we are approaching it and so we'll continue to do that.

### **Operator**

Thank you. And our next question comes from Brian Nowak of Morgan Stanley. Your line is now open.

### **Brian Nowak - Morgan Stanley & Co. LLC**

Thanks for taking my questions. I have two. Just the first one, a little bit on growing Alphabet's multi-app ecosystem. Sundar, how do you think about the strategic importance to drive Chrome and Google Assistant app installs and user growth on non-Android mobile platforms? Maybe talk about how you evaluate, how you're doing there so far?

And then bigger picture. You've made large and exciting investment in growth opportunities across Google and Other Bets. I'd be curious to hear philosophically, how do you evaluate these opportunities and talk about some of the ROI thought processes or evaluation you make when making large capital allocation decisions?

### **Sundar Pichai - Alphabet, Inc.**

So, on the first one. One of the unique things about how we approach product development is we've always, at Google, care about building our products for everyone. And be it Search or Gmail or Google Photos or Chrome, we work hard to drive it across all platforms.

Obviously, some products, their ability to make it work well on other platforms versus our native platforms, there are differences and so we understand that. It's partly why we are very committed to driving success on our platforms, both through the ecosystem and our hardware efforts as well.

So we think about it holistically. But you'll continue to see us put a lot of effort into other platforms as well. For example, over the past couple of



years, I think we've meaningfully improved our products on iOS, as an example.

On the other part, maybe Ruth, do you want to give color. I would just say, at a high level, we drive our investments because we think about it from a user perspective first. We see areas where there are clear user problems and we think about whether we can use computer science and our technology advantage as Google and Alphabet to give a differentiated offering for users. And we do that and then we think long-term. But that's how we do about it. Maybe Ruth can give more color there, too.

**Ruth Porat - Alphabet, Inc.**

And then the numbers flow out of that, which is we look over a multi-year period. A lot of the things that we're doing are multi-year investments, and that's why we stress repeatedly that we're looking at what are the long-term needs and opportunities that we could be addressing, if we're doing that well, we're delivering long-term revenue and earnings growth. And those investments need to be seeded early for them to continue to grow and flourish around the globe. Whether that responds to the first question on what's going on in APAC or across Alphabet more broadly, we take a multi-year look. We look at the business, technical, financial milestones along the way, and we allocate resources in order to make sure we're maximizing the long-term potential to deliver as we see is appropriate.

**Brian Nowak - Morgan Stanley & Co. LLC**

Thanks.

**Operator**

Thank you. And our next question comes from Michael Nathanson of MoffettNathanson. Your line is now open.

**Michael B. Nathanson - MoffettNathanson LLC**

Thank you. I have two for Sundar, one on HTC. It's kind of interesting thing that you didn't buy the company, but you bought talent. And I wonder, what does that move directly give you? And what did you think was lacking, I guess, from the product side before you made that move? Then I had one on YouTube.

**Sundar Pichai - Alphabet, Inc.**

On HTC, as we were working on our hardware efforts, we've been working with HTC very closely on the Pixel phones. So across the two companies, we

saw a win-win construct, by which we could bring the team and the IP and other assets related to the Pixel business in-house. And it also allows HTC to focus better on their phones and the other products they're working on.

So it just made a lot of sense to do it. And I would also think about the overall capability we are getting, not just to make phones, but as we get into other product categories, like Google Home, VR and so on, right? And so it's important to continue to build that out. And the talent we saw there is definitely best-in-class.

**Michael B. Nathanson - MoffettNathanson LLC**

Okay. And then on DIRECTV – sorry, YouTube TV. It's clear that you guys have pretty good momentum, 50 markets already. I wonder, what has surprised you about the early consumer engagements? Anything you could share about early findings on the rollout of YouTube TV?

**Sundar Pichai - Alphabet, Inc.**

Yeah, main thing I would say is the consumer feedback, I think there's always been this promise on being able to, just like today on Google Search when you want something, we make it so easy for you to find it. Bringing that kind of a seamless experience on to TV, when you think about something you want to watch, making it seamless. And so, improving that process, I think, is really what people positively comment on.

Other things are being able to personalize it, bringing our machine learning-based recommendations over time. So that's how people notice. They get content, in which they are interested in, surfaced much better. So I think given where we are, I'm really excited at the initial reception. And we are gathering a lot of feedback, bringing it to more markets, and I'm going to work hard at making the product better.

**Michael B. Nathanson - MoffettNathanson LLC**

Okay. Thanks, Sundar.

**Operator**

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

**Daniel Salmon - BMO Capital Markets (United States)**

Hi. Good afternoon, everyone. Sundar, I'd like to just follow-up on an earlier question about e-commerce and specifically, a trend we see growing across the ecosystem of applying e-commerce data to targeting advertising. Maybe

if you could describe how you view that at a high level and whether that's important to you, and growing that opportunity across all of your platforms. And perhaps, shed some light on areas where you may be able to tap into that. You discussed partnerships with retailers, Android Pay. You're tracking off-line conversions more, even a product like Customer Match would seem like it'd be an opportunity to have your advertisers bring that type of data to the table. Would love to hear a little bit more about your thoughts on that?

**Sundar Pichai - Alphabet, Inc.**

It's a good question, Dan. You kind of partially answered it. So you're welcome to come and work on our e-commerce team anytime. To us, as a vertical, we see huge opportunities there. There's a lot of flywheel effects we see. Almost all e-commerce providers are really interested in, like, cloud for obvious reasons. So we see tremendous traction by which we are – we can talk to them about cloud. They're already advertising partners. They're beginning to work with us much more closely on driving a seamless shopping experience. We're working on payments. And so, it creates a nice flywheel effect, and we can do this globally across all the countries we do it in. And so, we are treating it more thoughtfully and investing in addressing the vertical opportunity we see in front of us, and we'll continue working on that.

**Daniel Salmon - BMO Capital Markets (United States)**

Great. Thank you.

**Operator**

Thank you. And our next question comes from Colin Sebastian of Robert Baird. Your line is now open.

**Colin Alan Sebastian - Robert W. Baird & Co., Inc.**

Great. Thanks. Maybe a couple of follow-ups. First on TAC, wondering if changes in partner agreements, since those are one of the key drivers of the increase in TAC, could we then see the rate of TAC growth moderate as you anniversary those deals?

And then, secondly, as it relates to voice and visual search inputs, I know it's still early for Google Lens. But overall, I'm wondering what portion of those search queries are proving to be incremental to search, the search experience, or are they largely substituting for searches on screens? Thank you.

**Ruth Porat - Alphabet, Inc.**

So in terms of TAC, as I indicated, we've got a couple of things going on. We're pleased with our strong partnerships. We continue to stress the impact from the shift to mobile. And again, both Sundar and I have said it, our focus remains on the profit dollar growth. And we've got a really nice position and a strong growth area. So that's what you're seeing here. But as I also said, we do expect it to increase some from here. And you've got a couple of factors going on.

**Sundar Pichai - Alphabet, Inc.**

On the second thing, look, I think based on every metric we see users' information needs are only going up. And the amount of information they deal with are increasing. And as we add new modalities, it really drives a better experience for them.

Google Lens, there's a long way to go. But today, as humans, visual input is really big for us. I mean, it's a lot higher bandwidth than everything else. And so bringing back to computing, I think, is a really important step in advancing how users can process information. And so I see that as an important step. And thanks to machine learning, we'll be able to do these things a lot more powerfully. All of this I think, overall, adds to the search experience. And so I view that as all incremental, but it'll play out slowly over many years. And so we see this as a big opportunity ahead and we are investing for it.

**Colin Alan Sebastian - Robert W. Baird & Co., Inc.**

Thank you.

**Operator**

Thank you. And our next question comes from Brent Thill of Jefferies. Your line is now open.

**Brent Thill - Jefferies LLC**

Thanks. Good afternoon. The revenue growth was one of the highest growth rates you've seen in five years. I'm just curious if there was something that surprised you in the quarter or something that perhaps was an anomaly that we should be thinking about modeling going forward?

**Ruth Porat - Alphabet, Inc.**

So I tried to give you a bit of color going across the major lines. We feel we're really pleased with the sites' revenue growth, the performance in mobile desktop and YouTube. I think if you just go down to the big

categories, network revenue also was quite strong. I think one thing to add there is programmatic continues to be a strong contributor. Generate significant growth, we've talked about that on prior calls.

Given all the ongoing advertiser adoption of programmatic buying and AdMob continues to see strength. What you're also seeing here is the traditional AdSense businesses. Overall, the pace of advertiser migration to programmatic affects this business kind of quarter-on-quarter as well as the policy changes that we've talked about in prior quarters. And those factors were less of a drag in the last couple of quarters.

So you actually saw nicer revenue growth year-on-year here as well. It was up 16%. And then Sundar's talked a lot about the components of other revenues up nicely. We're really pleased with what's going on there and then, on top of that, Other Bets. So we've got a couple of components to it and tried to give you color on each one.

**Brent Thill - Jefferies LLC**

Thank you.

**Operator**

Thank you. And our final question comes from the line of Stephen Ju of Credit Suisse. Your line is now open.

**Stephen Ju - Credit Suisse Securities ([USA](#)) LLC**

Thank you. So Sundar, can you talk about how Google is positioning in the emerging markets over the longer term can be different versus what we are used to seeing here in the States. I mean, you talked about Tez in India, and that's just type of stuff that we're not even seeing here in the States. So is there a broader opportunity for you to do a larger land grab with more products?

And Ruth, should we assume that the relative size of the dollar contribution to the other revenue growth happened in the order you gave out in the prepared remarks, I guess, cloud, play, hardware? And if so, this would make it the second quarter in a row in which cloud is showing up as the largest contributor, I guess, as opposed to the third. So any perspective you can share in terms of the relative growth you maybe seeing recently? Thank you.

**Sundar Pichai - Alphabet, Inc.**

On emerging markets, we do see a differentiated opportunity there partly because the characteristics of how truly many of these markets came mobile first, I think, gives rise to different ways users are adopting our products. And also, more importantly, the ecosystem, which is built around, so for example, if you take e-commerce, the kind of models that are emerging in these countries are also a bit different. So I think we see a way to look at these markets with a lot more thought and address them for the opportunity that they have, not just apply our global products there. So I think that's what led us to do Google Tez in India. And we'll thoughtfully look at the opportunities in that region and invest a lot in the years ahead.

**Ruth Porat - Alphabet, Inc.**

And then we do – we did list them in the order in which they're making a contribution. It's obviously a mix of businesses. As we've talked about, we have very strong growth in each of cloud and hardware that was tempered by slightly slower growth in Q3 for Play, reflecting what's the hit-driven nature of that business of gaming. But again, feel really pleased with the progress, momentum that we're seeing in the various businesses. And I guess, the only other thing to notice, obviously, is seasonality on the hardware as we move into the fourth quarter here.

**Stephen Ju - Credit Suisse Securities ([USA](#)) LLC**

Thank you.