

*This transcript is provided for the convenience of investors only, for a full recording please see the [Q4 2016 Earnings Call webcast](#).*

**Alphabet Q4 2016 Earnings Call**  
**January 26, 2017**

**Candice (Operator):** Good day, ladies and gentlemen, and welcome to the Alphabet fourth quarter 2016 earnings conference call. At this time, the 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 touchtone telephone. As a reminder today's conference call is being recorded.

I would 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 fourth-quarter 2016 earnings conference call. With us today are Ruth Porat and Sundar Pichai. While you've been waiting for the call to start, you've been listening to Ingrid Michaelson. In just a decade she has released six albums, five of which have charted. The song you just heard, "Celebrate," is from her latest release titled "It Doesn't Have to Make Sense." Please check out her YouTube channel.

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 2015 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:** Thank you. Our revenue of \$26.1 billion in the fourth quarter underscores the continued excellent performance of our businesses globally. For the fourth quarter, our consolidated revenue grew 24% in constant currency versus 4Q '15, notwithstanding a challenging year-on-year comparison.

Advertising revenue growth was driven by mobile search with ongoing strength in YouTube and programmatic. We also had substantial growth in Other Revenues from Hardware, Play and Cloud.

Our outline for today's call is: first, I'll review the quarter on a consolidated basis for Alphabet. Given the obvious seasonality in Q4, I'll focus on year-over-year changes in our results. You can find quarterly comparisons in the earnings release. Second, I'll review the results for Google and then Other Bets. Finally, I will conclude with a summary of the full-year results and our outlook. Sundar will then review our business and product highlights for the quarter, after which we will take questions.

Let me start with a summary of Alphabet's consolidated financial performance for the quarter. Total revenue was \$26.1 billion, up 22% year-over-year. We realized a negative currency impact on our revenues year-over-year of \$202 million or \$15 million after the benefit of our hedging program.

Holding currency constant to the prior period, our total revenue grew 24% year-over-year.

Alphabet revenues by geography highlight the strength of our business around the globe. U.S. revenue was up 24% year-over-year to \$12.7 billion. U.K. revenue was up 7% year-over-year to \$2.1 billion, reflecting the continued weakness of the British pound relative to last year. In fixed FX terms, the U.K. grew 21% year-over-year. Rest of World revenue was up 24% versus last year to \$11.3 billion. In fixed FX terms, revenues were up 26% year-over-year.

GAAP other cost of revenues was \$5.8 billion, up 41% year-over-year. Non-GAAP other cost of revenues was \$5.5 billion, up 41% year-over-year, primarily driven by Google-related expenses; specifically, costs associated with operating our data centers, including depreciation, and content acquisition costs, primarily for YouTube, as well as Hardware.

The impact of our Q4 Hardware launches is reflected in both revenues and cost of revenues. However, it's important to note that cost of revenues was also affected by approximately \$320 million of one-time charges related to equipment and other adjustments which were unrelated to Hardware.

GAAP operating expenses were \$8.8 billion in the quarter, up 13% year-over-year. Non-GAAP operating expenses were \$7.3 billion, up 10% year-over-year. Year-on-year comparisons in part reflect the impact of the expenses from project milestones in Other Bets in 4Q '15 that we discussed last year. On a GAAP basis, operating income was \$6.6 billion, up 23% versus last

year. The operating margin was 25%.

Non-GAAP operating income was \$8.5 billion, up 24% versus last year. The operating margin was 33%.

Stock-based compensation totaled \$1.8 billion, up 29% year-over-year.

Headcount at the end of the quarter was just over 72,000, up 2,100 people from last quarter. Consistent with prior quarters, the vast majority of new hires were engineers and product managers to support growth in priority areas such as Cloud, including the addition of employees from our Apigee acquisition.

Other Income and Expense was \$218 million. We provide more detail on the line items within OI&E in our earnings press release.

Our effective tax rate was 22% for the fourth quarter, reflecting the geographic mix of earnings and certain discrete items affecting our U.S. rate. Our effective tax rate for the full year 2016 was 19%.

Net income was \$5.3 billion on a GAAP basis and \$6.6 billion on a non-GAAP basis.

Earnings per diluted share were \$7.56 on a GAAP basis and \$9.36 on a non-GAAP basis.

Turning now to capex and operating cash flow, cash capex for the quarter was \$3.1 billion. Operating cash flow was \$9.4 billion with free cash flow of \$6.3 billion. We ended the quarter with cash and marketable securities of \$86.3 billion, of which approximately \$52 billion, or 61%, is held overseas.

Let me now turn to our segment financial results, starting with the Google segment. Revenue was \$25.8 billion, up 22% year-over-year, which includes the impact of FX. In terms of the revenue detail, Google Sites revenue was \$18 billion in the quarter, up 20% year-over-year.

Year-on-year growth reflects strength in mobile search. YouTube revenue continues to grow at a very significant rate, driven primarily by video advertising across TrueView, including buying on DoubleClick Bid Manager.

Network revenue was \$4.4 billion, up 7% year-on-year, reflecting the ongoing strong growth of programmatic and AdMob offset by the traditional network businesses.

Other Revenue for Google was \$3.4 billion, up 62% year-over-year, with strong performance from each of Hardware, Play and Cloud.

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. Let me remind you that these metrics are affected by currency movements.

Total traffic acquisition costs were \$4.8 billion or 22% of total advertising revenue and up 20% 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 revenue reflects 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 as a result of an increase in the Sites TAC rate driven by the shift to mobile which was partially offset by a favorable revenue mix shift from Network to Sites, which carries lower TAC.

Operating income excluding SBC was \$9.5 billion, up 19% versus last year, for an operating margin of 37%.

Google stock-based compensation totaled \$1.7 billion for the quarter, up 29% year-over-year. Operating income reflecting the impact of SBC was \$7.9 billion, up 17% versus last year, and the operating margin was 31%.

Accrued capex for the quarter was \$2.9 billion, reflecting investments in production equipment, facilities and data center construction.

Turning to Other Bets, I'll cover results for the full year 2016 because it's most instructive to look at financials for Other Bets over a longer time horizon as discussed previously. Results for the quarter are in our earnings release.

For the full year 2016, Other Bets revenue was \$809 million, up 82% versus 2015, primarily generated by Nest, Fiber and Verily. Operating loss excluding SBC was \$2.9 billion for the full year 2016, a slight decline from 2015.

Including the impact of SBC, the operating loss was \$3.6 billion for the full year, an increase of 4% over 2015.

Other Bets accrued capex was \$1.4 billion for the full year 2016, up 63% over 2015.

Before I move to my conclusion, I'll quickly cover some specific changes to our past practices. First, we are making changes to our non-GAAP reporting. SBC has always been an important part of how we reward our employees in a way that aligns their interests with those of all shareholders. Although it's not a cash expense, we consider it to be a real cost of running our business because SBC is critical to our ability to attract and retain the best talent in the world. Starting with our first quarter results for 2017, we will no longer regularly exclude stock-based compensation expense from non-GAAP results.

Non-cash stock-based compensation will continue to be reported on our cash flow statement, but we will no longer be providing a reconciliation from GAAP to non-GAAP measures that reflects SBC and related tax benefits.

Second, we are shifting the timing of our annual equity refresh cycle for employees to the first quarter of every year. The next full-year equity refresh will occur in the first quarter of 2018. Because the last full employee equity refresh occurred in the third quarter of 2016, we are providing employees with a one-time half-grant in the first quarter of 2017.

Overall, total SBC for 2017 will be roughly the same as it would have been had we maintained a Q3 refresh cycle. However, given the shift in refresh timing, there will not be the historical seasonal increase in SBC in Q3 and Q4. We do not plan any changes to our senior executive equity refresh, which occurs every two years, with the next one planned for 2018.

Third, to hedge our non-U.S. dollar earnings, we are moving from using options only to using primarily forwards. We believe they will be a more effective way to hedge earnings. We intend to continue to use options selectively.

We continue to believe that constant currency revenue growth provides the best insight into underlying trends by isolating the impact of currency movements on revenue. We will continue to provide constant currency results for consolidated revenues as well as for revenues by geography. This will give you a view into the effects of currency movements on our revenue.

Turning now to our full-year 2016 performance and outlook.

2016 was simply a great year for us. Our extraordinarily talented employees worked very hard and successfully for our users around the globe. That commitment is reflected in the company's exceptional financial results.

For the full year 2016, consolidated revenue grew 20% and excluding the impact of currency movements grew 24%. GAAP operating income was up 23%.

This performance is a testament to the ongoing innovation that is driving our success in mobile Search, YouTube and programmatic advertising, each of which we believe has only begun to scratch the surface. We remain excited about the sizable opportunities that have not yet been tapped.

Alongside these businesses, we are focused on growing additional revenue streams within Google over the medium- and long-term. In 2016, our Other Revenue line grew 41% on a full-year basis, reflecting the growth in our Play, Hardware and Cloud businesses.

We see tremendous potential ahead for these businesses as well as in the continued

development of non-advertising revenue streams for YouTube. We're investing in our Cloud and Hardware businesses as well as our newer non-ad revenue sources for YouTube in order to accelerate their progress as major revenue drivers for Google in the next several years.

We're also investing significantly in the machine learning capabilities and next generation computing infrastructure that will propel Google's growth over the longer term.

For our Other Bets, we continue to calibrate the magnitude and pace of investment appropriate to their individual execution paths. A couple of our recent announcements demonstrate our approach here.

First, in December, Waymo graduated into a stand-alone business within Other Bets. We did this because Waymo achieved agreed thresholds on the path to commercialization in its technical and business model. Waymo continues to excel at safety, has begun putting its new Chrysler Pacifica minivans on the road, and is continuing to drive down hardware costs.

Nest delivered an outstanding performance this holiday season with sales of key products more than doubling over the two weeks including Black Friday and Cyber Monday.

And, just this morning, Verily announced that Temasek has agreed to invest \$800 million for a minority stake in the company. Temasek's extensive experience with life sciences and healthcare companies and deep understanding of Asian markets make it a valuable long-term partner for Verily.

The internal transparency we've provided to our business leaders across the Other Bets and Google is helping us to allocate resources more thoughtfully across the opportunities that we see. We remain committed to managing for long-term revenue and EPS growth, for dollars rather than margin targets while exercising careful stewardship over the amount and pace of investment.

I will now turn the call over to Sundar.

**Sundar Pichai, CEO Google:** Thanks, Ruth. 2016 was a great year for Google and 2017 is shaping up to be even more exciting.

This quarter was about the business firing on all cylinders and terrific progress across Google's newer areas of investment.

Today I'm going to talk about three things. First, the key trend powering Google today, machine learning, and how it's improving our products and creating lots of opportunities. In particular, how it's underpinning our core mission of providing access to information for everyone, especially via the Google Assistant which is off to a great start.

Second, I want to talk about three of our biggest bets -- YouTube, Cloud and Hardware -- where we are making great progress.

And third, I'll discuss the great trends we are seeing across our platforms. Our vibrant computing platforms -- Android, Chrome and Daydream -- strong momentum in Google Play as well as our thriving advertising platform.

First, machine learning and access to information. As I've shared before, computing is moving from a mobile-first to AI-first with more universal, ambient and intelligent computing that you can interact with naturally, all made smarter by the progress we are making with machine learning.

2016 was the year that this became central to who we are as a company and the products that we built. We had more than 350 launches powered by machine learning across areas like Search, Maps, Messaging and Google Play.

You've heard lots of these examples. Easier email replies in Inbox. Better YouTube recommendations. The incredible cameras on our Pixel phones. And smarter bidding for advertisers in AdWords.

A centerpiece of our machine learning efforts is the Google Assistant which allows users to have a natural conversation with Google to help them get things done across their experience. It's off to a great start. You can easily ask it to navigate home, tell you about your schedule for the day or even play trivia.

We reached a milestone last month with our announcement of the Assistant developer platform called Actions on Google. It gives developers like Uber, SongPop and Headspace the opportunity to build Conversation Actions for Google Home, and we'll expand it even further this year.

The Assistant is baked into our smart messaging app, Allo, which we expanded this quarter in languages like Hindi, Brazilian Portuguese and Japanese.

This quarter, using Neural Machine Translation, we improved our translation ability more in one single leap than all our improvements over the last ten years combined. We'll be rolling Neural Machine Translation out across the more than hundred languages available in Google Translate in 2017 and also for all of our cloud customers through the Google Cloud Translation API.

And Google Photos, which as you know has machine learning at its heart, continues to grow in popularity. Last quarter, we launched PhotoScan which helps you digitize all of those old printed photos that are probably stored in a shoebox in your closet, to keep them safe, organized and shareable.

In February, we are hosting a summit where our machine learning team and other experts will

discuss the future of the TensorFlow open source initiative and share some of their latest demos.

Now I want to spend some time talking about three big bets: YouTube, Cloud and Hardware.

First YouTube, which remains the premier destination for online video globally and has seen tremendous growth. At the heart of YouTube's success is its booming community of creators. Every single day over a thousand creators reached a milestone of having 1,000 channel subscribers. We are focused on two main areas of investment. First, creating the best video experience that's fast, personalized, searchable and that just works. We have rolled out many new features to the platform, like 360 degree videos, mobile live streams and support for videos in virtual reality.

And regions with limited connectivity we introduced YouTube Go which has transparency and control of data usage.

Second, we are focused on delivering content that gives fans exactly what they want through offerings like YouTube Music, YouTube Kids and YouTube Red. We have 27 Originals pairing some of the most popular YouTube creators with the biggest directors and producers in Hollywood.

One of our new originals called "This is Everything: Gigi Gorgeous," about the courageous journey of a transgender YouTube star officially premiered at Sundance just a few days ago. The popularity of this original content has been successful in driving new subscribers and retaining existing ones -- and we'll do more in 2017.

Second, our Cloud business is on a terrific upswing. In 2016 we made huge strides building out our product offerings across all areas of Google Cloud Platform, or GCP. We routinely hear from customers that we have now moved well beyond table stakes, and we have truly differentiated offerings in four key areas: data analytics and machine learning, security and privacy, tools for application development and the ability to create connected business platforms, leveraging our recent acquisition of Apigee.

Our product advancements across all of GCP in addition to our increased focus on how we work with enterprise customers have enabled us to accelerate growth with new Fortune 2000 customers while also inspiring our current customers to substantially expand their use of GCP.

We've also enjoyed strong growth with G Suite, our cloud-based collaboration and productivity applications. G Suite achieved a significant new-customer milestone last quarter. More than three million paying businesses are now using G Suite to collaborate smartly and securely in the cloud. Our increased success with enterprise customers relates to the unparalleled security and data protection we can provide by offering an entirely cloud-based solution that enables an extremely strong level of protection.



For both GCP and G Suite, expanding our partner ecosystem continues to be a big focus and last quarter the team announced new alliances including Intel, Improbable, Slack, Pivotal and Red Hat. Our customers and partners are appreciating Google Cloud's dramatically accelerated pace of product rollout as well as our responsiveness to both their needs and aspirations. We look forward to showcasing customers, partners and all of Google Cloud at our next annual Next user conference in March.

Third, Hardware. We introduced a new family of beautiful hardware devices in October that are made by Google, led by Google Home and our Pixel phone which feature the Google Assistant built in. We're thrilled with the reception as well as the really happy customers we saw over the holiday season.

In particular, Google Home was a very popular present that many people opened on Christmas morning.

We are committed to this for the long-term as a great way to bring a beautiful, seamless Google experience to people. The early signs are promising, and you can expect us to see us expand our offerings thoughtfully.

We'll also continue working closely with our ecosystem partners to create the best experiences for users.

So those are three of our biggest bets. We're also continuing to push the platforms that are powering our business and our partners' businesses.

First, our computing platforms. And second, our advertising platforms.

Building powerful open platforms has always been core to Google, and our platforms like Android, Chrome and Daydream are creating more innovation, more choice for users and more opportunities for partners. This was on full display at the CES show. There we saw partners like NVIDIA and AirTV introduce new media players based on Android TV and Casio and New Balance shared their latest Android Wear smartwatches. We also worked closely with Samsung on a new generation of Chromebooks called the Samsung Chromebook Pro and Plus which are getting great buzz. And in VR, we recently worked with partners like Huawei and ASUS and others to introduce even more new Daydream-ready devices.

CES is just a start, and there's a lot more coming from our great partners across these platforms in 2017, and we'll continue working hand-in-hand with them to provide the best experiences for our users.

We're also investing in ways to help developers succeed using our platforms. Last week, we announced that we are acquiring the Fabric mobile app development platform. This will work

alongside our Firebase platform to help developers build better apps and grow their businesses. Since we launched Firebase at I/O, developers have created over one million Firebase projects. That's incredible momentum.

Google Play helps bring our platforms to life on mobile and beyond, and it's experiencing great momentum. As a piece of trivia, do you know what 2016's top movie was on Google Play? I'll provide the answer in a second.

Play had a great quarter with continued growth in our top markets, as well as in emerging markets where user spend grew by more than 70% year-over-year in countries like India, Mexico, Turkey and Saudi Arabia. As the content hub across our growing platforms, the Play team is working hard to help users get the most out of their devices through apps, games and premium content.

In Q4, the Play Store launched on Daydream, Android apps became available on Chromebooks, and we announced that the Play Store will soon be coming to Android Wear. The platform is also benefiting significantly from machine learning. We recently introduced a new Google Play Music experience that makes music streaming smarter and easier to use with better recommendations and playlists.

And the answer to my trivia question, the top movie in 2016, was Deadpool.

Lastly, I'll quickly touch on the highlights across our growing advertising businesses. I'm so pleased with the terrific partnerships we've continued to grow this year. We work incredibly closely and deeply with agencies, marketers and publishers worldwide. These relationships owe a lot to the hard work of our fantastic business teams around the world. Our mobile properties, like Search, YouTube, Maps and Google Play are where people turn when they're actively engaged. They are the prime time in the mobile era.

We had another successful holiday season where we saw two clear trends. First, this was the year that mobile shopping went truly mainstream, with shoppers using phones as they go to the store to locate nearby retailers, find promotions and comparison shop.

We recently introduced Promoted Places in Google Maps, helping advertisers stand out with branded location icons, showing promotions and live updates of popular times right when someone's looking for it.

Gap, Inc., is one example of a company that understands the importance of connecting with consumers on mobile devices. In December, they increased their U.S. mobile search ad spend with us, and as a result, they saw about four times the mobile traffic to their U.S. e-commerce sites compared to December of last year.

Second, we saw this season that measurement really matters, and advertisers want reliable

ways of understanding where their sales and traffic are coming from and how their campaigns are working.

We saw increased use of our popular Store Visits technology over the holiday shopping season, helping businesses understand how online ads bring customers into their physical stores. In less than two years, Store Visits has helped advertisers measure over 3 billion store visits globally.

Now turning to our thriving video ads business led by YouTube.

Marketers are seeing terrific success here. Air France used YouTube's TrueView video ads in order to reach valuable business travelers and new customers around the world. By showing engaging videos, highlighting the unique experiences of Air France, they saw more than hundred million views throughout the campaign.

Turner Sports partnered with YouTube and DoubleClick for NBA Opening Night to try a new way to reach fans for the start of the season. We helped them deliver real-time video ads with behind-the-scenes pre-game footage uploaded immediately into a YouTube TrueView ad campaign. Thanks to the campaign, they were able to reach 19 million more people across the Web with 17% lift in ad recall.

Speaking of DoubleClick, many news publishers who are using our Accelerated Mobile Pages are now plugging into our Ad Exchange to drive revenue. We are thrilled that most publishers are getting higher click-through rates and effective CPMs with their AMP pages.

Before I end, I want to highlight one area that I'm really proud of where Google is truly leading the way. As you know our data centers from Oklahoma to Chile to Finland enable our services to be blazing fast, and they are what makes it possible for Google Photos to offer unlimited storage. But to do all this they use lots of energy.

In 2012, we set a long-term goal to reach 100% renewable energy for our operations. In 2015, we procured enough renewable energy to cover 44% of our total. And in 2016, we increased it to more than 50%.

I'm really proud that we'll reach 100% renewable energy for global operations in 2017. This is great for the environment, and with renewable energy costs declining, it's a huge win for our business results too.

With that, I want to thank the Googlers around the world who helped make this another exciting quarter.

Over to you, Ruth.

**Ruth Porat, CFO Alphabet and Google:** Thank you, Sundar. And 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, please press star and then the number one key on your touchtone telephone.

If your question has been answered or you wish to remove yourself from the queue, you may press the pound key.

Again, to ask a question, please press star one.

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

**Heather Bellini (Goldman Sachs):** Great. Thank you.

I had a question for Sundar. I was wondering, I wanted to focus on the Cloud business. When we speak with CIOs about GCP they highlight in many cases the need for Google to improve upon its enterprise sales strategy. I'm just wondering if you could share with us the changes you've been making in that organization and the goals that you have for the Cloud business for 2017.

**Sundar Pichai, CEO Google:** Thanks, Heather.

You know, as I said in my opening remarks, I do think, you know, we are seeing tremendous momentum with our partnerships team and how we're approaching. We have a lot of new alliances which I talked about. So now we have teams dedicated to partnering with GSIs, and we have a team focused on technology partnerships, too.

On the GSI front, we announced a new alliance with Accenture last September to create industry solutions for a number of industries, including retail.

So for me, I think overall, you know, everywhere I look at, we are establishing a world-class enterprise team. Partnerships has been a big focus, and I have seen progress there.

You know, I think, you know, as I said in my remarks, overall, 2017 I expect to have a lot of momentum because we have moved well beyond the table stakes. Now we are really, you know, competing on areas which we think we have differentiation. I talked about data analytics and machine learning, security and so on.

So, you know, I think we are well positioned. The momentum when we look at the numbers internally, and as well as the traction we see in competitive situations, you know, I definitely think we're going to have a great year. And hopefully in the Next conference coming up, Diane and

team will share a lot more details.

**Heather Bellini (Goldman Sachs):** Thank you.

**Candice (Operator):** Thank you.

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

**Eric Sheridan (UBS):** Thank you for taking the questions. Maybe first for Sundar. Now that you have this breadth of device ecosystem out there into the marketplace, wanted to know if we could get a little bit more color about what your learnings are about the adoption of the device ecosystem, how you're thinking about the go-to market strategy over the medium- to long-term, and how we might see sort of an evolution across operating systems.

And then if I can, maybe one for Ruth. You called out a one-time charge in -- or one-time impact on the number in the quarter. I want to know if we can get a little more granularity about what went into that one-time expense so we could just sort of factor that in the financials. Thank you.

**Sundar Pichai, CEO Google:** You know, Eric, I'm assuming when you said the device ecosystem, you're talking about how our platforms are working at scale.

You know, the thing which I get excited about is, you know, computing is increasingly moving, rather than just one device, which is a dedicated computing device, to being there for users in their context. And you'll see computing increasingly embedded in many things. And we have a comprehensive strategy. You know, we do want people -- you know, we invest in it for the long run. We are improving our computing experiences with machine learning.

We expect to be there for users across -- across a device ecosystem, and we're also building things like Google Play to work across all of this so that users can have one coherent experience.

I think, you know, we see great momentum both across our partner ecosystem as well as pushing the cutting edge of the experience which is what we strive to do with our own Hardware devices. And so I think the end-to-end strategy is working well for us.

**Ruth Porat, CFO Alphabet and Google:** And in terms of you noted the one-time item, there are really two that I'm actually going to call out. One was in cost of revenues, I noted that equipment costs were elevated by some -- some one-time charges, and so there was some pressure there. And then the other item that I noted was with respect to our tax rate. I noted that there was a slightly elevated tax rate this quarter. It's always affected by the geographic mix of results, but we did have a discrete item that affected the U.S. tax rate, just to make that clear.

**Candice (Operator):** Thank you. And our next question comes from Mark Mahaney of RBC.

Your line is now open.

**Mark Mahaney (RBC):** Thanks. Two questions, please.

Again, Ruth, on that \$320 million one-time charge, is there any more detail you can provide on that? It seems like a relatively sizable amount.

And then, Sundar, if you could talk a little bit about voice search, particularly in the home and in the car and the importance of getting devices out in the marketplace. And the challenge I'll throw to you is it looks to me like Google devices are being outsold ten to one or something like that in a lot of homes. And, you know, it's immaterial now but I could see in five years that there's a new voice search interaction interface and it's not Google in the home, that could be a real challenge for the company. Thank you.

**Ruth Porat, CFO Alphabet and Google:** So on the first one, trying to be helpful in giving you dimension and impact on cost of sales, but really not much more to add there. I think the other point is, as you're thinking about the Hardware business, it was gross margin positive. There were just some other variables in there.

**Sundar Pichai, CEO Google:** And, Mark, on voice search, we are really excited about it. You know, I think it's a very natural way for users to interact. We think it will be one mode. Users will have many different ways by which they interact with computing.

And for voice, you know, as you pointed out, we expect voice to work across many different contexts. So we are thinking about it across phones, homes, TVs, cars, and, you know, trying to drive that ecosystem that way. And we want Google to be there for users when they need it.

And even with -- even with Google Home, we just launched it in Q4. We had a very strong quarter there. And, you know, we are going to invest a lot in it over 2017.

It's very early days. You know, when I look at what it would take to voice search well, our years of progress we have done in areas like natural language processing comes into play, and I think there is a lot of work ahead to make all of this work well for users. And, you know, this is the core area where we have invested in for the very long-term, and so I feel very comfortable about how this will play out in the future.

**Mark Mahaney (RBC):** Thank you.

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

**Doug Anmuth (JP Morgan):** Thanks for taking the question.

Ruth, you commented on YouTube and addressed some of the non-advertising revenue streams. I was just hoping you could elaborate there a little bit what the goals would be there for your users.

And then just to follow-up on Mark's question on voice search, I understand, Sundar, it's early, but how do you think about the challenges and opportunities from a monetization perspective in voice? Thanks.

**Ruth Porat, CFO Alphabet and Google:** So on the first question in terms of YouTube, Sundar elaborated on my opening comments, we're really pleased with the ongoing strength we have there. As we've talked about on prior calls, it's largely driven by video, primarily TrueView with a strong contribution from DoubleClick Bid Manager. And we are continuing to invest significantly in the business given the importance of supporting the ecosystem of content creators through partner payments, marketing, YouTube Originals, YouTube Spaces. We're broadening the platform. We're investing in the requisite infrastructure given machines and bandwidth required. And Sundar elaborated on some of the upside we see there on the non-ad side. And really the point I was trying to stress consistent with Sundar's comments is we've got the non-ads momentum here on the YouTube side and we're also seeing tremendous momentum with Cloud, which we're excited about, and the hardware and investing behind those. So those continue to build out the revenue streams as we're looking in the near to medium- to long-term.

**Sundar Pichai, CEO Google:** And, Doug, just like Mark's question on voice search, I would encourage you to think about it from a user's standpoint, they are looking for information, looking to get things done. The voice queries are one part of the total journey they are on.

So when we think about something like the Google Assistant, we think about this as an ongoing conversation with our users across different contexts. So they may ask a question on voice. Later, when they pick up their phone, they want continuity. So we think of this as an end-to-end thing.

And all of this means users engage more with us, more with computing and look for more information. And I think the trends we see are positive.

So, you know, we think about it from a long-term perspective. And so I see more opportunity than challenge when I think about voice search.

**Doug Anmuth (JP Morgan):** Thank you.

**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 very much. Another one on YouTube, if I could. Would it be possible to get any sort of metrics around YouTube Red and how the subscription business

has been progressing, realizing you're not going to be providing that every quarter but that you do occasionally give us some sort of benchmarks in the market. Thanks so much.

**Ruth Porat, CFO Alphabet and Google:** Well, at this point, we've launched in five countries. We're pleased with the early success. And, you know, it's still early days. It takes a while to build a subscription business here. And I'll pass it to Sundar for additional commentary.

**Sundar Pichai, CEO Google:** Look, I mean, I think -- I would think about it as we're investing a lot in developing this premium experience. We have YouTube Red, YouTube Music and we do offer it across Google Play Music as well.

You will see us invest more. More countries, more original content. And we'll bring together the experiences we have over the course of this year so it's even more compelling for users.

But, you know, we are seeing tractions -- tractions with the rate of sign-ups. We're not disclosing specific numbers, but I'm excited at the progress there.

**Peter Stabler (Wells Fargo):** Thank you.

**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 questions. I have two.

The first one, just to go back to YouTube. I appreciate the color around the content. I would be curious to hear about how you think philosophically about partnering with more premium content players to maybe drive even higher engagement and even better YouTube experience.

And then the second one, if you kind of step back in your mobile search business and the verticals, the innovation you've had at retail and in travel with shopping and Hotel Finder, I guess I'd be curious to hear about where you see the biggest potential for more improvements in certain verticals for an even more relevant and higher search result experience over the next years. Thanks.

**Sundar Pichai, CEO Google:** On your first question, you know, look, I mean, we think of YouTube again as an ecosystem. We are trying to connect creators with users, form a community. And so, you know, we work hard to bring more premium content. You know, we already work with TV networks and their individual shows, whether it's the Late Night show like James Corden or Jimmy Fallon, afternoon shows like Ellen, sports programming like NBA and NFL. For example, sports is one of the most popular verticals. We have hundreds of sports partnerships in place. And so we'll continue to invest that way and drive -- drive the premium content there.



On the second one, you know, if -- you know, we do look at the Internet experience, look at what are the kinds of tasks which users are trying to get done. Mobile raises the bar. You know, we want to provide those deeper experiences for users. And so, you know, I generally think local is a big area. We have strong assets there with Maps. And so we think about how we can improve the local experience a lot more for users.

So, for example, within local areas like dining, we work closely with our partners to make that better.

So we get it -- we get it at a pretty granular level and we try to hit all the areas. And so I think you'll see progress in all these areas over the next few years.

**Brian Nowak (Morgan Stanley):** Great. Thanks.

**Candice (Operator):** Thank you. And our next question comes from Anthony DiClemente of Nomura. Your line is now open.

**Anthony DiClemente (Nomura Instinet):** Hi. Thanks for taking my questions. Just on YouTube, I'd love to hear about pricing and then also about ad load. So is there anything you can highlight on ad format? And specifically we notice that recently you're enabling marketers to target YouTube ads based on Search. And so I just want to hear about that strategy. And maybe relatedly, the recently announced non-skippable YouTube ad format, you know. Would love to kind of hear about that. Thanks for taking my question.

**Sundar Pichai, CEO Google:** Look, overall I would say there's been a -- been very pleased with how the team has been driving, you know, innovation in ad formats and the ad experiences. I think video advertising is in its very early days.

You know, we see whenever we -- so we are in an innovation phase, and the advertiser response to all of these new formats has been really positive. So, for example, Bumper Ads, our six-second video format that we launched, is already being used by thousands of accounts, including major brands like Universal Pictures and Netflix.

On your question around how we think about the experience across screens, you know, it's really important to understand users, you know, consume YouTube across screens, and so they experience a consistent experience. And similarly from an advertising standpoint, we want that to be thoughtful for users, more relevant across screens as well.

And so that's the context in which we do this. We give users control over the ads experience. But I do think as part of these changes, advertisers, you know, can get more detailed insights from their YouTube campaigns across devices so they can better understand the impact of their marketing campaigns.

So I think it's early days, but I think it's the right direction, and I think we will see good traction from it.

**Candice (Operator):** Thank you. And our next question comes from Michael Nathanson of MoffettNathanson. Your line is now open.

**Michael Nathanson (MoffettNathanson):** Thanks. I have two, one for Sundar and one for Ruth. Sundar, speaking on the YouTube questions, there was a report that YouTube and CBS had agreed on an agreement to distribute CBS on YouTube. Can you talk a bit if that is actually happened? And if so, what do you see the opportunity to partner with networks and how will that evolve over time?

**Sundar Pichai, CEO Google:** Look, you know, I can't comment on any specific discussions, but, you know, I said a little bit earlier, you know, we are constantly working with partners across these areas. You know, we work very closely with TV networks on their individual shows. It's a big part of the YouTube experience. So you'll see us work hard to make these partnerships deeper and bring more content to our users. So maybe I'll leave it at that.

**Michael Nathanson (MoffettNathanson):** Okay. And then for Ruth, you mentioned programmatic drove the network numbers, revenue growth this quarter. If you look at fourth quarter this year and last year, there seems to be an acceleration in Q4 and then it comes back. I wonder what's happening seasonally to that revenue line that drives fourth quarter up so much?

**Ruth Porat, CFO Alphabet and Google:** Well, as we've talked about on prior calls, there are obviously a number of businesses within the network line and a number of things went right this quarter. I wouldn't extrapolate from it. As you noted, there can be some seasonality, and Q1 is typically lower than the fourth quarter. I think the main point is that the programmatic business continues to be a strong contributor with significant growth, reflecting the ongoing advertiser adoption just given the overall efficiency of programmatic and improved targeting and the benefit of inventory growth.

And so the story is pretty much unchanged. We continue to see the growth in programmatic offset by declines in the more traditional businesses. And, you know, when you're looking at the quarter over quarter, you're continuing to see things like the impact of policy changes and timing of product launches. But I just think that there were a number of things that went well this quarter. Q3 was a bit lighter, so that then flattered the quarter-over-quarter comparison, but I wouldn't extrapolate from this.

**Michael Nathanson (MoffettNathanson):** Okay. Thanks.

**Candice (Operator):** Thank you. And our next question comes from Lloyd Walmsley of Deutsche Bank. Your line is now open.

**Lloyd Walmsley (Deutsche Bank):** Thanks. I'm wondering, Sundar, if you can just give us a sense on the Pixel phone hardware opportunity to kind of build direct mobile distribution and capture hardware margin, and how you think about that versus the potential disruption, you know, having your own handset at a bigger scale could cause in the Android ecosystem. You know, do you think this is something that could get meaningful market share without disrupting the ecosystem?

And then, you know, a second follow-up related to this would be on the Pixel phones, you know, with Google Assistant having been built uniquely into the core of the experience, is there anything you're learning as the usage of that increases? Is it driving a step-function increase in engagement with the hardware/software integration? Thanks.

**Sundar Pichai, CEO Google:** Look, I mean, we are in early days. I think it's really important when you work on a platform, you know, you have to drive it forward. So we've always done by putting out, you know, the state of the art. And I think it especially gets important in the vision we have for computing where users are going to use it across many different contexts. And so to do that end-to-end experience, it spans devices. So I think it's important for us to work at the intersection of hardware, software and services. And so that's how we think about it.

And I think, you know, we invest a lot more in our ecosystem. And I mentioned earlier, I'm incredibly excited about the line-up that we have for this year from our partners.

So we do both and we're very thoughtful about it. I think -- I think the scale at which we're doing it shows it's working. And, you know, I'm confident we'll be able to strike that balance well.

In terms of Google Assistant on the Pixel along with how -- how Search works, I think, you know, definitely, you know, it gives us a way to iterate and move faster and make sure it's working better for users. You know, our thesis is that you know -- as we make it easier for users to have Google at their fingertips across what they are doing, and including many modes, whether they're typing or asking Google a question, you know, we find that it overall benefits. And so it will be a long-term trend, but I think our early results show that our intuition is right there. And so we'll continue approaching it that way.

**Lloyd Walmsley (Deutsche Bank):** Thank you.

**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, you called out Google Play growth, and emerging markets in your prepared remarks, so I thought from a revenue-size standpoint, it would be one of the big bets you would highlight. So I'm wondering how you view your own Instant Apps as well as products from other operators to let consumers try apps either

in a messenger product or in an HTML5 environment. Do these innovations present an opportunity or a challenge for you and the Play franchise?

And, secondarily, it seems that the recurring theme in your prepared remarks is how AI is making the consumer products better. Is there anything you can share in terms of how it may be making monetization better? Thank you.

**Sundar Pichai, CEO Google:** So on Google Play for me, what makes it -- makes it work well is, you know, just with the vision of computing we have been talking about, about how, you know, it works across context. You know, you need an ecosystem -- you need an apps and services ecosystem to work cohesively across all of this. And that's what I like about how we're approaching Google Play. And you saw us this quarter see Google Play work beyond Android phones. They're coming to Chromebooks. They work in Daydream. They work in Android Wear. And so it's an end-to-end thing which works well.

And that's the -- that's the most important thing, so that as a user you know, whether you're engaging with a game or a TV show, that you can reliably get it across your computing experiences.

And we'll adapt, and I think we will drive innovations in Play to go where what's right for users and developers. And so, you know, be it instant apps or driving better HTML5 experiences, we invest in all that and I think we'll move it all forward.

On your second question, you know, about how machine learning and AI is improving our monetization, it definitely -- I mean, just like we -- we had many, many launches last year, you know, which involved machine learning being incorporated across Google, including our monetization products. Our monetization teams at Google have always been at the cutting edge of, you know, what I would call of machine learning techniques from early days on. So they are -- they are doing it.

It is early days, but I think we already have, you know, really new insights. And so we'll bake it in, you know, over the course of the year.

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

**Candice (Operator):** Thank you. And our next question comes from Ken Sena of Evercore. Your line is now open.

**Ken Sena (Evercore):** Hi. Maybe just another question on YouTube. You know, can you expand on the decision this quarter to remove third-party cookie and pixel activity? It looks as though you're favoring something much more identity based. And maybe you could just think through or explain a bit about the impetus there and maybe the trade-offs for marketers. That would be great. Thank you very much.

**Sundar Pichai, CEO Google:** I spoke about it a bit earlier, but I think it's important that we evolve all of this from a user-centric standpoint. And, you know, users have an identity. They have preferences. And so, for example, think about it from a user standpoint, if they don't like one particular ad, or they don't want to see an ad from a particular advertiser, they want it to work across their experience, across their cross-device experience.

So we think about it that way, and so we're working towards a long-term experience that's right for users and which I think will make sense for advertisers reaching users, too. So I think we're evolving it jointly and thoughtfully, giving users control. And I think that's the right way to approach it over time.

**Ken Sena (Evercore):** Thank you very much.

**Candice (Operator):** Thank you. And our final question comes from Justin Post of Merrill Lynch. Your line is now open.

**Justin Post (BoA-Merrill Lynch):** Thank you. I'd like to ask you first a question about ad coverage and click rates. Maybe just your thoughts on potential to increase ad coverage now that you have a fourth link. Is there still room to help ad clicks with coverage increases? And just as you think out to this year, how do you feel about the innovation pipeline in ads? Do you think there's a lot more you can still do in Search?

And then two housekeeping for you, Ruth. Maybe you could just let us know what kind of equipment was written off so we can think about how recurring that might be, and any comment on the buy-back activity in the quarter. Thank you.

**Sundar Pichai, CEO Google:** On the -- on the -- you know, on our monetization efforts, our teams always have been very thoughtful about planning, not just for the short-term but planning for the long-term.

You know, we don't start the year thinking our plan is to increase ad coverage or something like that, right. We are -- we have many experiments in the pipeline. We see how user behavior is evolving. And in conjunction with that, we evolve our ad experience. For example, as people use mobile, scroll more, et cetera, the user behavior changes and we adapt to that in a very, very disciplined way.

So, you know, last year you saw us maybe increase coverage in a certain way. For example, in desktop we removed ads on the right-hand side. So we take a very holistic approach to these things.

For me, I do think we have a lot of headroom ahead. I still look at where most of, you know, transactions happen and how that secular transformation is underway. And so I think we see

we have a lot more headroom left. And Ruth --

**Ruth Porat, CFO Alphabet and Google:** Yeah. In terms of your second question, really not much more to add on the first part. In terms of the buyback, we weren't able to commence it in the fourth quarter due to trading restrictions, but we do look forward to getting back into the market.

**Justin Post (BoA-Merrill Lynch):** Thank you.

**Candice (Operator):** Thank you. And I'm showing no further questions at this time.

**Ellen West, VP Investor Relations:** Thanks, everyone, for joining us today. We look forward to speaking with you again on our first quarter 2017 call.

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