

Operator

Good day, ladies and gentlemen. And welcome to the Alphabet, Inc. First Quarter 2016 Earnings Conference 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 will now like to turn the conference over to Ms. Ellen West, head of Investor Relations. Please go ahead.

Ellen West - Vice President-Investor Relations, Google, Inc.

Thank you. Good afternoon, everyone, and welcome to Alphabet's first quarter 2016 earnings conference call. With us today are Ruth Porat and Sundar Pichai. 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 - Chief Financial Officer & Senior Vice President

Thanks. Our very strong revenue of \$20.3 billion in Q1 underscored the great momentum of our businesses globally, with consolidated revenue growth again accelerating meaningfully, up 23% in constant currency versus last year.

The primary driver was the increased use of Mobile Search by consumers, benefiting from our ongoing efforts to enhance the Mobile Search experience. We also benefited from solid growth in desktop and tablet search as well as continued strength in YouTube and programmatic advertising.

We continue to rationalize our portfolio of products to ensure we efficiently and effectively focus our resources behind our biggest bets across Alphabet. I will present to you in the following order: first, review the quarter on a consolidated basis for Alphabet; second, review the results for each of Google and Other Bets; finally, I will conclude with our outlook. Sundar will then review our business and product highlights for the quarter, after which we will take your questions.

Beginning with a summary of Alphabet's consolidated financial performance, total revenue was \$20.3 billion, up 17% year-over-year and down 5% sequentially. As a result of the ongoing strength of the U.S. dollar, we realized a negative currency impact on our revenues year-over-year of \$762 million or \$593 million after the benefit of our hedging program. Holding currency constant to prior periods, our total revenue grew 23% year-over-year and declined 4% sequentially, reflecting holiday seasonality.

Once again, Alphabet revenues by geography highlight both the strength of our business around the globe as well as the impact that currency headwinds continue to have on our non-U.S. business.

U.S. revenue was up 21% year-over-year to \$9.4 billion and down 9% versus Q4. UK revenue was up 15% year-over-year to \$1.9 billion and flat sequentially. In fixed FX terms, the UK grew 21% year-over-year and 5% quarter-over-quarter. Rest of world revenue was up 14% versus last year to \$9 billion and down 2% versus Q4.

In fixed FX terms, revenues were up 25% year-over-year and up 1% sequentially. GAAP other cost of revenues were \$3.9 billion. Non-GAAP other cost of revenues was \$3.6 billion, up 27% year-over-year, primarily driven by Google-related expenses, most notably due to costs associated with operating our data centers including depreciation, content acquisition costs, primarily for YouTube and hardware costs related to sales of new Nexus, Chromecast and Pixel devices launched in the fall.

GAAP operating expenses were \$7.3 billion in the quarter. Non-GAAP operating expenses were \$6 billion or 30% of revenue, up 11% year-over-year and down 9% versus Q4. The year-over-year growth was primarily driven by R&D expense, mainly due to compensation expense related to head count growth.

On a GAAP basis, operating income was \$5.3 billion, up 20% versus last year. The operating margin was 26%. Non-GAAP operating income was \$6.8 billion, up 21% versus last year. The operating margin was 34%.

With respect to stock-based compensation, it totaled \$1.5 billion, up 24% year-over-year, and up 4% sequentially, primarily reflecting increased head

count and the impact of our senior executive equity refresh that occurs every two years. Head count at the end of the quarter was 64,115, up approximately 2,300 from last quarter. The vast majority of new hires continue to be engineers and product managers in areas where we've prioritized investment, such as cloud and apps. On a numbers basis, we're adding more head count in Google, while on a percentage basis, we're growing faster in Other Bets.

Other income and expense was negative \$213 million. As discussed on prior calls, OI&E consists of a number of line items with different drivers, which makes it inherently unpredictable. The key drivers this quarter were the ongoing drag from foreign exchange, given the volatility in currency markets as well as losses recorded for marketable and non-marketable securities. These items offset interest income from our investment portfolio, which remains fairly consistent.

Our effective tax rate was 18%, reflecting the geographic mix of our income and adoption of a new accounting standard that reflects certain SBC tax benefits in GAAP earnings that were previously recognized in equity. We have excluded these benefits in our non-GAAP earnings.

Net income was \$4.2 billion on a GAAP basis and \$5.2 billion on a non-GAAP basis. Earnings per diluted share were \$6.02 on a GAAP basis and \$7.50 on a non-GAAP basis.

Turning now to CapEx and operating cash flow, CapEx for the quarter was \$2.4 billion, the substantial majority of which supported the Google segment. Operating cash flow was \$7.7 billion, with free cash flow of \$5.2 billion. We ended the quarter with cash and marketable securities of \$75.3 billion, of which approximately \$45 billion, or 60%, is held overseas. This reflects our strong operating cash flow, offset by the impact of our share repurchases during the quarter of approximately \$2.1 billion.

Let me now turn to our segment financial results. Starting with the Google segment, revenue was \$20.1 billion, up 17% year-over-year, which includes the impact of FX. In terms of the revenue detail, Google Sites revenue was \$14.3 billion in the quarter, up 20% year-over-year and down 4% sequentially. Year-on-year growth reflects substantial strength in Mobile Search due to the ongoing benefit from the improvement in ad formats and delivery that we launched in the third quarter of last year. We continue to have solid growth from desktop and tablet search.

YouTube revenue continues to grow at a very significant rate, driven primarily by video advertising across TrueView and Google Preferred, with a growing contribution from app promotion.

Network revenue was \$3.7 billion, up 3% year-on-year and down 11% sequentially, continuing to reflect the strong growth of programmatic offset by the traditional network businesses.

Other revenue for Google was \$2.1 billion, up 24% year-over-year and down 1% sequentially. Year-over-year performance was driven by Play as well as continued strong growth in cloud and apps and a nice contribution from 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. As a reminder, these metrics similarly are affected by currency movements.

Total traffic acquisition costs were \$3.8 billion, or 21% of total advertising revenue, up 13% year-over-year and down 7% sequentially. The increase in both Sites TAC and Network TAC as a percentage of revenue reflects the fact that our strongest growth areas, namely mobile and programmatic, carry higher TAC.

Operating income, excluding SBC, was \$7.6 billion, up 22% versus last year, for an operating margin of 38%. Google stock-based compensation totaled \$1.3 billion for the quarter, up 25% year-over-year. Operating income reflecting the impact of SBC was \$6.3 billion, up 21% versus last year, and the operating margin was 31%. CapEx for the quarter was \$2 billion, reflecting investments in production equipment, facilities and data center construction.

Turning to Other Bets financials, as a reminder, the majority of these efforts are pre-revenue. We continue to invest across these opportunities, doing so in a disciplined way. Because Other Bets results aggregate the revenues and expenses from a number of businesses operating in different industries, there is likely to be lumpiness in the reported results from quarter-to-quarter, which is why we think it remains most instructive to look at them over a longer time horizon.

For Q1, Other Bets revenue was \$166 million, up 108% versus last year. Reported revenue for Other Bets was primarily generated by Nest, Verily and Fiber. Operating loss, excluding SBC, was \$657 million in the first quarter. Including the impact of SBC, operating loss was \$802 million. Other Bets CapEx was \$280 million in Q1, primarily reflecting ongoing investment in our Fiber business.

Look forward, a few observations, first, regarding revenue; our culture of innovation drives our strong revenue growth. We've talked previously about the benefits from changes made to ad formats and delivery in the third

quarter of 2015 and that continues to be a tailwind. Mobile, as an example, continues to offer sizable opportunity for revenue enhancement, given the increasing ubiquity of mobile use by consumers and the strong location and contextual signals from mobile devices. Although we remain intensely focused on innovation across Alphabet, the timing and magnitude of ongoing changes, obviously, are inherently uncertain and are not designed with an eye toward quarterly schedules.

Second, as to expenses; within Google, we continue to be focused on managing the expenses that we can actually control, as you can see from our results again this quarter. However, the secular trends driving revenue are accompanied by greater required investment in our ecosystem to support that revenue growth, most specifically the continued trend of higher TAC due to an ongoing change in mix within our Sites and Network businesses.

Third, regarding CapEx; as we have consistently said, technical infrastructure is a key strategic asset for us. We have tremendous scale and continue to add to it. The team continues to deliver innovative solutions that are creating meaningful efficiencies in machine use, allowing us to benefit from earlier investments and meet our growing Google requirements cost effectively.

With regard to CapEx investments for Other Bets, the bulk of that is directed to our Fiber business, where CapEx should obviously increase as we execute in a growing number of cities.

Fourth, about our balance sheet; as I discussed on our Q4 call, last quarter, we initiated steps to align our capital structure consistent with the move to Alphabet, providing greater flexibility as we continue to grow. Our exchange offer will be completed on April 25, and we have completed the move of our commercial paper and revolving credit facility from Google to Alphabet.

Finally, our strategic prioritization; as I indicated last quarter, there are a number of different execution paths we are pursuing to optimize our investments and opportunities. In some areas, we will be increasing investment if teams meet milestones we set as part of our 2016 budgeting process. In other areas, we've chosen to work with industry-leading partners who can increase our momentum.

Finally, in certain areas where we have had multiple teams developing different approaches to a similar technology, we've been evaluating how to rationalize these approaches, enabling us to increase investments around a smaller, more focused set of opportunities.

So my closing comment is that in Q1, we continued to see tremendous revenue growth across our businesses, and we remain focused on disciplined investing for the long-term.

I will now turn the call over to Sundar.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Thanks, Ruth. It's great to join you all today. Our teams are off to a great start this year and there is even more excitement in the month ahead as we gear up for big events, like: our annual developer conference, Google I/O; our YouTube event, Brandcast; and the Google Performance Summit for advertisers.

Google's mission is to organize the world's information and make it universally accessible and useful. And after 17 years, we have just scratched the surface of what's possible. We are reinvigorated around this mission and, as you will hear, we are making solid progress across many of our products.

Today, I'll quickly share a few highlights from the quarter, as well as some of the areas where we are investing to make our products more useful and intelligent. Then, I'll give an update on our Advertising business and our growing Cloud business.

A few highlights from the quarter; we continued to invest in making Search more useful and assistive. In the early days, when you did a search on your desktop, we gave you 10 blue links then sent you on your way. Users still had to do too much work to find the information they were looking for. We have made a lot of improvements over the years to add more comprehensive and assistive information right within the search results.

For instance, 10 years ago, if you tried to find the score during your favorite soccer team's match, we'd likely point you to some news articles or the team's website. Today, we show the live scores for nearly 200 soccer leagues across 70 countries, so fans around the world can quickly find information, like upcoming schedules, team news and conference standings right in the search results. We are incredibly well-positioned to better assist our users, thanks to our strengths in areas like search, geographical information, machine learning, image recognition and natural language processing.

One of the key ingredients behind this push towards greater assistance is AI. We have long invested in building the best machine learning team and tools, and we are seeing these efforts bear fruit in many ways. As many of you saw last month, DeepMind's AlphaGo has been making great strides. It was a privilege to play legendary Go player, Lee Sedol, in such an important

milestone for artificial intelligence. This is another step to what's creating AI that could help us with everything from our daily tasks to potentially even bigger challenges like climate change and cancer diagnosis.

At Google, machine learning is already helping us improve our products every day in search and many other areas like photos, maps and more. Last quarter, I talked about how machine learning helps Smart Reply suggest responses in Inbox. This quarter, we launched Goals in Google Calendar, an intelligent feature that helps users make the most of their time. You just add a personal goal, like run three times a week, and Calendar will help you find the time, then help you stick it to. There's still a lot more that we can do to make Search and other Google services more assistive and helpful to you. You'll see a lot more from us this year.

On the content side, we are seeing great traction on Google Play and YouTube. YouTube still has incredible momentum, and we continue to invest heavily here. What seemed like a moon shot a decade ago has grown into a booming community of engaged users, creators and brands, unlike any other video platform. YouTube on mobile alone now reaches more 18 to 34 and 18 to 49 year olds in the U.S. than any TV network, broadcast or cable.

This past quarter, we launched YouTube Originals, original content available on our premium service YouTube Red. And we are very pleased with how it's been going. And earlier this week, we announced that we are make 360-degree live streaming available globally on YouTube. We are kicking things off by live streaming select performances at Coachella for fans around the world in 360 degrees.

Google Play remains a thriving hub for digital content across apps, games, music, movies, TV and books. Game developers of all sizes are building successful businesses in the Play Store thanks to its global reach of over 1 billion users. In fact, in 2015, we saw 50% more games reach over 1 million installs compared to the previous year. And we keep adding great content to Google Play. For instance, performances by artists like Coldplay and Justin Bieber from the 2016 BRIT Awards that are available exclusively on Google Play Music.

When we talk about great content, the mobile web is equally important. This quarter, our simple, fast and secure browser, Chrome, reached another important milestone, surpassing 1 billion monthly active users on mobile alone. And, of course, one of the keys to a great mobile experience is fast content. As you know, we have teamed up with hundreds of publishers and tech companies to improve the mobile web for everyone with accelerated mobile pages. Early data shows that these pages load four times faster and use 10 times less data than traditional pages.

We recently made it easy to find AMP in relevant Mobile Search and Google News results, giving users a lightning-fast reading experience for top stories. And there are great advertising opportunities for publishers in these new fast pages.

Another example is progress of Web Apps, which combine the best of the web and apps allowing companies to build mobile sites that load quickly, send push notifications, have home screen icons and much more.

Of course, computing is the foundational layer through which all our products are delivered. In March, we previewed the Android N release to give developers an early look at what's coming in the next version of our software. This release has key features like multi-window support, direct-reply notifications and battery efficiencies.

We're also building for future platforms. We expanded Android Auto to Brazil, and Android Wear partners, like Michael Kors and Fossil, also announced that they are working on new devices coming later this year. In our newest platform, VR, we also recently introduced VR view, a quick and easy way for developers to include 360-degree VR images and videos in their apps and websites.

Now, moving on to some of the key drivers and trends in our advertising business; as people turn to their mobile phones in moments of high intent, which we call micro moments, Google has a compelling value proposition. We offer marketers four things: the best ways to target commercial intent at the right moment; the best mobile ad formats; the best reach and range of quality inventory; and the leading measurement solutions.

First, thanks to our unique interim signals, we are able to connect marketers with the right customer precisely the right time. A new example of this is Customer Match, which helps brands reach their most valued customers on Google Search, YouTube and Gmail, with highly relevant and targeted ads. After using Customer Match to reactivate their loyal customers, specialty retailer Williams-Sonoma reported a 50% lift in revenue compared to previous campaigns that didn't use Customer Match.

Second, we continue to invest in the best new mobile ad formats, tailored to help users find exactly what they need at the right moment. For example, we rolled out Model Automotive Ads, which helps automakers recreate the showroom experience by featuring images of cars alongside helpful information right in the Mobile Search results. On average, participating brands see a more than 30% increase in engagement rate with these new automotive ads compared to standard text ads.

Third, we provide advertisers with the best reach in inventory across many of the web's most coveted platforms. Marketers like HBO Now are seeing great results from our popular app (23:10) promotion offerings like Universal App Campaigns, (23:13) which helps advertisers easily run campaigns in Google Play, YouTube, Search and across our Display network. In fact, in January, we saw a 200% year-over-year increase in ad-driven installs on Android alone.

And in our burgeoning Programmatic business, we recently rolled out Programmatic Guaranteed, a new way to conduct better deals between advertisers and publishers on high quality inventory.

And fourth, we give marketers powerful measurement tools, so they know exactly how effective their ads are. Just this week, we announced the availability of sales lift studies to help consumer packaged brands better understand how their online videos are driving offline sales. This adds to our significant efforts in this area.

I want to specifically highlight the success we are seeing with YouTube advertising. As YouTube continues to grow, with great content and engaged users, marketers can't get enough. For example, Microsoft Xbox hosted a six hour live streamed event on YouTube for their Halo 5 opening week promoted with TrueView ads where 8 million people tuned in, helping it break sales records.

Excitement is especially high as we head into our annual Brandcast event coming up next month. Thanks to the success of Google Preferred, this is the third year in a row we are making it the cornerstone of our offering to marketers. In fact, number of brands in the U.S. using Google Preferred has doubled year-over-year.

Now, I want to spend time on our exciting Enterprise businesses, which have been gaining momentum. Last December, we have unified our cloud businesses under one leader, so we can innovate faster and better serve our customers. This decision is already paying off. Enterprises are starting to see the power of combining Google Cloud Platform with our suite of business applications, all of which are infused with our machine learning services.

As companies accelerate their move to the cloud, we can help them automate their IT operations, better understand their data, and become more cost effective and secure, while also offering them transformative office productivity.

In addition, we are helping customers adopt our powerful Chromebooks and Android phones. Our recent Next 2016 Conference in San Francisco showed just how serious we are about the enterprise. It was wonderful to hear

executives from Spotify and Coca-Cola share their stories about how they are benefiting from Google's cloud technology, including our best-in-class security, reliability and analytics. We also introduced Cloud Machine Learning, which provides modern machine learning services with pre-trained models such as Cloud Vision API and Cloud Speech API.

Our growth was accelerating going into that event, and since then, the quantity and quality of our enterprise conversations has risen to a whole new level. Now, we are investing and building our go-to-market activities to ensure we have the right expertise available for each of our business customers.

We are enabling service partners to assist customers with everything from migrating to the cloud to using machine learning to understanding their data. We are providing engineering to help them architect solutions, and we building out our support teams.

We are also helping businesses migrate to our suite of productivity applications like Gmail, Docs and Drive, and customers love them. And we continue to accelerate our innovation in this area with new announcements, such as Smart Reply and Voice Typing. It's gratifying to see the immensely positive response from our customers and partners, who recognize that we offer a powerful combination that's unique to Google: unmatched product innovation, combined with world-class security and reliability; technical transparency; and customer orientation.

To close, as I said before, Google's mission is, and has always been, to organize the world's information and make it universally accessible and useful. As I think about all our businesses and each of the countries we reach, I have never been more excited about how our teams continue to bring this mission to life and make technology available for everyone.

I've been so proud to see us expanding our core products to more and more countries around the world: Street View in Sri Lanka; YouTube in Nepal and Pakistan; new Hindu keyboards (27:58) in India; and a new engineering center in Singapore that will help us get closer to the next billion users coming online by developing products that will work well for them. We are laser-focused on our mission at Google, and I want to say thank you to all of the Googlers around the world who are helping us make it a reality each and every day.

Before we take your questions, Ruth and I wanted to take a moment to pay our respects to Bill Campbell, our very close friend and a mentor to many of us at Google and Alphabet, who sadly passed on Monday. Bill spent endless hours with our founders and our leadership over the years, helping to build

our Board of Directors and sustain our culture. He had a very big impact on our company, made us all smile, and inspired many great leaders of the valley. We offer our condolences to Bill's family, and we will miss him.

And with that, I'll hand it back over to Ruth.

Ruth Porat - Chief Financial Officer & Senior Vice President

We'll now turn it back to the operator for questions. Thank you.

Question-and-Answer Session

Operator

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

Eric J. Sheridan - UBS Securities LLC

Thanks for taking the questions, maybe just two, one on YouTube; you've now played around with the idea of original content, also injected a subscription offering into the marketplace. What have you learned from the early days of original content and a subscription offering and how that might allow YouTube to evolve and change over time as a product offering?

And second, with respect to the Advertising business, I was curious if there were any verticals or geographies that you might call out as either strengths or weaknesses in the Advertising business during Q1. Thank you.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Thanks, Eric. On YouTube, we are definitely excited by the successful roll-out of YouTube Red. It's been very well received. We've really focused on our creators and partners, so hopefully you've caught some of our YouTube Originals. We have released six so far, which are available to YouTube Red members. So early indications are that this is something that's going to resonate well with users, and we are working on a lot more original content throughout the year. And we'll see how it goes.

Ruth Porat - Chief Financial Officer & Senior Vice President

And then in terms of your question on the regions, as I tried to make clear in my opening comments, what we saw was real strength across the board. I think you could see that from the growth rates, with U.S. up 21% year-over-year, and that was really strength across products. UK, we're really pleased with the team. We continue to see great execution there. On a fixed FX basis, as I noted, up 21%. The biggest contributor to growth in the UK was

Mobile Search. And then rest of world growing at 25% on a fixed basis. That's about in line with last quarter. We continue to be really pleased with the growth we're seeing there. In addition to the ongoing contribution from Mobile, the rest of world also benefited from Play and then really nothing to note with respect to verticals.

Eric J. Sheridan - UBS Securities LLC

Thank you.

Ruth Porat - Chief Financial Officer & Senior Vice President

Thank you.

Operator

Thank you. And our next question comes from Carlos Kirjner of Bernstein. Your line is now open.

Carlos Kirjner-Neto - Sanford C. Bernstein & Co. LLC

Hi. I have two quick questions, first on margins. Despite the increasing TAC as a percentage of revenues, adjusted operating income margins expanded now almost 130 bps and 140 bps for Google year-on-year. Can you help us understand, even if roughly, how much of this margin expansion is specific to the quarter, like due to FX, versus systemic or secular, so to speak?

And the second question, I think maybe for Sundar, can you talk a bit about the decision you took last year to have an additional ad on Mobile Search response pages relegating organic results below the fold? How is it good for the user experience to have ad instead of organic? And if it is good, what does it say about the potential for innovation in organic search? Thank you.

Ruth Porat - Chief Financial Officer & Senior Vice President

Thanks, Carlos. So starting on the margin question, you've hit a couple of the components, so I'm going to try and just break it down into the drivers on cost of sales versus OpEx more broadly, as you asked it. So on the cost of sales or the gross margin trend, as I tried to make clear, certain costs associated with revenue are going up, given secular trends in the market, so in Sites, Mobile carries higher TAC than does desktop and Mobile remains a strong growth driver, so we do expect this to continue. And then on the network side, we have strong growth in programmatic and that carries higher TAC than traditional ad buying. The obvious result is more revenue and gross margin dollars, but at a lower margin.

And then on OpEx more broadly, we remain very committed to long-term revenue growth and profit. As we've talked about on prior calls, we did set priorities in the 2016 budget and we made some tough choices because our aim is to be as efficient and effective as possible with investment dollars, while properly funding the big opportunities that we have that are reflected in OpEx.

So as I've repeatedly said, some of the biggest bets are in Google. Sundar commented quite a bit on cloud. That's an exciting opportunity. We want to continue to add head count to drive growth. And all of this is consistent with our goals of driving long-term growth in revenue and profit. So it goes to my opening comments that we're focused on controlling the expenses we have, and then there are certain trends, as I noted, in particular on the TAC side, that have been increasing with the strong growth we're seeing in mobile and programmatic.

Sundar Pichai - Chief Executive Officer, Google, Inc.

And, Carlos, on the ad side, we are incredibly sensitive to the user experience on Search. And so we are constantly evolving how we display ads, but we take a very long-term view. Our ads quality efforts, these are people who have been working on this for many, many years and they are squarely focused on optimizing for positive metrics across users and advertisers. So our utmost focus is making sure, for users, these changes have a positive impact. And mobile is an entirely different paradigm and so a lot of things are counter-intuitive. So, for example, users are very comfortable swiping on mobile. So we deeply think about these things, and I'm very comfortable about how we are planning this for the very long-term.

Carlos Kirjner-Neto - Sanford C. Bernstein & Co. LLC

Thank you.

Operator

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

Ross Sandler - Deutsche Bank Securities, Inc.

Thank you. Ruth, I just had one question, a follow-up from a previous one on the regions. So the U.S. had greater than expected seasonal downtick. It was down 9% quarter-on-quarter. And I know that you picked up Yahoo and lost AOL from 4Q to 1Q. So is that the primary driver of that or as YouTube becomes a bigger percent of your revenue, should we expect greater

seasonal uptick in 4Q and seasonal downtick in 1Q? Can you just give us a little bit more color on what's driving that? Thanks.

Ruth Porat - Chief Financial Officer & Senior Vice President

Well, we, as you know, don't comment on any particular partner. So all I can add here is that the deceleration quarter-on-quarter does reflect holiday-related seasonality, which we did call out last quarter, and you see that in a number of the products.

Operator

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

Mark Mahaney - RBC Capital Markets LLC

Thanks. You talked about TAC rising because of the increasing mix shift towards mobile and programmatic. There seems like there was a little bit of an extra bump up this quarter. Would there have been any one major renewal of a deal that would have caused that? It did seem to spike more than what you would get, I assume, if you just rolled out mobile and programmatic. And then any commentary at all on Nest; there seemed to be an unusual amount of press since intra-quarter on troubles with that asset? Could you just comment on qualitatively how the asset is doing? Thank you.

Ruth Porat - Chief Financial Officer & Senior Vice President

So on TAC, it's really the ongoing growth in Mobile, as I've kind of answered a couple of times here, and that reflects the strong secular trends behind mobile, so really nothing to add on on the Sites TAC side. And then on the network side, again, it's really the higher TAC that we're seeing on programmatic, so nothing really to call out.

And then with respect to your question on Nest, I guess what I'll add there is Nest products are best-sellers in the category. It's a leading brand in the connected home. It's obviously early, but a very exciting category. And as we've talked about, our Other Bets are all very early stage, but continues to be best-seller in the category.

Mark Mahaney - RBC Capital Markets LLC

Okay. Thank you.

Ruth Porat - Chief Financial Officer & Senior Vice President

Thank you.

Operator

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

Heather Bellini - Goldman Sachs & Co.

Great. Thank you. This question is for Sundar. It's multi-part, but I was wondering if you could talk a little bit more about your cloud ambitions? And wondering what do you see as the biggest changes in strategy post Diane Greene's appointment? And then, how are you getting enterprise customers to think of you as having enterprise DNA, if you will, which is something that took Amazon a long time to get. And I guess lastly, just if you could just help us think about which type of workloads do you see Google as being the most competitive for at this time? Thank you.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Thanks, Heather. Obviously, I talked about it a lot in my prepared remarks. And we have already had a lot of momentum in this area. And in many ways, given the scale at which we have done this internally for us, we view it as an area we are very competent at. What Diane has brought to us to is a deep understanding of how to think about what enterprises need and adapt to it in a very detailed and nuanced way. And you saw the momentum at the Next Conference, which she hosted.

We are getting a lot more inbound. We are in much deeper conversations than we have ever been before. We do think we are competent across a range of work flows. And areas where we view we will be uniquely capable over time is, because of our machine learning capabilities, helping enterprises really understand their data, understand how best they can do what their core competency is and really revolutionize around that. It's early days and it's a long-term investment. But bringing our machine learning APIs over time through cloud to our enterprise customers is going to be a huge source of differentiation for us.

Heather Bellini - Goldman Sachs & Co.

Thank you.

Operator

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

Douglas T. Anmuth - JPMorgan Securities LLC

Thanks for taking the question. Two things; first, Sundar, I was hoping you could comment more on Mobile Search pricing, in particular it gets a little bit lost just within overall pricing per-click, especially with YouTube in there. So I was hoping you could comment on pricing on more of a like-for-like basis. And as inventory perhaps stabilizes some, would you expect pricing here to increase over time as conversion improves? And then secondly, Ruth, if you could just comment a little bit more on other income and just help us understand some of the details there on the negative number in that line? Thanks.

Ruth Porat - Chief Financial Officer & Senior Vice President

So I'll take those. In terms of the first question, there's obviously some data, as I referenced, attached with the press release. And, as you know well, all of the monetization data reflects a host of factors, from geographic mix and device mix and property mix, as well as it's all on a floating FX basis. And clearly, FX is a contributor. I think you're trying to get more color on Mobile. And what's hopefully clear from the opening comments, is that Mobile continues to outperform. Desktop growth did pick up modestly in Q1, but, from opening comments, should be clear that Mobile Search revenue was up significantly.

And then in terms of your question on other income, let me point you to the OI&E table that's at the end of our press release. This line consists of a number of different items. They can be affected by different trends, but you can see the breakout in that table, which hopefully is helpful there.

Interest income has been fairly consistent. We do continue to manage our portfolio conservatively. FX is consistently an expense here. It was slightly elevated again this quarter, given the ongoing volatility in foreign exchange markets. We haven't changed our approach to hedging, but up with volatility in the markets. And then the OI&E line also includes changes in value where equity pickups related to marketable and nonmarketable securities and investments. We appreciate with all those different line items it's tough to forecast, but you can see the detail attached to the press release.

Douglas T. Anmuth - JPMorgan Securities LLC

Thank you.

Operator

Thank you. And our next question comes from Steven Ju of Credit Suisse. Your line is now open.

Steve D. Ju - Credit Suisse Securities ([USA](#)) LLC (Broker)

Thank you. So, Sundar, I think it was at I/O last year when you started to call out the products which have over 1 billion users. At this point, are you able to elaborate on what percent of these users have either a Google ID or are known users for you?

And, Ruth, kind of a housekeeping, I guess, item on the CapEx here. When you talk about CapEx with the Other Bets being primarily for Fiber, is this a fairly sort of straightforward passing of homes, or is your cash use going toward developing new technologies or products like SkyBender? Thanks.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Steven, on the first question, maybe I can add more color this way. So user base is scaling most, you know, we are also seeing tremendous shift towards Mobile. It's in many of these products. We are already over 50% of these users are coming from Mobile. And in Mobile typically, all users are signed in. And so I think over time as the shift continues, I think we have a user base which is signed in. And so that's the way we think about it.

Ruth Porat - Chief Financial Officer & Senior Vice President

And then on the CapEx question, if I just broaden that a bit, the CapEx trends in part is efficiency, in part is timing when you look at year-over-year spend. Compared to last year, we had some outsized machine spend that filled some recently constructed data centers. And as we've consistently said, our technical infrastructure is a really key strategic asset for us. We have tremendous scale. We continue to add to it, and the team has done an extraordinary job innovating to deliver some meaningful efficiencies in machine use. And that enables us to benefit from earlier investments.

And although you asked about the Fiber side, just to build off of what Sundar was saying on cloud, given what a strategic priority that is for us, and the requirements for a leading cloud business are clearly at the core of all that we do and at a scale that's unmatched, given our sustained investments in infrastructure.

One of the things that was also mentioned at Next is that we plan to add 12 new regions. And to be clear, we're going to be using multiple execution paths for those data center requirements. In other words, every cloud region isn't necessarily going to be housed in a Google data center. So we don't need to build data centers in all of these places. They will all incorporate the same Google hardware and software and meet the same performance, reliability and security requirements. And investing in cloud isn't only about CapEx. We also put a lot of head count behind that again this quarter.

And then more specifically on the Fiber side, as you were pointing to, we do expect that to increase throughout the year as we execute on the cities that we've already announced. It's primarily about continuing to execute on those cities. We now are up to 22 announced cities, two most recent announcements being some buildings. We're bringing fiber to like buildings in San Francisco and we're working with the City of Huntsville. That being said, I liked your question because we're also very focused on innovation and technology. And so it's really both, but predominantly continued execution against these cities that we've announced.

Steve D. Ju - Credit Suisse Securities ([USA](#)) LLC (Broker)

Thank you.

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)

Hey. Good afternoon, everyone. Just a few questions on YouTube; first, on the Preferred program, Ruth, you mentioned it sounds like the growth continues to be really strong there going into Brandcast. And I was just curious, is the program now formally rolled out globally? And then I've got one follow-up on Red.

Ruth Porat - Chief Financial Officer & Senior Vice President

So in terms of Preferred, you're right. I did note that the strong revenue growth there is driven virtually exclusively by video. That's TrueView and increasingly Google Preferred, and, as we said, nice ad (45:29) promotion there as well.

Sundar Pichai - Chief Executive Officer, Google, Inc.

And it's largely rolled out in major markets and we'll continue to do that.

Daniel Salmon - BMO Capital Markets (United States)

Okay, great. And then just a quick one on Red, it seems as if the direction for the content remains to focus on your own originals right now. What may or may not make you consider looking at other licensed, maybe more traditional, TV or film content?

Sundar Pichai - Chief Executive Officer, Google, Inc.

Well, I mean, look, we are going to approach it comprehensively. And we have obviously had great early traction with the six original series we have released so far. This year, we are on track to release 15 to 20 original series or films coming up. (46:11) And so I think that's an exciting direction we will pursue, but, at the same time, we'll keep an open mind about all other revenues as well.

Daniel Salmon - BMO Capital Markets (United States)

Okay, great. 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

Great. Thank you. I have a few. First, for Sundar, could you talk about the cloud, why really get more aggressive now? We've been riding on it for many years, and just wondering why now really ramping up the investment? And how would you characterize the margins or the returns on capital in that business? Why is that interesting for you?

And then maybe for Ruth, you know, you give us a lot of detail on click growth, but I'm just wondering if you can help us all on query growth, just how that's trended since Mobile really took off? Is it growing? How is it trending? And do you have more room to monetize, given where your ad coverage is now? Thank you.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Just on the first one, I would say there are three points of inflection for us, and that's why we are really ramping it up. The first is we've always been doing cloud. It's just that we were consuming it all internally at Google, but as we have grown, really matured in terms of how we handle our data center investments and how we can do this at scale, we have definitely crossed over to the other side where we can thoughtfully serve external customers. So that's the first point of inflection.

The second point of inflection for us is as we've been investing in machine learning and AI for years, but I think we are at an exceptionally interesting tipping point where these technologies are really taking off. And that is very, very applicable to businesses as well, and so thoughtfully doing that externally, we view as a big differentiator we have over others.

And third, is definitely Diane Greene coming in. And I think I wanted to (48:12) scale our efforts here thoughtfully when it is set up with a great leader who understands this space deeply. And so those are the three main reasons why we are significantly ramping up what we are doing there.

Ruth Porat - Chief Financial Officer & Senior Vice President

And then on query growth, we don't really talk about query growth. As Sundar said, focused on answers; there are a lot of new ways to search on mobile, of course, voice, et cetera. So let me try and actually add a little more on your question on cloud.

We've consistently said it's early days. You asked about ROIC. We're really excited about the magnitude of the opportunity, as Sundar has talked about. And one thing that's really powerful here is we're benefiting from our heritage, from our differentiated strength, the scale of our infrastructure. Those are investments we've made over many years that give us extraordinary efficiency. We have robust security. Again, we've invested over many years. We have unparalleled machine learning. And so really, when we think through to the ROIC opportunity compelling building on investments that we've made and continue to make and a very exciting opportunity.

Justin Post - Bank of America Merrill Lynch

Thank you.

Operator

Thank you. And your next question comes from Anthony DiClemente of Nomura. Your line is now open.

Anthony DiClemente - Nomura Securities International, Inc.

Thanks for taking my questions. I have two. First, for Sundar on Google Fiber, just at a higher level, would you please broadly update us on your learnings from Google Fiber up until this point? And what are the goals that Google is trying to achieve with Google Fiber in terms of longer-term ambitions in terms of TV or video distribution?

And then, Ruth, you mentioned in your prepared remarks, Mobile Search being driven by improvements in ad formats and delivery starting in the third quarter of last year. Is there any way to frame or think about what Sites revenue growth might be on a recurring basis if you try to exclude the impacts or benefits from the changes in formats that you mentioned and as

we start to think about the year-over-year growth comparisons there for the back half of 2016? Thank you.

Ruth Porat - Chief Financial Officer & Senior Vice President

So let me go ahead and start on the Fiber question. Fiber is one of the businesses that is in Other Bets. And like all of our access efforts, we're really focused. And our vision here is to create abundant and ubiquitous networks. We think there's a lot of opportunity to improve the experience that users have, and that's where the Fiber team is focused. And we have some other efforts within Other Bets that are really exciting as well that address access. Loon within our X business is targeting the 4 billion people still offline. And we view that similarly as a big opportunity and an important problem to address.

And in terms of the early learnings, there have been a lot. As I talked about on the last quarter call, we've really continued to refine and enhance our go-to-market strategy, the way we're working with cities, the way we're building out those cities and really the level of technology and innovation that we can use to differentiate the offering and are pleased with the ongoing efforts there.

And then in terms of the change in ad format, as we've talked about on a lot of calls, innovation is core to all we do. It obviously happens on its own timeline. We have a culture of it. We're continuously focused on it. I'm not going to break out impact for any change. We're constantly looking to innovate and improve the user experience. And so there was a step-up, which we've talked about, and we continue to look at other ways, as Sundar talked about, to continue to enhance the user experience. But I think the most important point and somewhat implicit in your question, that shouldn't take away from the very strong underlying revenue and revenue growth that we have in that business.

Anthony DiClemente - Nomura Securities International, Inc.

Thank you, Ruth.

Operator

Thank you. And your 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 on Mobile Search and the mobile ad format changes in 3Q of last year, could you just help us? Were

those changes made globally last year in the third quarter? And if not, how should we think about when they will go globally or how you're kind of phasing those changes?

And then, the second one on the desktop, Ruth, you mentioned that desktop growth picked up in the first quarter. What drove that pickup in growth and any learnings from the change in the right-hand rail in the first quarter? Thanks.

Sundar Pichai - Chief Executive Officer, Google, Inc.

The launch which you're talking about was global. So we've been doing these changes for a long time and so we try to roll it out globally, and that's what we did.

Ruth Porat - Chief Financial Officer & Senior Vice President

And then, in terms of the desktop format change, so we had a modest benefit from that change where, just to be clear for all, we reduced the ad load by removing ads on the right-side of the screen while adding a fourth ad slot for highly commercial queries in the aggregate. That resulted in a cleaner, more useful, presentation and improved user experience. It was a modest impact, but additive.

Brian Nowak - Morgan Stanley & Co. LLC

Thanks.

Operator

Thank you. And our next question comes from Ben Schachter of Macquarie. Your line is now open.

Ben Schachter - Macquarie Capital ([USA](#)), Inc.

Hi, guys, a few questions. Sundar, your commentary on Play focused on games, but what needs to happen to have more verticals beyond games become meaningful? And then, Ruth, a couple more on the Sites TAC, at a high level, how do average TAC rates differ on mobile versus desktop? And aside from the TAC rates, are there any other notable contractual issues that differ meaningfully between mobile and desktop search partnerships? Thanks.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Yeah, Ben, on the first question, I think that's a good question. We are seeing traction across categories. It's just that games are at a much larger

scale, but, for example, when we get into education, we see if you view that as a vertical, we do see traction there and so on. So I think taking a very long-term view, it will probably reflect they're all, there are commercial opportunities across every vertical. But game developers are the savviest developed person in terms of getting ahead of this curve.

Ruth Porat - Chief Financial Officer & Senior Vice President

And on your TAC question, as I've indicated a number of times already on the call, the TAC rate is higher on Mobile. Mobile's growing at a faster rate and what you're seeing here is a mix shift. So there is a delta between the two. But I think, importantly, we are benefiting from an important secular trend behind Mobile, and like the revenue dollars and the gross profit dollars that come as a result of that, and we'll continue to innovate on mobile and are excited about the opportunity, in particular with all the changes that we continue to see in the way users use the phone and the opportunities.

Operator

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

Colin A. Sebastian - Robert W. Baird & Co., Inc. (Broker)

Okay, great. Thanks very much. Sundar, first off, you mentioned a lot of the ongoing projects at Google, but I wonder if you could share with us maybe the two or three areas that you're spending the most of your time on or are focused on? And related to that, one of the strengths of the company is obviously the strong engineering orientation and ability to hire some of the best talent and acquire the best technology. And the company has been able to adapt very quickly to change, but I wonder which areas of your business demonstrate where Google or Alphabet are really on the forefront of development, pushing innovation rather than adapting to changes you see in the market. Thank you.

Sundar Pichai - Chief Executive Officer, Google, Inc.

Thanks, Colin. On the first thing, obviously, we are doing many things, but I tend to spend my time on the core of, you know, our core product. I think we have a unique opportunity to evolve search to be very assistive in how we serve our users and be an intelligent assistant that helps users throughout their needs in context, especially in the context of mobile. That's an area definitely I spend a lot of time on. And related to that, we do think we can do a lot of that by based on our core advancements in machine learning and AI. So that's an area we invest a lot. And I'm thoughtfully involved with that as well. And third, definitely from a computing standpoint,

computing is foundational to everything we do. And so thinking through about how computing evolves, be it emerging technologies like VR or how mobile advances over the next few years, so these are all areas where I do spend time on.

And overall, I do think in the long run, I think we will evolve in computing from a mobile first to an AI first world. And I do think we are at the forefront of development. So we don't view it as adapting to it as much as pushing hard and getting there. And so that's the core of what we do, and we'll continue to do that.

Colin A. Sebastian - Robert W. Baird & Co., Inc. (Broker)

Thank you.