Operator

Good day, ladies and gentlemen, and welcome to the Alphabet, Inc. fourth quarter 2015 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. As a reminder, this call is being recorded.

I would now like to introduce your host for today's conference, Ellen West, Vice President of Investor Relations. Please go ahead, ma'am.

Ellen West - Google, Inc.

Thank you. Good afternoon, everyone, and welcome to Alphabet's fourth quarter 2015 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 2014 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. Please refer to our IR website for our earnings releases. This call is also being webcast from abc.xyz/investor, where a replay of the call will be available later today.

I'll now turn the call over to Ruth.

Ruth Porat - Alphabet, Inc.

Thanks. Revenue momentum in Q4 underscored the strength of our businesses globally, with consolidated revenue growth accelerating meaningfully versus last year. The primary driver was the increased use of mobile search by consumers, benefiting from our ongoing efforts to enhance the efficacy of mobile search as well as from the holiday season. In addition, results reflect ongoing momentum in YouTube and programmatic advertising. There were a number of unusual items in the quarter that I will address during the discussion of results.

With a move to our new Alphabet structure, we conducted a detailed review of business opportunities and investment levels across Google and Other Bets. We made some important decisions to prioritize the allocation of resources and capital to maximize long-term potential within each area. We are pleased to be sharing financial results for each of Google and what we call the Other Bets and thereby provide more visibility into financial trends in each segment.

In light of our move to segment reporting, I'm going to present to you in this 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 key themes for the near term. Sundar will then review our business and products highlights for the quarter, after which we will take your questions.

Beginning with a summary of Alphabet's consolidated financial operational performance, total revenue was $21.3 billion, up 18% year over year and up 14% 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 $1.3 billion, or $1 billion after the benefit of our hedging program. Holding currency constant to prior periods, our total revenue grew 24% year over year and 15% sequentially.

Alphabet revenues by geography also highlight both the strength of our business around the globe as well as the impact the currency headwinds continue to have on our non-U.S. business. U.S. revenue was up 24% year over year to $10.3 billion and up 18% versus Q3. UK revenue was up 16% year over year to $1.9 billion and up 7% sequentially. In fixed FX terms, the UK grew 20% year over year and 9% quarter over quarter. Rest of world revenue was up 12% versus last year to $9.1 billion and up 12% versus Q3. In fixed FX terms, revenues were up 26% year over year and up 14% sequentially.

Non-GAAP other cost of revenues was $3.9 billion in Q4, up 24% 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 due to the launch of our new Nexus, Chromecast, and Pixel devices.

Non-GAAP operating expenses were $6.6 billion or 31% of revenue, up 14% year over year and up 15% versus Q3, primarily driven by R&D expense, particularly affected by expenses resulting from project milestones in Other Bets established several years ago.

On a GAAP basis, operating income was $5.4 billion, up 22% versus last year. The operating margin was 25%. Adjusting for stock-based compensation, our non-GAAP operating income was $6.8 billion, up 22% versus last year. The operating margin was 32%.

With respect to stock-based compensation, it totaled $1.4 billion, up 20% year over year and flat sequentially, primarily reflecting head count, which was up 15% versus last year and 3% versus 3Q 2015. The vast majority of new hires continue to be engineers and product managers.

Other income and expense similarly included an unusual item this quarter. Specifically, other income and expense was negative $180 million, due primarily to the write-down of securities received in conjunction with the sale of a business, offsetting interest income from the investment portfolio.

Finally, taxes also reflect the impact of certain one-time items in the quarter affecting the U.S. rate. Specifically, taxes reflect the resolution of a multiyear audit in the U.S. as well as the full-year impact in Q4 of the U.S. Congress making the R&D tax credit permanent. Our effective tax rate for the full year, including these one-time items, was 17%.

Net income was $4.9 billion on a GAAP basis and $6 billion on a non-GAAP basis. Earnings per diluted share were $7.06 on a GAAP basis and $8.67 on a non-GAAP basis.

Turning now to CapEx and operating cash flow, CapEx for the quarter was $2.1 billion. Operating cash flow was $6.4 billion, with free cash flow of $4.3 billion. We ended the quarter with a cash and marketable securities balance of approximately $73 billion, of which approximately $43 billion, or 59%, is held overseas.

Our cash balance reflects the impact of seasonal working capital requirements and our repurchase during the quarter of approximately 2.4 million shares of Alphabet Class C stock for a total repurchase amount of $1.8 billion. Our Board of Directors recently authorized a modest increase in the size of the stock repurchase we announced last quarter. You can find the details in our earnings release of the total remaining authorization.

Let me now turn for the first time to our segment financial results. In our earnings release, we are providing key financial metrics for Google on the one hand and the combined Other Bet businesses on the other hand. I will review the results for each segment with respect to revenues, operating income, and CapEx, which I will discuss. You can also find in the release details of stock-based compensation as well as depreciation, amortization, and impairments for Google and the combined Other Bets.

As I go through the Google segment, I'll be providing the same level of detail we've presented in prior periods, both to best assist in comparability relative to prior periods and given the fact that Google continues to represent the overwhelming majority of our results. For Other Bets, I'll be discussing revenue, operating income, and CapEx for the full year. Detail on a quarterly basis is included in the press release.

Keep in mind that Other Bets represents an aggregation of businesses, many of which operate in distinct sectors with different business models. Given their stages of development, these businesses will have idiosyncrasies with respect to the timing of revenue, expenses, and CapEx resulting from milestones, partnerships, and other factors. You can expect that results for the combined Other Bets may be uneven in the near term, so it's likely to be more instructive to look at them on an annual or rolling 12-month basis to assess their trajectory.

Starting with the Google segment, which includes our Search and Ads business as well as related businesses such as Play, Hardware and Cloud and Apps, as well as our newer efforts within Google such as Machine Learning and Virtual Reality, Google revenue was $21.2 billion, up 18% year over year. This reflects the impact of FX.

In terms of the revenue detail, Google Sites revenue was $14.9 billion in the quarter, up 20% year over year, and up 14% sequentially, notwithstanding currency headwinds. Year-on-year growth reflects substantial strength in Mobile Search due to ongoing improvement in ad formats and delivery. As I mentioned previously, we also saw the benefits of consumers' greater use of mobile for shopping during this holiday season.

YouTube revenue continues to grow at a very significant rate, driven primarily by video advertising across TrueView and Google Preferred. Network revenue was $4.1 billion, up 7% year-on-year and up 12% 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 up 20% sequentially. Given the geographic mix of our Play business, FX also had an impact on Other revenue. Year-over-year performance was driven by Play as well as continued strong growth in Cloud and Apps.

Finally, on monetization, as a reminder, these metrics similarly are affected by currency movements. Aggregate paid clicks grew 31% year over year and 17% sequentially. Aggregate CPCs were down 13% year over year and 5% sequentially. In terms of the drivers within Sites, paid clicks were up 40% year over year and up 22% sequentially. Site CPCs were down 16% year over year and down 8% sequentially.

The movement in Google Sites paid clicks and CPCs primarily reflects the continued growth in YouTube TrueView. Network paid clicks were up 2% year over year and up 1% sequentially. Network CPCs were down 8% year over year and up 7% sequentially. Total traffic acquisition costs were $4.1 billion or 21% of total advertising revenue, up 14% sequentially and up 12% year over year.

As a reminder, the sites TAC line in our earnings release includes the TAC that we paid to search distribution partners for distributing Google Search as distinct from their own branded search. Operating income excluding SBC was $8 billion, up 28% versus last year for an operating margin of 38%. Google stock-based compensation totaled $1.3 billion for the quarter, up 18% year over year. Operating income reflecting the impact of SBC was $6.8 billion, up 30% versus last year, and the operating margin was 32%. CapEx for the quarter was $1.8 billion, reflecting investments in data center construction, production equipment and facilities. Full-year 2015 Google revenues were $74.5 billion, operating income excluding SBC was $28 billion; operating income including the impact of SBC was $23.4 billion and CapEx was $8.8 billion.

Turning to Other Bets' financials, Other Bets includes efforts such as all we are doing with Fiber, Verily, Calico, Nest, self-driving cars, and our incubation activities in X. As discussed previously with respect to Other Bets, we're focused on optimizing resources across this portfolio in the near term, with the objective of maximizing Alphabet's long-term value creation. For the full-year 2015, Other Bets revenue was $448 million, up 37% versus last year. Reported revenue for Other Bets was primarily generated by Nest, Fiber and Verily.

As noted previously, the majority of efforts within the Other Bets are pre-revenue. On a full-year basis, operating loss excluding SBC was $3.1 billion. As previously noted, these results reflect the impact of project milestones established several years ago. Including the impact of SBC, operating loss was $3.6 billion. Other Bets CapEx was $869 million for the full-year, primarily reflecting investment in our Fiber business.

Let me conclude with some comments about our continuing transformation of Alphabet. As Larry articulated in the 2013 Founders' Letter, and then, again, when announcing the creation of Alphabet, incrementalism in technology leads to irrelevance over time, because change tends to be revolutionary, not evolutionary. This belief was the impetus for our organizational structure, which enhances focus on opportunities within Google and across Alphabet, while also pushing our leaders to extend the frontier that we are addressing.

Consistent with the move to Alphabet, we expanded transparency internally regarding the expenses and CapEx required in each business, which benefited our 2016 budgeting process and capital allocation decision-making. As part of this process, we established technical and business targets for a number of the businesses to set the appropriate pace of investment. We made necessary choices to align resources with those efforts that maximize the potential for long-term value creation, prioritizing certain efforts, while making tough calls in Others.

Given the fact that we are innovating in a number of exciting industries, in some areas, the optimal execution path could encourage accelerated investment. In Others, we continue to receive interest in exploring partnerships or alternate approaches to commercializing our efforts. Verily is a great example of where we formed strategic partnerships with companies like Dexcom, J&J, Novartis, and Sanofi in order to accelerate our efforts. My main point here is that we remain on a journey, and it is still early days. We are working diligently to build additional businesses that create long-term revenues, profits and value.

Looking forward, a few observations. First, regarding revenue. As a reminder, the fourth quarter tends to be seasonally our strongest quarter, reflecting the benefit of the holidays. In addition, our GAAP results will continue to be affected by changes in the relative strength of the dollar.

Second, operating expenses. As I said last quarter, our priority remains revenue growth, but that doesn't give us a pass on a rigorous approach to expense management. We continue to invest in longer-term opportunities within both Google and Other Bets, consistent with our emphasis on pushing the frontier to adjacent areas and moon shots. Given the early-stage nature of a number of these efforts, they are likely to require additional investment prior to generating meaningful revenues.

Notably, in many ways, some of Alphabet's biggest moon shots are in Google itself, from driving the next wave of computing through machine learning, capitalizing on the shift to the cloud by enterprises, building platforms like virtual reality and pursuing the opportunities we see with the next billion users in emerging markets, you should expect Google to continue to invest in efforts to improve life for billions of people.

Third, CapEx; as we've indicated previously, the vast majority of CapEx supports Google. We view our computing capacity as a core competence and will continue to invest here given our advantages in providing efficient, secure computing to support growth in both our consumer products and services globally as well as our Cloud and Apps businesses. In Other Bets, the majority of CapEx supports the ongoing deployment of Google Fiber.

We're still operating in only a few cities, but have announced plans for additional cities, which we expect will be reflected in 2016 CapEx.

Forth, our balance sheet. In 2016, we intend to align our capital structure with the Alphabet organization so that debt is held at the holding company level. That alignment would allow us to have greater flexibility as we continue to grow, including the ability to utilize debt financing, if appropriate, and consistent with our changing product mix.

So my closing comment is that we saw tremendous revenue growth across our businesses and are applying discipline as we move to implement the Alphabet structure.

I will now turn the call over to Sundar.

Sundar Pichai - Google, Inc.

Thanks, Ruth. It's great to be here to talk with you all again.

Above all, our Q4 results show the great momentum and opportunity we have in mobile search and across Google's range of businesses. What's most exciting is the incredible enthusiasm for our products among consumers and our partners.

Two things show this. First, on our last call, I shared that six of our consumer products, Search, Android, Maps, Chrome, YouTube, and Google Play, all have over a billion monthly active users each. I'm pleased to share that Gmail now joins those ranks, crossing that number last quarter. Of course, all of these products are very popular and continue to grow rapidly on mobile.

Second, there is incredible momentum behind the Android ecosystem, and the model is working at scale. This is a group of companies with whom we have worked really hard to build strong relationships. At the center of this are Android phones, and it's exciting to see the lineup of flagship devices our partners are working on this year. And there are newer areas, which are showing a lot of promise.

In addition to an Android web partnership with New Balance and a new smartwatch from our friends at Casio, over 40 car brands worldwide are bringing Android Auto to their cars. Dozens of partners are integrating Android TV and Google Cast technology into living room products launching this year.

I want to talk about two main things today. First, some thoughts on the approach we are taking to drive the next wave of innovation, and then, some thoughts on our advertising business and our newer emerging businesses.

First, a few words on our approach. At Google, we've always tried to bring our unique technical strengths to areas where we think we can make a big difference, like indexing the world's information to make it discoverable. We have focused a lot on really improving search in mobile and now we are investing in evolving this to actively assist our users throughout the day in smart and helpful ways. This comes thanks to our years of investments in areas like natural language processing, computer vision, knowledge graph and other areas.

And the next wave will be powered by big advances in machine learning and artificial intelligence, an area where we believe we lead the industry. Just last week, DeepMind published an incredible result, the first ever to master the game of Go with artificial intelligence. An amazing accomplishment, and I'm excited for the world championship in March. And in November, we open-sourced TensorFlow, our new machine learning system, to help accelerate discovery and development in the field.

Machine learning is making our products smarter and more useful for people every day. It powers Smart Reply, in Inbox by Gmail, which suggests short responses that are relevant to an incoming email. People absolutely love this feature. In fact, in just a few months, Smart Reply already makes up 10% of all mobile responses in Inbox.

From image recognition in photos to eliminating email spam to better translation and voice recognition, our machine learning efforts are making a huge difference for people every day. In sum, we believe we've only scratched the surface of truly being there for our users anytime, anywhere, across all devices, giving them the assistance they need. We are excited to make even more progress on this vision in 2016.

The second part of our approach is to make sure we are solving big problems for everyone. We believe that someone in Indonesia should get the same quality email service or search results as someone in New York. This quarter I visited Korea, Vietnam, and India to speak with partners, developers, and students. It was a very inspiring trip. I even sat down at a local coffee shop with Dong Nguyen, the creator of the popular Flappy Bird game, which has inspired Vietnam's growing community of developers and startups to think hard about how to create worldwide hits.

From providing Internet access in India's railway stations to making Chromebooks available throughout the region, it reinforced what a huge opportunity we have to help the next 1 billion users come online and to have great experiences with the whole Internet once they are there. That's why creating open platforms that anyone can build on is core to Google's DNA, from Chrome to Android to Brillo to our latest virtual reality efforts.

It's still incredibly early innings for virtual reality as a platform, and Cardboard is just the first step, but we are excited by the progress we have seen. Our partners have shipped over 5 million Google Cardboard viewers, and we recently teamed up with The New York Times on a virtual reality experience in which over 1 million Times subscribers received Cardboard. And since launching in September, the Expeditions Pioneer Program has helped more than 500,000 students travel to places like the bottom of the sea or the surface of Mars. Beyond these early efforts, you'll see a lot more from us and our partners in 2016.

Now turning to the trends and highlights that we are seeing across our advertising business as well as some of the newer areas. It's hard to believe that AdWords just celebrated its 15th birthday. Just like Google Search and the computing devices we all use now, the product is largely unrecognizable from the first version that launched in 2000, but the key value proposition remains unchanged. Google helps advertisers reach the right customer at precisely the right micro-moment when they are looking to buy something, go somewhere, know something, or do something.

Mobile is really helping us making these connections for marketers. As Ruth mentioned, Mobile Search was particularly strong in the fourth quarter. This holiday season, we found that shopping moments replaced shopping marathons. Shoppers turned to their mobile devices to purchase gifts online in spare moments throughout the day all season long, and marketers turned to our mobile ad offerings to reach those customers.

And people are actively buying products when searching on mobile. Our research shows that 30% of all online shopping purchases now happen on mobile phones. In fact, in the U.S., looking just at product listing ads, revenue from mobile phones exceeded desktop on Thanksgiving, Black Friday, and through the weekend. Not only were people using mobile ads to shop online, they also used their phones to find the best products and prices in stores around them.

Our local inventory ads help people see if a product they are looking for is in stock at a retailer nearby. Marketers at Lowe's and Target find them useful because they can measure the foot traffic that their search ads drove. In fact, thanks to local inventory ads, Target reported millions of incremental store visits in the week leading up to Christmas.

We also continue to see great success in driving app downloads. Our app promotion offerings like Universal App Campaigns, which help marketers easily run campaigns in Google Play, YouTube, Search, and across our Display Network, are getting great traction and delivering results for advertisers. We are now seeing a trend of advertisers moving their app install budgets to Google.

Now moving to video, people watch hundreds of millions of hours on YouTube every day, and it continues to be a must-have for all brand advertisers. Not only does YouTube on mobile reach more 18 to 49-year-olds than any cable network in the U.S., but the time people spent watching YouTube in the living room more than doubled in 2015.

Brands turn to YouTube to inspire and engage potential customers. And with our recently launched Shoppable TrueView Ads, marketers like Michael Kors can connect the dots between inspiration and purchase. And it is brands of all sizes. In fact, over the last two years, the number of small and medium-sized businesses advertising on YouTube has doubled.

We also continue to expand measurement options for marketers on YouTube to help them better understand the effectiveness of their ad spend. In addition to our own measurement tools, we recently introduced support for third-party viewability vendors on YouTube.

YouTube is also a powerful platform for creators. Today, any creator can upload a video to YouTube and get discovered by over 1 billion people around the world. That global exposure has allowed YouTube and Google to pay out over $3 billion to the record industry to date.

We are also investing in the future of video. You can now watch the VR videos on YouTube, and content creators can now film in new YouTube spaces in Paris and Mumbai.

Between incredibly strong viewership growth, the move of advertising budgets to digital video, great new features, as well as the successful rollouts of YouTube Music and our YouTube Red subscription offering, I couldn't be more excited about the prospects for YouTube in the years ahead.

In programmatic video and display, we continue to see strong momentum. More marketers and publishers use programmatic automated ad buying and tools through our DoubleClick platform this holiday season than ever before. Programmatic video impressions doubled compared to the holiday season last year. And in the week leading up to Black Friday, more than 60% of programmatic impressions came from mobile devices.

Lastly, I'll discuss some of our newer business areas, where we continue to see tremendous potential. Google Play, our hub for digital content, continues to see great momentum. In 2015, spend per buyer in the Play Store grew by more than 30% globally compared to 2014. We had particularly strong growth in this area in countries like Brazil, India, Indonesia and Mexico, thanks to continued investments in payments capabilities.

On Hardware, as you know, last quarter, we launched the Nexus 5X and Nexus 6P in more than 30 countries. They are truly great examples of the best that Android can offer and have gotten great reviews. And the adoption of Chromebooks continues to gain a ton of momentum, particularly in education.

Before I wrap up, I want to share some thoughts on our Cloud and Apps group. Public Cloud services are a natural place for us, so we established a business unit late last year to take full advantage of the opportunity. I'm excited that Diane Greene, a highly respected industry vet, joined to lead it. As you know, Google pioneered the Cloud at scale. Our data centers have handled the workload of Google's own products from Search to YouTube for 17 years.

We are able to take that infrastructure and computing power and optimize it for all customers. Our data centers, infrastructure, machine learning, and premium data services are leaders in the Cloud space as is our price-to-performance ratio. And we are now able to bring this to bear just as the movement to Cloud has reached a tipping point.

Businesses now see that the easiest-to-use, most price-effective and secure infrastructure can best be obtained through the major public cloud providers. Google cloud platform is already used by more than four million applications. And we recently introduced a new way to purchase and use virtual machines, called Custom Machine Types, so that clients can tailor their purchases based on the memory they need to get the best possible cost and performance.

Our business collaboration and productivity suite, Google Apps, now incorporates the best of Google's new technologies like machine learning and natural language processing. Our adoption now extends from large healthcare providers to retailers, to government. Last quarter, Catholic Health Initiatives, the nation's second largest non-profit health system with more than 100,000 employees, announced its move to Google Apps. There's great buzz at Google around this area, and we continue to heavily ramp up investment here.

I want to say thank you to all of the Googlers around the world for their amazing work, from Cloud computing, digital video, and the mobile revolution, to machine learning, virtual reality, and helping the next billion get online. Google has a front row seat on the trends that will define computing in the coming years. There is truly no more exciting place to come to work every day.

With that, I'll turn it back over to Ruth.

Ruth Porat - Alphabet, Inc.

Thank you, Sundar. We will now take your questions.

Question-and-Answer Session

Operator

Thank you. And our first question comes from Carlos Kirjner from Bernstein. Your line is now open. Please go ahead.

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

Hello, thank you for taking my questions. I have a couple. First, Sundar, do you believe there is a non-trivial chance of Google and the DeepMind team achieving strong AI in the next five years or so?

And secondly, on your revenues, can you tell us what do you feel the drivers of Sites revenue growth and what seems to be an acceleration have legs and are more like improving this experience in advertiser returns and less like increasing ad lows, which one could argue have a limited headway? Thank you.

Sundar Pichai - Google, Inc.

Thanks, Carlos. I'll answer the first, and turn it over to Ruth on the second. On AI, we are obviously seeing incredible progress in this field. We make great strides, and we start taking it for granted and look to the years ahead. It's always tough to predict what happens over a five-year timeframe, but I do see us making significant strides. Even a year ago, I wouldn't have predicted that we would be in a strong position to mount a serious challenge to the world champion in Go this year. So looking at the pace of progress, I think we will have AI in a form in which it benefits a lot of users in the coming years, but I still think it's early days, and there's a long-term investment for us.

Ruth Porat - Alphabet, Inc.

And then, on Sites' revenue, what the results reflect is, is product strength, geographic breadth, and obviously, the added backdrop of an active holiday season with the Sites' revenue up 20% year-on-year notwithstanding the currency impact. The way we look at it is we've got extraordinary capability and strength in Search, and then ongoing innovation across the platform.

As we talked about last quarter, we did benefit from a change made in Q3 in ad format with respect to mobile search and we do continue to benefit from that change. Mobile search growth was the biggest driver again this quarter. And then, in terms of YouTube, the momentum continues. The story continues to be about strong growth in video advertising, TrueView and Google Preferred as distinct from Display on YouTube. And then, just to round it out, desktop search remains a solid contributor as well.

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

Thank you.

Ruth Porat - Alphabet, Inc.

Thank you.

Operator

Thank you. And our next question comes from Eric Sheridan from UBS. Your line is now open. Please go ahead.

Eric J. Sheridan - UBS Securities LLC

Thanks for taking the questions. Maybe two on margins now that we have the new disclosure – and thanks for all of that information. With core Google, we saw a very nice operating margin improvement in 2015 versus 2014. Wanted to know if we could get a little bit color on what drove that, whether it was incremental revenue, pricing, cost efficiency, how you sort of think about what drove that? And the opposite for Other Bets, clearly, a bigger loss in 2015 versus 2014. Maybe a little bit of color on the volatility as you called it out, and how that might develop over time. Thank you.

Ruth Porat - Alphabet, Inc.

Certainly. So starting with Other Bets, as I said in my prepared remarks, we're at the beginning of a journey with the creation of Alphabet and breaking this out into the segments is a meaningful step. As you look at some of the numbers, the reason I said it's more instructive to look at annual or rolling 12 months is that there can be some lumpy things on a quarterly basis, but we're continuing to invest across the businesses as we talked about.

So that would explain the 2014/2015 trend here. It just underscores that we're investing in the business, we've made some tough choices, and as I said, in terms of how we're allocated across the various businesses, but an important area for us and tried to give you the sizing here in the segment information.

And then, in terms of overall Google, we're continuing to invest there as well. We're investing quite meaningfully, as I previously said, the 70-20-10 model is an instructive framework that Larry's articulated for a long time. And as I tried to stress in my opening comments, we're looking to push the frontier both within Google and Other Bets. So ongoing innovation is key to all that we're doing in Google, and it's benefiting users and the ecosystem broadly. So you're continuing to see us invest there, and notwithstanding, that you see the results that you have here today.

Operator

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

Heather Anne Bellini - Goldman Sachs & Co.

Great, thank you. Sundar, thank you for the color on your initiatives with the Cloud, and we're all very excited about Diane Greene's hiring. I was wondering if you could share with us when you were having conversations with corporate customers over the last 12 months, what were the biggest areas of change or things that they said Google needed to work on in order to win over their Cloud business versus, say, them choosing to go with an AWS or an Azure? And can you talk to us about how that change might progress and how we might see that filter through in 2016? Thank you.

Sundar Pichai - Google, Inc.

Thanks, Heather. I'm very excited to have Diane here as well. We are already getting significant traction. It's a strongly growing business for us. And we plan to invest significantly in 2016. It'll be one of our major investment areas. In terms of talking to customers, first of all, as I said earlier, the Cloud platform is now already used and trusted by over four million applications. And a lot of it is about making sure we are very seriously committed to the space, which we are.

And in terms of wanting, there's a breadth of feature requirements, and so we've been carefully taking customer feedback and addressing all those needs. And as time goes by, I think we are getting very competitive. We have natural advantages in doing this, but we also need to make sure we address all the feature needs, and that's what we've been focused on. And I think we are at a point now where the product is ready to be used at scale. And so I expect to get significant traction in 2016.

Heather Anne Bellini - Goldman Sachs & Co.

Thank you.

Operator

Thank you. And our next question comes from Mark Mahaney with RBC Capital Markets. Your line is now open. Please go ahead.

Mark Mahaney - RBC Capital Markets LLC

Sundar, could you talk a little bit about – provide any milestones for autonomous vehicles and Nest? They're two of the Other Bets that we're particularly intrigued by here. I know they're very long-term bets, but the milestones that you've seen that kind of give you confidence in the forward direction of those businesses? Thank you.

Ruth Porat - Alphabet, Inc.

So I'll take that. Those are two of the businesses that are, as we call them, Other Bets. Look, on the self-driving cars, we have an extraordinary tech team. We've been working on it for many years, and the focus is developing technology with a real emphasis on safety and understanding what it takes to build and operate fully autonomous vehicles.

We continue to make great progress. We've now driven 1.3 million miles with important data regarding the safety and utility, and that's what we're really focused on. We've got prototypes on streets in two cities. So we're continuing to execute against that and continuing to build it out.

And then, on Nest, we have now more than 14,000 developers who've joined the Works with Nest program, enabling them to connect with Nest products through the Cloud. The team refreshed the entire product portfolio in 2015. That resulted in very strong year-over-year and quarter-over-quarter revenue growth, and again, similarly, they're just executing against that business plan.

Mark Mahaney - RBC Capital Markets LLC

Thank you, Ruth.

Ruth Porat - Alphabet, Inc.

Thanks, Mark.

Operator

Thank you. And our next question comes from Justin Post from Bank of America Merrill Lynch. Your line is now open. Please go ahead.

Justin Post - Bank of America Merrill Lynch

Thank you. Ruth, I wondered if you could give us a little bit more detail on the U.S. acceleration. It's been pretty strong four quarters in a row. Is that YouTube and Search? Any more detail on that would really be helpful if those individual businesses have accelerated. And then, on the Other Bets business, clearly, and you mentioned milestones a couple of times, the losses have really increased over the last two quarters. Could you share any of those milestones with us? Thank you.

Ruth Porat - Alphabet, Inc.

Sure. So starting with the U.S., I think the main point is that we've had meaningful growth in all geographies, reflecting the product strength and the added tailwind of the holiday season. And looking forward, we would expect typical seasonal patterns to hold Q4. As you know well, it tends to be our strongest quarter. But specifically on the U.S., that as we talked about last quarter, really reflects the diversity of our products here. Each is doing well. Mobile growth, as both Sundar and I talked about, was the key driver yet again. But YouTube and programmatic continue to deliver strong growth, and that translates into the results that you saw for the U.S. We obviously had a nice lift from retail, no surprise given the holiday season. But I think simply put, it's the diversity of doing a lot across a lot of different products.

And then in terms of the milestones and your question regarding Other Bets, as I mentioned in the opening comments, results this quarter were affected by project milestones. Those milestones were established several years ago. And that's why I called out that it could be lumpy on a quarterly basis and why we look at it over a year, over rolling 12 months, and I'm not going to break it out in more detail than that. As Larry said, when we announced Alphabet, it's an exciting new chapter. It is about getting more ambitious things done. We're doing that in a framework to ensure we are disciplined with our resources, and this was just calling out a milestone established some time ago.

Justin Post - Bank of America Merrill Lynch

Thank you.

Operator

Thank you. And our next question comes from Stephen Ju from Credit Suisse. Your line is now open. Please go ahead.

Stephen Ju - Credit Suisse Securities (USA) LLC (Broker)

Okay, thank you. Sundar, you just called out Gmail as the latest among your products to reach 1 billion users. So I guess at this point, you're explicitly monetizing Search, YouTube, and Gmail to some degree, while some of the other products maybe they're a bit more nascent are still not monetized or under-monetized, it seems. So big picture as you look at the next 1 billion users who want to come online and use your products, are you in any hurry to begin monetization at all?

And, Ruth, I think since you came on board, CapEx is down basically every quarter. Granted, fourth quarter of 2014 had the discretionary real estate purchase in there, but in your budgeting process for 2016, is the nature of what you're going to be spending money on changing much at all for core Google? And in regards to the CapEx for the Other Bets, being primarily for Fiber, it seems like there are six upcoming cities and 11 potential cities. What is the green-lighting process for whether a city gets considered or not? Okay, thanks.

Sundar Pichai - Google, Inc.

Great. I take a very long-term view towards this. When we look at the scale of mobile for the first time in our lifetime, so I think we have a platform which is going to reach one day the entirety of the world's population, so it will be over 5 billion users. And from our standpoint, core to our mission, we want to be in a position where we are helping users throughout the day. We are assisting users with their core information needs across all our products. And I think if we do that well, a lot of that information is commercial, and hence our monetization works effectively as well, as you've seen this year. And so very focused on long-term building that user experience to be assisting users, and that's the framework with which we think about it.

Ruth Porat - Alphabet, Inc.

And then in terms of CapEx, you've noted the important difference on a year-over-year basis a couple of sizable real estate items as part of our facilities expansion that we called out last year on top of continued investment in our technical infrastructure. But really to the heart of your question, looking ahead for 2016, we do expect to see accelerated investment in CapEx, and that's to support both Google and Other Bets. As we often talk about, we view our technical infrastructure as a key strategic asset for the company. We have terrific scale and efficiency, and the team has done an extraordinary job innovating to achieve efficiencies following a period of heavier investment in 2014.

So we're now delivering about three times the compute power for the same amount of power or dollars we did five years ago. And that's an important point because it explains some of the slower CapEx in 2015. But given our commitment to have the most potent infrastructure, we do expect to increase CapEx in 2016. And for Google, that is intended to continue to support growth in our consumer products and services globally as well as all that we're doing for our enterprise clients, as Sundar has already talked about, so CapEx in both areas there.

And then, in terms of Fiber and what we're doing more broadly in Other Bets, Fiber will continue to be, we expect, the biggest consumer. And again, you identified the driver of it. It obviously increases as we execute in a growing number of cities. One of the main things that also affected 2015 is the rollout was really measured as we worked to enhance the construction process and efficiency, doing things like developing relationships with cities and establishing protocol with construction partners, but we have more cities announced. And obviously, as we execute on those, that takes more CapEx as well.

Stephen Ju - Credit Suisse Securities (USA) LLC (Broker)

Thank you.

Ruth Porat - Alphabet, Inc.

Thanks.

Operator

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

Douglas T. Anmuth - JPMorgan Securities LLC

Thanks for taking the questions, two things. First, Sundar, if you could, talk a little bit about YouTube. It's been several quarters now where you've talked about the mix shift toward TrueView ads bringing down the average CPC for Sites. But can you talk about the trend that you're seeing there more on a like-for-like basis, and whether in theory that should tighten up more relative to search ads going forward?

And then, secondly, Ruth, on the core Google business, we've seen roughly 300 basis points of margin expansion here over the last year or so. I know you're talking obviously about the investments around cloud and machine learning. Do you think there is still potential there for profitability to improve in that segment? Thanks.

Ruth Porat - Alphabet, Inc.

Let me start first on YouTube monetization. There's really no change from my comment last quarter. YouTube had very healthy revenue growth, again, driven by growth in TrueView and other video ads, but the monetization story is still evolving. It's still early innings, and we're focused on the opportunity to get larger offline budgets moved to YouTube. Given the level of user engagement globally and the compelling nature of demographics, it does remain a very attractive platform. In the near term, given the growth in viewership, YouTube TrueView CPC pricing is expected to continue to affect our overall Sites monetization mix.

And then in terms of Google and margin outlook I think is really what you're getting at, I'll go back to my prior comment. What we achieved here by pulling out the two pieces is providing, obviously, greater visibility into what we're investing within the Other Bets, but want to underscore that we continue to invest in Google. We're in early innings in many areas. And I already referenced back to the framework we use, which is to continue to push the frontier within Google as well to adjacent areas. You named one, we've talked about it on this call, it's very important, Cloud and Apps, and all that we're looking to invest there.

But we're doing more than that. It's also the moon shot areas, it's virtual reality and other areas, and these are exciting early-stage efforts. We do expect we'll be in a position to discuss in greater detail over time. I'll let you estimate the short-term impact, but we believe the investment is really important as we're enhancing the long-term potential for Google and continuing to really enrich the ecosystem.

Douglas T. Anmuth - JPMorgan Securities LLC

Great, thank you.

Operator

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

Brian Nowak - Morgan Stanley

Thanks for taking my questions. I have two. Just to go back to the YouTube comments you made and the progress in the living rooms and the progress of the YouTube Red, can you just talk a little bit about how you think about potentially going into more original scripted longer form content, or even licensed longer form content to go after even a larger share of offline ad budgets?

And then, secondly, the rest of world, can you just talk about what you're seeing in the emerging market CPCs on a constant currency basis? How big is that gap now between the emerging markets in the U.S. and how do you think about closing that longer term? Thanks.

Sundar Pichai - Google, Inc.

On YouTube, let me answer first on YouTube. On YouTube, obviously, the overall momentum has been great. We have over a billion users watching hundreds of millions of hours. To me interestingly – sorry. Let me answer the YouTube question first. On YouTube, we have great momentum. We have over a billion users watching hundreds of millions of hours. And in fact, 80% of YouTube's views are from outside of the U.S. It's been an incredible year where I feel the team is on fire, focusing on launching YouTube Red, YouTube Music. And as you saw at Sundance, a big push on YouTube Originals with a focus from our top creators to create exclusive content for YouTube Red users. And so I'm really excited about all the new investments we are doing there, and users are responding very positively. And so I think it's going to be an exciting 2016 for YouTube.

Ruth Porat - Alphabet, Inc.

And then, in the rest of worlds, it's already growing at a high rate off a large base. And we're really pleased with the ongoing progress there. In addition to mobile, we benefited from Play and our Universal App Campaigns, as Sundar said. We're continuing to invest meaningfully in rest of world. We view it as a very sizable opportunity, bringing the next four billion online and all the opportunities there. So that's really the main focus for us at this point, is continuing to build out availability, access, and products for the rest of world.

Brian Nowak - Morgan Stanley

Thanks.

Operator

Thank you. And our next question comes from Paul Vogel from Barclays. Your line is now open. Please go ahead.

Paul Vogel - Barclays Capital, Inc.

Great. Thanks. Just two questions. One, just going back to CPCs real quickly, if we were to normalize out both TrueView and currency, I'm just wondering, any comments on how core search is doing and just how core mobile search is doing from a pricing standpoint.

And then second, just on the CapEx side, I'm just curious how you think about utilization across all of your products? And you obviously spent a lot in the past, are we at a good spot? Do we need to spend ahead? Or is there a lot of capacity that isn't being utilized right now? Thank you.

Ruth Porat - Alphabet, Inc.

So in terms of CPCs, other than YouTube, I guess, the other comments to add are in the fourth quarter, we did see an impact from the ad format changes that we talked about in the third quarter. That also increased our overall click base. And we believe this click growth is a positive indicator of ads that are proving to be more relevant to users. In other words, the CPC trend reflects the fact that the denominator's growing faster than the numerator. But we do view that as a long-term upside opportunity for both CPCs and revenue. So mobile continues to be very healthy as evidenced as I tried to indicate in my opening comments and Sundar did as well. And similarly, Desktop growth remains very healthy.

In terms of CapEx, I guess, the main point is we do expect it will be increasing in 2016. I've already address that. I think part of it's you got in the way you asked the question, which is we've achieved efficiencies after this heavy spend in 2014. And that's where the team was very focused, is we ramped up spend, and then we've been focused on how to extract the most efficiency here. And that, as I said, does explain some of the slower CapEx in 2015, and the reason we've been very focused on indicating that it will be increasing to support all that we're doing. It's quite a bit of requirements on both the Google side and what we're doing in Other Bets, and Fiber specifically. So part of it was the 2014 spend and the digestion in 2015.

Paul Vogel - Barclays Capital, Inc.

Great, thank you very much.

Ruth Porat - Alphabet, Inc.

Thanks.

Operator

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

Ross Sandler - Deutsche Bank Securities, Inc.

Great. Thanks. I just have two questions for Sundar. Most of them have been answered already. But on the UK, Sundar, it's now growing over 20% despite a tougher comp. And that's the most mature digital advertising economy globally. And we haven't been over 20% at Google for three-plus years. So is this mostly a function of mobile search hitting its strides?

Is there anything else that's driving that growth up? And what do you think that says about the maturity or lack thereof of digital advertising globally as we look at all other regions? And then, you also made the comment during the prepared remarks that ARPU for Play, I believe you were referring to Play is up 30%. Is that on a like-for-like geo basis? And is that a function of the personalization efforts that Google has been doing within Play? Or is that more a function of just the overall content flowing through Play evolving and maturing? Thank you.

Sundar Pichai - Google, Inc.

On the first half, when I think about growth, you're right. And as Ruth mentioned earlier, too, mobile search, YouTube, they're all working well. But I would take into account overall a secular shift to mobile, how users are adopting mobile. And on top of that, I think we're working hard to serve our users well on mobile. So it's a combination of all of that, and I think the model is working well.

On Play, to be very clear, spend per buyer is up 30%, and that's globally. And it's a function of, as you pointed out, I think we've made good strides in terms of personalizing the experience for each user. And I think that's borne fruit. But a lot of it is also improving our ability to handle payments for users and developers, and to do that better through time at a global scale.

Operator

Thank you. Our last question comes from Mark May from Citi. Your line is now open. Please go ahead.

Mark A. May - Citigroup Global Markets, Inc. (Broker)

Thank you. I think they're both for Ruth. I just wanted to make sure I was interpreting your comments correctly earlier. You talked about looking at the trendline on a trailing 12-month basis with the Other Bets losses to give a sense of the trendline. I think operating losses roughly doubled on a year-on-year basis on a trailing basis. Is that sort of the trajectory that you're wanting us to think about going forward?

And then, more of a housekeeping question around Other Bets, can you just describe what you mean by project milestones and maybe provide an example of that? And then, on the Search business, can you talk about what sort of progress that you've seen in the auction in terms of closing the gap between the average mobile CPC and desktop? Thanks.

Ruth Porat - Alphabet, Inc.

So the trend, when I talked about looking at an annual or rolling 12-month to assess trends, it was really to say that there can be idiosyncrasies on a quarterly basis that – so it leads to a lumpiness, just again, given how early-stage these are, and any particular events in one or more companies can affect the overall numbers. It was not intended to, say, take the 2014 over 2015 and extrapolate, far from it. The budgeting process that we went through was a very rigorous process. As I said my opening comments, we prioritized some, we made some tough calls, but very much with a view of having a very disciplined envelope around the way we are looking at the opportunities we have across the Other Bets. And so we look them again opportunity by opportunity.

In terms of the milestones, they can really vary for a number of things, but it would be linked to anything at the company, which, in our view, whether it's technically or from a business perspective, advances the development of the company, the value of the company, and we're not going to go into detail on each one of the specific companies. I think your second question was around Search in terms of the monetization trends in Search, and I think I've already addressed that one as well.

When I first provided color on desktop and mobile, the point is really about the health of both of them, and as I've already said here on this call, mobile continues to outperform, desktop growth remains healthy. And with all the comments that both Sundar and I made with respect to mobile, it should be clear that mobile search revenue was up significantly this quarter.