

This transcript is provided for the convenience of investors only, for a full recording please see the [Morgan Stanley Technology, Media & Telecom Conference webcast](#).

Ruth Porat, CFO, Alphabet and Google at the Morgan Stanley Technology, Media & Telecom Conference on March 2, 2020

Some of the statements that Ms. Porat may make during this session could be considered forward-looking.

These statements involve a number of risks and uncertainties that could cause actual results to differ materially. Any forward-looking statements that Ms. Porat makes are based on assumptions as of March 2, 2020 and Alphabet undertakes no obligation to update them. Please refer to Alphabet's Form 10-K for a discussion of the risk factors that may affect its results.

Brian Nowak (Morgan Stanley): All right, good afternoon, everyone. We are thrilled today to have Ruth Porat with us, the CFO of Alphabet, as well as Google. Before we get started, I have to read all the disclosures and everything else. So let's do that first. Please note that all important disclosures including personal holdings disclosures and Morgan Stanley disclosures appear on the Morgan Stanley public website at www.morganstanley.com/researchdisclosures, and they're also available at the registration desk.

Ruth Porat is the CFO of Alphabet and Google. Prior to joining Google, she was the CFO of Morgan Stanley. She received her undergraduate degree from Stanford University, a graduate degree from the London School of Economics in Political Science, and an MBA from the Wharton School at the University of Pennsylvania. It's always so good to see you, Ruth. Thank you so much for coming today.

Ruth Porat, CFO of Alphabet and Google: Thank you, great to be here.

Brian Nowak (Morgan Stanley): Yes. It's been a fascinating time at Alphabet, as always. There's always a lot of things going on, so we always really appreciate you coming here and sort of updating us on the state of the state. So I think you're approaching your fifth year anniversary at Alphabet in a few weeks and it seems like there's some things have changed. I feel like, I know we have some new disclosure, some capital return changes, an exciting announcement today around Waymo. And some things haven't changed. I feel like the focus in investment, and innovation really never lets up. So, I guess just to sort of table set for everyone, talk to us about how you think about the one or two key investment priorities at Alphabet and then maybe even your capital allocation philosophy as you look into 2020 and 2021.

Ruth Porat, CFO of Alphabet and Google: So, at the highest level, it's very consistent with what I've spoken about on a bunch of earnings calls. The most important is continuing to invest for long-term growth. The second priority is we are very focused on how do we optimize within

every product area. How do we stack rank and look at opportunities to free up capital to then be in part contributing to growth - these longer term growth opportunities. And the third, very important, is to invest in what I call operational excellence. It's everything around trust and safety, security, privacy - really ensuring that we deliver on our mission. And those are the organic uses of capital. Obviously, we supplement that with M&A and we can get into that and then there's a portion where our view is the opportunity to return capital is additive. So, I'm really pleased with what we've been able to do there. But that's the overall framework.

Brain Nowak (Morgan Stanley): That's helpful. So your comment around operational excellence, I think really sticks out to me. So, how do you think that we, sitting here externally - what should we be looking at to really assess whether Alphabet is successful and sort of really executing on operational excellence and delivering that sustained growth?

Ruth Porat, CFO of Alphabet and Google: Well, there are a couple of parts to your question. I would say how to measure our progress - what we try and do beyond financial results is increasingly provide metrics and color around sort of the journey that we're on. So that is one key element of it. And then we've tried to be more expansive as it relates to what is operational excellence, how do we deliver on it? And it's not just those items that I talked about - that really goes to how do you protect the ecosystem, how do you protect users? There's another whole portion around operational excellence, which is some of the more granular plumbing like moving to centralized procurement so that we can benefit from our scale and we're really putting a lot of work around that as well.

Brian Nowak (Morgan Stanley): You talked about how the the disclosure can change, you've said in the past, where Alphabet sometimes changes the way it discloses based on how things are changing in the way the business is run. We now have some new revenue disclosure. And I guess, I'd like to first I hear about what drove really the decision to provide us with the new revenue disclosure. And then now that you've provided us with the new revenue, what's been your biggest surprise from investor reactions to that disclosure and what part of the new revenue segmentation do you think is still most misunderstood by Wall Street?

Ruth Porat, CFO of Alphabet and Google: So I probably overuse the word journey, that we've been on a journey, and we've consistently tried to build on whether it's disclosure or some of the more qualitative text that we use, so we can give people a better understanding of what's in the business and I think one of the things that struck me the most - I think you and I spoke about it at this conference some time ago - is how internal disclosure can really change behavior. Changing disclosure can change behavior, and the best example I keep coming back to is when we in 2015, the early days and the beginning of that journey, moved from non-GAAP to GAAP. And what it really did internally is helped focus everyone on the full set of resources that were being used behind any particular product. So it was as helpful internally, as externally and that's the way we look at this sort of journey on changing up disclosure. Whether it's the way we look at geographies or the way we look at Google versus Other Bets and then our view on kind of going under the hood here a bit more, breaking out our Sites Revenue into Search and

YouTube, really provides a different view of sort of the key drivers of that advertising business. And we thought incrementally helpful also to break apart Other Revenues to give a sense of the momentum in Cloud and where we are on that journey.

Brian Nowak (Morgan Stanley): And then, what's been the biggest surprise? I'm sure you've had some investor discussions about the new revenue disclosure. What's surprised you most - the sort of the feedback and Wall Street's reaction?

Ruth Porat, CFO of Alphabet and Google: I think that there probably hasn't been that much surprise. You all have done a great job with estimates and putting things out there, so we get a sense of what people were looking for and, look our goal is to try and provide as much insight as possible with the way we're running it and what's useful.

Brian Nowak (Morgan Stanley): Got it. I want to get into the revenue breakdown a little bit because you will see how wrong my YouTube number was. But on capital returns. First of all, I think that's the other part that really has changed and it stands out as a big change. You have \$21 billion dollars left remaining on the repurchase authorization. You talked about last quarter, how you expect to execute on the remaining authorization at, at least the pace that's consistent with what you did in the fourth quarter. You have \$120 billion in cash and marketable securities on the books. So maybe just sort of talk to us about this philosophy around capital returns and capital allocation as you really sort of think about how do you compete for investment dollars from investors in the overall tech spectrum.

Ruth Porat, CFO of Alphabet and Google: So I'm very pleased that we went from nothing five years ago to where we are now. And as I did say on the fourth quarter call, in the fourth quarter of 2019, we more than doubled the pace of repurchase. And that was - not to overuse this word journey, but that has been a journey as well, really consistently increasing the pace of capital return and I think that given the cash flow business and where we are today, it's incrementally additive. We still have tremendous flexibility and that's the way we've looked at it.

Brian Nowak (Morgan Stanley): On the point of flexibility, we noticed in the 10-K, there's some change in the language around the dividend section from previously not expecting to pay any dividends in the foreseeable future to now regularly evaluating your cash and capital structure. So, is there any dividend announcement? That's the quick question. But even as sort of like talk to us about how is even the thought processes around a dividend changing internally?

Ruth Porat, CFO of Alphabet and Google: No, I'm glad you brought that up. So, you know the intent on changing the language was just to be really clear that there's not an a priori answer and that when we go through the analysis on how best to return incremental capital, we look at the size, we look at the pace, we look at the form. Our view continues to be that a share repurchase makes the most sense and that's obviously reflected in everything we've said and what we've done. We've never paid a dividend obviously, we don't currently intend to, but we thought it was useful as we were reviewing it internally, we were looking at size, pace and form.

Brian Nowak (Morgan Stanley): Understood. So I want to get into the individual revenue disclosures a little bit now to sort of drill into it. Let's start with the Cloud. So, we now know that Google Cloud, which is both G Suite as well as GCP is about a \$10 billion annual revenue run rate growing over 50%. Now, and GCP is a subset of that growing even faster. One of the questions that I'm often asked by investors and this comes up a lot on the overall community is what are your real competitive advantages? Yes, it's early in Cloud adoption, but it's really competitive. So maybe talk to us about one, how do you differentiate in that GCP space and how do you think about the one or two key investment areas to really make sure you capitalize on this opportunity?

Ruth Porat, CFO of Alphabet and Google: So we're excited about all that Thomas has laid out - the team that he's brought in. You know, GCP is growing significantly faster than that overall Cloud number and there are a couple of differentiators. I would say at the top of the list, I would put security and resilience. And I mean, when you think about how Google was built, we have 20 years of this at scale and we certainly hear that from customers over and over again. I think the second really exciting area is the opportunity working with us to be multi-cloud, hybrid. You know, increasingly what you hear from customers is whether it's for risk management or for regulatory reasons, the opportunity to operate seamlessly in a multi-cloud environment is what they're looking for. And that's what our Anthos product does - write once, run anywhere. At the third, really potent, is what you can do with AI, with ML. And I think it's transformative across businesses whether you're looking at new revenue opportunities or efficiencies or better analytics. So very excited and we believe we have a real leading team in AI and applying it across verticals. And then the fourth I would say is really just the opportunity to work across Google, and what that brings - what people are looking at is what is their digital transformation? And so, when you look at whether it's what we're doing with the Assistant or other areas, there's sort of this integrated approach. Those would be the key differentiators.

Brian Nowak (Morgan Stanley): Yep, and then the investments around that, is it - I know we've talked about tripling sales. What else do you sort of need to really capitalize on that?

Ruth Porat, CFO of Alphabet and Google: Yes, the investments, we've tried to be clear, we're investing meaningfully. We had the core pillars for the business and really started leaning into it later than, I would say, I wish we had. And therefore our view when we look at the opportunity, it's very early days, very sizable market. We bring truly differentiated capabilities for enterprise customers, so we're investing meaningfully. It is starting with go-to-market capabilities. We've talked about looking to increase our sales force 3x and we're well on our way there, but it's also building out by vertical and building the additional requirements. So we're very committed to this.

Brian Nowak (Morgan Stanley): It's interesting, within that Google Cloud revenue disclosure, I feel like there's always a lot of questions around GCP and how does it compete? I'm rarely asked about G Suite. So maybe just help us understand. What are the real drivers around G

Suite, what types of companies or enterprises are adopting that and how do you think about that opportunity?

Ruth Porat, CFO of Alphabet and Google: Well, I would say when I left your place, this place, one of the most transformative things was the way I work. And it is the opportunity to be on collaborative docs and how that unleashes productivity and creativity amongst the team. It's the opportunity to be on video conference on Hangouts constantly, doesn't matter where people are around the globe and the productivity and efficiency that you get there. You look at the application of that in times like now where - thank you for traveling, not everyone's traveling. So, there's a lot of extraordinary transformative ways that we work. The most important of which I think is collaborative docs, collaborative tools and that's what people are really responding to. It's transformative for businesses of all scale and that's what we're seeing.

Brian Nowak (Morgan Stanley): That's helpful. All right. The next revenue disclosure on YouTube. Here's an area where I was completely wrong. We now know it's a \$15 billion business, we were at \$21 billion. So, you know a little smaller than expected. It doesn't at least from our view look like there's any challenges with engagement. And we've always thought that online video from an advertising perspective is sort of the Holy Grail that a lot of companies are trying to monetize and yet when you sort of look at the pace at which YouTube's ad revenue has scaled, it's slower than other social networks and even other platforms that we follow. So I guess the question is, you have much better purview of the data than we do. What do you think that from our seat externally - what do we miss? What is it about online video that has kind of caused it to monetize really well, just not as fast as people outside the industry would have expected?

Ruth Porat, CFO of Alphabet and Google: So that estimate will be right at some point, but I would say that we look at \$15 billion revenue growing at north of 30% and are really pleased with YouTube. But do agree that there's significant upside from there for all the reasons that you said. And as we've talked about, YouTube, the biggest part of ad revenue is Brand and we're really excited about that and the upside there. But the other is Direct Response, which is growing at an even faster rate than Brand and we see opportunities in both. I think to the heart of your question, one of the things we're extremely focused on is ensuring that we're providing advertisers with the tools they need to really present their brand the way they want, how they want and really to protect and measure that. So our view is there is tremendous upside, but I wouldn't take away from that north of 30% growth.

Brian Nowak (Morgan Stanley): Yes, still impressive growth. We'll get to the \$21 billion soon enough.

Ruth Porat, CFO of Alphabet and Google: Exactly. That wasn't a forecast.

Brian Nowak (Morgan Stanley): On that YouTube piece, the other area of investment, it feels like is around safety and sort of ensuring that the platform is safer, safe for children, really safe

for everyone globally. And so I guess, as you sort of look out over the rest of the year and going forward, talk to us about what do you think still some of the largest areas of potential incremental investment from a safety perspective that you think you need to make sure you preserve on YouTube and then maybe how should we think about revenue risk from safety changes you may have to make yet?

Ruth Porat, CFO of Alphabet and Google: Well, there's really nothing new in the fact that we've been leaning meaningfully into investing to support users, content creators, the entire ecosystem, and we've talked about increasing the number of people, the amount of effort with machine learning, we've partnered with NGOs because in many of these verticals that expertise is so critical. And as a result, what you've seen is what Susan refers to as the four R's. We've been very focused on really rewarding great content, focusing on the most authentic content, raising up great content, looking at what is authoritative, accurate, so that's one starting point. We have for quite some time been focused on removing controversial content. We don't want that on the platform. We want to make sure that as I said, we're protecting the ecosystem and the pace at which we are able to accomplish that in particular with machine learning has been really additive to our ability to early detect things before through machine learning, before it ever gets, otherwise flagged. And then the other part of it is that we've been reducing in recommendations that stuff that's sort of on the bubble. And so again, that's already embedded in what you're seeing because protecting the ecosystem is so core to the way we're looking at what is YouTube and really what is that long-term opportunity. We want to make sure it's quality growth and protecting the ecosystem.

Brian Nowak (Morgan Stanley): Yes, very important to keep it safe and high quality growth.

Ruth Porat, CFO of Alphabet and Google: Absolutely.

Brian Nowak (Morgan Stanley): That's right. You also disclosed some information on the subscription business at YouTube. \$3 billion dollar annual run rate, so maybe \$21 billion wasn't so wrong, plus or minus. It feels like over the past few years, the YouTube subscription versus advertising strategies have been somewhat, sort of going back and forth on what's behind the wall, what's not behind the wall, et cetera. So I guess as you sit here, talk to us about how you think about driving the subscription product going forward and how does that fit into the long-term strategy for YouTube as you balance a subscription business of how big that could be versus continuing to drive the advertising?

Ruth Porat, CFO of Alphabet and Google: So the primary business is obviously the advertising business. But one thing that has not changed is that we wanted to make sure that we could give users a choice. And so for those who prefer subscription and non-advertising products, we have our Premium product, and that's growing at a nice clip, but that's the primary benefit of it. It also does provide music companies with an added revenue stream and so we're now up to 20 million subscribers, really pleased with the direction of that business. YouTube TV is newer obviously, but we've been growing that geographically and our view is with all of the

experience that YouTube has on short-form content, if we could apply that to long-form content, as we are seeing how users are changing the way they consume media, we're sort of bringing the best of all to viewership and the way we have the opportunity to consume media. So that is a newer one. I think you were asking about how we change content, that was more related to YouTube advertising and to YouTube Premium.

Brian Nowak (Morgan Stanley): TV's a great product, the limitless DVR. It's great. Search, probably the biggest upside surprise at least for me of the new disclosure is how big the Search business is. ~\$100 billion dollars of annual revenue, still growing 15%. And even what we think is the 20-plus-year-old desktop Search business, ~\$50 billion still growing really impressive, the cash cow. There's a lot of innovation there, you've talked in the past about how there's about a hundred changes to Search every quarter, again, just in the 80-20 world, help us, talk to us about one or two of the key changes you made over the last year or so that have really kept this type of growth going because it's really impressive even through what some would say laws of large numbers, just keeps humming along to be \$100 billion dollar business now.

Ruth Porat, CFO of Alphabet and Google: Yes, the reason I tried to go into the hundred enhancements every quarter and the fact that no one really drives the change, is that it really is this incredible focus on innovation. And it's the benefit we get from machine learning, but it's beyond that and it is what are we doing with ad formats, user experiences, how are we providing leverage for advertisers, how can they use ML to create content or ML to think about advertising across the platform in a way where they have greater visibility on the overall returns to manage campaigns? So it's not one thing and that to us actually is actually the good news in it. It's the constant hundred enhancements, changes. To your point on desktop, I agree with you. I think that it's really exciting every quarter to be able to talk about ongoing healthy growth in desktop and I think one of the intriguing things at least for me about that was that when we looked at a number of the changes on mobile, what we found is that given the frequency with which we're all looking at our devices, the way consumers are interacting with devices is also changing and some of the format and other changes on mobile actually port well desktop and vice-versa. And so that's helped us sort of, the back and forth, to I think extend that runway on desktop as well.

Brian Nowak (Morgan Stanley): That's helpful. I think, on the point on runway. \$100 billion is still \$100 billion, still growing fast, but there's always this question of at what point will you bump into a ceiling, what's the ceiling? And so we have our own views, the market has their own views. I'd be curious to hear, how does Alphabet think about the amount of ad dollars that are available to be captured or what is the limit on sort of Search monetization that you look at internally?

Ruth Porat, CFO of Alphabet and Google: I would say they're probably two parts to it. One is the backdrop. 40% of ad budgets still offline, 90% of commerce still offline, so you could say, there's a good runway there. And then the other is just what I talked about, is the opportunity to continue to enhance the user experience, what advertisers can do whether it's through ML or

other things and it's really both of those that are additive. There are a number of areas where we think we're still very early in sort of the monetization path, whether it's Maps or other. But I'd start with both the macro and what we're doing.

Brian Nowak (Morgan Stanley): On that point around Maps or other, one of the pieces of other that I always like to talk about is Discover, being part of other. You talked last year about how there's 800 million users on the the Discover product. You've now started to roll out some ads on it. So talk to us maybe about early learnings on consumer behavior, early learnings on advertiser adoption, and how do the Discover ads fit into the advertiser budgeting? Is it Search ads or Display ads, how is it all fitting in?

Ruth Porat, CFO of Alphabet and Google: So I'm glad you broke it out that way because there's Discovery and Discover ads. So if you start with what is Discovery (*sic*) [Discover], it is really the opportunity to have content that is based on queries so that it's sort of proactive. We're trying to predict what it is that might be of interest to users. And as you said that, the base is doing pretty well there. It's still early. But then we go to so what are the ads and ads are really video format, feed that is additive to what advertisers can otherwise do across the platform. We started testing, it's in beta in May of last year. It is still very early days, but we look at this as a potentially interesting additional opportunity for users and for advertisers.

Brian Nowak (Morgan Stanley): That's exciting, now 800 million users and everything starts with engagement and eventually creates opportunities. To that point, the Map. Maps just celebrated 15 year anniversary. I have the little balloons on top of my car on the Map. So, happy birthday to the Map. Monetization now is finally starting to roll out. So I guess talk to us about sort of early learnings on the Map monetization and as you sort of sit inside of the Alphabet or the Google Map machine, what are some of the factors that you look at in determining how quickly to throttle up or throttle down the monetization of this is big user base.

Ruth Porat, CFO of Alphabet and Google: Well, as you know well and as we've talked about, it all starts with what is the user experience and in many respects with Maps that journey has been users indicating to us what it was they need. So where as ads now are responsive and helpful if you're searching for like where is the whatever near me, it's responsive. The concern has been in the early days, it would be actually intrusive and so we're trying to make sure that we - as we do in everything - spend a lot of time on what is the long-term opportunity and how do we focus on the user experience here and now. But there is increasingly - it is incredibly useful not just for users, but for in particular local merchants, and how do we think about what are particular ad formats like sponsored pins that make it easier for merchants and make it really helpful for users or how do you think about the local experience overall? So when advertisers are looking at how can you get kind of local and what's relevant building off of this 15 year journey with Maps as you know, we're excited about it. But again, it has been a slow build. I feel like we've been talking about it for five years and I'm sort of using many of the same words that it continues to build slowly.

Brian Nowak (Morgan Stanley): I'll keep using the example of landing in San Francisco, being jet-lagged and the Starbucks next door to see that opportunity to let them know, there's a caffeine addict next door.

Ruth Porat, CFO of Alphabet and Google: And you don't need to say "near me." It just knows. Starbucks, and there it goes.

Brian Nowak (Morgan Stanley): Yes, we'll get there. Google Play, I think that's one of the other probably under appreciated assets. I feel like within the Alphabet structure.

Ruth Porat, CFO of Alphabet and Google: We appreciate Play.

Brian Nowak (Morgan Stanley): Externally, I would say. To your point, 2 billion users, taking a 30% cut of all of the transactions. There's some puts and takes around subscription things, but it's a good business. So talk to us about some of the innovation at Play that sort of excites you and excites the team and what do you think's going to really drive that growth over the next couple of years?

Ruth Porat, CFO of Alphabet and Google: Well, 2 billion users. So, what to us is exciting is when you look at that base and what we're doing with developers globally, how did we get there? And I think that our view is it's very much about extraordinary security, it's payments, it's the support we provide developers. And it's the reach and so, in the aggregate it becomes a positive flywheel. And so we, in all seriousness, do greatly appreciate what the Play team has been doing and the support of developers. I think Sundar gave a stat on the earnings call that we've paid out \$80 billion to developers. We're really pleased that we have done that. I think what's notable when you think about what the Play team has done is they've reached that scale, been able to support developers at that pace and we're not even in China. So it just gives you a sense of I think the quality and excellence, the security, the support that is the kind of driver of what you're seeing in the Play results.

Brian Nowak (Morgan Stanley): It sort of, part of it starts with Hardware, with the phones being - Alphabet's had a Hardware strategy that's changed a few times over the years between Motorola, the Pixel, HTC and now Fitbit. I guess what have been sort of some of your biggest learnings about the importance of having your own Hardware business and then sort of just help us better understand the vision around the long-term Hardware opportunity with ambient computing and why philosophically it's important to have your own Hardware ecosystem.

Ruth Porat, CFO of Alphabet and Google: Yes, so Sundar spoke more about ambient computing, I think on this last call than we had previously and I view it very much as a continuation of some of the things that we've been talking about for the last several years. When we started talking about, really we went from mobile first to AI first and it was very much about how do you leverage AI to improve the user experience, the advertiser experience. But we're moving into a place where in particular as you think about the AI, the next stop on that is the

Assistant. It is this proactive support addressing needs that users have. We go into what is ambient computing. The desire to be able to go from surface-to-surface, from phone to home to living room to cars to watch and have things that are always with you but in a non-obtrusive way, providing relevant information because that's what the Assistant does. And that's the vision of what is ambient computing and it's very much anchored in Google's history, which is, it's about deep technology, deep science. Where is this market going? And our view, our thesis is that ambient computing is what we're all expecting. What we're already living with without actually putting it together in that way. And so excited about Fitbit being added to that suite of products.

Brian Nowak (Morgan Stanley): That's exciting. No, I think a couple more and then we are going to open it up to audience Q&A. So if there are mic runners, they can start to get ready to run. The next one, hot off the press around Other Bets. There was an announcement around Waymo in the last couple of hours, so maybe talk to us about how you think about value creation in Other Bets and even the Waymo announcement today.

Ruth Porat, CFO of Alphabet and Google: Sure. So for those of you who haven't seen, we raised external capital for Waymo. We announced \$2.25 billion. We're excited about that and it sort of goes back to the earliest days when we set up Alphabet, the goal as we've talked about at this conference before, was to really focus intensely on Google and then to create an opportunity to focus intensely on new big problems in society, each of which is captured in an Other Bet. And I think one of the really valuable things to your question, how do we think about long-term value creation is we put more governance and rigor around the Other Bets and we're looking at defining what are the metrics and milestones to measure progress and how do you tie that then into capital allocation? And I think this year what you've seen is sort of two examples of that. One granted is smaller, but with our wind energy business, Makani, they were making progress against metrics and milestones, but not quite at the pace that I think they or we had expected and as we step back and said what's sort of the risk-reward opportunity here, our view was, made more sense to wind it down and then you know here today we're looking at Waymo and one of the things that we found is bringing in external capital can actually be additive to this intense focus on what are the metrics and milestones and what's that long-term value creation, so excited to be able to do that.

Brian Nowak (Morgan Stanley): It's a complicated problem to solve as well. So bringing in some of the minds and expertise that comes with the capital helps as well, I'm sure.

Ruth Porat, CFO of Alphabet and Google: Exactly.

Brian Nowak (Morgan Stanley): Last one I had on coronavirus. It's a very difficult sort of macro situation to be going through. Just maybe talk to us about, how we should think about coronavirus impacting the business, what areas that are in your control, out of your control. Any guardrails that you can put around that for us?

Ruth Porat, CFO of Alphabet and Google: Yes, so it's obviously still very much evolving and hard to know precisely where it goes and so too early to sort of comment on what the impact may be. I think for us where we're intensely focused beyond the obvious, the health and well-being of everyone at Alphabet is there's a real need for quality information in times like this. And so, the focus is on how can we with our products be most helpful. And I'll just give you two examples. In Search, we partnered up with the World Health Organization for our SOS alerts. So when anyone searching for authoritative, quality information about coronavirus in their area, go to SOS and we'll have the information there. And so we want to make sure that in all times, we're leaning into what is most needed globally. The other area that has really been quite stunning is when you see what's going on with schools around the globe and given are our strength in education and what we're doing with our video conference products, you asked about G Suite earlier, one area of that is with schools. So as schools have closed, for example in Hong Kong and Vietnam, we've seen hundreds of thousands of parents, kids and teachers really embrace the G Suite video conference capability so they can stay connected and continue their classroom work through technology. And I think finding ways where technology and solutions can be helpful in times like this is where we're really focused.

Brian Nowak (Morgan Stanley): No, that's fantastic. It's good. Time for one or two questions for Ruth in the audience, raise your hand if you have a question. The mic runners - one over there.

Audience attendee: What for you are key metrics to manage the business by? If you mention, if you were to list only three, what are sort of top metrics for you that you look at?

Ruth Porat, CFO of Alphabet and Google: Great question. So we look at, it really, it depends across the business, but I would say healthy user growth, revenues and then, at the end of the day - there was an expression years ago at Google that revenue solves all problems, but it's really cash flow solves all problems. So how do we look at overall resources consumed by each area and what does that actually mean for the long-term value creation. So it's breaking it down into - I'm giving you more than three, but it's a big and complicated business - at the end of the day, we're driven by people and compute and how are we looking at the requirements across the business.

Brian Nowak (Morgan Stanley): I'll never forget, four years ago, when we were sitting here talking about some of the changes you're making on the opex side, sort of discipline. You talked about gating factors. That really always rings in my head. Where are you in sort of in that evolution as far as putting in more stringent capital discipline to the core business? Have you gone through it or is there still sort of more new gating factors and sort of aspects and ways to tighten the discipline?

Ruth Porat, CFO of Alphabet and Google: Yes. I don't think you're ever done on that. I think that it's been incrementally valuable for business leaders to understand the full set of resources that are being used. It's a great question that you asked. The question about how do you

measure progress? And how do I look at progress? And so to me the most valuable when you're working with extraordinary leaders, which I feel privileged to do, is provide greater transparency so they can make those choices. And I don't think you are ever done on that kind of journey because if you go back to your first question, I said what are we most focused on? Long-term growth. What's the second thing? How to optimize within portfolios so that you can partially fund that growth. And if we're really striving for moonshots or you know, quasi moonshots across the portfolio we better not be deeming ourself to have succeeded in everything. So there is always an opportunity for reinvestment, redeployment, to make sure that we are leaning heavily enough into the things that we need to be leaning into. Like we are not being shy about investing in Cloud. We see that as a substantial long-term opportunity - near-term, medium-term, long-term opportunity. We need to make sure we're doing it with the right intensity. And so there is always a series of things that I think we need to challenge ourselves. I think every business needs to do. How do you optimize within and that's the journey.

Brian Nowak (Morgan Stanley): One more question over there, Tom.

Audience attendee: Thank you. Just going back to the Waymo external capital raised. Do you look at that as something that can lower the run rate of Other Bets losses is going forward or something that allows you to incrementally invest in Waymo without it coming out of Google's pockets? Kind of how do you think about that in terms of the ability to affect the Other Bets losses?

Ruth Porat, CFO of Alphabet and Google: Yes. So we still consolidate, so on a reported basis that doesn't reduce the operating losses. I think there is in part, an elegance to say it's not being funded out of Google cash flow, but that's not the driver. The driver of it in our view is that there's an added value in particular with the quality of investors that we have. If you go to let's set up metrics and milestones. We've got a massive opportunity, long-term opportunity with Waymo and we've seen this with Verily. There's a valuable added sort of governance discipline when you have additional voices at the table. Sort of somewhere between private-independent and public and we kind of get the advantage there. So I think we've been really impressed with the impact that that can have, having partners at the table and are pleased to have therefore done this round. I think it really focuses everyone within the company -- within, in the prior case Verily. We're excited about what the implication is for Waymo as they're thinking about where this takes them long-term.

Brian Nowak (Morgan Stanley): Great. All right, Ruth. Thank you so much.

Ruth Porat, CFO of Alphabet and Google: Thank you all so much.