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Neal Mohan, Chief Executive Officer of YouTube at the SVB MoffettNathanson Inaugural Technology, Media, and Telecom Conference on May 18, 2023

**Michael Nathanson, MoffettNathanson:** Okay, this is a treat. And I am so excited for this next interview. Neal Mohan is here – from – CEO of YouTube and SVP of Google. Thanks for being here. Before we start, I have to read Safe Harbor, okay?

So, some of the statements that Mr. Mohan may make today 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 Neal makes are based on assumptions as of today, and Alphabet undertakes no obligation to update them. Please refer to Alphabet's Form 10-K for discussion of the risk factors that may affect its results.

So, with that, thank you for being here. Let me give people a little bit of a background, for those that don't know who Neal is.

So, Neal has been at Google for 15 years, first building out the Display & Video Ads Business, and then YouTube's Product Operation. He stepped into lead YouTube when Susan stepped down as CEO, I believe in March, and now oversees YouTube's Content & Business Operations, Engineering, and Product Development. He previously served as YouTube's Chief Product Officer, and was responsible for YouTube's Products & User Experience and Trust & Safety on all platforms and devices globally.

Prior to this, he held the role of SVP of Display & Video Ads at Google, and before joining Google, Neal was Senior Vice President of Strategy & Product Development at DoubleClick, where he built the company's strategic plan, led the product team, and rapidly grew the business.

So, thank you so much for being here. This is the first on the back of Brandcast last night.

Neal Mohan, CEO of YouTube & SVP, Google: Indeed.

**Michael Nathanson, MoffettNathanson:** Busy couple days. You were named CEO of YouTube in March. I thought it would be helpful for everyone here to walk us through the priorities you have in this new role.

**Neal Mohan, CEO of YouTube & SVP, Google:** Sure. First of all, thank you, Michael, for having me here. It's great to be here. Thank you, everybody, for making the time.

You know, I think I'll just start off by saying, just repeating what our mission is at YouTube, which is we like to say that YouTube's mission is to give everyone a voice and show them the world.

And that sounds very lofty, but really fundamentally, it's about the creators on our platform. Everything at YouTube starts with our creators. They are incredibly talented. They're all over the world.

They are looking to build audiences, share their creativity with the world, and build a business. And so, by enabling our creators to build an audience or build a living on our platform, that's what brings their millions and millions of fans to YouTube, and of course, that's what is attractive to our advertisers, all our partners that support this incredible creator economy on YouTube. And so that's sort of the big picture.

And in terms of my priorities to enable that goal, to really enable our creators, there's four of them. And so I'll talk about them. And they have to do with what I think are really some pretty fundamental, seismic shifts that are occurring in our industry. And they're about creation, they're about quality consumption, they're about monetization, and they are all based fundamentally on our responsibility as a global platform. So, let me sort of unpack what I mean by that.

So just starting with creation. So, creation of content, video content in particular, and we're a platform that's, of course, all things video, is changing fundamentally, and it's changing because we all have the power of a production studio in our pockets, with our mobile phones. So we are all creators in some sense, especially younger Gen Z creators.

I think I saw a stat recently, that said something on the order of three out of every four Gen Z in the U.S. uploaded a video online in the last year. So that's a pretty profound change in terms of creation of content, the democratization of content creation. And so that's a big priority for us. It's mobile-first. A lot of it is short-form. YouTube Shorts, of course, we can talk more about. But for us, it's really multiformat, mobile-driven, participatory in nature.

And so really making sure that we have the tools and capabilities from a creation standpoint. One of those capabilities, of course, that I'm very excited about that's also going to revolutionize creation, of course, is Generative AI, which we can talk more about. We're investing there in terms of creator tools and really enabling our creator ecosystem.

So, creation, mobile-driven creation, short-form, multi-format is a top priority. A lot of our focus is there.

The second area that I'll call out, which is changing rapidly as well, is consumption, quality consumption of video content. And for us, you know, we are a platform that is about young users. 95% of Gen Z say that they use YouTube on a regular basis. We want to maintain and super-serve our young users on our platform. And for them, that means community, that means fun, so making YouTube more interactive. I talked about participatory. You see all those changes in the app when you open up the mobile phone, by really just bringing the platform to life. So that's on the quality consumption side.

The second big thing on the quality consumption side, of course, is the living room. So, the living room screen is the largest and fastest growing place where YouTube is consumed.

So, Connected TV, our investment there is a really big priority of mine. That's about bringing the full magic of YouTube, the interactivity of YouTube. When viewers are consuming content, when they turn on the television set, they want to watch YouTube, and that means all forms of content. Everything from their favorite YouTube creators, to, you know, blockbuster movies, to football, which we can talk about – live sports, what have you, and they all expect that in the YouTube app in the living room. So, quality consumption is a second really big priority for us.

The third that I'll call out, of course, is monetization. This amazing creator economy that exists on YouTube, and that's what we want to really double down on. Monetization for us, first and foremost, is driven by advertising. That will be a primary driver of our business.

Over the last 12 months, across all of YouTube products, we generated revenues of nearly \$40 billion, and that's across all YouTube products. And obviously, AVOD is a big part of that. The other part that's a big part of that is our SVOD business.

And so on the SVOD side, we have YouTube Premium. 80 million subscribers on YouTube premium. We have YouTube TV, of course, five million-plus subscribers on that. And so monetization is going to remain a priority, especially on our fast-growing products and surfaces like YouTube Shorts and Connected TV.

And then the final piece, which I touched on in the beginning, none of this would be possible in terms of creation, quality consumption, monetization, without our focus on responsibility. That remains my top priority, and so that's living up to our responsibility on behalf of our two billion users that come to our platform on a regular basis and making sure that we are a safe platform for creators, for our partners, for our viewers.

So those are what our teams are focused on, and that's what I'm super excited about investing in.

**Michael Nathanson, MoffettNathanson:** Thanks, Neal. Over the past few quarters, YouTube's advertising growth has really slowed down. What's contributing to that weakness and what types of advertising verticals have you seen being hit the hardest?

**Neal Mohan, CEO of YouTube & SVP, Google:** So, you know, we've talked about this over the course of the last 12 months, and kind of the bigger sort of macro economic slowdown that's going on. We also mention -- I think Ruth mentioned this in our latest earnings that we've seen a stabilization on that front.

In terms of advertiser verticals, I think what I would say is, you know, we've seen growth in things like travel, retail, which has been balanced by slowdown in things like finance and media

and entertainment. Those are some of the verticals I'd call out. But that's basically what I'd say about that, in addition to what Ruth talked about.

**Michael Nathanson, MoffettNathanson:** So in your first communique as CEO in March, you really put an emphasis on creators. You've done that again here. I wanted to know, what has YouTube done differently in this area versus prior strategy? Has there been any strategy shift in terms of embracing creators or anything you're doing differently now?

**Neal Mohan, CEO of YouTube & SVP, Google:** No, I think what I'd say there, Michael, is again, what I said at the beginning, which is – creators really are our lifeblood. I mean, everything that we do is about supporting our creator ecosystem. We are the original creator economy. These creators are media moguls in their own right. Not only are they incredibly creative, talented people that have subscriber bases and followers that are millions, tens of millions of fans all over the world, but they are incredible entrepreneurs, too. And so, supporting their businesses is our top priority, giving them monetization capabilities, but also giving them the creative tools that I talked about.

And if we do that, that's what creates this incredibly vibrant sort of ecosystem that brings billions of fans to the platform. And then, of course, that's incredibly attractive, that engaged reach, if you will, is incredibly attractive to our advertisers.

**Michael Nathanson, MoffettNathanson:** And on the same theme, has there been any change of consumption patterns over the years towards more creators? When you look at the composition of how time is spent, is there anything you can say about creators' impact on consumption?

**Neal Mohan, CEO of YouTube & SVP, Google:** The way I would think about that is – we really want to be a platform for all things video, and so that, of course, means our YouTubers, our creators on the platform, and for them, we want to cater to all of their needs. Some creators are incredible at 15-second YouTube Shorts. They generate tens of millions of views on that type of content. Other creators have grown up on what we call long form, sort of that traditional YouTube format, 15-minute VOD videos, what have you.

There's other creators, gamers, that will do hours-long live streams. So everything from 15-second shorts to 15-hour live streams is our focus, and by building those capabilities for our creators, that's what brings their fans back to our platform.

And so truly having a multiformat approach is really the way that we go after. And just to make that very concrete for you, Michael, is we -- just a couple months ago, Meghan Trainor released a single, one of her kind of hit singles called "Mother." She teased it with a 15-second Short, generated an enormous amount of buzz around that song. She premiered it through a live stream on YouTube. And then now, it's racking up millions and millions of views, the music video is, as a traditional sort of long form video on the platform.

So it's like that multi-format journey works incredibly well for creators because their fans get a chance to experience that creator across all of those different surfaces.

**Michael Nathanson, MoffettNathanson:** So you teased Shorts for us, which was started back in August of '21. We have a couple questions here. What have engagement trends been on Shorts? Is it mostly a mobile product at this point in time?

**Neal Mohan, CEO of YouTube & SVP, Google:** So, the way I think about Shorts, again, is that it's kind of one pillar in that overall sort of multiformat story that I described, but it's an important one and it's one that really leans into all of those creation sort of paradigm shifts that I was describing at the top of this conversation.

It is, you know, mobile-first in terms of creation, and we are seeing lots and lots of success among creators adopting short videos on YouTube. 80% growth in terms of creators that upload Short content daily to our platform in the last year. So it's working as a creation tool, so when you open up the app, you hit that plus button on YouTube, and you can upload a Short from your mobile phone very, very quickly that can rack up lots and lots of views.

There was a creator that I was just with yesterday evening at our Brandcast event called Airrack. He's a huge creator, millions of subscribers. He does a lot of really innovative things on the YouTube Short format. He also produces longer form content, so truly multi-format.

But his Shorts that he uploads on average generate something like 22 million views every time he does it. He's incredibly talented, but he's also, as I said, a true entrepreneur.

So on the creation side, we're very happy with the progress we're seeing on YouTube Shorts, and creators are obviously incentivized to do it because it's getting lots and lots of viewership.

So, I think in Q4, the metric that we announced was 50 billion daily views of Shorts content on our platform, up from, you know, 30 billion earlier that year. And those views are generated by 1.5 billion monthly logged in users on our platform, over five trillion views over the course of the last 12 months. And so, lots of success on the viewer side.

And then the third part of that sort of stool after creators and viewers that I'm also very excited about, although it's very early days, is monetization. And so we're very focused on creating opportunities for our advertisers in this new format that we have to augment what they're doing on YouTube generally. And so, those are direct response use cases.

We have Shorts campaigns that are about direct response objectives, shopping objectives. We are investing now in brand use cases, so that advertisers can get very efficient reach through the Shorts format.

And so, that's something that's early days, but I'm excited about.

**Michael Nathanson, MoffettNathanson:** Yeah, and the company's been very clear it's early days, going to take some time.

One of the questions we get, and I'm sure Ellen gets, too, is – do you think short-form video formats like Shorts can monetize at similar rates to other YouTube ad products? Thinking about the monetization – one of your competitors talked about monetization of short-form video. But what's your take on the potential monetization of short-form versus all the other products you guys have?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah, I think I would say something similar to what I said about creators on the platform, which is just like we want to provide that broad canvas to creators across all formats, whether it's 15-second Shorts, 15-hour live streams, we recognize that that's what works for advertisers as well. And before my time at YouTube, as I you mentioned in my bio, I spent a lot of time over a couple decades building ad products for advertisers, for agency partners, and one of the things that I learned through that experience is that advertisers really want to be where their consumers are. And what YouTube gives them is --you know, it gives them efficient reach, it gives them an engaged audience, because of this creator fan connection that I'm describing, and that's ultimately what turns into ROI, regardless of whether they have brand objectives, direct response objectives. And that works across all formats. It works across, you knowing our traditional VOD formats, but it also works in Shorts.

And so I view it as sort of a complete portfolio that we can offer to our advertisers, and that's why I'm so excited in terms of investing in these ad formats on the Shorts feed as well.

**Michael Nathanson, MoffettNathanson:** You said earlier about the living room, and that's one of our favorite areas to study, right? So YouTube in the living room is the fastest growing surface, and according to Nielsen, YouTube CTV consumption is now larger than Netflix in the most recent month within the U.S. And I think people don't really realize how large of a platform you have on Connected TV.

What improvements have you made to the service to make it so popular? How have you gotten it to be so sticky on CTV?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah, I'm glad you brought up that. It goes back to those four pillars I said at the beginning. And in terms of quality consumption, living room is one of those things that's front and center because it's growing so fast. And by the way, that's not just a U.S. phenomenon. That's a global phenomenon in terms of the consumption we're seeing on living room screens. It just works for our viewers.

And so, we're investing very heavily in it. And really, the way that I would describe that is we are trying to bring that full magic of the YouTube product that people know and love on their mobile devices to the living room. So that means interactivity. That means all of our formats. That means our advertising products for brand, for direct response.

So, to give you an example of that, we talked a lot about Shorts. Shorts is obviously a product that works incredibly well on your mobile device, but one of the big sleeper hits in terms of products we launched last year was Shorts in the living room. And so we see lots of consumption of the Shorts format on living room screens.

And it goes back to what I said about what viewer expectations are when they turn on the TV. You know, young users, young viewers – particularly when they turn on the TV, they're turning on YouTube. That's what TV is for them. And when they turn on YouTube, they want all of their content in one place, and that means their favorite creators, Shorts creators, long form creators, multi-format creators, but also their favorite movies, live sports, what have you, and that's the power of our presence on the living room, and that's really what powers those numbers that you mentioned. We're the number one streaming service in the U.S. I think just a couple of days ago, Nielsen came out with their latest numbers. Not only did we maintain our number one position as a streaming service in the U.S., but we grew it while other streaming services were either flat or down.

And so we're very excited about our growth in Connected TV, and that's why we're investing so heavily in it. I think 150 million users in the U.S. in terms of our reach on Connected TV devices.

**Michael Nathanson, MoffettNathanson:** You teased me before, but globally, we have observed that CTV is a little bit slower to develop. You talk a bit -- versus where we are in the U.S. where we have such acceleration. Give us a sense of the international opportunity for YouTube on Connected TV. What are you seeing and anything you're offering internationally?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. I think a lot of the growth that we have seen here in the U.S. over the last few years is what we are seeing now in international markets. And it really is truly around the world, and what I would say is that everything that we're doing to really super-serve our viewers in terms of this quality consumption concept that I'm describing in the U.S. is what we're doing globally.

So, we see the same trends in terms of viewers, especially younger viewers, Gen Z viewers, wanting to watch and engage with their favorite creators all over the world, whatever language, whatever region they're in.

But also, other forms of content. You know, we obviously are invested in things like live sports here in the U.S. with the NFL, but we've carried live sports in other parts of the world as well. And where does that get consumed? Often times it gets consumed on the largest screen in the house.

And so those trends I think are carrying forward, not just in North America, but in other parts of the world as well.

**Michael Nathanson, MoffettNathanson:** So let's go back to the key pillar discussion we had. We always tend to focus on the advertising opportunity on YouTube, because it's so large. But can you talk a bit about the opportunities that you see in subscriptions?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. So, I mean, we always start with advertising, because that is, you know, a big part of our business, and I think going to be the primary driver of our growth.

As I mentioned, you know, across all YouTube products, we generated nearly \$40 billion in revenue over the last 12 months. A large part of that is advertising. But we're also investing in our SVOD business. I mentioned both of them, YouTube Music and Premium, YouTube TV.

Starting with Premium, the way I think about that is that it's really, again, a way for us to truly super-serve our viewers that love the YouTube product by giving them this enhanced experience, and that's why it's got over 80 million subscribers. So, everything from ad-free to background to downloads. And it really particularly caters, of course, to music lovers. And so that's why there's that close association between YouTube Premium and Music.

And so we're -- the way that we think about that is really investing in the features and products that our users are expecting on those platforms.

So to give you a couple of examples of that, you know, we have a standalone YouTube Music app. We obviously have the main app. And we invest in products that are really geared towards music lovers.

So we built something called Radio Builder a couple months ago. That's the ability for you to be able to generate kind of like your own personalized radio station based on your favorite artists and musicians. So we want to keep investing in things like that. Investing through things like machine learning and artificial intelligence to make our recommendation, so that discovery of music across our catalog of 100 million-plus songs is delightful and fun for our users, and so that's a big part of our Premium experience.

And we're also building features that are just kind of great features to have, regardless of whether you're listening to music or what you're doing as a Premium subscriber.

So just a few weeks ago, we launched the ability to queue videos so that you can have your backlog to work through at your own leisure as a feature. We're investing in things like, you know, more optimized enhanced bit rates around things like 1080p, so that the viewer experience is more crisp and high quality, especially in sort of very fast motion detailed type videos and things like that, to really just delight our users.

And so, that's how we think about Premium, which is to cater to our viewer needs. Of course, that's a new revenue stream for our creators as well. And so -- and it gives us twin engines so that nearly \$40 billion is driven by, of course, advertising revenues, but also by subscriptions.

**Michael Nathanson, MoffettNathanson:** So here's a question that's near and dear to our hearts here at MoffettNathanson. We are students of pay TV; that's how we built our firm. And we're intrigued about your push into the virtual MVPD space. YouTube TV. I love the product. I'm a fan of the product.(Indiscernible) to get it.

We wonder what do you see is the potential long-term opportunity at YouTube TV?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. I think it goes back to how we think about product development in general at YouTube and, you know, Google more broadly, but in this YouTube context, which is about building something that we think is going to be really awesome for our users, for our viewers. And that's how YouTube TV started, which was – how do we re-imagine the television viewing experience, in this case, you know, linear television viewing experience through the lens of YouTube.

So, that meant things like DVR in the Cloud, unlimited DVR. You know, recommendations, personalized recommendations powered by our investment in things like machine learning. Innovation to the live sports experience in terms of things like key plays or in-game highlights or dynamic scoreboards and things like that. So really trying to bring that type of innovation to the viewer experience, and that remains fundamentally the way that we think about YouTube TV.

And so that's why we've continued to invest in that platform. It's got over five million subscribers now, so we're very happy with that. An area where we brought a lot of that innovation that we developed on the YouTube TV side to the main app is in something called Primetime Channels, which we just launched in the U.S. a few months ago, which is this kind of a la carte channel subscription service on the main app.

And so, again, it sort of shows how the YouTube TV strategy and kind of our core main app strategy fit together.

**Michael Nathanson, MoffettNathanson:** Okay. Another question I always wanted to ask you is that we've studied the market for a while, and believe that the opportunity is a skinnier bundle. The optimal price is a skinnier bundle led by sports and news, under \$50 a month.

So given the leaking of more and more premium content to programmers' own services, you've seen the content leak, that's good content, what do you think the evolution of YouTube TV will look like within this environment?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. You know, what I'd say about that is we're really happy with our channel lineup. It has grown over the years, and a lot of that has been in response to the direct feedback we get from our customers on YouTube TV. They tell us what they think about our features regularly. They love our features. This Views feature that I was describing in terms of key plays, et cetera, just won a technical Emmy.

So we're very focused on, obviously, product feedback that we get from users, but we also get content feedback. And so our content lineup that has grown over the years is really driven by a lot of that feedback that we get from our subscribers.

Michael Nathanson, MoffettNathanson: Okay. I give a lot of content feedback, by the way.

Neal Mohan, CEO of YouTube & SVP, Google: All right. Keep it coming.

**Michael Nathanson, MoffettNathanson:** So you mentioned Sunday Ticket, one of my favorite topics as well. YouTube made a – very big news in our world by agreeing to carry Sunday Ticket. What do you see as the opportunity here to create a product that was mostly limited to satellite TV?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. I think that there's a few things that I'll say, and I'll start by just kind of describing it from a YouTube standpoint and why I think it really makes sense for us, which is of course, it will allow us to -- again, back to super-serving our users, our YouTube TV subscribers will help us grow that business. I mentioned Primetime Channels, so giving users choice in terms of how they can sign up for Sunday Ticket, either on the YouTube TV side or a la carte through Primetime Channels. So that's kind of another piece.

And then the third piece, of course, which I think I'm very excited about, but I know the NFL is also very excited about, is bringing the magic of YouTube to that football experience, and that's about engaging our creators. And so that's about allowing them to produce content that is exclusive in terms of NFL content, behind-the-scenes access. You saw a lot of that, actually, at the draft that just happened a couple of weeks ago. There were lots of YouTubers there. And the YouTubers were a huge hit, not just amongst the people at the draft, but by the athletes themselves who were getting drafted, many of whom grew up on YouTube, right?

And so that was -- that's some of the excitement that we want to bring. And of course, so, you know, across all of those three pieces, YouTube TV, Primetime Channels, that's about growing our subscription business. The creator piece, of course, is about growing our advertising business. And so that's what we see together.

But the other thing that I'll say about that I'm very excited about, Michael, is just the innovation that I think we'll be able to bring to the fan experience. And so that means you can get Sunday Ticket anywhere. So, not just through YouTube TV, but if you want it a la carte on the main app, you can get it through Primetime Channels. You can get it without a dish on your house. You can literally just get it with a couple of taps on your phone, watch it on your television screen, so that accessibility, that consumer choice is a big part of the value that we want to bring to the table.

The second is just innovation. So, again, I mentioned, you know, a lot of the features that we're doing for sports lovers on YouTube TV, want to bring them to the main app. Just a couple weeks ago during March Madness, we launched our multiview feature, which is the ability to watch

multiple games at once. It was a feature that was just overrun with customer support requests asking for that feature as quickly as possible, because we were doing a gradual rollout. So we sped it up to respond to that feedback.

And I'm super excited about bringing that to the NFL. And that's a feature that works regardless of device, regardless of, you know, set-top television, what have you, because we do it on the software side. So we're very excited about innovation.

And then the third thing, which our fans on YouTube, especially our younger fans, is what we're going to be able to do with creators. And so -- and by the way, all these things, you know, accessibility, product innovation, creator integrations, are things that not only are we excited about, but the NFL is also very excited about.

**Michael Nathanson, MoffettNathanson:** They were so excited that Roger Goodell came to you at the Upfront yesterday, and that was the only Upfront he visited this week.

Which leads me to my next question: How should we think about YouTube's appetite to add to other premium sports rights going forward, including an NBA digital package, which is the next big league that's being negotiated?

**Neal Mohan, CEO of YouTube & SVP, Google:** So, the first thing I'll say is right now I'm very focused on making sure that the Sunday Ticket experience is a great one for our fans, you know, our partners, of course, our creators. And so that's a top priority.

The other thing that I'll say there is that, you know, there's obviously lots of attention around Sunday Ticket, but YouTube has been a big destination for sports fans all over the world for a very, very long time, especially -- you know, we are one of the largest sports platforms, especially for Gen Z viewers, all over the world. We've carried live sports from, you know, soccer matches to other forms of sports all over the world for years. Sports leagues, federations, teams, athletes have all had channels on our platform. For many years, the NFL, of course, has a very big channel. You mentioned the NBA. They're one of our closest partners and they have an incredibly successful channel on YouTube.

We distribute NBA TV, as you know. We carry League Pass, both on the YouTube TV side as well as on the Primetime Channels side. And all the live games, of course, are on YouTube TV through our partners as well.

And so, that already has been a long-term sort of flourishing relationship on our platform.

In terms of rights around content, we're very focused on the NFL and Sunday Ticket, and we look at everything on an individual basis to make sure it makes sense for our viewers, for our business. And so that's how we would approach anything.

**Michael Nathanson, MoffettNathanson:** As more -- as (indiscernible) kind of accelerates, as leagues look for younger viewers, this is going to be a constant question that you'll get going forward, because there's a clear need from the leagues to find a partner like YouTube to solve their long-term problems on aging demographics. That's just an editorial. You don't have to comment if you don't want to.

Let's pivot to gaming. Again, something that you talked about on your first communique to all of us. We focus a lot on Amazon and Twitch and what they've done on Twitch, but can you talk about your plans to increase traction and engagement among the gaming community?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. So, you know, I talked about things like music earlier, Michael. That's one of the kind of longstanding big verticals on our platform. The other one that's sort of comparable is gaming. Gaming has been a part of YouTube's history from the very, very early days of YouTube. You know, well over a decade ago.

And so it's a big part of our users' experience on the platform on a regular basis. Some of our biggest creators, most successful creators are gamers on our platform. And for us, gaming means not just live streaming. That, of course, is a big part of the gaming experience on our platform. But also VOD consumption. That is where a lot of gaming content gets consumed, across all titles, not just what's the hot title today, but really over the entire corpus.

And so that's what I would say at a high level about gaming.

The other thing that I will say that's really interesting about gaming creators on our platform and gaming viewers is it's where a lot of the product innovation actually happens as well. Some of the earliest adopters of our features tend to be gamers.

And so we talked a lot about our AVOD business and our SVOD business. Another area that we invest in is alternative monetization solutions for our creators, things like fan funding, channel memberships, Super Chats, Super Stickers, the ability for creators to make money through livestreams. Well, a lot of that technology and a lot of those products got seeded in the gaming community because there is this notion of gamers and viewers really supporting each other, gamers supporting other gamers.

So the ability to gift a channel membership to a creator's channel was developed with gamers in mind. And once we built it for gamers, we wanted to make it available to the broader creator community and viewer community.

But a lot of that seed of innovation actually happens amongst our gaming community. So it remains something that's very important to me, important to YouTube that we're going to continue to invest in.

**Michael Nathanson, MoffettNathanson:** Okay. You touched on this earlier with the NFL and your subscription opportunity. But what does the Sunday Ticket mean for your ambitions in

building a Primetime Channel space? Can you talk about maybe using that as a beacon to bring people to your new launch of channels?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. So, as I mentioned, Sunday Ticket will be available to YouTube TV subscribers, but it will also be available on this new product called Primetime Channels in an a la carte fashion. So it will be an important part of our lineups in Primetime Channels.

But we've had Primetime Channels now for a few months. It's really early days. We have I think over 40 channels now that our viewers are subscribing to. And so Sunday Ticket will be part of that lineup, but we're going to continue to grow that portfolio of channels there.

And again, our lens by which we look at all of these new products and businesses is through the user innovation lens.

And so, to give you -- so, going back to, you know, some of my core themes, in this case, around quality consumption, the expectation is that when a user comes to YouTube, they want all of their video content as a one-stop shop on our platform.

And so what does that mean? It means my favorite creators, of course. But now it might mean the channels I subscribe to, whether it's Sunday Ticket, whether it's Paramount+, what have you. You get that there. And oh, by the way, when you do that, the recommendations for shows or videos are now just going to happen seamlessly in that recommendation feed that you know and love on YouTube already.

So we don't want to just create a product for the sake of creating a product. We want to really bring user innovation to it. That's what I think is our differentiator, and Primetime Channels in the way that discovery is going to work, integrated with your core YouTube experience is what our users expect and what we're going to deliver to them.

**Michael Nathanson, MoffettNathanson:** Because again, one of the major frustrations, if you ask anyone in this room or any of the executives who have spoken in the past couple of days, it's that lack of content discovery, recommendation agents in the streaming world, is incredibly frustrating for everyone that you can't find the content where you want it. You see that as a major opportunity given your search credentials and given YouTube?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. Just from all of our own experiences on YouTube here, a lot of that quality engagement comes from the quality of our recommendations, our personalized recommendations.

So when you open up the app, the feed that you see is personalized for all of you based on your interests. And so, in that sense, we are a place where viewers come to consume video. We're kind of our own unique thing. We're a video consumption platform. We're not a social network.

We're not sort of traditional media. And the big part of that is discovery of our content that's personalized.

So that's the type of innovation that happens kind of on the core YouTube side that we're going to bring to something like Primetime Channels. So when you subscribe to your channel, your expectation should be that you don't have to think to go and figure out sort of where that show is. It should just show up in your recommendation feed on the home feed, after you're done watching a video, on the watch page.

And so that's an example of how we aim to tackle this discovery problem in a kind of one-stop shop type of experience on the YouTube app.

**Michael Nathanson, MoffettNathanson:** And password management. If you sit at my house on Sunday night, we're trying to figure out what's this password or that. So to unify password management using your Google login to basically do it would be really efficient as well.

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. As I said, the expectation is that amongst young viewers, when they turn on the TV and they're turning on YouTube, they want all their content there. That's the vision.

**Michael Nathanson, MoffettNathanson:** Okay. Let me ask you something that Philipp has been saying on the calls lately, which is he's looking to bring more shopping features to YouTube. Can you give us some examples of what you're doing on this front and how will that drive growth?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. So shopping is an area that we have been investing in, as Philipp's talked about, others have talked about for the last -- a few years. Again, it goes back to what I said at the very beginning, which is – it all starts with our creators again.

And so a big opportunity for our creators to be able to connect with their fans, and also obviously to grow their businesses, is shopping services, products. You see that already on YouTube. You know, I view it as a way to just augment that connection that exists between creators and viewers already on the platform.

So much of our verticals, whether it's fashion and beauty, whether it's electronics, whether it's what have you, really across the spectrum, oftentimes it's creators talking about their favorite products, talking about recommendations in terms of their favorite services, where they went on vacation, what have you.

And that is a shopping opportunity from the standpoint of creators being able to offer that to their fans in an authentic way, but it's also an opportunity for their fans. Like, their fans want that. They want the ability to watch something that their favorite creators are talking about, and then

to be able to transact, to be able to purchase that product, whether it's a hair brush or a top or what have you.

And so, that's again, sort of the product vision behind why we're investing in shopping to connect the creators with their fans, not just in terms of viewing content, but now this kind of shopping commerce experience on our platform.

And the way I think about it is, you know, just like when you go to a mall in the real world, you're not going because like this shopping list of stuff you want to buy. Part of it is in entertainment, community experience or going with your friends, your family, and along the way, you might buy a pair of jeans.

And so that's sort of the way the journey lives on YouTube. It's just kind of – I feel like is a core part of the YouTube experience that we should build for our creators and our fans.

And so we're investing in it. And of course, that's a great opportunity I think for our retailers, for our brand partners. You see that, so you've probably seen a lot of that in terms of the shopping cards that now show up below the videos on the watch page on YouTube, the carousels that exist there. Their ad formats. The shopping cards are also organic.

We just had Coachella a few weeks ago. A big part of that Coachella experience, of course, were the live streams. Like, the unprecedented number of live streams that we did from all the stages that made it a truly global phenomenon for music lovers. But we also had a lot of commerce opportunities there where merch from your favorite artists, whether it's Bad Bunny or BLACKPINK or what have you, were available on the YouTube app right then and there, and that stuff kind of sold incredibly well, because that's what the fans of those artists wanted.

And so that's the way that we think about the shopping opportunity. What I will say is that it's really early days and we're investing in it, but we are doing it because we think it really serves all of these constituents over the long-term.

**Michael Nathanson, MoffettNathanson:** So, my last question is one that only can be -- is really a topic of 2023. Can you talk about -- you've been using machine learning and AI for many years, so it's nothing new for people at Alphabet.

But what could Generative AI do at scale to contribute to either creativity on the platform, or engagement at YouTube? So when you think about the AI opportunity for you, how would you quantify it?

**Neal Mohan, CEO of YouTube & SVP, Google:** Yeah. So, first of all, Michael, I'm glad you said that we've been thinking about it, investing in it for a long time. You know, if you think about, again, the YouTube product, I talked so much here about personalization, recommendations, and discovery.

Well, what is that? That's investment in artificial intelligence and machine learning. We build these classifiers that allow us to rank videos in your home feed, in our search results. So we have been investing in artificial intelligence in terms of a delightful user experience, but also in terms of living up to our responsibility.

A lot of the work that we do to detect violative videos, et cetera, is based on our investment in artificial intelligence and machine learning. So we've been doing that for years and we intend to continue to do that.

There's obviously been lots of conversation around Generative AI and capabilities there. I do think that if you think about our creator ecosystem, there's real opportunities there for us. For our advertisers, there's opportunities as well.

And so, sort of to take each of those in turn, and I talked about some of this in my Brandcast remarks last night.

You can imagine a whole set of creator tools, so when you open up the app and you hit that plus button at the bottom of the app and you're ready to create a Short or another form of video from your mobile phone, well, you should be able to do things like, you know, change your hair color, change your outfit, maybe change the background. Maybe you're in a forest. Maybe you're in a desert.

And so, a lot of that will be powered by things like Generative AI. So you can imagine that those types of use cases, sort of enhancing the creativity, making the workflow more efficient, to really just superpower our creators. And so that's one area that I'm very excited about.

You know, the other one, of course, is having those same sort of AI investments really pay off for our advertisers. So, you know, obviously, things like targeting and optimization. Measurement is based on our investments in AI over the last several years. But also, we talked a lot about multiformat and advertisers wanting to be across all of these formats. Well, AI will be able to transform your creative from a horizontal creative that's suitable for VOD videos to one that's vertically oriented for short-form videos, both cropped in terms of the canvas, but also time. And that should happen seamlessly and efficiently for advertisers to maximize their ROI.

And so, you know, creator side, advertiser side, there will be viewer features as well that will be powered by AI that I'm very excited about.

**Michael Nathanson, MoffettNathanson:** Well, Neal, thank you for coming out today. Really appreciate it. See you next year here.

Neal Mohan, CEO of YouTube & SVP, Google: Thank you very much. I appreciate it.