Speaker: As a student of technology, I have the great honor and privilege of introducing one of my heroes and that would be Dr. Eric Schmidt. Eric Schmidt is the Chairman and CEO of Google. He came to Google to help a promising young company learn the basic business infrastructure and gain some chops to really become the biggest company in the world. Dr. Schmidt has the kind of brain that I'd describe as scary smart. He's a Ph.D. from Berkley, who then went on to work at Bell Labs, who was on the research staff at the Computer Science Lab at Xerox Palo Alto Research Center, the CTO at Sun Microsystems, the Chairman of Novell and now at Google. He's going to give us a brief comments and then we'll have some questions. Thank you. Dr. Schmidt.

Eric: That was much, much too generous. I wanted you all to know – and thank you for having me – that the room that we're in is actually quite historic, because between the years 1990 and 1995, literally this ballroom was the scene of the conferences where much of the personal computer industry and the internet was planned. So it's only fitting now, from my perspective – literally they've repainted the rooms and aside from that it's pretty much the same – 15 years later, we're looking at the consequences, good and bad, by the way, for what's happened with the explosion of information, the creation of whole new industries and the way I would like to think of it is, as Google bringing some science to advertising because we believe advertising has great value.

Let me talk first and foremost about information and the world. I think the world of information is underappreciated in politics and business -- global phenomena, culture and so forth. And the rate of innovation is actually increasing in the internet, which is sort of a little frightening. And there are these very, very large new opportunities and platforms before us, that all of us together are going to be exploiting, using, being creative on or being upset about. This is happening, it's happening globally and it's happening right now. There are four sort of major experiments, I think, globally in how information is being used. Think of them stereotypically as follows. Europe, educated, thoughtful, rule of law, empowering. United States, innovative, creative, surprising, individualist. China, monocultural, chaotic, controlling, confronting the individual truths of their structure. India, following, accelerating, the merging of their cultures. These four major, major social phenomena that comprise 80% of population and 99% of economics, will be defined by the role of information and the power of individuals using that information. That is the story of the next 5 to 10 years.

There are lots of examples of this. Rice is in short supply. One of the reasons it's in short supply is that the people who make rice are using their cell phones to discover that the intermediaries are screwing them with respect to pricing, so they're withholding rice to get the prices set correctly. Who would have thought? People on boats who are doing tuna fishing are choosing which port to go using their mobile phones, or internet connection satellite connections, to determine where they get the price for their fish.

You don't need to think about the internet without thinking about the three Presidential candidates we seem to have today, each of whom have had their troubles with YouTube, stories on the internet and perhaps some issues with the things that they said or did.

Each of these are illustrative of the fact that there is a next universe coming and at Google we're trying to build some of the atoms that people can build these things out of. And it's very important to also understand that these are not zero sum games, there's a logic in business where everybody says, "Well, if I take from here I lose from there." This is positive, it's plus positive, that these new platforms, new innovation, new services, in fact, create new opportunities for advertisers, new opportunities for information and new opportunities for people to have great lives.

I mean as an example, there are 5,000 photos uploaded per minute to Google's Picasso website. I have no idea what's on those photos. I just can't imagine, I can't imagine even trying to look. Even scarier is there's 10 hours of video in YouTube uploaded every minute.

Now the technology has all sorts of interesting problems. We did some math and in 2019, you'll be able to have an iPod like device that has a 85 years of video on it. So in your entire life you cannot watch all the video. You'll never do it. I guess you could fast watch it. We'll watch a frame here and frame here and a frame here. And by the way, that includes sleeping time, which is another problem we haven't fixed yet.

So the scale of this, I think, is underappreciated and the societal impacts are very significant as well. As Ben, who's one of my heroes, talked about, the shift in audience is causing content to really be multi-platform. Network primetime audience is now around 45% down from sort of 80%. These new industries, whether it's print campaigns, search advertising or now these very large industries, they didn't exist 10 years ago. The average American internet user is spending 13% more time on the internet every year, which means basically they're ruining their lives. They're giving up everything else because they're so addicted to this phenomena. This is very, very real and very powerful and it's, of course, demographically shifted toward the next generation of consumers, which is very important for all of us.

We're seeing people do interesting experiments. Typical example is CBS did something called the *CBS Channel* and they promote clips of their shows on YouTube and we've measured it and it drives more viewership. So even simple stuff like that is easy to do, is stuff that we can work together with you all to make sure that they're doing. It's a no-brainer. They have the content anyway, it's promotional and each and every person should be thinking about how to do those sorts of things.

And I consider those sort of necessary, that we have to do those and obvious, but not sufficient, that the real opportunity is in develop new forms of storytelling, new forms of narratives. And some of these are unusual. An example is that there's a show called *21 Steps*, which is based on an adventure novel called *39 Steps*. I don't know why it's 21. And it's an online novel where each chapter unfolds as a backdrop of Google Maps. Google Maps is an amazing, amazing growth property for us. And of course the story is around a location. It's a narrative, it's a story, there are things going on. If you think of it from an advertising perspective, there's lots of advertising that you can do, which will be geo-centric. It makes perfect sense.

There are lots of people working on new formats, new short episodes. There's a comedy skit called *Smosh*(?), which is done by these two guys, sort of very unusual. And they've done 45 videos 3 to 6 minutes long and they're the number one most subscribed channel. They have as many viewers as the major networks do now. So again, this is happening and it's happening right now.

But even scarier is the fact that in 2007 in Japan, the top 3 books over the year were first delivered on mobile forms and read on people's mobile devices. And only after they were hugely successful were they turned into print books. So there's an example of the inflection point. There's the example where, in fact, the popularity was done in a different format, and ultimately moved into a more traditional monetization strategy. Of course it makes sense if you spend some time in Japan, why are they doing it on mobile phones? Because they spend all their time in the subway and have to read something. But it makes sense that that's a model that we can exploit.

If you think about what you can now do with this, you have a great deal of analytics and tools and so forth that we've never had before. And you can obviously mine this for many, many different reasons. We have things like Google Trends and people can watch contests and so forth and watch what happens. You could see the popularity things and we work with people, advertising agencies work with people to sort of understand what's popular and what's not.

We're also beginning to look at this as a television problem. And television, of course, all of us understand the importance of television. It's sort of one of the great sources of information and entertainment for people worldwide. It's still the most important in many, many ways. And the advertising part of it can also be measured. As we were talking earlier, the inevitability of this. Because the set-top boxes are computers and those computers are connected to the internet, all of a sudden it's a programming problem and we can actually – and my kind of programming – and we can actually measure what's going on. So we've been doing experiments, we have some partners, including EchoStar. And according to our research, most people seem to watch TV pretty passively. 40% of the viewers almost never tune away from the commercials and 20% of the viewers almost do and usually within 5 seconds of the commercial starting. Now maybe you already knew that, but I didn't. But that's an example of the kind of data that when properly analyzed, can be used to really do much better ad targeting. And there are many other examples. And because our computers, serving as ad insertion engines, if you will, sort of the underlying technology, can talk to these set-top boxes, there are many, many interesting things that we can do. We can obviously also use it to broaden the reach of the show and how it works with respect to the internet and other modalities, mobile phones, texting and that sort of thing.

So my thesis now is that we're going to see a shift in our joint industry, because we're in the advertising industry all of us, in a way that is similar to what happened in finance, in New York in the 1970s. A set of scientists and mathematicians, in _____ case, developed new metrics and all of a sudden a whole generation of analytical people joined those firms and they were able to maximize efficiency, profit and so forth. And in my view probably to excess, looking what's going on this year. And there's every reason to believe that marketing will now go through a similar transaction. That the principles of marketing, which are around entertainment, storytelling, targeting, selling, all the things that we do so very well in our industry and particularly you do, because I don't do it -- we're sort of an enabler for this -- that they'll be augmented by very, very significant analytical tools which will allow this kind of targeting.

Google has a product called Google Analytics and the simple rule is, anybody using Google Analytics is much happier, sort of how I operate every day. Because they know what's happening on their website, they know who's using their services, they can track their advertising and we've, of course, seen a direct and 100% correlation between the adoption of Google Analytics and more revenue to Google and what's wrong with that? So you get the idea.

So along the way -- and I'll put this into context and then finish up -- we looked at this not just as a text ads problem -- which, of course, has been our historic business -- but as a much broader opportunity to serve global advertisers with all of the tools necessary to target all of these different industries. And we eventually saw that the correct thing to do was to acquire DoubleClick, which indeed we've done and we're very proud of that. And of course what happens by virtue of acquiring DoubleClick is we can make more inventory available to DoubleClick advertisers, many of whom are your customers. We can make more ads available to DoubleClick publishers and we can basically get the integration of all of these tools and services to really take them to the next level. So if you think about it, our goal here is to deliver actionable metrics that make it easier for people to optimize their campaigns. And that's true across every media type and every single platform that we're doing.

Give you some examples of some of the things going on. Cadillac did click-to-play video ads. They did 13 different versions and they tried them in 78 different markets and they proved the correlation between demand and, in fact, dealer demand, with viewing the ads. And click-to-pay video ads is a brand-new advertising format. Now how much is that going to scale? We don't know. We're busy measuring it and doing trials there.

YouTube is doing some interesting things. An example was that Chrysler – again, using cars as an example because it's an obvious one for all of us to understand – you could customize your Chrysler 300, but they did it as a contest. Again, drawing viewer engagement, drawing a story, so forth and so on. So all of a sudden it all makes sense. Honda sponsored a concert, a series last year with a band called Fallout Boy, which I'm not familiar with, thank goodness. And we built a gadget -- one of these sort of atoms in the next universe -- and this gadget included the ability to ask the band questions, again, sponsored in this case by Honda. And then the band did video responses and interacted and so forth with their fan base. Again, this is the kind of stuff that you can do in this new paradigm that was just not possible in any of the earlier technologies. And I think these models are going to be the ones that will really evolve to be the defining models for advertising over the next 10 or 20 years.

Now the good news is that the application of analytics and the application of tools is exactly what the customers that I've talked with that you serve, really want you all to do with them. They want the creative, they want the analytics and they want the tools. Our job is to do a piece of that. We're not creative, we're sort of boring, which is perfectly fine with us. We need to provide those tools, we need to figure out a way to get them into your systems and so that people can really get the benefit of the analytics to go on with the storytelling and the creativity.

To give you a sense that we're not done -- and my initial thesis was that the internet was accelerating -- we're investing tremendous resources in information and scale and opportunities around search and all the things, mobile and so forth that you know about. But there was a study done and the study done was sort of what is the next opportunity? And 11% of the US survey respondents actually were asked, would they be willing to safely implant a device that enabled them to use their mind to access the internet? And I was very pleased to see that of that split it was – demographics were different – 17% of the men were willing, but showing once again that women are smarter than men, the women only 7% were willing to have that done. I am not in the 17%. I think the internet should stay right there and my mind will stay right here. Thank you very, very much.

Speaker: So this is a really rare opportunity. We have time for a couple of questions. What we did was we – I'm going to turn it over to the audience in a second, but actually sent out an email asking for people to ask questions ahead of time. So let me just ask one of them and then we'll turn it over to the audience. Notwithstanding your current efforts to work in peace with advertising agencies, when you look into a crystal ball, what does the advertising industry look like 10 years from now? What value and services can agencies provide in order to survive an advertising industry that is increasingly automated?

Eric: A very good question. I think it's obvious when you talk to the customers that advertising agencies will be growing very dramatically because customers are confused. This whole conference is about confusion. You have this choice, this choice, this choice, this choice. How do I do this, how do I do that and so forth and so on. The customers are not going to get there. They need the agencies to tell them. I mean this is so obvious. And so we can provide analytical tools and now basically give you a framework by which you can talk about the choices, but ultimately these are decisions that are incredibly mission critical for the advertising industry. We love advertising. Advertising has value, people actually enjoy the ads, especially when they're highly targeted. There's every reason to believe that this new narrative form that I'm talking about in targeted ads, whether they're video ads and other kinds of ads, especially if they're user generated, is going to provide a whole new set of complexity and opportunities for advertisers, especially the viewer engagement stuff and embedding things and so forth and videos. So I think the opportunity is very, very strong and it's fundamentally because there's more choices. We're not taking a static industry and automating it analytically. We're taking an exploding industry of choices and providing a framework, and then people will need help and they'll have help from you, which is why this is so important.

Speaker: Thank you. Open it up to the audience.

Q: First of all Eric, congratulations on a stunning quarter last quarter. I understand you kind of beat all the estimates out there. My question is, Google has its base for a revenue generation is advertising. Down the road, and you're giving away many of your applications and products, do you see that changing down the road?

Eric: I think the short answer to your question is no. Most of the people who have tried to use the internet to sell things, with subscriptions, so forth, have run into real user adoption problems. There are some counter examples, but for digital goods, the best price is free. And if you have a free business, by far the best way to monetize is just through advertising. So we like the notion of free information with highly valuable, highly targeted advertising. One way to think about it is what's our long-term goal? And what I'd like you to do is when you search, I'd like you to enter a query and have us give you exactly the right answer, with exactly one correctly targeted ad. And I know this seems strange, wouldn't you want to show more ads? But the best advertising experience is the perfectly targeted ad, exactly once, which is so compelling people have to watch it, have to read it, have to study it, have to buy the product. And that's what we're trying to get to. Eventually, maybe what we can do is we can have a situation where I'll guarantee – this is my fantasy – I'll guarantee you as an advertiser, if you just pay us some money, we'll guarantee the sale. And by the way, we'll immediately go to Lloyds of London to get the insurance program to make sure in case we make a mistake. But if we can get to that level of specificity, what will happen is advertising will no longer be a marketing expense, it will just be a sales expense. And it can be judged that way. And then it's just – and by the way, that's great for all of us because that money was just all going to come in our direction.

Q: You mentioned the US Presidential candidates. I'm curious, in your view, who you think is the most digitally savvy and why.

Eric: I'm not going to get anywhere close to that question. Each of them have made at least strategic errors with respect to the internet, or their associates have. For many years I've thought that the internet would affect American politics and in 2006, George Allen, who was at the time the Senator of Virginia, uttered an inappropriate word that was captured on YouTube and in a very tight race, that – his misbehavior, from my perspective, cost him the Senate. Well, that switched the Senate from Republican to Democratic. A month later, Speaker Pelosi wanted her colleague, who had been involved with the ad scam scandal, to be the number two and because of the videos resurfacing of what was a bad time and bad choices that he'd made 30 years before, he was ultimately not put in a position that he worked so hard to get to. So the reality is that if you're a political leader, you pay attention a lot to these and some of them will pay attention literally out of fear, fear that they'll be caught, fear that they'll make a mistake or fear that somebody will do something bad to them. All of the candidates, and the three major candidates I've spent a fair amount of time with, all of them have a good understanding of technology and the role of it and they all see it as a way of ultimately providing growth for America.

Q: One of the great strengths about YouTube as the distribution platform is its ability to get content seen by millions, obviously. One of the great weaknesses of YouTube as a content distribution platform, as we're seeing, is its, I guess, inability to sufficiently make enough money to sustain content production, especially online-only content production from online-only content producers. What challenges are you guys facing or what answers are you finding for ways to adequately compensate the producers of content that you're placing advertising around?

Eric: So from our perspective there are two big challenges ahead for YouTube. YouTube, by the way, is growing at this phenomenal rate. It's a global brand, it's growing very, very quickly. And essentially everything interesting in video online seems to end up on YouTube, for better or worse. The first is a discovery problem. It's difficult with YouTube to actually find the content unless you know what you're looking for, because there's so much of it. And this is essentially a problem that can be – where user interface techniques, knowledge of what people are looking for, the sort of search problem can merge with the browsing problem. The second problem is that if you measure minutes, if you will – simple way. We measure minutes of monetization on television versus minutes of monetization online, the minutes of monetization on television is higher. So in other words, if you have somebody who switches one minute from television to one minute to YouTube, the amount of money that we can now make from that one minute is lower. This is a challenge, but it's not an insurmountable one. And the solution is to come up with more compelling and more targeted advertising that commands higher ad rate. It's not to somehow subsidize it. We'd love to do that, but that doesn't scale. So our fundamental solution is, first to say, there is a problem that the online advertising in general, when you're going from a traditional media to a new media, does not monetize as well with some exceptions, and that the way you get the monetization is by having better and more targeted and more clever ads, clever in the technology sense, that then command a high enough ad rate that they're roughly equal. And then you do rev shares. And in our model, the vast majority of the revenue goes to the creative people and the distribution partners and that problem we hope to get fixed very, very soon, in some number of months literally.

Speaker: Thank you so much.

Eric: Thank you guys very much.

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