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Google's view on the future of business: An interview with CEO Eric Schmidt

How the Internet will change the nature of competition, innovation, and company operations.

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Few would dispute that Google sits at the center of the Internet. As the leader in search, Google is now the Internet's premier brand and the planet's most potent free service. Managing that commanding position falls largely to seasoned technology executive Eric Schmidt, who in 2001 was tapped for the CEO post by Google founders Sergey Brin and Larry Page.

In his years at the company, Schmidt has delivered steady growth while expanding Google's reach. By anticipating the ways in which people would expand their use of Internet applications, Schmidt has introduced new products from the popular Web-based e-mail service Gmail (Google Mail in Germany and the UK) to the recently unveiled G1 mobile phone. And as Google's audience and influence have increased, so too has its appeal among advertisers worldwide.

Making all this happen depends on Google's ability to attract and engage top talent. The organization that Schmidt has helped shape depends on collaborative projects and free flows of information that encourage employees to share ideas. Staffers devote 20 percent of their work time to special projects of their own design, an inventive and effective policy that is at the core of its innovation efforts.

Not many executives have a better vantage point on the changing technological landscape than Schmidt. He recently took time out to discuss his views with McKinsey director James Manyika. Schmidt sees more powerful digital assistants arising from cloud computing, markets morphing at an ever faster pace, and plenty of space for human creativity if organizations are willing to carve out a place for it.

The *Quarterly*: The Internet has radically changed the world. What are the kinds of developments you see ahead?

Eric Schmidt: When people have infinitely powerful personal devices, connected to infinitely fast networks and servers with lots and lots of content, what will they do? There will be a new kind of application and it will be personal. It will run on the equivalent of your mobile phone. It will know where you are via GPS, and you will use it as your personal and social assistant. It will know who your friends are and when they show up near you. It will remind you of their birthdays. It will entertain you. It will warn you of impending threats and it will keep you up to date. It will use all of that computing power that's in the cloud, as we call it.

So, for example, when you go to the store this device helps you decide what to buy at the best price with the best delivery. When you go to school it will help you learn, since this device knows far more than you ever will. So this vision of nearly infinite computing power, network power, and these powerful devices is the basis of the next generation of computing.

Eric Schmidt

Vital Statistics

Born April 27th, 1955, in Washington, DC

Married

Education

Graduated with a BS in electrical engineering from Princeton University, in 1976

Received a PhD in computer science from the University of California, Berkeley, in 1982

Career highlights

Google (2001-present)

- CEO
- Chairman (2001-04)

Novell (1997-2001)

- CEO

Sun Microsystems (1983-97)

- Chief technology officer

Fast Facts

- 2007 American Academy of Arts and Sciences Fellow
- Chairman of the board of directors for the New America Foundation; member of the board of directors for Apple; member of the board of trustees at Princeton
- Named one of *PC World*'s 50 Most Important People on the Web, 2007
- Informal advisor to US President-elect Barack Obama during the 2008 campaign

The *Quarterly*: Armed with all this technology, what happens to how people live and work in the world?

Eric Schmidt: There's such an explosion of content, and yet there's so little understanding of it. So, I think the gap between what computers do—which is very high volume analytical and replication work, and the things that humans can do, which are essentially insightful—is a large gap. In our lifetimes, we will not see that gap close very much. Corporations will change the way they sell products to people who are increasingly computer assisted. But ultimately, we still run the world.

The harsh message is that everything will happen much faster. Every product cycle, every information cycle, every bubble, will happen faster, because of network effects, where everybody is connected and talking to each other. So there's every reason to believe that those who are really stressed out by the rate of change now will be even more stressed out.

However, there's a new generation who are growing up with this as the normal pace of their lives. They will develop the social norms. As leaders they'll figure out how they want to organize their world, when you and I are sitting around watching them from our retirement.

The *Quarterly*: Will the Internet bring down barriers, making markets more democratic?

Eric Schmidt: I would like to tell you that the Internet has created such a level playing field that the long tail[1] is absolutely the place to be—that there's so much differentiation, there's so much diversity, so many new voices. Unfortunately, that's not the case. What really happens is something called a power law, with the property that a small number of things are very highly concentrated and most other things have relatively little volume. Virtually all of the new network markets follow this law.

So, while the tail is very interesting, the vast majority of revenue remains in the head. And this is a lesson that businesses have to learn. While you can have a long tail strategy, you better have a head, because that's where all the revenue is.

And, in fact, it's probable that the Internet will lead to larger blockbusters and more concentration of brands. Which, again, doesn't make sense to most people, because it's a larger distribution medium. But when you get everybody together they still like to have one superstar. It's no longer a US superstar, it's a global superstar. So that means global brands, global businesses, global sports figures, global celebrities, global scandals, global politicians.

So, we love the long tail, but we make most of our revenue in the head, because of the math of the power law. And you need both, by the way. You need the head and the tail to make the model work.

The *Quarterly*: So how do companies make money in these markets?

Eric Schmidt: Free is a better price than cheap. And this simple principle has been lost on many a business person. There are business models that involve free with adjacent revenue sources. And, in fact, free is a viable model with branding [advantages] ,[charges for] service, and other things. But it's a different business model from what most of us are used to.

A rule of economics is that for manufacturing and mature businesses, eventually the price of the good goes to the marginal cost of its production and distribution. Well, in the digital world, for digital goods, the marginal cost of distribution and manufacture is effectively zero or near zero. So, certainly, for that category of goods, it's reasonable to expect that the free model with ancillary branding and revenue opportunities is probably a very good thing.

The *Quarterly*: What's an example of how an industry might adapt to these changes?

Eric Schmidt: Obviously, for things which have some physical cost of production, you'll be losing money in a million units at a time unless you come up with some offsetting revenue. Telephony is a classic example. Most of the costs for telephony physical infrastructure are sunk costs. The cost of operating is not that great—mostly billing and so forth. So you could imagine a situation where telephony went from being billed by the minute to being billed by the purchase of the phone. You buy the phone, and covered in the cost of the phone is a part of that infrastructure. And then you could use the phone forever.

People have to accept that, at least in the digital world, the cost of transmission and distribution, is not going to go up. It's on its way down. The people who build physical devices that connect to [transmission and distribution] will eventually morph their models into more of the prepay model, because it will be more consumer efficient.

The *Quarterly*: What kinds of management changes are needed to cope with all this?

Eric Schmidt: The old saying is no one knows you're a dog on the Internet, that you can't tell the size of the organization, and so suddenly the Internet levels playing fields in many ways—distribution, branding, money, and access.

But it has a lot of other implications for the way corporations operate. They can't be as controlling. They have to let information out. They have to listen to customers, because customers are talking to them. And if they don't, their competitor will. So there's a long list of reasons why a more transparent company is a better organization.

There are many business models predicated on control. My favorite example is movie distribution windows. As a consumer, I want to watch the movie whenever I want, and on whatever medium I want. But the whole economic structure of the movie business, up until recently, was organized around distribution in a certain format, at a certain price, and then wait a while. But in the new world people won't wait. A good example was the delay of the Harry Potter movie. The fans were fanatical, writing letters and calling private cell phones to overturn the delay. The industry has a fan base that they need to spend time thinking about.

There's a lot of evidence that groups make better decisions than individuals. Especially when the groups are selected to be among the smartest and most interesting people. The wisdom of crowds argument is that you can operate a company by consensus, which is, indeed, how Google operates.

The *Quarterly*: So, how do you do it?

Eric Schmidt: You need two things. You have to have somebody who enforces a deadline. In a corporation the role of a leader is often not to force the outcome, but to force execution. Literally, by having a deadline. Either by having a real crisis or creating a crisis. And a good managerial strategy is "let's create a crisis this week to get everybody through this knot hole."

And the second thing is that you have to have dissent. If you don't have dissent then you have a king. And the new model of governance is very much counter to that. What I try to do in meetings is to find the people who have not spoken, who often are the ones who are afraid to speak out, but have a dissenting opinion. I get them to say what they really think and that promotes discussion, and the right thing happens. So open models, beyond input from outside, also have to be inside the corporation.

Encouraging this is an art, not a science. Because in traditional companies, the big offices, the corner offices, the regal bathrooms, and everybody dressed up in suits cause people to be afraid to speak out. But the best ideas typically don't come from executives. And, unfortunately, the executives don't agree with me on that.

The *Quarterly*: What types of people will succeed in this environment?

Eric Schmidt: I would venture to say that [in some organizations] many people still show up at 9:00 and leave at 5:30 with a half an hour break. And their productivity is defined by how much they can get done in the eight hours. And I would venture today that things haven't changed very much in 50 years. A counter example would be people who are trying to make money in the blogosphere. Bloggers, for example, can't sleep. It's so competitive that if they go to sleep, and a story breaks all the clicks from their blog go to the others. So bloggers end up sort of disasters on a human scale because they can't deal with the fact that they can't even sleep, it's such a tense environment.

There's a spectrum in between, and, as an executive you have to think about where you are in that spectrum—both personally and as an organization. For senior executives, it's probably the case that balance is no longer possible. I would love to have balance in my life except that the world is a global stage and, when I'm sleeping, there's a crisis in some country, and I still haven't figured out how not to sleep. So the fact is that you're going to select executives who like the rush of the intensity. They're going to be drawn to the sense of a crisis. The sense of speed. And they are the ones, ultimately, who are going to rise to the top.

The *Quarterly*: Could you tell us about how Google innovates?

Eric Schmidt: Innovation always has been driven by a person or a small team that has the luxury of thinking of a new idea and pursuing it. There are no counter examples. It was true 100 years ago and it'll be true for the next 100 years. Innovation is something that comes when you're not under the gun. So it's important that, even if you don't have balance in your life, you have some time for reflection. So that you could say, "Well, maybe I'm not working on the right thing." Or, "maybe I should have this new idea." The creative parts of one's mind are not on schedule.

So, in our case, we try to encourage [innovation] with things like 20 percent time, and the small technology teams, which are undirected. We try to encourage real thinking out of the box. We also try to look for small companies that we can acquire. Because, often, it's small companies which have the great new ideas. They have gotten started with them but can't really complete them.

Google's objective is to be a systematic innovator at scale. Scale means more than one. And innovator means things which really cause you to go, "Wow." And systematic means that we can systemize the approach—we can actually get our groups to innovate. We don't necessarily know this month which one [will succeed]. But we know it's portfolio theory. We have enough groups that a few [innovations] will pop up. And, of course, we also cull the ones that are not very successful. We push them to try to do something different, or retarget—or, in fact, get canceled. Although that's relatively rare.

The *Quarterly*: Is there a type of organization that has an edge when it comes to fostering innovation?

Eric Schmidt: Executives always want to simplify their lives. So they have three divisions, and four products, and all the marketing and so on. That may work in some businesses. But, for most businesses, due to the nature of technology, they're going to become more complex. They will have more products and more variance. And it's part of [maintaining a] competitive barrier to have resilient, scalable, differentiated, and global products.

Which means they can't be built by two people anymore. So, in our case, while we recognize that innovation comes from small teams and we organize that way, we also encourage them to talk to each other.

One of the things that we've tried very hard to avoid at Google is the sort of divisional structure and the business unit structure that prevents collaboration across units. It's difficult. So, I understand why people want to build business units, and have their presidents. But by doing that you cut down the informal ties that, in an open culture, drive so much collaboration. If people in the organization understand the values of the company, they should be able to self organize to work on the most interesting problems. And if they haven't, or are not able to do that, you haven't talked to them about what's important. You haven't built a shared value culture.

The *Quarterly*: What are some of dangers you see as the Internet continues to develop?

Eric Schmidt: There are a number of initiatives to try to build essentially a global standard for the Net. Given the history of war and global politics, it's highly unlikely that we'll see a single regime, for example, for copyright law, or for what content is appropriate, or for the penalties for inappropriate content, or for all of the issues that people face in the online world. Today, the way we solve this problem is to use per-country domains. So a domain that's per country is seen as different, such as the US domain, which is called dot com.

There are likely to be legal and political challenges to this over the years, and I think the next one will come soon. The Internet has withstood them so far. The most important thing in these situations is to have a large number of lawyers. The reason is that the laws have become so complicated that, to operate globally, every large corporation I know of has to have a lawyer who understands Brazilian law, one who understands Turkish law, and one who understands the European court. In the case of information, and in particular cultural information, there are widespread differences in what's legal and what's not. The Internet [response is] that people are subject to the local laws.

It would be a tragedy if the Internet, because of these issues, became balkanized at a physical level. It would be a tragedy if every country built, sort of, a police state around its Internet. It's much, much better to use other approaches to make sure that what's legal in one country and illegal in another country does not go from the legal country to the illegal country without appropriate supervision. Q

About the Author
James Manyika is a director in McKinsey's San Francisco office.

Notes

[1] A phrase coined by Chris Anderson, editor-in-chief of *Wired* magazine, in an October 2004 article of the same name. The theory of the long tail states that as the costs of production and distribution online fall, niche products and services can be as economic as mainstream ones.

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