Masters of Scale Episode Transcript: Eric Schmidt

> **ERIC SCHMIDT**: My first office at Google was an 8-by-12 office, just enough room for me and my desk and my little chair. And one day I walked in, and I find I have a roommate. I said “Hello.” He says, “Hello.” I said, “Hi, I'm Eric.” And he goes, “Hi, I'm Amit.”

REID HOFFMAN: That’s Eric Schmidt. This story happened on his first day as Google’s CEO in 2001.

> **SCHMIDT**: Now as a new person coming into the company, it’s very important to not create a cultural faux pas. Like it would be incorrect to say, “I'm the CEO. Get the heck out of my office.” So I looked at my secretary and said, “Did you know anything about this?” And she said “no.” And I said, “Well, who said you could move in?” And he said, “The VP of engineering.” And I said, “Ah, they playing a joke on me.” And I said, “Well, why did you move here?” “Well, because I was in a six person office, it was very crowded, and your office was empty.” So we became colleagues.

HOFFMAN: So was Amit playing a joke on Eric? Oddly enough, Eric doesn’t say. He drops the investigation. Amit offers no further explanation. They settle into their work, and do a fine job of ignoring one another.

> **SCHMIDT**: He would put his headphones on and I would talk on the phone. I’m calling the vice president of sales. And at the time the revenue was estimated about 120. And I said, “Don't you think you could do better?” And he said, “Well, I think we can get to 123, 124.” “Come on push harder, push harder.” And as I hang up the phone, Amit takes his headphones off and said, “I can tell you what the revenue is going to be.”
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> And I said, “I knew you were listening into my conversations.” And so I said, “What's the revenue going to be?” And he said, “It’s going to be 138.” I said, “How do you know that?” “Because I build the analytics that predict this.” And so I didn't tell the sales people, and I watched—and they kept moving their forecast up, and hit 138. It was a really easy lesson to understand the power of data analytics, plus having a great roommate.

HOFFMAN: Amit eventually built a tool that accurately predicts how much revenue the company had at any given time, down to the second. Pranks and productivity tend to blend together at Google, which is why Eric doesn’t dwell on the question of why Amit moved in to begin with.

> **SCHMIDT:** We were roommates and literally officemates for years. We became such good friends.

HOFFMAN: I would argue that a dash of insubordination is the secret ingredient to Google’s

success. Ideas emerge organically through conversations like the one Eric and Amit had in their cramped executive suite. There's only one way to keep those unruly conversations going. You let them unfold chaotically, anywhere and everywhere across the organization. And you listen for what bubbles up. If you want your company to innovate, your job is to manage the chaos.

[THEME MUSIC]

HOFFMAN: This is Masters of Scale. I'm Reid Hoffman, co-founder of LinkedIn, partner at Greylock and your host. In this episode, I'm going to make the case that the best managers—of the most innovative organizations—don't tell their employees how to innovate. They manage the chaos. I'll prove that to you with stories from the smartest entrepreneurs I know.

If you want an innovative company, your job is to manage the chaos. Managing chaos may sound like a contradiction in terms. Shouldn't it be the opposite? Isn't the manager's job to wring order *out* of chaos? Not always.

If you want to invent something new, or reinvent something at a spectacular order of magnitude, you have to suppress management. Let your employees pursue wild ideas that may raise your eyebrows. It's not for you to judge whether their ideas are good or bad. It's for your employees to prove it through freewheeling experimentation.

I wanted to talk to Eric Schmidt about this, because he pushes the anti-management philosophy to its outer limits—as CEO of Google, and now as chairman of the parent company, Alphabet. He's an unlikely proponent of chaos, because he came to Google from a company that nearly crashed due to lax management. Before Google, he was CEO of the software company Novell.

We'll start the story on his first day at Novell, when he discovered the company's financials weren't all they were cracked up to be.

> **SCHMIDT**: The reality, of course, hit on the first day, because I was presented with different numbers for revenue for the quarter than I'd been told when I was interviewing. And by that Wednesday, third day in the job, we were in a real crisis.
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> We had a month which we called the worst month, where everything was failing, and it was clear that the business was in very different trouble. And there was a moment in that month where I remember saying to my colleague, "I just want to get out of here with my integrity intact."

HOFFMAN: There's only one way to take your mind off of a disaster on this scale—flirt with scarier disasters.

> **SCHMIDT**: My friend said, "You need a distraction. And if you're flying planes, you won't be able to think of anything else." It was the best advice ever. I eventually figured out it

made a big difference, shockingly to me—because in aviation, they teach you to make rapid decisions, and they, over and over again: “Decide, decide, decide.” It's better to make a decision and just accept the consequences. And that discipline helped me in the hard times when I was at Novell in a real hard core turnaround.

So I approached aviation the same way I approached the company, which was trying to figure out how it actually worked. And once you figured it out, if it's a well-defined system, it has a certain logic and a certain beauty in it.

HOFFMAN: I want you to notice two things in this story. The first is the way Eric thinks about companies:

SCHMIDT: If it's a well-defined system, it has a certain logic and a certain beauty in it.

HOFFMAN: He’s thinks of a company as a system that he has to understand. The other thing I want you to notice is what flying taught him about decision-making:

SCHMIDT: In aviation, they teach you to make rapid decisions, and they, over and over again: “Decide, decide, decide.” It's better to make a decision and just accept the consequences.

HOFFMAN: Both of these habits will serve Eric well as he lands in Google’s chaotic system. And he’s about to land. That opportunity came in the form of a fateful phone call.

SCHMIDT: I got a call from John Doerr, a good friend and venture capitalist, who said, “You should come over and talk to Google.” And I said, “Oh, it’s just a search engine.” He said, “Well, you'll enjoy it.” And I said, “Probably not.” But I figured I'd go visit, because I'm curious. And I walked in, and here's Larry and Sergey—

VOICE: Larry Page and Sergey Brin are the two founders of Google.

SCHMIDT: —Two young men. They had my bio all on the wall, and they had food on the table in front of them. I thought, “This is very odd.” And they proceeded to spend an hour and a half grilling me about what I was doing at Novell, and deciding that it was foolish—that the products we were building made no sense. And I, of course, provided a blistering counterattack. And as I left that day, I realized that I hadn't had such a good conversation in years. And that was the moment I knew this was a special company.

HOFFMAN: You might find it odd to hear a “blistering counterattack” described as a “good conversation.” But I’m not surprised by Eric’s reaction here. He knew how rare it was, as an executive, to find a team that’s willing to challenge you. And this feisty, free-thinking team just might push him to top of his talent.

Not every CEO is cut out for this kind of insubordination. But the most innovative ones welcome it. I asked Margaret Heffernan to give us a perspective on this. Margaret was the CEO of five tech companies, and she gave a TED Talk called “Dare to Disagree.” So I thought she might have an opinion on Eric’s reaction.

> **MARGARET HEFFERNAN:** Any CEO worth their salt is starved for argument and debate, so I’m not incredibly surprised by Schmidt’s response—because one of the big problems with power is that most people won’t argue with you if you’re in a powerful position.
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> They mostly try to second guess you. They try to figure out, “What is it you want me to say?” And of course that’s no use at all, because being told what you think you want to hear doesn’t give you any options. You’re kind of stuck in your own head.

HOFFMAN: You have to be able to butt heads. But there’s an art to disagreeing well. High-speed, high-IQ conversations often have the rhythm of “point / counterpoint.” That’s how you move across the intellectual space quickly—I say something, and you say, “Well, actually, this part of what you're saying isn't quite right. Here's the better version.”

Some people naturally excel at this kind of conversation. For others, it takes practice. Technical people, for example, usually need to learn that you don’t have to start the conversation with, “You’re wrong,” or, “That’s the stupidest idea I’ve ever heard.” Far better, you can say, “That's interesting. But here's a challenge to that point of view.” And if you do it that way, you frequently make more progress, because then people are less hung up on whether “I’m right,” or whether “I’m wrong,” and stay focused on the idea.

As Eric ventured outside the executive suite, he found idea-generating conversations unfolding across the company.

> **SCHMIDT**: I think a fair statement is that the founders built the company in the image of what they saw at Stanford graduate school. So the offices for example, if you had them, would have four people in them—which is the number of graduate students that are in an office. And of course, everyone's very crowded, and it's very casual. And of course there's free food, and everyone is sort of hanging out all day. And that graduate student culture—that sense that somehow we're about to discover something new—permeated the decision making. So the culture of food and benefits and being quirky came from the founders trying to recreate that feeling.

HOFFMAN: Amid this creative ferment, his job was simple. He just had to give employees a slight nudge to deliver on their promising ideas.

> **SCHMIDT**: The first thing I did as I went to the staff meeting. And the staff meetings were long, and they were like being in graduate school. “What do you think of this? What

do you think of that?" But a real lack of business procedures, and that kind of thing, which were easily remedied.

HOFFMAN: When you're surrounded by bright young minds, you don't have to push too hard for interesting ideas. They tend to tumble out of conversations or shared challenges, and take you in unpredictable directions. But not every manager is comfortable with this type of chaos. It requires a particular kind of leader who can embrace both *humility*—the uncomfortable notion that you don't have all of the best ideas yourself—and *uncertainty*—because you can't always schedule innovation on a predictable timeline.

I'm going to come right out and say it: If you're a *control freak*, you're going to have a hard time with this. And if you find yourself relating to this song—it's Jamie Leonhart, by the way—you're probably at least *part* control freak. And the hardest part for control freaks is when your team suggests an idea that you find utterly reckless.

And that's exactly what Eric thought when his team suggested a radical new way to set prices on advertisements. What I'm about to describe may sound crazy to you—and it sounded that way to Eric, too. Eric's team made an argument for a type of auction, in which bidders name their price, without seeing competing offers. The highest bidder wins, but only has to pay the *second* highest bid. This is effective because it allows bidders to go high, knowing they will only pay true market value. And there are plenty of academic papers explaining why this type of auction would actually work wonders on revenue. But companies rarely put it into practice.

> **SCHMIDT**: I was *absolutely* convinced that this would bankrupt the company. And I was so convinced, that I ordered a cash-restriction period, where the only thing that you could do was spend money on Friday mornings, at 10:00. You had to come to my office and you had to convince me that you needed to buy those pencils, or those computers, or whatever.

HOFFMAN: You heard that right. Not only was he convinced it was a bad idea. He was convinced that it would *bankrupt* the company. So he forced all purchases to be brought to his office in person.

> **SCHMIDT:** And as we pushed this thing through, we turned it on, but we had no data analytics, because no one had bothered to get that working yet. And we went into full crisis mode for a week, meeting every day at 4:00 to try to figure out what to do. At the end of the week, we realized we were making *far* more money, and we were able to go from there.
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> It was that moment that I realized that both this team was magical, but also that the scale of the search ads opportunity was immensely larger than even we had thought.

HOFFMAN: Notice how Eric is stunned by the success that emerged out of this chaos—he calls

it “magical.” And to harness this magic in an organization, you have to understand where ideas come from—not just from individuals, but from networks of people. And this runs contrary to the popular myth about innovation. We tend to tell the *heroic* story of innovation.

This is a story that credits a single inventor: the founder, the creator. A genius has an idea. Everyone else executes on the idea. And then everyone waits for the genius to have another idea.

But that’s a false story of innovation, and it breaks in at least two ways. First, while it’s true that some people are much better at idea generation than others, it’s always better to have a number of people working on ideas simultaneously. The best idea may come from person #89. And you can’t always predict where the good ideas will come from.

And second, very rarely do ideas spring perfectly formed, like Athena from the brow of Zeus. To turn a good instinct into a good idea, you have to talk to a lot of smart people, and ask them for feedback and criticism. So having networks both within and outside the company to improve on ideas is key to success.

Margaret Heffernan, former CEO of five tech companies and advocate of frank conversations, has a great example of a time this worked. I asked her to tell the story.

> **HEFFERNAN:** The piece of software we were running had a very specific problem, which was what I would call a load balancing problem. It would just require too much processing power. And the more customers we got, the more acute this problem became. And because it’s such an existential threat, everybody knows about it.
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> And one Friday, one of my marketing people came to me and said, “You know, I’m not an engineer, but I just had this idea.” So I call my CTO and I say, “Harry, what do you think about this?” And he thinks about it for a minute, and he thinks, “I think I know how we could do that.” So it was a really thrilling, not to mention kind of life-saving moment.
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> But what I think is especially interesting is, in very siloed organizations, or fearful organizations, you wouldn’t share that problem. But actually, everyone knowing the problem was what allowed us to solve it.

HOFFMAN: Margaret is right. No one in your organization has a monopoly on good ideas, particularly when you’ve hired thousands of smart creatives.

What’s equally important to recognize, as an leader, is that *you*, personally, are *not* the source of all good ideas. My friend Mark Pincus learned this the hard way. He’s Co-Founder of the gaming company Zynga, which pioneered the idea of blending games into social media. Before Zynga, he built one of the first social networks, a little-known website called Tribe that didn’t quite make it. I asked him to tell me that story.

MARK PINCUS: It's pretty amazing, if you think about it, that I started one of the first three social networks in 2003, and I managed to fail—at a time when everything worked, I actually managed to fail. And the lesson from Tribe that came resoundingly out for me—and still stands out—is that as entrepreneurs, part of the journey that we're on is learning how to separate our winning instincts from our losing ideas. I think as a rule of thumb, if you're a good entrepreneur, you can assume that your instincts are right 95% percent of the time, and your ideas might be right 25% percent of the time.

HOFFMAN: By the time Mark launched Zynga, he was acutely aware of the dangers of stubbornly sticking to his ideas. He started to draw the distinction between his usually-great instincts and his not-always-great ideas.

PINCUS: I'll try anything, and I'll kill anything, and I'll kill it quickly. And I'm not going to let killing an idea kill a winning instinct. And so that was a really core idea that I'm still thinking about, and learning as an entrepreneur. And I can see it playing out so often in people's companies.

HOFFMAN: Mark separates specific ideas—which must be killed when they don't work—from underlying instincts. And this willingness to kill ideas is essential to making innovation work. A free-wheeling, idea-generating climate of open inquiry—like the one Schmidt cultivated at Google—has to be matched with disciplined decision-making in order to thrive.

SCHMIDT: The most important thing to do is to have quick decisions—and you'll make some mistakes, but you need decision-making. We ultimately adopted a model of a staff meeting on Monday, a business meeting on Wednesday, and a product meeting on Friday, and this was organized so that people could travel in the right ways. And the agenda was, everybody knew which meeting the decisions were made at—and so as long as you could wait a week, you knew you would get a hearing on your deal.

I cannot tell you how many people have told me that at Google, decisions are made today quickly, in almost every case, even at our current scale. And that's a legacy of that decision. Most large corporations have too many lawyers, too many decision-makers, unclear owners, and things congeal—they occur very slowly. But some of the greatest things happen very quickly. We made the decision to purchase YouTube in about 10 days—incredibly historic decision—because we were ready, people were focused, we had a board meeting—we wanted to get it done.

So I always tell people, somebody is running your company. What are they doing? Why don't they just make this decision? Even if it's the wrong decision, a quick decision is better in almost every case.

HOFFMAN: This combination of inventive, bottom-up ideas and focused, top-down decision making has guided Google's growth over the past 16 years. But the two forces don't always live

together comfortably. Eric took some radical steps to keep ideas flowing in the organization. This meant empowering engineers, and keeping management in check. For instance, product leaders can draw in as many engineers as they'd like on any given project, so long as they can convince engineers to join their team.

I've talked to other managers at Google who are frustrated with this, because they argue: "We agree that my project is strategic. Why don't you just assign some engineers to me?" And the answer is, "No, no—you have to persuade the engineers that your project's a good one to work on. And then, by the way, you can have all of the engineers that you can persuade to work on that project." And that's central to Google's culture for making progress.

Eric took this idea one step further. He granted employees the freedom not only to choose their projects, but openly defy their managers along the way. Google famously instituted a rule that any employee could devote 20% percent of their work-week to any project they'd like.

20% percent time was, in some ways, a logical extension of Google's graduate school culture. Managers, like research advisors, can set timetables and budgets for experimentation. But the staff, like the "students," pick the research agenda.

> **SCHMIDT:** Many, many initiatives in the company have come out of 20% percent time ideas. Much of the mapping work, many of the search ideas, many of the advertising, many of now the AI work, have come from people working and practicing in new areas.

HOFFMAN: As Eric says, many of the products people know best—Gmail, Google Maps, Google News, AdSense—grew out of ideas generated by employees, during this 20% percent time. But *why*, exactly, does it work?

> **SCHMIDT**: And while the rule says you can do anything you want to with your 20 percent time, these people are computer scientists and engineers, they're not going to veer too far away from their core business—and that is the genius of 20% percent time.

HOFFMAN: The tendency of high-performing employees to use their 20% percent time productively is the *well-documented* genius of the program. But there's also a *hidden* genius of 20% percent time. It allows *reasonable* employees to defy *unreasonable* managers. And this institutionalized defiance can help balance the power, and keep high-performing employees engaged during challenging times.

> **SCHMIDT**: So the interesting thing about 20% percent time is although it's reported as, "You get to spend one day doing whatever you want," what it really served as was a check and balance on the power of the engineering management over the subject.
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> So if an employee is under pressure, the manager says, "You've got to work harder, you've got to give me everything you have." That employee can legitimately look that

boss in the eye, and say, “I'll give you 100 percent of my 80% percent time.” And that simple principle—which never really happens in practice, but it's understood—empowers the employee with both dignity, but also some choices.

HOFFMAN: Was there anything that you regretted that came out of the 20% percent time?

SCHMIDT: No, because 20% percent time was understood as likely to fail. Part of your compensation was your ability to try new ideas and fail. The value of that failure is incalculable, because you tried something, it didn't work—well, then you try something else, it doesn't work. Persistence doesn't mean marching on the same program, against the same hill, with the same sledgehammer, or whatever metaphor you want. Persistence means you keep trying, but you change your tactics. You modify your strategy, you think differently about how to solve the problem, and you don't give up.

HOFFMAN: So step one of managing the chaotic process of invention is allowing ideas and conversations to flow freely in an organization. Step two is making quick decisions on what’s working, and what isn’t. But step three is even harder: deciding the precise moment you should scale that idea to the world. And this requires an explosive change of pace.

As soon as Eric saw the potential of Google’s new advertising model—the one driven by auction pricing—he turned to his colleague Omid Kordestani and asked about global sales. Turns out, international sales were non-existent. Eric saw an opportunity—and he acted.

SCHMIDT: And so I said, “Omid, go to Europe next week, and don't come back until you have a European office set up.” And he looked at me and he said,

OMID KORDESTANI: “Really?”

SCHMIDT: And I said, “Yes.”

KORDESTANI: It was very clear to him that, “Look, we just need to fire on all cylinders.”

HOFFMAN: Yup, that’s Omid Kordestani, who’s now executive chairman of Twitter. He told us what he was thinking at the time:

KORDESTANI: I need to get on a plane, and go set up these offices, and interview people, and set up our operations. I’ll start with London.

SCHMIDT: He left on a Sunday night from California to London.

KORDESTANI: I literally started going to hotels, and setting up meetings in hotel rooms. And I tapped into my network a lot of times—sometimes I used recruiters—but it was

initially literally sitting in hotel lobbies and interviewing candidates one after another.

SCHMIDT: And by the end of that week, he had hired the head of our London operation, and had identified heads of our Paris and Hamburg operation. So, a very productive week.

KORDESTANI: To me, it was exciting that we're taking this company, and now giving it wings across the globe.

SCHMIDT: Today, Europe is 50% or 60% percent of the profits of a hundred-billion-dollar corporation. Think about if we'd waited a year, how much smaller that number would be. So moving and establishing a global revenue source quickly is key. And in hindsight, I would do that over again, and I would have done it even faster.

HOFFMAN: Knowing when to scale is perhaps the single most valuable decision a manager can make. And because Eric was practiced in making fast, informed decisions, he was ready when the time came.

I want to offer a note of caution here. I would never advise an entrepreneur to blindly copy Google's rules and announce to their teams, "Okay, you all get free meals, 20% percent time, and the freedom to camp out in the CEO's office. Now: start innovating." That's not a recipe for managed chaos so much as plain old chaos. As Eric said, you have to see your organization as a complex system that operates by a logic and beauty of its own.

You have to understand how your staff operates as a network. And you'll never build this network simply by announcing playful rules. You have to first recruit the right people who tend to swap ideas and tackle challenges together. To effectively manage the chaos, you have to hire people who thrive under chaotic circumstances. Remember how most people feel about chaos:

And here we come to another secret of Google's success. They've managed to quadruple in size each year, while ensuring that every last hire was, in Schmidt's terms, a "smart creative."

SCHMIDT: So the company was getting very large, very quickly. And I had suggested to Larry and Sergey that there was a problem with what I called "glue people." And glue people are very nice people who sit between functions, and help either side, but don't themselves add a lot of value. And I thought, "These are nice people, but we don't really need them. We can have these groups talking directly." And Larry looked at me and says, "We could solve this problem, if you would just review all the hiring." And I said, "Larry, we can't look at all the hiring." He said, "Sure we can."

So the company, of course, invented a number of hiring algorithms, which are used throughout the industry today. Many of them include pretty aggressive hiring interviews from peers, asking people to do work, and so forth. Ultimately, the judgment has a lot to

do with whether the person is interesting or not. And so we would, for example, take a position that we want to hire rocket scientists, because rocket scientists are inherently interesting. And in sales, we love to hire Olympians. Or Super Bowl winners, or football players—because of the discipline that they had in their lives as young people—men and women—to get to that point indicated that an extra set of discipline.

HOFFMAN: I want to acknowledge that most companies don't have the option of hiring rocket scientists, Olympic athletes and Super Bowl winners. But Eric does have more pragmatic advice for companies that can't set the bar at Himalayan heights.

> **SCHMIDT:** So today I would suggest that—and this has since been confirmed by many studies—that persistence is the single biggest predictor of future success. And so we would look for persistence. And the second thing was curiosity. What do you care about? The combination of persistence and curiosity is a very good predictor of employee success in a knowledge economy.

HOFFMAN: Suppose you've copied Google's entire system for innovation, end-to-end. You've hired smart creative types, cultivated a culture of experimentation, and set up a decision-making framework that enables you to scale the best ideas without delay.

None of these steps, on their own, will unlock innovative ideas, unless people are also sharing information across the organization, from the C-suite to the frontlines.

And this principle extends beyond the organization as well. Your users can surprise you as much as your staff. Eric shares a story that I think gets to the very heart of the innovative process. It starts with the release of Google Earth, and ends with a journey into the inner workings of a cow brain. Allow Eric to explain.

> **SCHMIDT:** The most interesting thing about cows is that they organize themselves north and south, and they do that north and south because of the magnetic resonance inside their cow brains. How was this discovered? Because of Google Maps.

HOFFMAN: That's because Google Maps offered researchers the first comprehensive view of cow herds across the world. They zoomed in on herd after herd, and observed the same curious formation—snouts and tails, aligned north to south. This observation sent researchers on a whole new path of inquiry. And who could have predicted that path?

So the next time you try to control where inquisitive minds might go in your organization — ask yourself: Do you really know what they might discover? Are you really prepared for the "cow brain" scenario? If not, then prepare to be shocked. Eric expects it.

> **SCHMIDT**: Learning about human behavior, and how people actually live and work, is, I think, always a shock. Humans are much more varied than you and I think they are. And

most people don't know it, or don't pay attention to it.

HOFFMAN: I'm Reid Hoffman. Thank you for listening.