WHY COMMUNITY-DRIVEN COMPANIES WILL ALWAYS WIN

AN INTERVIEW WITH CHRIS ANDERSON OF 3D ROBOTICS

Chris Anderson has a unique perspective on technology-driven innovation. He was the editor in chief of *Wired* for more than ten years, and he's written two *New York Times* best-selling books on the digital economy—*The Long Tail: Why the Future of Business Is Selling Less of More* and *Free: How Today's Smartest Businesses Profit by Giving Something for Nothing*. In 2009, he made the move from keen observer to hands-on player and maker when he cofounded 3D Robotics, a company that makes unmanned aerial vehicle (UAV) technology—that is, drones. His career change followed the release of his book *Makers: The New Industrial Revolution*, which describes how technology is transforming manufacturing.

Chris sat down with Ralf Dreischmeier, a senior partner and managing director in BCG's London office and global leader of the firm's Technology Advantage practice, to discuss the role of communities in driving innovation. The two also examine how companies that are accustomed to operating in traditional ways can harness this disruptive force. Edited excerpts of their conversation follow.

Chris, let's just dive straight in and talk a little bit about disruptive technologies—an issue that I think you are very familiar with since you've lived through this quite a few times. What would you tell business leaders in today's world about how can they deal with the fundamental changes that technology brings to their business?

Well, the easiest way to deal with them is to embrace them. The disruptive technologies tend to be driven more just by Moore's law—

CHRIS ANDERSON

Chris Anderson cofounded 3D Robotics, a maker of drones, in 2009 and has served as its CEO since December 2012. Before assuming that role, he was the editor-in-chief of *Wired* from 2001 to 2012 and a writer and editor for the *Economist* from 1994 to 2001; he has also held writing positions at *Science* and *Nature*. Chris has published widely on business, including two *New York Times* best-selling books on the digital economy: *The Long Tail: Why the Future of Business Is Selling Less of More* and *Free: How Today's Smartest Businesses Profit by Giving Something for Nothing*. He holds a bachelor of science degree in physics from George Washington University.

that things get cheaper and easier and the barriers to entry fall. As a result, you have new entrants: you have start-ups, entrepreneurs, and even amateurs entering markets. I came from the media industry, which was fundamentally disrupted by the Web since its barriers to entry are zero. Once that technology trend puts powerful tools in the hands of regular people, disruption is going to happen regardless of what you do.

Tell us a little bit about your company and describe what you

are doing differently to really leverage and harness this technology disruption that's going on.

A year and a half ago, I was the editor of *Wired*, and now I run America's largest drone company, which has, among other things, a Tijuana drone factory. It's a very mysterious leap unless you look into it further. The reason a media guy is able to run an aerospace company is that running an aerospace company has gotten a lot easier. Our company was not intended to be a company. It was started as a hobby. Then it became a community, something called DIY Drones. Then that community started creating innovations, autopilot software, etc. And then that community started growing. People said, "Can we just buy the drones?" and an opportunity arose to make the things that the community was inventing.

In the old days, building a factory was a hard thing. You had to get funding and actually build a factory. These days, the technology of manufacturing has gotten to the point that it's so automated and it's so inexpensive that you can either outsource it through cloud manufacturing, or you can buy the necessary components from eBay, which is what my partner, a 19-year-old from Tijuana, did. He was able to basically buy pick-and-place machines from eBay, download the manual from Google, teach himself how to use them, hire people, and grow organically with no funding, to the point that we were making tens of thousands of these things.

Then at that point, when we did raise venture capital, we were able to scale up to a really quite large operation, again with no traditional training in aerospace whatsoever.

I guess one could argue that you started from scratch. You started DIY Drones as a hobby, and therefore—although building a community was, I'm sure, not easy—there was a different starting point. What do industry conglomerates do? What do large manufacturing companies do if they clearly see this opportunity and can see that it can create value in a very different way?

There is a fundamental DNA path dependency here. Are you primarily a community or are you primarily a company? The reason you have to ask yourself this is because sooner or later the two will come in conflict. We are primarily a community. Every day, we make

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decisions that disadvantage the company to bring advantage to the community. We did this on the advice of one of our advisors, Matt Mullenweg, the CEO of WordPress. He said, "Whenever this moment comes up, always bet on the community, because that's the difference between long-term thinking and short-term thinking."

The company's interests are for the short term. The community's interests are for the long term. If you get the community right, opportunities will present themselves for the company. If you get the community wrong, the engine of innovation will dissolve, and then you won't have a company anymore. Stop running the company the way you always have. Instead, you're telling the lawyers to stand down. You're telling the IP team to stand down. You're telling the licensing team to stand down.

You're telling all kinds of people who have been used to working in secret to gain competitive advantage to stop doing that, and to become transparent and open. It's just really, really hard.

I think we've seen some examples of companies that have built teams and said, "Your job is to be open and community. You're not representing the company. You're representing the community. Go out and prosper." And that has won in some instances—the so-called skunk works model. In other cases, companies decide that's just too much. They can't open up the whole thing, but they create a layer, a platform, as Apple did with its App Store. They're superclosed be-

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low and superclosed above, but there's this one layer where anybody can do anything, as long as it's approved.

What is the leadership model in a community world?

You know, that is the most important thing. Everyone thinks that communities are emergent and self-organizing, and it's nothing of the sort. The communities need more leadership, not less. In a company—with traditional roles, responsibilities, chain of command, and divisions—it's a lot like, "This is your job, you're paid a salary, go do your job." And people will show up every day because they have an obligation to the company to do so.

With communities, of course, it's nothing of the sort. We don't know who these people are. They don't

have jobs. They all have different motivations. None of them have a paycheck as a motivation. They all have strong opinions, and they've come to the project for their own reasons—and, as a result, they want to pursue their own projects.

What you need in these cases is even stronger leadership, even clearer lines of roles and responsibility, demarcations of projects. What we end up doing is building a very traditional leadership structure; although there are no employees, people have assignments. They have milestones. They have responsibilities. They essentially get hired or fired, brought in or not, based on their performance. They're evaluated constantly, unlike employees who might get a performance review once a year. Developers in the open-source community are getting code reviews on a daily basis. If they're found wanting, that becomes very public. What we find is that the more open the community, the more traditional and best-practice the leadership model has to be. At the top of every one of these communities is a benevolent dictator.

Let's come back to our incumbents. Clearly there are examples like Apple that will build open-innovation-type layers with kind of a community structure. If you translate that type of world into the world of manufacturing and industrial goods, where do you see opportunities for companies, for incumbents, to create these layers of open innovation, these layers of communities?

I think one of the lessons we're learning from the smartphone era is the importance of platforms. All hardware these days has some software in it. Increasingly, everything has sensors and is connected to the Internet; all these things are talking to one another, and they tend to use common standards. What you're finding is that what used to be stand-alone hardware is now part of the network. The moment something becomes part of a network, network effects kick in and there's an advantage in having a platform and in having a standard that other people can work with—or perhaps in joining an existing standard. What we're finding is that any company that traditionally shipped a product is now shipping part of an ecosystem. Let's say you're shipping consumer electronics to the home. These used to be stand-alone things. Now they're all connected things. The question is, are you going to set the standard or are you going to embrace somebody else's standard? One way or another, being part of a platform allows a product to become a service—and that service to become an ecosystem, and that ecosystem to become a community. That single product gets better every day because the software, content, and data that come into it get better.

How do you see this evolving? Are the community-driven companies going to win?

Community-driven companies will always win. Basically, it's very difficult to touch proprietary software anymore. When I use my phone, my open-source operating system is communicating with an open-source Web server and open-source databases going to open-source content-management systems to open-source browsers. It's really hard, at least in the digital world, to not see community-driven companies winning. Increasingly, the difference between software and hardware is blurring. Now you take this to your physical devices. You take it to your home. Increasingly, you take it to your car. My autonomous electric car is not quite yet in my garage, but when it is, I think it will look more like what I describe than my current Toyota does.

I think that it's very hard to find industries in which community-driven companies won't ultimately win.

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