McKinsey&Company

Inside the mind of a venture capitalist

August 2016

Draper Fisher Jurvetson partner Steve Jurvetson reveals what he looks for in entrepreneurs and explains how large companies can respond to disruption.

What do venture-capital firms look for when they back entrepreneurs? With billions of dollars flowing into start-ups around the world, that question has never been more important, nor the answer more consequential. Silicon Valley venture-capital powerhouse Draper Fisher Jurvetson has backed almost two dozen unicorns—start-ups valued at more than \$1 billion—including Box, Skype, Tumblr, and Twitter. In this interview, one of the VC firm's founding partners, Steve Jurvetson, tells McKinsey's Michael Chui what he looks for when he makes investment decisions, what he considers hot sectors, and what could be the biggest start-up of all: space. An edited transcript of their conversation follows.

What venture capitalists want

I like to invest in entrepreneurs who have this infectious enthusiasm. This starts with people—people like Elon Musk—who can convince you that whatever they're working on is going to work. Usually, this has to be in some sector of the economy that we feel is going to experience rapid growth, that's in a period of massive disruptive change.

In the '90s, that meant software and semiconductors and biotech. Then it morphed. Today, it's a wide range of industries, from synthetic biology to rockets to electric cars to a variety of sectors that weren't ripe for venture investment in prior decades but now are becoming software businesses. As they do, we find that they're going through profound change. And whenever there's profound change, that's great for start-ups.

Only investing in things unlike anything I've seen before always gets me searching outward from a comfortable core toward something new, something different. These things tend to correlate with those crazy ideas that actually do change the world, because the ones that succeed dramatically were never uniformly considered good ideas at their onset.

If a few people passionately think that something is the future, and a large number of people think it's absolutely harebrained and will never work, that's a good sign. I also try to find attributes and people somewhat similar to what I look for in the team at work: enough self-confidence to be humble about what it's proposing and respect for the team over individuals, as opposed to the cult of a single CEO running a company.

What are the hot sectors?

Then the interesting question is, well, which sectors? We look at how Moore's law is percolating into new industries and turning them from industrial, crappy, lowest-gross-margin businesses into software-centric, rapidly innovating, exciting businesses. Think of the transition that Tesla brought to the automobile industry or SpaceX to the military-industrial complex or Planet Labs to satellites.

In all cases, those industries hadn't seen a new entrant for decades—literally decades. There hadn't been an automotive IPO in America since Henry Ford. Then the next one, Tesla. Believe me, many investments in-between failed. A proven bad sector. But it's different now; it's a software-centric industry. Over time, it's been transformed by an entirely different pace of product enhancements pushed over the cloud-service layer.

Sometimes we'll see a process of innovation that spans many industries—for example, the application of deep learning and machine learning to just about everything. This was a very geeky subject just a couple of years ago. Only a few people in image recognition at Google and a handful of other companies would have known much about it and would have been applying it routinely to their products.

These techniques are going to percolate out into almost every industry because they embody a fundamentally different way to do engineering. If our minds are prepared for that, then we can look for a variety of companies—in radically different industries, which may not seem to have anything to do with each other—and spot opportunities others wouldn't spot at that process layer.

How should large companies respond?

If I was a senior executive at a large company, my first worry would be that it's a precarious place. Just about every large company should wonder how long it's going to last, and that should be measured in decades at most.

The reason is that the pace of change in technology is ever accelerating and subsumes almost every industry over time. You can see the wreckage in the telecom and other sectors but think, "oh, that won't happen in my sector, because I have all kinds of"—who knows what? Unfair competitive advantages and monopoly positions and "hey, I'm the only game in town." This is all going to change, and it will be new entrants that lead the change.

The large companies that are most exciting to me are the ones that innovate outside their core. Think of Apple and everything it's done over the last decade or two. These things were not in what had been core businesses previously, right?

The innovations were in what initially hadn't been Apple's core businesses—in music and phones. In retrospect, this all seems to be a brilliant and unified and digital convergence of media. But at the time, everyone thought Apple was completely off its rocker—everyone would have copied it if this had been the obvious strategy.

My point is that big companies will never do something substantial or worth thinking about or worth writing a history book about in their core businesses. What is meaningful innovation? It's often synonymous with disruption, meaning that something has changed. It isn't business as usual. It isn't an incremental improvement of 10 percent in some process every year. It's "wow—we finally freed ourselves from gasoline in the automobile industry." An existing automobile company won't do this. But the beauty is that it doesn't mean big companies are dead; it just means big companies need to innovate outside their core businesses.

The biggest start-up: Space

What kid doesn't want to go to space? The question: is it safe, is it cost effective? When we grew up in the '60s—those of us who did, of course—it was dangerous, and you had to be a fighter pilot, you had to do the training. But in the future, you'll just jump on a robot.

A SpaceX spacecraft is a robot in space—the astronaut sits back and has a great ride. There's seven Recaro-style seats; you just go for a ride. A seven-person jet is pretty expensive to fly around the world. There's no fundamental reason rockets should be more expensive than air flight, and the only reason they are today is that we throw away the rocket after every one-way flight. That's insane.

SpaceX will soon succeed in recovering the booster—that's been a long-predicted outcome, even dating back to Arthur Clarke in 1969. If you can do that, space flight should be as cheap as air flight. That will change everything. It will be as frequent as air flight and, soon, as safe and as much fun.

Steve Jurvetson is a partner at Draper Fisher Jurvetson. **Michael Chui,** based in McKinsey's San Francisco office, is a partner at the McKinsey Global Institute.