

# Anatomy of a unicorn: Why tech start-ups are staying private

July 2016

Up-and-coming technology companies are no longer racing to list their shares on public markets. A massive increase in late-stage venture capital has enabled many start-ups to reach valuations of more than \$1 billion while remaining in private hands.

**Will the tech unicorn** go the way of the dodo? It depends on a number of factors. In this episode of the *McKinsey Podcast*, McKinsey partners David Cogman and Kara Sprague talk with McKinsey's Simon London about why dozens of billion-dollar technology start-ups in Silicon Valley and elsewhere are choosing not to go public—and whether the unicorn phenomenon is cyclical or here to stay. An edited transcript of their conversation follows.

## Podcast transcript

**Simon London:** Welcome to this episode of the *McKinsey Podcast*. I'm Simon London, an editor with McKinsey Publishing. Today we're going to be talking about unicorns, the new breed of companies valued at a billion dollars or more, but which remain in private hands. The first unicorn didn't appear until 2009. But today, there are more than 100 worldwide.

To discuss the issues, I'm joined today by Kara Sprague, a McKinsey partner based in San Francisco, and also by David Cogman, a partner based in Hong Kong. Kara and David, thanks for joining today.

**Kara Sprague:** Thank you, Simon. Looking forward to it.

**David Cogman:** Thank you, Simon.

**Simon London:** Perhaps we should start by defining our terms. Kara, could you tell us more about these unicorns? How many are there? Where are they based? And what kind of businesses are they in?

**Kara Sprague:** As you said in your introduction, Simon, there are more than 100. The latest count from CB Insights says there's 164.<sup>1</sup> This rate of growth and the number of unicorns is actually quite fast. When we last looked, at the end of last year, there were 146. Most of them are based in the United States or China. But there are also some that you could find in India, Germany, and elsewhere around the world. The list includes many familiar names like Airbnb, Uber, SpaceX, but also some names that many probably haven't heard of. For example, companies like Tanium, which specializes in IT security, or MongoDB, which works on databases.

What they all have in common, as you mentioned, is that they are worth more than \$1 billion in value. And they remain in private hands. There's even some of these unicorns that we could call decacorns, which are worth more than \$10 billion in value.

**Simon London:** David, from a China perspective, what jumps out at you at the list of unicorns?

**David Cogman:** A bit under a third of the companies are China based, but you look at the type of companies you have there and it's actually quite a bit different from what you would see in the US. The US tech sector tends to be a lot more, if you like, "real" tech.

Whereas what you have in the China tech sector is a lot more intimate, and a lot more, if you like, sort of reseller business models. So, companies that are providing intermediation through a service. Things like social media—e-commerce is obviously a very big issue. E-commerce in China is absolutely huge. It's a massive market, and much, much better developed than most other countries right now, including the US.

So you have a slightly different mix of types of companies. The China Internet sector itself is, in a way, fundamentally different than the US because it's basically dominated by three behemoths that function as platforms. The end game for a lot of the Chinese start-ups—well, not just the end game, but right from the outset many of them want to be on one of those platforms, and on two of those platforms, and potentially acquired by them at the end of the day. It's a lot more organized around that exit route than perhaps the US would be

**Kara Sprague:** If you look at the range and variety of the unicorns in the United States, it's just much broader. For example, we talked about Uber and Airbnb, which are representative of these sharing-economy companies. You see many of those also popping up in international markets.

But also in the United States, you see a number of these security players. I already mentioned one. You see Palantir, for example, doing things in advanced analytics. There's Stripe in payments, there's Slack in collaboration software. So the variety of what is making it and scaling to \$1 billion is just much broader.

<sup>1</sup> The CB Insights list of unicorns is updated in real-time. The current number may not match the one mentioned in this interview, which was conducted in May 2016.

**Simon London:** OK. Obviously these are some pretty big companies. And in some cases, they are pretty well-known brands. The obvious question is why are they still in private hands?

**David Cogman:** Fundamentally, they've taken the decision to stay private for longer because that was possible. It wasn't possible 10 years ago or 15 years ago. They'd hit a point where they had to go to public funding because they just couldn't continue to finance themselves and finance their growth.

Now that there is a substantial amount of capital aimed at the late-stage sector, that allows them to stay private for longer. In the venture-capital sector itself, you've got unprecedented levels of fundraising. A few hundred billion of uninvested funds sitting there, and it has to be deployed. Now, venture capital is fundamentally a bit of a cottage industry. It doesn't scale very well. It's all based on a small group of people searching for opportunities in a defined area, industry or geographic.

That's put more pressure to get money into investments. But I think what's really changed the game has been the entry of a lot of money from outside the traditional venture-capital industry. So, buyout funds looking to get into late-stage limited partners, pension funds and so forth who want to do pre-IPO investments into some of these more prestigious companies like Facebook.

The numbers in those industries absolutely dwarf what you've got in the venture-capital industry itself. You've got something close to about \$1 trillion that's getting recommitted into private-equity funds at the moment. Then if you look at the broader limited-partner industry itself, there's \$30-odd trillion of capital in that.

**Simon London:** If we're advising these kind of companies, what do we tell them about how to think about an IPO strategically? When's the right time to do it? And indeed, are there types of companies for whom, frankly, it may never make sense?

**Kara Sprague:** The way I like to think about this is, think about your growth and acts. For example, a tech company starts out in a prelude, and that's when tech companies are searching for the thing that's going to be able to scale to material customers.

Think about it as them searching for their first real product offering that could be repeatable and sold to a number of players. When they finally find that, that would be their act one. Now, act one, depending on the market you pick, will last only so long. If you're Google, and your act one is search, it'll last for a very long time. But if you're a smaller company or a company that's picked a much more reduced scope, so for example GoPro, they picked a much smaller market, your act one isn't going to last very long. Once you think about how far your act one can go, it's a question of when do you start having to think about your act two.

My advice in terms of thinking about what's an ideal time for a company to do an IPO is thinking about, are we in a stable period for our act one? Meaning, I don't want to go public and then have everything become unstable because I haven't figured out what my next growth platform is. At the same time, you don't want to go public when you're still trying to figure out what that scalable model is, which is why many companies are waiting longer and longer.

**David Cogman:** When you think about why you actually need to have a public listing, you bear in mind that the listing process itself and then maintaining your listing is painful. It imposes real costs on the company, not just disclosure of information but directors' liability and so forth.

There's a lot of overhead that goes with having a listing, so why do you need one? In some cases, it's so that you can use your equity as currency for acquisitions. But obviously, if you have a near-unlimited supply of funders pre-IPO, that's less of a consideration.

It can be to give liquidity to employees who hold significant stock holdings, which is possible but harder to do when you're pre-IPO. So there are a few motivations for why you might do it. There are some companies for whom the considerations of privacy and avoiding transparency can be enough to outweigh this indefinitely. But typically those aren't so much in the tech space.

You see companies say in the commodity trading space that, "We'll never go public." They're very big companies but will never go public because they just don't want the scrutiny that the public markets would bring. If you're talking about a company never going public, that's quite a different proposition from what you see in the late-stage tech space now. The reason that these guys are able to get a lot of pre-IPO investors for a very long time is because the pre-IPO investors eventually expect an IPO.

It would have been very hard for Facebook to raise so much pre-IPO money if it had turned around and said, "Hey, by the way, there's never going to be an IPO. That's it. You're going to get dividends." If you say, "We're never going to go public," that actually changes the proposition of the company to its employees and to all of its stakeholders and partners. That almost requires a societal consensus within the company that they're not going to do that. There are very few companies that have done it, but it's just not very easy to do and not very popular.

**Simon London:** Why don't we talk a little bit about the public markets. Let's assume that most of these unicorns, they're either going to be acquired or they are going to IPO at some point. How do public markets view technology companies, particularly smaller, faster-growing technology companies at the moment? Are there frothy valuations out there? Or is a little more serene?

**Kara Sprague:** At least in the United States, it has been frothy, I would say through 2015. In general, we saw a bit of a correction in the early part of 2016 with a number of stocks seeing anywhere from 20 percent to 40 percent reductions. Many of those have not yet rebounded from that.

At this point, if you look at the relative valuations, they look reasonably solid, at least in the public market. In the United States, while I said we had some inflation going through 2015, where the inflation was the strongest was in the private market where we already talked about the huge influx of private capital.

**David Cogman:** If you look at everyone, excluding China, valuations in aggregate seem fairly reasonable. And yes, a lot of the start-ups come to the market with quite high valuations, but the track record of the unicorns that have gone IPO is actually pretty poor.

Most of them have traded down fairly significantly after their IPOs. The big glaring exception, as is often the case in equity-market valuations, is China, where the market as a whole, and particularly the tech sector, is extremely expensive. That's a combination of a couple of things.

You get a differential premium in China between private companies and state-owned enterprises. That premium has widened significantly over the past couple of years. Within that, the tech sector in China tends to get the very, very aggressive premiums.

**Simon London:** If we exclude China, let's just say, as is so often the case, we need to exclude China. But elsewhere in the world, public-market valuations of tech companies are not particularly high at the moment by historic standards. Yet, we have what you say is this wall of money in private markets. Presumably, the sort of valuations between public and private markets will need to close at some point. Is that right? And how might it happen?

**Kara Sprague:** Simon, this is exactly the conundrum that a lot of the unicorns and maybe even some of the decacorns have found themselves in. Which is they started in the private market, there was a huge influx of private capital, and they've grown to enormous valuations.

Now they're sitting there looking at a public market that doesn't seem too [welcoming]. So many of them have delayed their IPO. They're continuing with their late-stage rounds trying to raise more capital to fund their business model. While at the same time the late-stage investors increasingly now due to their own accounting restrictions are going back and saying, "Well, we're going to have to knock a few billion dollars off of the valuation because it doesn't suit or it doesn't fit comps in the public market."

I talked about a correction that we saw in the US public market in the early parts of 2016. There's a similar correction going on in the private market with a number of the institutional investors knocking off the valuation of several of their unicorn investments.

**David Cogman:** This is a very important point because the types of new investors who have come into the late-stage sector, institution investors and so forth, they have obvious responsibilities, many of them, as public funds to market. They're a lot more focused on looking at the value of their investments in terms of what they'll get when they exit and how they can exit and so forth. They're ultimately tied to using public-market benchmarks in thinking about the value of what they've got on their funds.

The vast majority of these companies will ultimately have to IPO, in that you can't think that there's going to be 100 or so megacompanies like this that all decide to never go IPO and the funding will be there indefinitely. That's just not going to happen. And as you say, Simon, public markets have been, for the most part, eminently reasonable in how they valued the sector ever since 2001, 2002, when we had the last tech bubble, which is interesting because at that time the valuations in the public markets were very aggressive and private markets were much more conservative. So most of these companies will eventually have to IPO or they will die off.

If you believe in history, then the majority of these 100 or so unicorns will not make it in some form. Either get acquired or fold. We're starting to see this with a few of them already. It will be interesting to see how that process plays out.

**Simon London:** Kara, I know you and the team have done quite a lot of work looking at high-growth tech companies, their life cycles, success rates, those that make it, and those don't. Based on what we've seen historically, how many of these companies are likely to make it to an even grander established position? And what marks out those who will make it?

**Kara Sprague:** It is interesting, Simon. We've taken a look at public software companies going back to 1980 and done research on that data set. What we found was the number one factor that drives success being growth and survivability for a software company is the growth rate.

For example, companies that were in a category we call super growers, which is growing greater than 50 percent CAGR<sup>2</sup> year over year at the time they hit \$100 million. Those guys only have a crapshoot of making it to a billion. So a 50 percent shot. Whereas companies in other categories, for example, growing between 10 percent and 50 percent CAGR, it was a much, much lower survivability rate, on the order of 10 percent to 15 percent.

Then it even falls farther if you go into companies growing less than 10 percent. So growth in terms of whether a company is going to make it to be one of these large software companies is super, super critical.

One of the underlying bylines in Silicon Valley for many of these companies is do we take our extra dollar and do we try and show that we can be profitable? Or do we invest it back into sales that we continue to grow fast?

<sup>2</sup>Compound annual growth rate.

And many of them have conversations ongoing with their boards and with their investors about what's the right mix. You have anything from a model like certain companies where, for example, their sales and marketing expense is something like 60 percent to 70 percent of their total revenue and they're hitting way negative in terms of their operating profit.

A few other companies are applauding them and patting themselves on the back because they've managed to break even. Yet their growth rate is something down around 30 percent. The question is, which company looks like a better investment?

**David Cogman:** The last time I was living in Silicon Valley was 2001, which is ancient history by current standards. Those were the days of companies like Pets.com and Webvan and so forth, which you don't hear so much about these days.

But at that point, there was this idea that it was all about top-line growth. And frankly, who cares about breakeven and profitability? It's just a sprint to get as big as you can as fast as you can. As you'll recall, at the time, that was ridiculed by a lot of the more traditional investment community, who said, "Why would you run a company like that? That's value destructive."

Then I moved to China, and the whole concept of the land grab, and get big fast and figure out how to be profitable later was not at all a controversial idea. Even today, it isn't a controversial idea. Not just in the tech sector in China, but, frankly, everywhere in China.

When you're talking about anything multiplied by 1.5 billion people, then the correct thing to do is always to get big first. That was never even a debate. You look at the Internet companies and how they scaled up in China, and it was growth, growth, growth for as many years as possible. Profitability was always something that could come later. In retrospect, that was absolutely the right thing to do.

**Kara Sprague:** In general, I would say yes, it's the right thing to do. As long as on paper you have some path to showing a business model that's profitable. The reason why people still remember and talk about things like Pets.com is because the business model itself never made sense, and there was no way for anybody to make it make sense.

You do see a bit of that frothiness. And some of it came back in 2015 when a bunch of new start-ups were looking at ideas to deliver very, very low-expense commodity items for free. You have to look at that and say, at what point are they going to be able to make up the cost of the actual diversity?

So I do think there has to still be a pragmatic lens on a business in terms of eventually there being a path to every dollar of revenue having to yield some amount of profit. Then you have to be clear on what is the incremental investment we're putting into doing customer acquisition. And will it pay off in the long term?

**David Cogman:** Absolutely. It would be irresponsible of me as a supposed corporate finance guy to say that having a path to profitability was not important. Pets.com obviously was one of the more egregious examples of that era. This is obviously critically important for the investors in the companies involved. But it's important to try and put this in context a bit. Through January, February [2016], in the equity markets, we lost more money in just those two months than is invested in the entire venture sector at all. So in the broader scheme of things, if your concern was around economically efficient allocation of capital, you would care a lot about valuations in the public markets being right because that applies to a much larger base of companies.

And you'd probably care less about valuations in the private markets, being a little bit optimistic maybe for a short period of time, since these things tend to correct anyway and because the stock of capital that applies is much smaller by comparison.

**Simon London:** So let's assume that we're sitting in the boardroom of one of these unicorn companies. How should we think about the dynamic that's playing out here and our decision whether to list or when to list?

**Kara Sprague:** For many of these companies, there's now a long line of these unicorns whose stated objective is eventually to go public. Yet they're looking at a public market that doesn't look very appealing right now. Many of them have seen the history where some 40 percent of unicorns that have gone public over the past several years have actually lost money through their IPO.

It just doesn't look like an appealing future, so those companies are going to continue to need cash to fuel their growth because many of these companies have not implemented a lot of financial discipline and thus are losing money every month, every year.

They're going to continue to have to go back to the investor base to try and find more investment. One thing that they can think about, especially as they're in some of their later rounds, would be considering taking a more moderate valuation, not a down round so to speak, but more moderate valuation in terms of don't take the most that's given to you.

Or alternatively, look at other things such as venture debt. Just consider the range of different options in terms of funding that growth while they're waiting for the public markets to become a bit hot again.

**Simon London:** And David, as a corporate finance wonk, would you add anything to that?

**David Cogman:** That's all very good advice. What I'd add is you look at the amount of capital in the limited-partner industry right now and how much there's going to be for the next few years. There will continue to be a lot of liquidity. So it will continue to be possible for the respected and prominent companies to do this.

While the music's still playing, why wouldn't you keep dancing? That said, once you get to this scale as a company, if you were going public, then the public markets and that process would force on you a whole set of disciplines about how you run the company, which no one likes, but they're inevitable and necessary.

Like thinking more systematically about your investments, your use of capital, your cost base and so forth. And, you know, if you're making the conscious decision to stay private for a bit longer, you shouldn't duck those changes. You should be embracing them so that when the point comes that you do go public, it's maybe less of a painful transition than it otherwise would have been.

**Simon London:** OK. And how about the future of unicorns? If we cast ourselves forward by a few years, are we expecting 1,000 unicorns? It sounds like that there is plenty of private money out there. Or do we think that this is actually a somewhat cyclical situation caused by the slight mismatch perhaps between public market and private capital valuations? Is it always going to be a relatively small pool of companies? Kara, what do you think?

**Kara Sprague:** I don't know if we'll see 1,000. But just given the fact that we have grown from about 146 at the end of 2015 to already 164 in a market that everybody recognizes has cooled substantially are signs that that number is probably going to continue to grow.

The dynamics in terms of the institutional investors that weren't previously getting in on the private-tech game, they are still going to continue to put money into that. Similarly, I don't foresee any major law change again that would reduce the number of investors allowed to these companies. And so the fundamental dynamics that gave birth to the unicorns are still there.

**David Cogman:** I think the phenomenon's here to stay. But we could go in one of a couple of directions. One is that the new investors in the late-stage space reflect on what's happened and eventually come back and say, "OK, guys, we're happy with billion-dollar valuations for companies that have made it and are successful."

But you look at the existing list of unicorns and it contains a number of companies that have not yet made it and probably won't be successful. So you could see it being pared back a little bit from where we are now. The other possibility is that, collectively we get comfortable with the idea of \$1 billion speculative invests that may not make it and accept that there'll be a certain failure rate. In which case, then, in a few years' time, I'd expect there to be a lot more than there are today.

**Simon London:** All right. Thank you very much, Kara Sprague in San Francisco and David Cogman in Hong Kong. Thanks for this fascinating conversation. □

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