The Tall Task of Getting Big Companies and Government to Innovate Like Lean Startups: Interview with Steve Blank

Steve Blank has been at the epicenter of the ‘lean startup’ movement since he ignited it in 2006 with his book *The Four Steps to the Epiphany*. A Silicon Valley entrepreneur for 21 years who founded or was involved in the launch of eight technology startups (both successes and failures), Blank left that world in 1999 to teach and consult on startups.

Today, Blank’s Lean LaunchPad approach (which he teaches at Stanford University, the University of California, Berkeley, and Columbia University) is taught at more than 75 universities worldwide. What’s more, lean startup methods have been embraced by a number of government and scientific organizations. Blank’s Stanford class became the curriculum for the National Science Foundation Innovation Corps in 2011; since that time, over a thousand scientists and engineers have taken the course to help commercialize their ideas. Blank also co-created the Hacking for Defense and Hacking for Diplomacy programs, which use lean startup methods to address critical national security problems. You can read his extensive writings at www.steveblank.com.

At the turn of the century, one of Blank’s students was Eric Ries, who launched two companies that Blank had funded. The first practitioner of Blank’s lean startup method, Ries took the concept mainstream after publishing two books, *The Lean Startup* and *The Startup Way*. 
From his Silicon Valley outpost, Blank has continued to publish books about lean startup methods as well, including the bestselling *Startup Owner’s Manual* (co-authored with Bob Dorf). In addition, Blank has been an author or co-author of eight *Harvard Business Review* articles, including a May 2013 cover article (‘Why the Lean Start-Up Changes Everything’23) and an article in *HBR*’s November–December 2017 print edition (‘When Founders Go Too Far’24).

He recently talked about his lean startup principles, the reasons why big, established companies, and government agencies need to adopt them, and the challenges they’ve had in trying to do so.

**TCS:** Your ideas around the lean startup have jumped the tracks from the startup world to the big-company world and to the government. But before you talk about how large organizations are using them, take us back to the evolution of the ideas.

**Steve Blank:** It started just from a very personal basis. I was a serial entrepreneur. I did eight startups in 21 years and retired in ’99. When you’re a practitioner, you don’t have time to think about big picture stuff; you just do what you are told. If you’re lucky and good, you get to do it again.

When I retired, I started thinking about the innovation of entrepreneurship. It struck me that in the 20th century, startup investors treated startups like they were nothing more than smaller versions of large companies. It was a big idea.

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What [startup investors] essentially said was, “If big companies are doing [business] plans, we want a plan. Big companies do five-year forecasts, so obviously before we invest we need to see the forecast.” And “Big companies hire sales, marketing, and [business development] people on Day 1, that’s what we want you, the startup, to do.” And “Big companies build their products with waterfall engineering, which is a serial process that specifies all the features and then works for the next year or two to delivering them for Release 1.0.”

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But it wasn’t until I retired and started thinking about this that I realized it was wrong—big time! Startups are not smaller versions of large companies. Large companies are large because they execute a known business model. A known business model is 95% of what large companies do. It’s “Gee, we know our channel, we know our customers, we know our pricing, we know our competitors, we know lots of stuff.” And most of this stuff is continuing to fill the pipeline with product line extensions and new features, painting it blue or whatever. That is a known business model.
By contrast, startups have very few things that are known. Startups are searching for a business model. Yet business schools have built 100 years of tools and techniques for executing known business models of existing companies. Remember, business schools were designed to graduate people with degrees in business administration. Therefore, we were building tools to help those administrators. But no one had consciously said that perhaps we need a management toolset in a management stack for innovators. It didn’t exist. The language barely existed.

So I started reading all the literature about innovation. The irony here was that very little literature existed about startups. There was literature about corporate innovation—Rita McGrath stuff, Clayton Christensen stuff, and so on. But I felt it was about innovation in the context of environment that was primarily focused on execution.

To make a long story short, I wrote The Four Steps to the Epiphany. That was the first time anyone ever described the difference between search (startups) and execution (existing companies). That kicked off the lean startup movement by describing one of the three components of lean: the customer development process. I said a startup has no facts about real customers when the people in that startup stay inside their building. Therefore, they need to get the heck outside.

Then one of my students, Eric Ries, said, “Steve, you grew up in the 20th century with waterfall engineering, where products were built serially, but startups are now using something called agile engineering, where they’re building the products iteratively and incrementally. That is a perfect fit for customer development. So why don’t we combine customer development and agile engineering.”

Then I ran into someone named Alexander Osterwalder, who had figured out how to map a 40-page business plans into a single diagram called the business model canvas. So I adopted Osterwalder’s canvas as a living scorecard for first articulating the hypotheses a
startup needs to test, and then to keep track of what they learned—using my customer development process, as well as to test the minimal viable products we were building using Eric’s agile engineering method.

Those three components—business model design, customer development, and agile engineering—became the lean startup.

One key idea of this lean method was this notion that we’re learning new things as we talk to customers and test minimum viable products. And as we learn, we give startups permission to make substantive changes to their business model. These changes are called a pivot. It’s hard to remember, but in the old days—and this still happens in corporations—once your plan is blessed, any deviation is considered a failure instead of as learning.

Geez! What were we thinking?

**TCS:** So the venture capitalists in Silicon Valley in the 1980s and ’90s got nervous if the founders changed their initial business model.

**Blank:** Yeah, and [when that happened] they fired the founders. Any failure was treated as a failure of the individuals, not a failure of the initial hypothesis or assumptions. That’s a huge idea. Huge. Their belief was, “There can be nothing wrong with the plan. I funded it! It must be an execution problem.”

By the way, it wasn’t that the founders were always right. But there was no notion that they needed to be testing and exploring their [company’s] hypotheses—about customers, about features wanted, about pricing, channel, etc. … The other problem was that we started staffing and building a burn rate per the business plan. I remember being in companies where the only thing that [went according to] plan was our burn rate! You kind of go, “I don’t think this is right,” even though you got three-quarters of the plan correct.

So I said, “What’s wrong with this movie?”
TCS: When you stopped launching companies in 1999, venture capital was abundant. So perhaps the VCs were not too worried about many of their portfolio companies failing, as long as they had a few winners that more than made up for the losers.

Blank: During the last dot-com boom (around 1999), we didn’t need any of this [lean startup] stuff because we had infinite cash. Post dot-com crash, people were being pretty judicious about time and resources, and lean made all the sense in the world. The irony is that now with funds like Sequoia and even more so like Softbank, [having huge funds] makes up for everything. Their approach is “It doesn’t matter, I’ll buy my way in.”

The irony is that the need for lean has now moved from startups, which had to be judicious with cash, to [established] corporations, which are actually much more threatened than startups.

The real surprise for me is that some startups now have more capital than large corporations.

Herein lies the opportunity of using lean startup approaches in corporations. Big companies that survive are no longer just delivering what McKinsey called Horizon One innovation (incremental features, colors,
supply chain efficiencies, and so on), and Horizon Two innovation (satisfying the needs of existing customers with new products). The ones that are going to stay in business are now acting like startups by delivering what McKinsey 30 years ago called the third horizon of innovation—i.e., disruption. Apple, the computer company, getting into music. Amazon, the ecommerce company, buying Whole Foods.

Large corporations have great managers dealing with Horizon One and Two types of innovation. The problem is they are facing continuous disruption; they have Horizon Three problems now, but the wrong leadership to deal with them. If you got your MBA more than three years ago, everything you know about innovation is obsolete.

For the first time in the history of corporations, [established] companies are not setting the rules. The rules are changing rapidly. That’s why you see all this M&A activity and people just trying to figure out what the new rules are. There is probably more innovation and creative disruption right now of corporations since maybe in the gilded age in the U.S. [the late 1800s].

**TCS:** So largely speaking, how have large companies reacted to the lean startup ideas since you started publishing them?

**Blank:** Between my work and Eric Ries’ work [who in his book wrote about their application at GE and Procter & Gamble], there has been recognition and adoption at various levels. But it’s hard to turn super tankers. Remember, large corporations can innovate not only by using lean methodologies to build internal innovation; they can also buy companies.
TCS: What are the biggest challenges large companies face in adopting lean startup approaches?

Blank: It’s the other way around. The issue is not about adoption of lean. The issue is about dealing with continuous disruption. Lean is just a tool in a tool set. It is not the answer. It is a component of this: “How do I change the engines of the plane while it’s in flight? Am I reconfiguring the product line? Am I going digital? Am I changing channels? Am I reinventing the company? And am I willing to bet my job, and is my strategy aligned with my investors and my board?”

TCS: So what five years after Harvard Business Review published your article on the lean startup, are big companies doing enough to make their ventures lean?

Blank: I keep telling [HBR] they ought to be writing the article, “Why the Lean Startup Changed Nothing.” [He laughs] [The article] mostly resulted in innovation theater: a set of activities, typically like incubators and accelerators inside a company, that generate great coffee cups, posters, and lanyards, and almost nothing else. My test [for their effectiveness] is this: Did it move the top or bottom line? What I often get back is, “Let me show you our ‘Dogs at Work Policy.’”

What I’ve learned is that companies don’t just need to build a lean startup process. They need to build an end-to-end innovation pipeline that has a funnel on the left and deliverables on the right. If you don’t know the ratio of funnel ideas to deliverables, you’re going to get it wrong. The big mistake is confusing activities with deliverables. When I ask them about deliverables, the answer for some 90% of them or more is they have none yet.

You’re not going to believe this, but it turns out the people who are doing it right is the U.S. government.

The approach plays out slightly differently for government agencies. But because the government is being disrupted, the consequences are even greater than they are for companies. Macy’s can go out of business in the U.S. and the country will still go on. We can’t afford to have part of our Defense Department go out of business from being disrupted.
They get it. They understand it. Their disruption is pretty clear. In the 20th century, the country was essentially facing a single adversary. Now you need a scorecard. They need to scale [their innovations] to today’s [much higher] number of adversaries. They now realize the answer is not only tech, which is machine learning and robotics and whatever, but also innovation processes that are radically different than the way they’ve been building requirements and acquiring products and services.

The Defense Department has adopted not just lean but this notion of an innovation pipeline incredibly fast. The 2018 National Security Strategy, written by the Secretary of Defense, is probably one of the most important innovation documents so far of the 21st century. It said, “Organize for innovation. The Department’s management structure and processes are not written in stone, they are a means to an end—empowering the warfighter with the knowledge, equipment and support systems to fight and win. Department leaders will adapt their organizational structures to best support the Joint Force. If current structures hinder substantial increases in lethality or performance, it is expected that Service Secretaries and Agency heads will consolidate, eliminate, or restructure as needed. The Department’s leadership is committed to changes in authorities, granting of waivers, and securing external support for streamlining processes and organizations.”

It feels a lot like the lean startup take-up that we had in Silicon Valley. It’s catching on in the U.S. government, and it’s saving lives.