Stanford eCorner

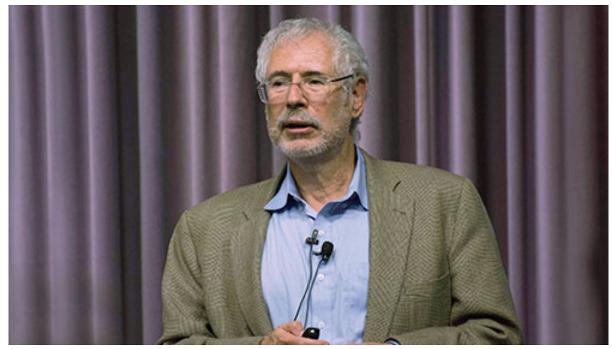
The Principles of Lean

Steve Blank, *Stanford Engineering*

November 09, 2016

Video URL: http://ecorner.stanford.edu/videos/4687/The-Principles-of-Lean

Steve Blank, creator of the Lean LaunchPad approach to entrepreneurship, summarizes the methodology's most important concepts: from the framing of a startup's core hypotheses about commercialization, to testing those assumptions through customer feedback and building a "minimum viable product" that gets improved upon via "agile engineering." Blank, an adjunct professor at Stanford, begins by parsing how established companies and startups plan their business.



Transcript

- So I did eight startups in 21 years, all of them in the 20th century. And the only tool I had as a founder was this thing, anybody recognize this? Says Business Plan. Business Plan was the book when venture capitalists said go write a plan, you kind of looked at what everybody else was doing and basically a business plan was what you thought you were gonna do. And it had a great appendix, Appendix A which had a five year forecast and surprisingly all of them said $100 million by year five. (audience laughing) And in fact, if you really think about it, a business plan still to today makes all the sense in the world for your second, third or fifth product in a large corporation because you have a series of knowns. But a business plan for a startup is really kind of different because in a startup you don't have a series of knowns, you have mostly a series of unknowns. And this is a big idea because the only people in the 20th century to require a five year plan for a series of unknowns were venture capitalists then the Soviet Union. (audience laughing) That's a joke, okay. Write that down. So one of the other things we recognize as entrepreneurs was that no business plan survived first contact with customers yet this was the only tool we had and it kind of made sense because most venture capitalists at the last quarter of the 20th century were either MBAs or financial types and that what they grew up with, and what's interesting was there was clearly no distinction between the tools of what a startup would need versus what a large company would need, we didn't even have a language to distinguish the two.

So when I retired after doing eight of these, I started to contemplate, what worked and what didn't. And what I realized was we never even were able to articulate something as simple as this. Startups Are Not Smaller Versions of Large Companies. This believe it or not, which seems like duh, was a heretical idea 16 years ago. And even more so, this was heretical, Large Companies Execute Known Business Models. Alright, a large company knows it's customers, knows it's competitors, knows it's channel, knows pricing, it knows that 'cause that's how it got large. Yes, stuff will change but yes, we're large because we know all that and we do a great job of executing it. But here was the distinction, startups don't execute known business models, Startups Search for Business Models. This distinction between search and execution in the history of entrepreneurship had never been written down. If you would have asked practitioners, they would have said yeah, we know something's different, we keep getting fired or our company keeps not working but we don't know why.

And the mistake we were making as entrepreneurs were assuming that everything we wrote in that plan, somehow magically translated into facts when all we had were a series of untested hypotheses. And we were failing because we were confusing what we should have been doing which was searching for business models but instead we were executing them. And so I realized that startups needed their own tools, different from those used in existing companies. And so we came up with this idea called the Lean Startup, which is simply a risk reduction methodology for early stage ventures. Nowadays, not only for startups but inside of large companies as well and as you'll see later, inside the government. And the Lean Startup has three simple components, one is let's take all our hypotheses, who are our customers who are the stakeholders, who are the regulators, what are we building for them? What are their needs? What jobs do they want to get done? What pains or gains? This, who are the customer and what are you building are the two most important things in any market you need to figure out and it has a special name called product market fit. The mistake very bright founders make is believing that because you implicitly think you understand the problem on day one, you take some money and you go build the solution and you ship the product. And the smarter you are, the deeper the hole you tend to dig. One of the things I've learned painfully is that as smart as you are, there is no way you're smarter than the collective intelligence of your potential customers and they don't exist inside your building, so therefore there are no facts inside your building so get the heck outside. We use this thing called The Business Model Canvas by Alexander Osterwalder to kind of frame the core commercialization hypotheses early stage ventures need to worry about.

It's not all of them, but it's the core. Customers, value proposition, how you're gonna make money, what are your costs, what are partners, activities, resources, etc. But then, we say you need to get out of the building and test those hypotheses and by test them, I don't just mean here's a product, do you want to buy it? That's selling, I mean getting out and understanding deeply what are the customer problems, what are their needs and what kind of solution might actually solve them. And so not only do you talk to those customers, you build something called minimum viable products, because the third piece of Lean is using agile engineering to instead of specing an entire solution and then building it and shipping it and finding out people don't want it, you build the product incrementally and iteratively and you continually interact with those customers trying to understand whether you're on the right track. These three components, business model design, customer development and agile engineering is the Lean Startup.