



# Stanford eCorner

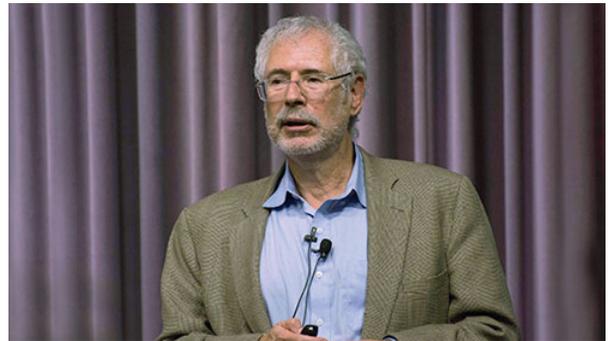
## The Birth of Silicon Valley

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Video URL: <http://ecorner.stanford.edu/videos/4685/The-Birth-of-Silicon-Valley>

Steve Blank, who teaches entrepreneurship at Stanford in the Department of Management Science & Engineering, describes how scientific research during the Cold War kicked off an era of transformation in the surrounding valley from farming to a focus on defense technology. Blank, one of the founders of the lean-startup movement, cites the arrival of Lockheed as the moment the region turned into Silicon Valley.



### Transcript

- So, Stanford in the Cold War, this was Silicon Valley's first wave of innovation. We had great infrastructure, which meant we had great research universities, we had a predictable economic system, stable legal system, 24/7 utilities, you don't know how important it is to have power on 24/7 until you're a country that doesn't have it. We had a great culture. Our academic and innovation culture kind of rewarded, or at least at the time, didn't punish risk taking. We were entrepreneurial, as I said we had outward-facing universities and a free flow of people and information. What we didn't have at the time were any innovation management tools, we'll get back to them. And the motivation at the time in the 50s and 60s for doing these startups was not particularly how to become a unicorn. It was not about money. It was about a Cold War crisis. And the entrepreneurial ecosystem was from people who were building weapons systems funding these spin-outs out of Stanford, there was no venture capital as we know it.

There was no Sand Hill Road. You got funded by your customer, who would either pre-pay products or give you a contract, or give you what was called non-recurring engineering. But there was no traditional venture capital. And so that was the state of Stanford in the Cold War. Now, what's interesting is obviously in the 60s and 70s, what started to emerge were startups in a venture capital ecosystem. But surprisingly, it all started in one year in 1956. In 1956, an airplane manufacturer from Burbank, California called Lockheed bid on and won a contract to build something called submarine launched ballistic missiles. And that is, think of these as rockets that went inside of submarines. Couldn't find a place in LA, but they found a great air base in the middle of this valley called the Valley of Heart's Delight, which just had mostly orchards, way before it was called Silicon Valley. And they built their facility in Sunnyvale, California.

And that company was Lockheed. They built the Polaris, then the Poseidon, then the Trident missiles on an assembly line in Sunnyvale. Now, Lockheed set up a special missiles division in Sunnyvale and just to give you some scale about the impact that Lockheed had way before most of you were born, is from the day they started that division in 1956. In four years, they hired 20,000 employees. Just for scale, Hewlett-Packard in 1960 had 3,000 people.