

Stanford eCorner Rise of Startups and Investors 09-11-2016

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Retired serial entrepreneur and educator Steve Blank traces the origin of technology startups and venture capital in Silicon Valley. An adjunct professor in Stanford's School of Engineering, Blank talks about how the very first semiconductor business in the valley spawned 65 other chip companies over the next 20 years. The increased activity and a loosening of financial regulations subsequently led to the birth of venture capital, according to Blank.



## Transcript

^- Startups and Venture Capital.. On the other side of town in 1956, someone named William Shockley starts a company.. Now I don't know if any of you know Shockley's name today, it's not on a lot of things, but in World War Two he was director of Naval anti-submarine warfare at Columbia.. And then he moved over to the Air Force and did radar bombing training.. But he's mostly known, if you're in technology, as the co-inventor of the transistor and won the Nobel Prize in 1956, but what he had to do with Silicon Valley is he founded the first transistor company, the first semiconductor company in Silicon Valley.. Now, what's interesting about Shockley was not that company.. What was interesting about Shockley was he was a great researcher, probably the world's best talent spotter, and equally pretty well-known as the world's worst manager in the history of Silicon Valley.. And the reason why is he made life so miserable for his eight best employees that they all got up 15 months after he founded the company and left, and they started a little company called Fairchild Semiconductor.. And two of those eight, someone named Gordon Moore and another guy named Robert Noyce, would also go off and found Intel.. Now what's interesting about Shockley though, in 1956, is every other, let me say it again, every other semiconductor company that was started in Silicon Valley came from Shockley..

So here's Shockley, let me zoom out, every other Silicon company came from this one startup in 1956.. Now what started to happen about 20 years later was that private investors noticed that there was some activity going on south of San Francisco in technology. Silicon, semiconductors, this whole chip business, this whole diagram now, by the mid-'60s, early '70s is getting kind of interesting, and while there was some private money funding them and some customers funding them, there was no organized venture capital as we know it today.. At best, it could've been described as angel capital.. And so what happened is a couple of smart investors decided to raise money from pension funds, private universities, and wealthy individuals called limited partners, and in 1978 and 1979, the US government changed two tax rules that made this actually pretty lucrative for all parties. One is that capital gains rate was cut in half essentially from 48 to 25%, but more importantly, what was called the Prudent Man Rule for pension funds that said you couldn't invest in risky ventures was loosened so pension funds who were sitting on billions of dollars to invest were allowed to put up to 10% of those dollars, and for the first time ever, into venture capital funds.. And VC funds until then, which had been kind of you know a couple hundred grand, maybe a million, could now tap into tens of millions of dollars that were never available before, and so what you start seeing in the mid-'70s is people inventing this form of venture capital called two and 20.. The general partners would take 2% as a management fee and keep 20% of the profits, and a whole set of firms started to emerge. A couple first of them were kind of experiments, but some of them you might still recognize, Patricof, Kleiner Perkins, Sequoia, all started building an idea of a culture that would fund risky ventures, be patient through the failures, and make their money on the obscene returns of the ones that succeeded.. No unicorns yet, not even for the next 25 years, but it was the first time that there was a financial asset class that matched the passion and the vision of the technology entrepreneurs.

And so venture capital is actually now driving this second wave of innovation in Silicon Valley.. Again, we had great infrastructure, we had great culture, we still had no management tools, but now for the first time, the motivation instead of crisis was profit, and instead of getting military financing, we were now getting venture financing tied into this profit cycle.. Things are getting interesting because now money is starting to scale Silicon Valley...