

Entrepreneurship in Europe: Alumnus brings Silicon Valley culture across the Atlantic

Hervé Lebreton (MS 1990 EE) steers seed grants to scientists and engineers with promising ideas.

<https://engineering.stanford.edu/news/entrepreneurship-europe-alumnus-brings-silicon-valley-culture-across-atlantic>



Stanford kindled Hervé Lebreton's (MS 1990 EE) love of entrepreneurship, a passion that he took back home with him to Europe after studying here. He wants to see more of an entrepreneurial culture there and is working in more than one way to effect that change. After he earned his EE PhD in France, he became a venture capitalist with Index Ventures. Now his job at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in Switzerland is to steer seed grants to scientists and engineers with promising ideas. Last year he also wrote a book, "Start-Up," examining the business culture in Silicon Valley and in Europe, in hopes of encouraging the latter to be a bit more like the former. A bit like the 19th Century French scholar Alexis de Tocqueville, his view of a slice of America can also teach Americans something about themselves.

What is "Start-Up" about? What are the main points you wanted to get across?

The book is subtitled "what we may still learn from Silicon Valley". Many regions in the world, in Europe, in Asia, and also in the USA have been struggling with innovation and high-tech startups. No other area has given such success stories as Intel, Cisco, Apple, Oracle, Yahoo, and Google. I wanted to explain my views about this unique phenomenon. One feature which may have been missed is that Silicon Valley ("SV") is about individuals — passionate individuals in a very dynamic and open environment. I am convinced there was no real individual or collective plan or policy to make Silicon Valley an innovation center. On

the one side it is well-known that Terman is considered as a father of Silicon Valley; . Hewlett-Packard for example has strong links to that side. But on the other side the success of companies such as Fairchild and then Intel were not really linked to the academic side of the SV's history. Steve Jobs never graduated either. SV developed from many different sources. However the addition of all these passionate people shaped this environment.

What impact do you want the book to have?

My book is hybrid. It has anecdotes and data points. Policymakers should be interested. But more importantly, I want young people, engineering or MBA students to understand the dynamics of the startup world. As Vinod Khosla (a founder of Sun and former Venture Capitalist at Kleiner Perkins) says, "success only comes from those who are foolish enough to think unreasonably". I hope my readers will be fully convinced with this book. Another VC, Tom Perkins says SV is about psychology. Role models generate new ones; Noyce encouraged Jobs, Grove mentored Page and Brin, the Google founders. These personal connections are critical.

Aren't there passionate people everywhere? Why is SV a particular encouraging place for them?

This is a delicate subject. There is no doubt that passion and energy can exist anywhere. But first passionate people may not know about innovation and startups so their energy goes somewhere else. Second the environment is less favorable. If you read *Regional Advantage* by Annalee Saxenian, you know that the corporate culture is a barrier in other regions, even in Boston which is known as another successful cluster of high-tech companies and intellectual capital. There is less openness, less encouragement to try. Terman invited young people such as Hewlett and Packard to come near Stanford and it seems that this culture of risk taking is quite unique to SV.

In your book you devote a chapter to Stanford's Information Systems Lab. What's so special about that lab?

Many people know startups are linked to stars such as Steve Jobs or Brin and Page. But startups are also about a critical mass of successful and also unsuccessful entrepreneurs. I studied spin-offs from ISL and could identify 36 startups that raised \$900M of venture capital. I counted seven IPOs and 15 mergers and acquisitions (i.e. a huge success rate). Actel, Integrated Systems, Numeritech, and ONI Systems went public for example and then some were acquired later. Even more interesting are the connections between professors, students, investors and external managers with an experience with startups. Professors such as Abbas El Gamal or Thomas Kailath have impressive connections but they are not the only ones. I am sure studying another Stanford lab may have given similar conclusions, but I am not sure there is anything like it outside Stanford.

You mention in your online summary that some people view the world of startups with suspicion or at least confusion. Why is that?

If many areas outside SV have been struggling, it is sometimes because they do not know what startups really are. The Internet has been seen as a speculative bubble where people could be rich with just an idea. Many people still smile at the idea of startups as a number of pet food dot.com companies and the craziness of two-year old companies going public with

no revenue. Even Yahoo and Netscape could create that feeling. I want to fight these perceptions. Nobody can deny that the Internet is today a major economic event. Google is probably the most amazing illustration of all this. But money is not always perceived positively in Europe and other areas and making money out of a great idea may not be well understood. It is also about taking risks, hard work and having fun in what you do. Connections between entrepreneurs and investors, between engineers and business people need to exist. Outside of Silicon Valley, there is too much isolation, which is also linked to suspicion. People with different backgrounds do not connect enough. Of course there are connections and networks in New York, Paris, London, Tokyo but not the right ones for startups. A startup is probably the ideal first job for a student and nowhere else will he or she learn or experience as much. Startups should be seen as great places to work.

You also mention that when it comes to startups, Europe hasn't fared as well as Silicon Valley. Why do you think that is?

Well, just give me names of successful European startups, comparable to the ones I mentioned from Silicon Valley. I describe some European companies in my book and with the exception of SAP, none belongs to the league of great success stories. In Europe, students go to established companies or become civil servants. Talented people are not attracted by startups and when they are, it might be too late, at least statistically; I noticed founders of startups are in their thirties in Europe, but in their twenties in SV. This might be a critical difference. Another element is indeed this lack of connections. Engineers stay in love with technology and forget about products and markets. At some point, a startup has to leave the garage to grow and sell and in Silicon Valley there are people willing to embrace them. Investors also have a critical role. I describe the VCs in the USA and in Europe. There are differences: investors have often been entrepreneurs in a prior life in America and this may be less often the case in Europe, even if it is changing.

What do you do in your job at the EPFL?

I try to bring solutions to these challenges in two ways: first, I fund projects with an internal seed fund ("the Innogrants") to encourage entrepreneurs. I try to convince them to be ambitious. I explain to them how Silicon Valley startups succeed. I connect them to other people. They have to try, as early as possible. Second, more importantly maybe, I invite successful entrepreneurs to tell their stories during conferences. The inventor of Nespresso and the CEO of Synopsys (another SV success story) are EPFL alumni and have spoken during our conferences.

What are some of your favorite "innogrant" success stories?

It is still too early to say as none has been VC-backed (Innogrants were launched in mid-2005). I'd like to mention Innovative Silicon or NEXThink, two EPFL spin-offs which raised VC money before the Innogrants but with which I have been involved. Some Innogrants are exciting though: small companies such as RouteRank, Inocs, Attolight, Scanlight, Aleva, Prediggo may be our next promising companies.

How often do you visit Silicon Valley and Stanford?

When I was a VC, I was in the Bay Area every quarter. Index (my former employer) funded Numerical Technologies, ArrayComm and Parallele out of Stanford. Nowadays, I come once

a year but I would like to come back more often. I have many friends in the region and SV is a great battery charger! More importantly, my dream would be that EPFL students would all come and experience this exceptional entrepreneurial ecosystem, and Innogratees would better understand SV's dynamics. We should all become migratory birds.

What did you study here?

I studied engineering in 1989-90, I got my MS then. I remember a number of great professors such as Tom Kailath and John Cioffi. Stephen Boyd was my favorite and I was lucky enough to come back for my (French) PhD and spent one year in 1992-93 at ISL with him, developing optimization algorithms for signal processing. It is also when I discovered startups. Many of my former classmates founded or worked in startups. This was another great learning. These were two great years!

How did you get from studying here to your current position?

I first moved back to Paris and continued my research. However I had a great friend at Stanford who was studying anthropology. We met at the Coffee House very often (watching Joe Montana or Michael Jordan). It is also there that we saw the Berlin wall fall... He had moved back to Geneva and he hired me to become a venture capitalist with Index Ventures in 1997. I did not know anything about financing companies but I was passionate and curious about technology and startups. Passion and personal connections! I left the VC world in 2004. I think I needed a break from this enthusiastic but crazy life and I needed to see my kids grow. But I stayed in Switzerland to work at EPFL with student entrepreneurs, a fascinating task!