Can we build high-tech Gorillas in Europe?

Building a start-up: why Switzerland?

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Outline

• Introduction
  • A US, European and local view of CH
• My personal adventure: Innovative Silicon
  • Innovative Silicon today
  • Innovative Silicon early days
  • CH vs US for us
• Some thoughts
  • CH vs Europe vs US (Silicon Valley)
• Conclusions
Introduction

Switzerland?
Switzerland?

• The US view:
  • Cheese, cows
  • Chocolate
  • Cuckoo Clock

“In Italy, for thirty years under the Borgias, they had warfare, terror, murder and bloodshed - they produced Michelangelo, Leonardo Da Vinci and the Renaissance. In Switzerland, they had brotherly love and five hundred years of democracy and peace, and what did they produce? The cuckoo clock!” Orson Welles

But, how can you possibly have a successful high tech start-up in Switzerland?
Switzerland?

- The European view:
  - Taxes
  - Banks
  - It’s clean

“If you’re wealthy, you have any number of options about where to live, all of which have their own particular charm. Some places have a wonderful location; some have favorable tax laws; some have a welcoming and accommodating culture. But the fact of the matter is this: Switzerland is already what it would be like if wealthy people could design their own country” Offshore real estate & investment quarterly

Create a startup there? No, I would rather retire in Switzerland!
The Swiss view (personal view):

- **Education**
- **Innovation**
- **Money**

Some of the key ingredients to build a successful high tech start-up! Some or all?
Innovative Silicon

Today

Early days

Switzerland vs. US
Innovative Silicon Today

- 37 employees start-up company, Inc. with SA & KK subs (started as a Swiss SA)
- 3 sites: Lausanne (31), Santa Clara (5), Tokyo (1)
- 16 nationalities
- VC funded: raised 22 M$ (CH, F, US VC)
- IP business model
- Semiconductor memory (embedded & stand alone RAM)
- Replace SRAM & DRAM memories
- Product: Z-RAM memory IP (sell licenses)
- Customers in US, Eu, Asia
- 1st Licensee announced in 2006: AMD
Management Team

- **Mark-Eric Jones, CEO**
  - EE, 20+ years general management, 16 years IP licensing, CEO at 3Soft, VP & GM at MoSys

- **Pierre Fazan, Founder and CTO**
  - PhD Physics, 20+ years process integration, 8 years Micron Technology
  - > 150 patents

- **Serguei Okhonin, Chief Scientist**
  - PhD EE, 22+ years device physics, test & reliability
  - > 20 patents

- **Jeff Lewis, VP of Marketing**
  - 22 years in marketing, engineering, management
  - CEO CiraNova; VP Marketing at Form Factor and Artisa

- **Daniel LaBouve, VP of Engineering**
  - 20+ years in engineering and engineering management
  - VP of Engineering at ARM, Physical IP Division; Sr. Director of Engineering at Artisan Components

- **Virginia Picci, Director Finance and Administration**
  - 20+ years financial, 10 years at PricewaterhouseCoopers Boston & Geneva
Z-RAM® is 5x denser than SRAM and up to 2x denser than eDRAM, enabling you to…

...Or…

Save 10% - 40% in chip costs

Embed over 4x the memory at the same cost
The Very Early Days: < 2003

EPFL LEG

Z-RAM memory

Innovative Silicon Solutions

Before 2002

2002
The real reasons:

- The technology was developed around EPFL
- The founders and their families were in Lausanne
- The initial team was in the CH/France area
- Desire to bring back to Switzerland a positive US experience
- Initial investors in Geneva
- First potential partner in France
- Driven by a combination of technical, human and financial adventure
Innovative Silicon: Switzerland

• The consequences of staying in CH for us:

• Pros:
  • Pool of local talents, ability to attract people (16 nationalities)
  • Stability of employees
  • Technical ecosystem around us: F, D, CH, B
  • Fast to think & develop globally

• Cons:
  • Convincing investors was more difficult
  • Convincing partners was more difficult
  • Hiring takes longer
  • More complex for many things (customers, lawyers, contractors, investors, partners interactions, etc…)
  • Slower potential growth
Innovative Silicon: Switzerland

• How we deal with it:
  • Extensive travel
  • Modern communications: video conference, skype, net meeting, etc…
  • R&D in Switzerland
  • Bus. Dev. in US
  • Marketing in US
  • PR around the world
  • Presence at customer location
Some Thoughts

US vs European vs Swiss Gorillas

The right ingredients
### US (Si Valley) vs Europe vs Switzerland

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<th>Pros</th>
<th>Cons</th>
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<td>Education, ambition</td>
<td>Workers fidelity</td>
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<td>Risk taking</td>
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<td>Competition</td>
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<td>Large market, economy</td>
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<td>Expensive (cost of living in Si Valley)</td>
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<td>World talents, IC birthplace</td>
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<td>Stimulating, critical mass</td>
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<td>Hard working</td>
<td>Industry, ambition</td>
<td>Small country, market, thinking</td>
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March 30, 2007

Pierre C. Fazan
The right ingredients in Switzerland?

- What we have:
  - Education
  - Ideas, innovation
  - Money
  - Comfort, wealth, insurances

- What we miss:
  - Risk taking
  - Entrepreneurship
  - Can do attitude
  - Business & product development
  - Market, country size
Conclusions

• Innovative Silicon is a Silicon Valley style startup company (“the hottest Silicon Valley startup is in Switzerland”)

• Financed by VC

• Developing memory IP: Z-RAM proprietary technology

• Starting was difficult: 2 years transition period to get funded: 2002 - 2003

• Switzerland vs US: in early phase, at investment and it’s a constant pressure. Inc with Swiss subsidiary

• In CH we have some of the key ingredients (education, ideas, money) to develop successful start-ups, but not all of them (entrepreneurship, risk taking, can do attitude, sense of urgency)

• 3 years after funding: If I had to start over: Switzerland again!