AlwaysOn Stanford Summit 2007¹ Palo Alto, CA July 31 - August 2, 2007

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Executive Summary

This was the seventh annual conference hosted by Stanford technology Ventures Program and AlwaysOn. The VC industry is back, but never to the insane levels of the dot-bomb days. Rich private equity funds are creating too much debt that doesn't bode well for either the country or high-tech. M&As are definitely far outnumbering IPOs. The Valley is doing much better, but neither is California nor the U.S.

Beyond Search: Discovery

Moderator: James Joaquin, Partner, Bridgescale Paul Martino, CEO, Aggregate Knowledge Joe Greenstein, CEO, Flixster David Hyman, CEO, MOG Bambi Francisco, Co-Founder & CEO, Vator.TV

Paul: How do you find a gift for Father's Day on search?

Joe: Don't just search, discover on Flixter, and start looking for sharing.

David: Mog provides better tools for music lovers, 1,500 blog posts per week. Download Mog-O-Matic³, it browses music collection on desktops and facilitates sharing.

Bambi: Aggregate information around ideas and qualify what you are looking for. Create networks around ideas, not people. 40% of new ideas are now coming from outside the U.S.; this is flattening of the world.

StumbleUpon was acquired by eBay. Much of the ideas come from contacts. Social-based recommendations work if you trust the person. Flixter is almost all social discovery. Discovering through friends is sometimes dangerous. We have implemented thousands of algorithms that can all be used simultaneously.

The Global Shift—Everything is Changing

Joe Schoendorf, Partner, Accel Partners

There is only Silicon Valley, but the world is catching up. Moore's Law is not going away.

Shift happens

1 in 4 workers stay in a job for 1 year. Today's college graduate will have 14 jobs by the time they reach 38. One in eight couples in the U. S. met online and later married last year. The largest English-speaking country today is China, which graduates more engineers than the Valley has every year.

- The world has gone from print to video—Guttenberg to YouTube.
- We say, "A picture is worth a thousand words." The Chinese say, "One seeing is worth a thousand telling."
- "During the 20 minutes of my presentation, 182 babies will be born in the U. S., 575 in China, 971 in India, and Russia will lose 114 people."
- The first billion mobile phones sold in 20 years, the second billion in 1,400 days, and the third billion in fewer than 1,000 days.

¹ http://alwayson.goingon.com/ecom/productview/7540

² http://www.itnewswire.us/

³ http://www.download.com/Mog-o-matic/3000-2141_4-10621316.html

Think exponentially

- There are 65 million websites today, and 50,000 new ones are added every day.
- More SMSes are sent every day than the entire global population.
- Today's under-18 kids use more MySpace, Facebook and SMS than e-mail.
- Our lives are driven by kilo, mega, giga, and tera; our kids' lives will be driven by peta, exa, zetta, and yotta.
- The amount of technical info doubles every 24 months.
- Technology is changing so rapidly that many colleges are not properly educating their students. They must train students for job that do not exist yet!
- How do use technologies that have not been invented?
- You will see an exaflop computer in the next six years, smarter than the human brain!

Going Global

The top economic powers in the not-too-distant-future countries will be China, US, India, Japan, Brazil, Russia, and Britain.

Customer Powered Innovation

Moderator: Jeanne Bliss, author, Chief Customer Officer Brett Caine, President, Citrix Online Adam Selipsky, VP, Amazon Web Services Danny Kolke, CEO, Etelos Steven Aldrich, VP Strategy & Innovation, Small Business Division, Intuit

Jeanne started with Land's End in 1984, when customers were fearful of paying in advance by credits cards, so Land's End issued guarantees.

Brett: Customers look for a simplified life, making it easy to collaborate. Citrix is an early SaaS vendor. Amazon is providing storage and computing in the cloud, Intuit creates a WOW experience. Don't claim you have the best software, let customers have a good user experience and be the judge.

Why Aren't VCs Happy?

Paul Deninger, Vice Chairman, Jefferies & Company

Most VCS are happy, but they should be concerned. Exits make VCs happy, today, there are a more number of larger deals, although the number of deals is flat. In 1H2007, six of the largest deals were private equity. Philips and Freescale went private last year. 25% of all deals greater than \$50 million this year were done by 10 companies.

Myth: IPO market is back.

Reality: Pre-dot-com bubble, average deals were 135 per year, now it is 50. What it means is, 90% of the exits now are M&A, and there are fewer IPOs. There are 1,640 public tech companies, fewer than in 1988-89. VC industry this year will deploy 2½ times the amount of capital than a decade ago. There are five times more M&As than a decade ago. The industry is mortgaging its future. Cisco's market cap at IPO was \$225 million.

Myth: 2/3rd of NASDAQ have a market cap of >\$1 billion. **Reality:** 62 of all companies have market cap <\$1 billion.

VCs: Are You Happy?

Moderator: Mark Stevens, Managing Partner, Fenwick & West Roger McNamee, Partner, Elevation Partners Erik Straser, General Partner, Mohr Davidow Ventures Paul Deninger, Vice Chairman, Jefferies & Company Bill Gurley, General Partner, Benchmark Capital

Erik is green-tech guy. Predicting the future is a waste of time. Web 3 is about trust.

Roger: There is a battle between greed and fear; fear is temporary, greed is permanent. There is too much private equity, too much VC money. M&A market is very active. Bureaucracy doesn't go away, not many folks want to be public CEOs because of SarbOx, etc. A billion more cell phones will being added soon and 40% more people will be entering the Internet age; how do you exploit these developments? IPO market, except for the late 90s, has never been money making. 1995-99 was an anomaly, today is normal. It took nine years to take Shutterfly public; its market cap is over \$600 million now. The market place is supporting fewer companies, and the number of buyers is shrinking. Forbes hasn't bought a company in 90 years, but has acquired two since Elevation Partners invested in them. If you are an entrepreneur, make your company more valuable. There is too much debt, thanks to the greed of private equity companies, and poor retirees will lose billions of dollars. The Valley has always been adjusting and moving to where the food is.

Mohr Davidow Ventures is investing green-tech and bio-tech. The Valley's situation is fine; California's is difficult, as is America's. The Valley's model can be applied anywhere; the Valley is getting big on media. Capital markets are definitely global. The Valley had a mythical notion that you can go IPO at the blink of an eye. The U. S. capital market is out of whack and needs adjustments. Raise capital, don't use it.

Building the Green Data Center

Moderator: Dave Edwards, Research Analyst, Morgan Stanley Steve Sams, VP, Global Site & Facilities, IBM Global Technology Services Mike Rigodanzo, SVP Technology Services, Technology Solutions Group, HP Stephen Trainor, VP Strategy, Level-3 Subodh Bapat, VP & Distinguished Engineer, Sun Microsystems

Energy consumption has gone up from 2 KW to 40 KW per rack, \$5 billion IT energy costs annually in the US, over \$7 billion worldwide. IBM is building 40 datacenters in China. HP's customers are worried about energy consumption, server under-utilization (< 20%), and cooling issues. Level 3 has 7 million sq. ft. of datacenters. Sun focuses on systems-level energy efficiency, not just at the CPU or board level, but the entire computing chain—hardware, software, chip, and motherboard. Every watt a server consumes requires two watts of cooling power. IBM finds worldwide concerns for energy. Europeans worry more about energy being shut off, than it being wasted. Many European countries charge energy per sq. ft. of floor space. Improve power-supply efficiency; today, 30% is wasted and the rest goes to the motherboard. Abraham Maslow's Datacenter Hierarchy—money, cooling, power; financial benefits; socially responsible company. Unfortunately, most datacenters were built with zero flexibility.

Featured Fireside Chat -- with US Senator John McCain

US Senator John McCain, 2008 US presidential candidate Tony Perkins, Founder, AlwaysOn Peter Robinson, Research Fellow, The Hoover Institution

McCain talked about the radical Islamic threat, many terrorists living in Pakistan, educated in madrasas, and funded by Saudi Arabia (could have added 'from our oil money'). [We are tired of the label Islamic threat; there are some bad folks that happen to be Muslims. Not every Muslim is a terrorist. So, was Timothy Mcveigh a Christian terrorist or a terrorist who probably called himself a Christian?]

The U. S. Congress has approval rate of 14%, and the President's is 28%. [We wonder who those 28% are probably right-wing radicals from the Red states!] Climate change, a la global warming, is real, only technology can solve it. [It was good to hear this from a Republican.] McCain believes in nuclear power, "Sarkozy is the first pro-American Frenchman since Lafayette." Reduce greenhouse-gas emissions. John Chambers supports McCain. "I want technologists like you from the Valley work with me—for free." Peter Robinson wrote, "Mr. Gorbachev, bring this wall down," for Reagan. Immigration Bill failed because "we failed to convince the American public of the need to secure our border." [Isn't it ironic we celebrated the tearing down of the Berlin Wall, but now are building a fence with our border with Mexico?]

We have three kinds of senators—Republicans, Democrats, and Appropriators. There are 100,000 empty homes in Michigan because of loss of manufacturing jobs. "If I became the President, I'll fix Social Security that

is underfunded by \$3 trillion. Medicare is more challenging; it is underfunded by \$40 trillion." "I'd rather lose a presidential race than lose the Iraqi war." We believe McCain has been thoroughly brainwashed by George Dubya.

Fireside Chat -- Co-Creating the Global Mobile Experience

Om Malik, GigaOm Tero Ojanpera, CTO, Nokia Tero moved to the U. S. 12 months ago, and prefers living near New York City — in Connecticut — where financial engineering is stronger than technical engineering. Mobility is transforming the Internet. On the Internet there is too much stuff — created by somebody else. Make any browser work on a cell phone. Mobile Internet is dead, it never existed.

Will the Internet Still Be Here in 20 Years?

Moderator: Greig Coppe, Managing Partner, Accenture Nick McKeown, Professor, Stanford University Andy Bechtolsheim, Co-Founder, Sun Microsystems Phil McKinney, VP & CTO Personal Systems Group, HP

Andy: Internet will be here in 20 years, just as power, electricity, and water will be. The Internet started with Netscape, Yahoo!, Google, etc. What did people do before Google? The future is definitely wireless; in a few years you will be able to get a good iPhone-like device for \$100. Security has gotten worse, privacy is zero. Spam has got to be fixed. Applications will become more and more SaaS.

Phil: In 15 to 20 years there will still be an Internet, just as Ethernet. You will see some changes in e-mail with a kind of originator identification. Today, the hardware infrastructure and application folks are making money, but the Internet service providers are not. The biggest expense today in fiber to the home (FTTH) is the last mile. Broadband access in Germany has become as important as the GDP. Will wireless last mile be cheaper than FTTH? Bell Canada is now delivering 20 Mbps in Toronto over copper, where population density helps. In Japan broadband prices have come down by a factor of five. There is a debate today in Europe over AC vs. DC power transmission. In 15 to 20 years, most cars will be powered by something other than gasoline, maybe H2, fuel cells, etc.

High Performance Global Innovation -- From Labs to Customer

Doug Merritt, Corporate Officer & Member of the Executive Council, SAP AG

SAP has 7,000 developers in Waldorf, 3,000 in India, 2,000 in China, and 1,200 in Palo Alto. Its core business is business management suite, then middleware (NetWeaver), followed by business apps. Despite different rules, regulations, laws and business practices, there are 70% common practices in payroll in China, Germany, and the U. S. Compliance and risk management were top issues in 2005. They still are now, along with security and privacy

Out of the Labs and Into the Market

Moderator: George Gilder, Chairman, Gilder Technology Publishing Dr. Jai Menon, IBM Fellow, VP & CTO, Architecture & Strategy, IBM Doug Merritt, Corporate Officer & Member of the Executive Council, SAP AG George Dies, Director of Strategic Planning, HP

Jai: IBM is working on storage class memory, like RAM. Disk drives will be gone in 10 years, replaced by RAM and SSD. HP is using GPU (general processing unit) in its printers. SAP believes in open source. With so much common—AMD, Intel, LAMP stack—how do vendors compete? From both Jai and George: We know the lower layers are commoditized, we differentiate ourselves in the upper layers of the stack — middleware, applications, and, of course, services.