

A Strategic Overview of the Silicon Valley Ecosystem: Towards Effectively "Harnessing" the Ecosystem:

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6. Labor Markets and Employment Systems

The deep talent pools available in Silicon Valley, and their dynamic circulation among various types of firms, startups, and universities are one of the strengths of Silicon Valley. The question for Japanese firms is how to tap into this labor market. Before formulating strategies and illustrating the challenges later on, we must first introduce how the labor market looks.

The performance of Silicon Valley's job market is in stark contrast to that of the rest of the US, and that of California in general. As seen in Figure 11, the job growth in Santa Clara and San Mateo Counties in 2013 grew 10 percent compared to the second quarter of 2007, just before the global financial crisis hit in the fall of 2007. San Francisco's job growth during the same time period was 3.9%, compared to a contraction of 2.2% for California as a state, and 1.4% for the US overall. Alameda County in the East Bay, which is on the geographic periphery of Silicon Valley, where many people in middle tier white-collar jobs in Silicon Valley coexist with an independent economy with a significant non high-tech economy, experienced a 1.1 percent contraction.

From 2012 to 2013, the core Silicon Valley counties and San Francisco's growth outpaced those of California and the US overall. Notably, Alameda county, while growing more slowly than the core Silicon Valley counties and San Francisco, did grow faster than California and the US overall, demonstrating the spill-over of Silicon Valley growth pulling up employment.

Relative Job Growth 112 Santa Clara and San +10.1% **Mateo Counties** Fotal Jobs Relative to Q2 2007 (100=Q2 110 San Francisco County 108 Alameda County 106 California 2007 Value) **United States** 104 +3.9% 102 100 98 -2.2% 96

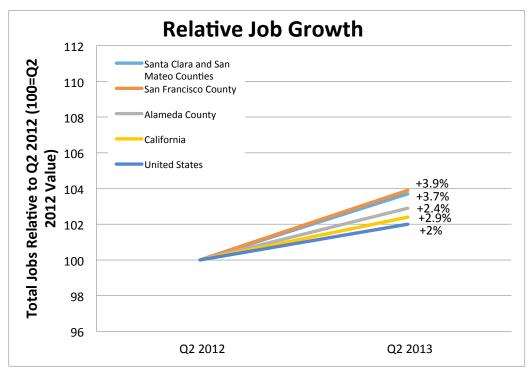
Figure 11. Relative Job Growth In Silicon Valley and San Francisco vs CA, USA (1)

Source: National Venture Capital Association, citing US Census Bureau

<u>02 2007</u>



<u>02 2013</u>



Source: National Venture Capital Association, citing US Census Bureau

The age distribution of Silicon Valley is not much different from that of California and the overall US. The largest proportions of the population are of the working ages of 25-44 and 45-64, respectively.

Age Distribution 2012 ■ 17 and under **18-24** ■ 25-44 45-64 Silicon Valley 23.2% 8.5% 30.0% 26.3% 12.3% California 24.3% 10.6% 25.1% 28.0% 12.1% **United States 23.4% 10.0% 26.3%** 26.4% 13.7% 40% 60% 0% 20% 80% 100%

Figure 13. Age Distribution in Silicon Valley, California, and US, 2012

Source: National Venture Capital Association, citing US Census Bureau

The positive role of immigrants, particularly those with high-end skills, has been a dramatic feature of Silicon Valley. To take a recent snapshot, the percentage of foreign born population in Silicon Valley was 36.4% in 2012, exceeding that of California overall (27%), and is almost three times that of the US average (13%).

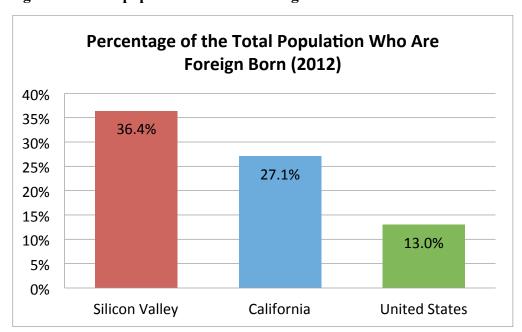


Figure 14. Total population who are foreign born

Source: National Venture Capital Association, citing US Census Bureau

What are the effects of these immigrants? Saxenian has argued that Silicon Valley has continually benefited from flows of immigrants from various areas of the world that create bridges with the economies of their home countries. Silicon Valley therefore benefits from ties to places such as Israel and their strong software and intellectual property creation; crossnational production networks co-evolved with places like Taiwan, where entrepreneurs and scientists from Silicon Valley created fab-less semiconductor plants to facilitate Silicon Valley's specialization on design²; a flow of people from India created the ties that enabled business process outsourcing for back-office tasks and software co-creation to the Indian subcontinent; flows of Chinese from the Chinese diaspora and the mainland China itself created bridges to form cross-national production networks.

There are at least two policy points directly relevant to Japan from here. First, it is unrealistic to hope to duplicate this level taking top talent from the rest of the world. While calls for opening certain job types to greater immigration are increasing in Japan, it is almost impossible to envision this level of attracting global talent. Therefore, instead of only trying to

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¹ Saxenian, A. (1994). <u>Regional advantage: culture and competition in Silicon Valley and Route 128</u>. Cambridge, Mass., Harvard University Press, Saxenian, A. (2006). <u>The new argonauts: regional</u> advantage in a global economy. Cambridge, Mass., Harvard University Press.

² Chenming Hu illustrates this. After an undergraduate degree in National Taiwan University, he pursued a PhD in UC Berkeley, receiving it in 1973, and becoming faculty in the Electrical Engineering and Computer Science department in 1976. He was a decorated academic, making critical advances in semiconductors, publishing 4 books and over 900 papers, including co-authored ones, with over 140 patents granted. He founded a semiconductor design company in the 1990s, and become CTO of TSMC, the world's largest fabless semiconductor firm in Taiwan in the early 2000s.

increase inflows of highly skilled immigrants to Japan, making use of the Silicon Valley focal point to make connection to the rest of the world should be pursued in parallel. There are numerous types of policies that could facilitate increase the presence of Japanese in Silicon Valley, including lobbying for easier visa treatment for early startups. Second, the point about Silicon Valley having a large and beneficial foreign-born population as high performing workers is that *Silicon Valley can act as an access point to talent from the rest of the world*. Sometimes going through Silicon Valley can put entrepreneurs and firms in touch with a more valuable network in other parts of the world than going directly.³

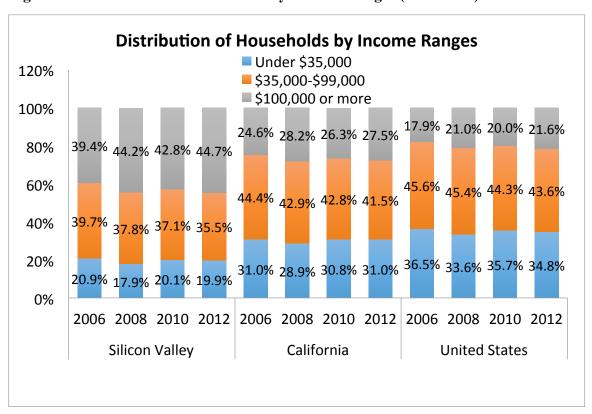


Figure 15. Distribution of Households by Income Ranges (2006-2012)

Source: National Venture Capital Association, citing US Census Bureau

The region's population growth has accelerated over the last year due to a 52 percent increase in foreign immigration in 2013 over the previous year. The region's total population grew 1.31 percent last year compared to 0.88 percent statewide, and our net migration (13,766 people) has not been this high since 1997 when it reached a high of 14,515. (SV Index P.8)

6.1. Diversity of Employment Systems and Philosophies

There is a diversity of employment philosophies and compensation systems in Silicon Valley. In order to attract high quality talent, Japanese firms need to be aware of the various mechanisms and design appropriate internal organizations to create attractive employment

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³ "Innovations" 2015

environments. This is usually one of the most difficult challenges for Japanese companies with centralized, powerful personnel departments.

Silicon Valley companies are also continuously experimenting with effective philosophies and compensation schemes.

Stock options are often one of the most focused-upon aspects of compensation for startups. Yet, for companies that have already grown fairly large, the stock is already quite diluted, and may not promise high payoffs. Therefore, high wages based on performance are often used. This has the effect of pushing up wages, making Silicon Valley talent extremely expensive vis-à-vis the rest of the world. This raises several challenges for Japanese firms attempting to best utilize the ecosystem.

First, local Silicon Valley offices become responsible for screening and interviewing candidates, but employees of large Japanese firms usually have very little experience in doing this. There has been no single "best practice" for finding the best candidates, beyond the fact that many top management teams spend a great amount of time on recruiting. An interesting example for recruiting top management is from Google. When hiring a very senior position from IBM, Google instituted a strategy of having the people who would be working for the job candidate interview him. They presented him with very difficult, cutting edge theoretical problem in computer science that they were currently working on. They then assessed how he answered those questions—not just the answers, but how he approached the problems themselves. Then, convinced that he was somebody they wanted to work for, they gave an offer. Put simply, for hiring top management talent, evaluations were made from both above and from below the potential candidate.

Netflix represents and extreme example of how the corporate practices and norms surrounding employees differs significantly from large firms. Netflix has principles for fostering high employee morale that has made waves in Silicon Valley. In a 150 page slide-show Netflix lays out core principles, including the statement that there are no formal vacation days or expense accounts. The logic is that since employees regularly work late hours on weekdays and often on weekends as well, it does not make sense that they don't keep track of their working hours while they must report vacation hours to the company. Therefore, in 2003—even after it became a listed company—Netflix it shifted its policy. For expense accounts, instead of having to justify each little expenditure and create layers of bureaucracy and rules, the company decided that it would trust its employees to ask the question, "is this in the interest of Netflix?" If yes, then they were free to use an expense account in a reasonable way. Overall, the company created a culture in which employees are judged by what they produce rather than how hard they work to produce it—a "B" level output workers, despite working extremely long hours and hard, can be let go while an employee working far less can be rewarded if they produce "A+" output. For managers, the question of whether to keep employees on their team boils down to "would you fight for them if they got an attractive outside offer?" They applaud employees who find new opportunities elsewhere, and believe that those they would like to retain deserve high salaries. Rather than have policies designed to manage the 3% of troublesome workers, they try to not hire, or quickly get rid of the 3% that do cause problems. Moreover, in some cases, being

forthright about letting go employees that had produced excellent work but no long fitted the need of the company as it grew to become public, and offering them generous severance packages turned out to be effective morale boosters. Bonuses were also not based on performance, since the idea was that if the hires were successful, individual performance bonuses should be compensated for by competitive wages.⁴

Second, for startups, the variety of employment and compensation schemes can be extensive. For example, certain star programmers may prefer to remain contractors. Some might prefer larger cash salaries and fewer stock options, while others prefer the reverse. Some companies, such as Netflix, allow employees to choose the mix, entrusting employees to make their own decisions based on what they calculate to be in their best interest given their individual levels of risk-aversion, family, et cetera.

When purchasing and integrating companies with such diverse employment philosophies and compensation schemes, it is a challenge for any company—especially Japanese large corporations—to assess how best to manage the new company. Rakuten, for example, tends to leave the purchased companies maintain their own individual identities and cultures, aiming to own a portfolio of companies rather than integrating them completely into its own culture. DeNA, after purchasing ngmoco in 2010, did integrate it into its own culture. It was an exercise that led to a great deal of organizational learning. In terms of compensation, DeNA took the approach of offering profit and loss (PL) based bonuses. Since it had already IPO'ed in Japan and stock options would be highly diluted, it took the stance that the company's PL should be the baseline for assessing performance worthy of a bonus. However, given the culture and expectation of potential employees to get stock options, it took time to convince many that PL was actually a good measure of the company's actual performance.

For Japanese companies to most effectively utilize the Silicon Valley ecosystem, a reasonable amount of flexibility in the headquarters' personnel division, with a relatively high level of autonomy granted to the Silicon Valley offices, is likely to bring better results than a centrally controlled system if it is not calibrated to accommodation Silicon Valley employment conditions. This is an area in which top management needs to understand the logic of Silicon Valley to provide support to the local operations.

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⁴ McCord, P. (2014) "How Netflix Reinvented HR." <u>Harvard Business Review</u>. https://hbr.org/2014/01/how-netflix-reinvented-hr