



# Business Lessons from the Silicon Valley

Sources of their Competitive Advantage

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## **Introduction**

The Silicon Valley has been the epicenter of entrepreneurship and innovation since the rise of the internet and the dotcom boom. Regarded as the ‘mecca’ for entrepreneurs and inventors, the valley as they regard it has transformed dynamically since its first association to technology when a high concentration of silicon chip innovators and manufacturers started growing in the region. Today, the Silicon Valley is home to over 120 unicorn startups (valuation over \$1bn), accounts for one-third of all venture capital investment in the United States and represents a majority proportion of California’s \$2.3 trillion GDP. Despite the variation and volatility in the global and national economy and even the burst of the dot-com bubble, the long standing and prosperity of the valley has not been hindered much. As a result, executives, professionals, entrepreneurs and even government officials from all across the world have travelled to the Silicon Valley to learn their best practices, understand the secret within their culture that has been driving success in the region for so long (Appendix 1). Surely, there are many factors that have contributed to the success but maintaining the status-quo and balancing the increasing prosperity requires comprehensive strategies. The practices being implemented by the people in the valley has a certain element to it that has fostered growth in the region and led to their position as the the ‘mecca’ for technology while building up on competitive advantages.

So, this paper would explore 4 key business lessons from the Silicon Valley that add to its competent standing and have been sourcing its competitive advantages. Would then analyze them through a Stanford University case study of Bangalore (Indian city) which is being regarded as the ‘Silicon Valley of Asia.’

## 1. The Tech Cluster

The most prominent observation from my visit to the valley was the tight knit cluster that was spread across the bay area. Competitors, organizations, incubators and even VC funds were all located right adjacent to each other. As Mr. Aryn Thawer, VP of LinkedIn in an interview quotes: *“we are currently at the LinkedIn HQ, right across the street, you can find the Google campus. so someone from LinkedIn can just walk up there and look for another job.”*

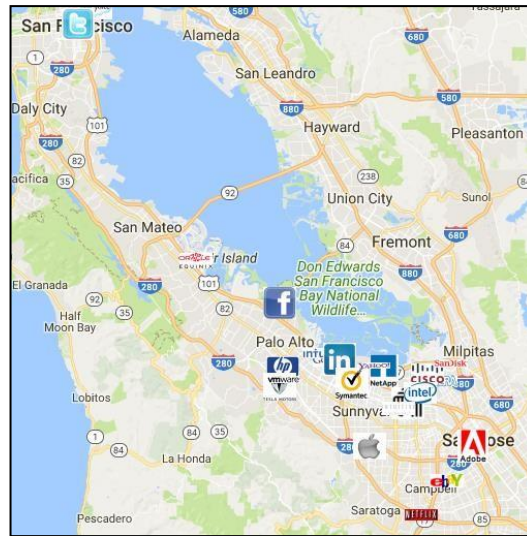


Figure 1: The Silicon Valley Cluster (major technology companies on the bay area map)  
Source: Google Maps

Michael Porter of Harvard Business School argues that the presence of this cluster has been a major and prominent source of competitive advantage in the Silicon Valley. The reason behind his argument is that clusters promote both competition and cooperation. The rivals and competitors in the cluster compete intensely with each other to retain customers and hold market share (Porter, HBR, 1998). This vigorous competitive spirit, keeps the companies on an innovative edge constantly pushing them towards the differentiation focus competitive strategy. Competition in today’s times and economy is far more dynamic, especially in the Silicon Valley. While the traditional points of competition and scale would be costs and input-advantages, today with globalization and outsourcing- it has become less relevant. The main source of modern competitiveness today is productivity and innovation and the manner in which companies compete in a particular location is very strongly influenced by the business environment they operate in. Reason behind this is because companies cannot employ heavy capital investments in projects or sophisticated services if the environment doesn’t support it. If the ecosystem is not

developed accordingly, a state of the art logistics system or self-driving cars won't sustain. So, the cluster allows each members to benefit from each other and adding to the greater scale.

All in all, clusters foster growth through competition in three broad ways (Harvard Business Review, Porter 1998):

1. First, by increasing the productivity of companies based in the area
2. Second, by driving the direction and pace of innovation which fosters productivity growth.
3. Lastly, by the stimulating the formation of new businesses and business models which furthers the expansion of the cluster and keeps it going.

This takes shape through multiple avenues:

- **Better access to talent:** furthering on Aryn Thawer's quote, companies in the Silicon Valley can tap into an already existing competitive and skilled pool of talent. This lowers their search and transaction costs and provides them with already validated talent in the industry. The moving cost for employees is also not so high given the close proximity and high concentration which makes it a very decisive sector.
- **Access to specialized information:** close proximity means increased communication which leads to high accumulation of specialized information about the market, technologies more readily accessible. The information is more transferable also given personal relationships and the tight knit community.
- **Economies of scale: even** smaller companies enjoy the benefits that are usually reserved for larger corporations. For instance, investments made by the government for public infrastructure to foster growth in the industry, is accessible to all but is implemented cause of the presence of the large companies and the economic impact of the region.
- **Innovation and New Business formation:** being at the epicenter of technology and startups, the people living in the Silicon Valley realize and understand the gaps in the market and the wants of the customer before anyone else. This gives them an edge to capitalize on those gaps and build their ventures around it. Keeps the cycle of innovation always running.

## 2. The Shift from Products to Platforms

There has been a dramatic shift in the primary domain of the companies that are rising in this decade as compared to the past 3 ones. While in the 1980's and 90's, the major unicorn corporations that rose in the silicon valley were product oriented like Intel, HP, Apple; today a majority of them are platform oriented with the valley housing the majority of them globally (44, market cap: \$2,229B). Five of the 10 most valuable companies in the world today- Alphabet, Amazon, Facebook, Microsoft and Apple derive a majority of their wealth from multisided platforms (MSPs) (Appendix 3). The business models that these platforms enables allow companies to create entire new ecosystems that leads to self-sustained growth and drives competitive strategies. These platforms constantly open new paths that capture new opportunities and changes the way startups have been doing business. Platform ecosystems are the foundation for new value creation in the today's digital age and economy and the most recent unicorns in the past 10 years are a testament to that:

Facebook, Uber, Airbnb, Slack- leaders of the startup sphere of this decade from the Silicon Valley have been built and grown around those platform ecosystem MSPs (McKinsey & Company). As a result today:

- Airbnb the online marketplace for hospitality services despite owning any properties is more valuable (\$30bn) than Marriott, the world's largest hotel chain.
- Uber, the world's largest taxi company, owns no vehicles.
- Facebook, the world's most popular media owner, creates no content.

However, what they all own and have produced is a platform.

As Accenture research and TechCrunch coins it, the battle today is for the customer interface.

The reason behind such a strong emphasis on the interface is because it gives rise to:

- a. Network Effects/Two-Sided Market: the interaction between the two or more user groups on the platform generates value for each other that results in mutual benefits. The increased connectivity between the users, the stronger the drive for value creation. For example: Apple has created its platform- 'App Store', where over 380,000 developers

have created around 1.5 million applications that has been downloaded by consumers more than 100 billion times.

- b. Effective Distribution: the platforms business models enable scalability and is self-sustaining as it not only makes profit itself but even allows others to generate profits. For example: those 100 billion downloads from the Apple App store have generated \$33billion in sales and as per their agreement, 70% of it goes to the developers which still leaves Apple with over \$10bn
- c. Asymmetric Growth: this exists when two competitors/companies are going after similar market opportunities but with different approaches and resources. This helps eliminate cross industry lines and tap into the core market. For example: while the Apple App store is large and doing well, credit for its asymmetric growth goes to the existence of the Google/Android play store.

This lesson explains the high billion dollar valuations of the tech startups coming from the Silicon Valley because products only produce a single revenue stream and platforms generates multiple (BCG, 2008).

### 3. Bridging the gap between Technology and Business

(Agile organizations | *Leadership: collaborativeness and teamwork*)

Companies within the Silicon Valley embody the external ecosystem of the region of being collaborative and agile within their internal structure as well. The constant dynamic shift in the tech environment requires firms to be flexible and collaborative in nature to constantly keep innovating. It's always been a predicament that tech and business don't work together and have always been treated as separate business functions especially in the larger organizations. However, it's the opposite in the valley with companies especially the larger ones like Google, Facebook, LinkedIn making constant efforts to flatten their hierarchical structure and the bridge the gaps across various functions of the respective organizations (Roon, Wharton, 2016). They are altering their practices to be more efficient and quick in customer response by:

- **Organizational structure**: shifting from an application-oriented focus that was confined to singular divisions/perspectives to a more product-based focus looking at the end-end perspective. Increased pooling of resources and communication across functions.

- **Cross functions interactions:** the service process is worked upon by both product owners from business and tech at all stages rather than separate processes. This means that the products aren't solely defined as single offerings but rather combination of offerings.
- **Roles:** all roles are integrated under the same teams and divided by products. Delegation of work increases, reducing the responsibility from PM's leading to a uniform understanding of every employee working on the same product regardless of function.
- **Large business units to autonomous startup:** with growing organizations, also grows the complexity. In an effort to not let that complexity affect growth and innovation, a lot of silicon valley firms have started converting and treating individual units-product lines as autonomous startups operating under a large parent company. For. ex: Google has several products, each team like the Android team, YouTube team work separately (California Management Review, 2014).

The companies in the Silicon Valley realizing that innovation and creation is inherently team based, and thus embody the unconventional practices as listed above. This goes on and adds to their culture making it a conventional norm across the whole cluster. Whether it be Google or LinkedIn or Facebook, the 3 campuses I visited during my trip to the valley- they all offered incentives for employees to stay on campus as long as they could especially in community areas. For instance, all the meals for all employees, their families and their guests is free of cost just in the hope that people from different teams like tech or business come up with new solutions or ideas while having that one meal. They invest heavily in recreational activities on campus that are team oriented in nature in the same hope. While, this may add additional costs to the companies, they feel that these costs outweighs the benefits and the new solutions and ideas that come out of those collaborative spaces and meetings.

**Malcom Gladwell** in his best-selling book *The Tipping Point* uses the term "connectors" to describe this kind of leadership. It is this practice of connecting people implied by these tech leaders, leveraging their ability to link people, ideas and resources.

#### **4. Multiple revenue streams and business models**

A lot of the major companies in the valley have developed multiple revenue streams through different models, going beyond the traditionally practiced ones. Companies like LinkedIn, Slack, Skype use different business models to capture different kind of consumers (MIT Sloan Management Review). Coined as the "freemium" model where they attract customers by offering their services at no cost, and then introduce several paid for options ranging from networking privileges in LinkedIn to subsidized international calling through Skype. Similarly, Google and Facebook as well have multiple products and services like YouTube, Gmail, Nest and Oculus, WhatsApp, Instagram-FB. Through this, they try and combine products, services and data to bring out very new businesses often knitting each other together.

#### **Silicon Valley of Asia: Case Study of Bangalore**

Source: Stanford University Center for International Development

The Indian city of Bangalore has been very commonly regarded as the silicon valley of Asia and India, owing to the increasing concentration of technology companies and rising startups in the region. Similar to the silicon valley, the Bangalore IT industry started garnering growth cause of the high rise of two major tech firms in the 1980's and 90's- Infosys and Wipro. The presence of high-academic profile institutions like the Indian Institute of Management (IIM), Indian Institute of Science and Technology etc. play similar roles that Stanford and Berkeley do in the original silicon valley. The inflow of venture capital (\$2.2 bn- 2<sup>nd</sup> highest in the world) has been increasing significantly in the region with all major VC firms having established offices in Bangalore ranging from Sequoia to Accel. That rise has led to the start of a formation of a cluster but unlike the Silicon Valley, it is a big challenge to create an ecosystem like that because of the growing complexities of the Indian societal issues. While the Silicon Valley has started forming since over 60 years, the IT scene in Bangalore has only taken up since 1991. The ecosystem even in the valley has taken a long time to evolve and Bangalore is just in the nascent stages. The tight knit Silicon Valley cluster has fostered innovation which has started to take place around Bangalore but not matured yet.

On a point by point comparison on the above lessons:

- The formation of a cluster in Bangalore has started to form similar to the valley but is in its initial stages right now. Very essential to grow to match up the success of the bay area.



- The growing startups are platform oriented indeed and very similar to the SV startups. The most prominent ones being Flipkart, Paytm, SnapDeal, Ola etc. which have replicated business models of successful ventures from the valley like Amazon, Paypal, Uber and have gained unicorn status.
- The presence of Bangalore in a developing economy of India poses certain challenges that the Silicon Valley doesn't face which makes it a problem to have relatively agile organizations and multiple revenue streams.

While, there are some similarities and a common history to both places, they are still singular in nature. Silicon Valley has positioned itself as benchmark and the city of Bangalore is an aspiring model of that with a carved niche in the developing world (IIM-B, Shapira). They have comparable strengths and weaknesses but variate opportunities and threats. Both the regions are riding the wave of innovation with SV leading it and as the ecosystem around Bangalore and India keeps growing, the similarities and the gap would keep narrowing. So, at this point comparing Bangalore to the Silicon Valley might not completely be fair.

## **Conclusion**

This paper exhibited 4 key business lessons from the Silicon Valley and how the next most speculated tech cluster (Bangalore) is potentially catching up. Detailed analysis into the cluster formation, shifting trends towards platforms, agile organizations and multiple business models explained the long standing and strong dominant positioning of Silicon Valley and it's the source of its competitive advantages. The case study of Bangalore exhibited how potential new clusters are being formed around the world on the same ideologies as the valley but the distant point in time by which they would be able to match up.

## **Points of Consideration**

While this paper gives a detailed insight into the sources of competitive advantage of the Silicon Valley, it is very important to note and take into consideration that there may be some outliers and may not be applicable or said for all companies in the valley. There is a growing new wave of technologies in the Artificial Intelligence field coming up in the valley which might demand practices that are not coherent with the ones discussed in this paper. As for the case study, the

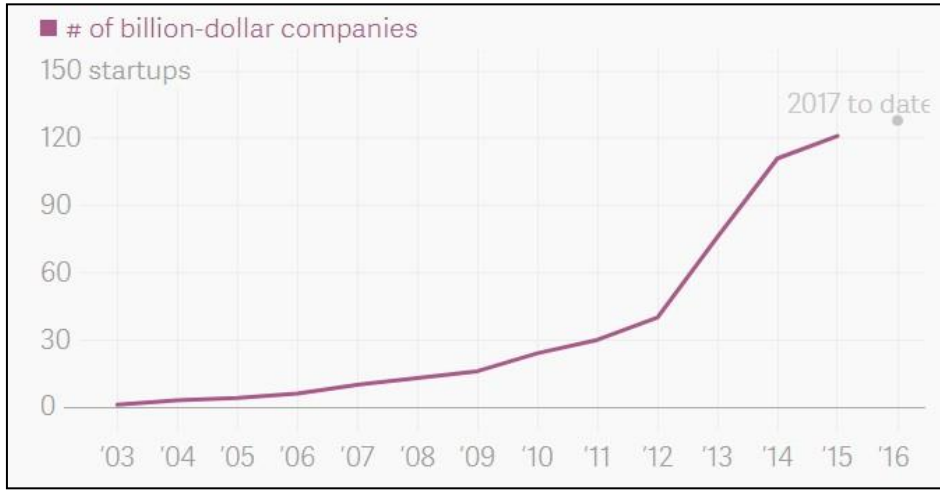
main point of consideration is the external challenges that come into play as India is a developing economy and the US is a developed one. Political, Social and Societal challenges can change the trajectory of the analysis depending on the macroeconomic condition of the cluster being analyzed.

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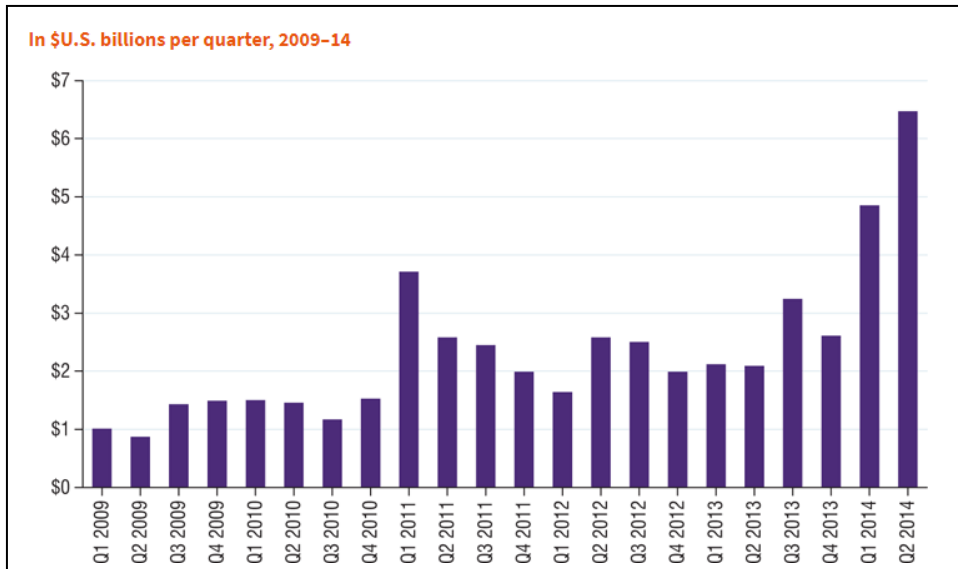
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## Appendices

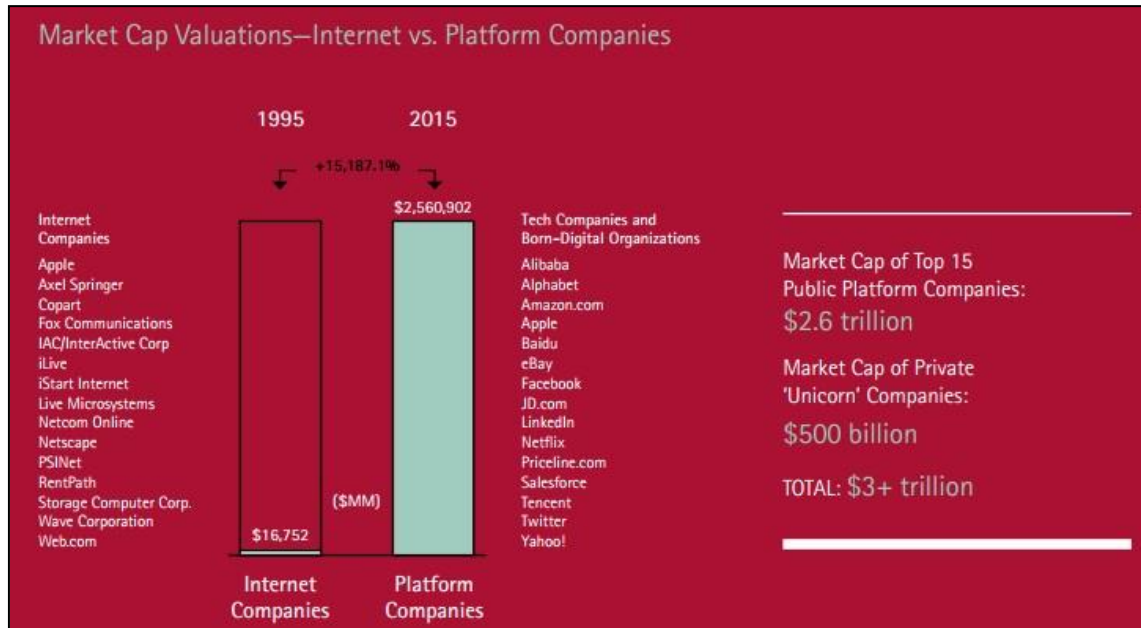
### Appendix 1: Unicorn Startups in the Silicon Valley



### Appendix 2: Rise of Venture Capital Investment in the Silicon Valley



### Appendix 3: The Growing Platform Economy



### Appendix 4: Bangalore's Global Standing (World #2) and Growth Index.

	Ranking	Performance	Funding	Market Reach	Talent	Startup Exp.	Growth Index
Silicon Valley	1	1	1	4	1	1	2.1
New York City	2	2	2	1	9	4	1.8
Los Angeles	3	4	4	2	10	5	1.8
Boston	4	3	3	7	12	7	2.7
Tel Aviv	5	6	5	13	3	6	2.9
London	6	5	10	3	7	13	3.3
Chicago	7	8	12	5	11	14	2.8
Seattle	8	12	11	12	4	3	2.1
Berlin	9	7	8	19	8	8	10
Singapore	10	11	9	9	20	9	1.9
Paris	11	13	13	6	16	15	1.3
Sao Paulo	12	9	7	11	19	19	3.5
Moscow	13	17	15	8	2	20	1.0
Austin	14	16	14	18	5	2	1.9
Bangalore	15	10	6	20	17	12	4.9
Sydney	16	20	16	17	6	10	1.1
Toronto	17	14	18	14	15	18	1.3
Vancouver	18	18	19	15	14	11	1.2
Amsterdam	19	15	20	10	18	16	3.0
Montreal	20	19	17	16	13	17	Compass

