

2017年8月18日

Elizabeth Yao, Stanford University Class of 2019, Summer Intern

How the Guangdong-Hong Kong-Macau Bay Area Can Learn From Silicon Valley

Summary

As the Guangdong-Hong Kong-Macau Bay Area starts to take shape, it is important to examine the place it is loosely based off of, Silicon Valley. An understanding of Silicon Valley's strengths and weaknesses and how they map onto the Bay Area's strengths and weaknesses will help accelerate economic growth in the area.

What is the Greater Bay Area?

By now you have probably heard about the Guangdong-Hong Kong-Macau Bay Area (colloquially known as the “Greater Bay Area”) from watching the news, reading the paper, or even talking to your friends. The idea behind the Greater Bay Area has been around for a while, with the governments of Hong Kong, Guangdong, and Macau having launched public consultation for the “Action Plan for the Bay Area of the Pearl River Estuary” as early as January 2011. In case you have missed whisperings of the plan for the past six years or have not heard the new name for this yet, the crux of the Greater Bay Area plan (which may be formalized by September 2017) is that China hopes one day, the Pearl River Delta Bay Area (one of many names for the Greater Bay Area) will rival that of San Francisco, New York, and Tokyo.

The Greater Bay Area is comprised of nine Chinese cities (namely Dongguan, Foshan, Guangzhou, Guizhou, Jiangmen, Shenzhen, Zhaoqing, Zhongshan, and Zhuhai) and the two Special Administrative Regions (“SARs”) (Hong Kong and Macau), covering 56,000 square kilometers and home to 66.71 million people. In 2016, the Greater Bay Area churned out a GDP of US\$1.36 trillion. For comparison, the San Francisco Bay Area is 18,000 square kilometers with a population of an estimated 7.6 million, the New York Delta is 17,400 square kilometers with a population of 23.4 million, and the Tokyo

Delta is 36,800 square kilometers with a population of 43.5 million. Because the San Francisco Bay Area is among the first places people think of when they think of a booming economy or hear the phrase “Bay Area”, comparisons will be focused there.

The San Francisco Bay Area vs. the Greater Bay Area, by the numbers

Let’s start by comparing the numbers. The San Francisco Bay Area had a GDP of US\$0.76 trillion in 2016, or around US\$100,000 per capita, making it 4.4% of the US economy. It is home to 2 of the world’s 100 best universities (Stanford University and University of California, Berkeley) and 22 of Forbes’ 500 best companies. The Greater Bay Area, again, had a GDP of US\$1.36 trillion in 2016, but that number sounds slightly less impressive when you realize that is equivalent to US\$20,000 per capita. The Greater Bay Area accounts for 12% of Mainland China, Hong Kong, and Macau’s combined GDP and houses 4 of the world’s 100 best universities (The University of Hong Kong (“HKU”), The Hong Kong University of Science and Technology (“HKUST”), The Chinese University of Hong Kong (“Chinese University”), and City University of Hong Kong) and 15 of Forbes’ 500 best companies.

	San Francisco Bay Area	Greater Bay Area
Area	18,000 sq km	56,000 sq km
Population	7.6 million	66.71 million
GDP	US\$0.76 trillion	US\$1.36 trillion
GDP per capita	US\$100,000	US\$20,000
% of country’s economy	4.4%	12%*
Top 100 schools	2	4
Forbes 500 companies	22	15

Source: Guangdong-Hong Kong-Macao Bay Area Forum, Tencent, Forbes

*Percentage of Mainland China, Hong Kong, and Macau’s combined GDP

Both Bay Areas are clearly impressive, but how did innovative technology become so associated with the San Francisco Bay Area, leaving the Greater Bay Area second-best? To fully understand this, it is important to know a bit about Silicon Valley’s history and see how Silicon Valley’s greatest catalysts (easy research money, easy venture capital money, and mobility) play their part.

You may have noted the use of the term “Silicon Valley” rather than “San Francisco Bay Area”. Strictly speaking, the San Francisco Bay Area is comprised of 9 counties and stretches from Napa County in the north to Santa Clara County in the south. Silicon Valley stretches from San Jose to San Mateo

(though some contest that the northern border is San Francisco). Back to Silicon Valley history...

The origins of Silicon Valley

The roots of Silicon Valley formed in at least the 1940s, when Silicon Valley was primarily industrial and military focused. There were a lot of unused federal research funds after World War II and Fredrick Terman, dean of Stanford's engineering school (and often called the father of Silicon Valley), saw the funds as a way to make Stanford a top-tier engineering school, and so chartered a committee to help Stanford secure them.

During Cold War paranoia, the U.S. government was quick to throw money at pretty much any project without question of feasibility. This easy research money served as a buffer against failure and allowed Stanford to quickly pump out important research. (Not to discount the importance of the research coming out of Berkeley, but Berkeley is not technically part of Silicon Valley, so I will not talk about it here.) Consumers did not benefit much from this work until the personal computer revolution of the 1980s, but many companies you know and love today (e.g. Apple) would not have been the same without military research funds or Terman's idea to build an industrial park on Stanford's campus, leasing out spaces to companies that might benefit Stanford.

On top of the easy research money, Silicon Valley was (and still is, to a certain extent) known for easy venture capital money: it was relatively simple to find money to bring ideas from research to consumers. Silicon Valley embodied the idea that it is important to fund businesses even if they have no clear or significant profitability.

Silicon Valley is also known for being a very mobile place professionally. People move around a lot, which helps good ideas move around faster and bad companies fail faster. Even founders of companies that have failed can still recover — they can reset by going to a more established company, join a new venture, or even by getting recruited to leadership positions so they can share their experience and give appropriate warnings. Additionally, Silicon Valley is known for being mobile socially as a place where nerds, hobbyists, and hoodie-wearing college dropouts do quite well.

How can we use what we know about Silicon Valley to speed up economic development in the Greater Bay Area?

Silicon Valley probably sounds quite hunky dory at the moment, but we will get to the bad stuff later. For now, let's bring our focus back to the Greater Bay Area. The biggest economies in the Greater Bay Area are that of Hong

Kong, Guangzhou, and Shenzhen. Hong Kong is an international financial center, Shenzhen is an innovation hub, and Guangzhou is a manufacturing heavyweight. These cities (and the rest of the Greater Bay Area) can clearly have a very synergetic relationship, but the biggest obstacle to sustained collaboration is the fact that many of these cities operate under very different systems.

The most obvious manifestation of this is immigration. To travel between Hong Kong, Macau, and Mainland China, you need visas, and if you are planning on working in a place where you do not have citizenship, you need a work visa. Now, if you are going to a big, established company like Tencent or Huawei, the process takes a bit of time, but is more of a formality. However, if you are a budding startup in Hong Kong trying to recruit overseas talent, you may get buried in paperwork trying to sponsor visas.

Clearly, physical movement within the Greater Bay Area is more difficult than within the San Francisco Bay Area. This makes it difficult for the process of creative destruction to occur the way it does in Silicon Valley. With it more difficult for top talent to physically move from company to company, ideas stagnate and bad companies hang on to employees that can make more of a difference elsewhere. Immigration can definitely be a tricky issue, with questions about how the SARs fit into this framework, but it is an important thing to get right early. Good immigration policy can get rid of a lot of overhead, allowing companies to allocate more time to creating and bettering their products.

A more streamlined visa and immigration policy between the 9 cities and 2 SARs will facilitate movement and collaboration. In terms of concrete action, the EuroStar immigration policy of going through the destination country's customs and immigration before getting on the train in the origin country is a good model for the future Guangzhou-Shenzhen-Hong Kong Express Rail Link. It saves passengers time to not go through two rounds of customs and immigration for a one-way journey and it still allows the destination's government to have control over who is entering its borders.

Silicon Valley is also known for social mobility, which goes hand in hand with professional mobility. Supposedly, Silicon Valley is a place where anyone can build the next Facebook or Google, but who do you imagine as "anyone"? Is it a young, energetic guy? If so, you are unfortunately thinking the way a lot of people in Silicon Valley with money do. The numbers may be a good wake up call. According to Pitchbook 2016 data, 17% of VC backed companies were women-led, 11% of VC dollars went to women-led companies, 9% of VC backed companies had a women CEO, and 5% of VC dollars went to companies with women CEOs. Now, Silicon Valley is definitely trying, but take one look at Google's most recent diversity numbers and you'll see that

even though women account for 31% of the company, they only make up 20% of the technical roles and 25% of the leadership roles. Think about the recent Google employee memo and you'll be even more disheartened.

Diversity is obviously an area of growth for Silicon Valley and is definitely something the Greater Bay Area can do better than Silicon Valley in the future. Diversity is valuable for a lot of reasons, but one of the most useful reasons for companies is that different people bring different backgrounds and ideas to the table, and a larger variety of people will lead to a broader range of ideas and expertise.

However, the Greater Bay Area has other pressing social mobility issues that may need to be addressed first. The traditional Chinese mindset very much tends toward safety, seeking to do more than survive, but being afraid to take the risks necessary to thrive. Mindsets have slowly changed, especially in Shenzhen, but Hong Kong is still very much stuck on safety.

More specifically, what can Hong Kong do?

In Hong Kong, startups are slightly looked down upon. As a parent, you mostly likely wouldn't want your child to be founding or working for one — after all, medicine, law, and banking are safer, right? A lot of the time, innovation is seen as contrary to safety and though innovation is celebrated and admired, no one wants to be the one to go out on a limb and potentially hurt themselves.

One way to help bring about this change is to pull a Stanford and pump more money into research. After all, all four of the Greater Bay Area's top 100 schools are in Hong Kong, scholarship is seen as a worthy pursuit, and more exciting stuff has been coming out of the HKU, HKUST, and Chinese University labs than Cyberport and Science Park anyway. University labs have been partnering with banks and other corporations to insure that research is actually applicable to real firms. Additionally, university labs have already tried to instill an entrepreneurial spirit in their students, exemplified by HKU's partnership with Cyberport to develop an "innovative FinTech system" and HKUST's Entrepreneurship Center that works with their research centers and encourages "well-rounded students" to "think innovatively".

Hong Kong's universities are definitely making steps in the right direction, and monetary support could definitely help them expand their programs, but there are a lot more ways for Hong Kong's government to promote entrepreneurship, like giving money to startups.

Hong Kong's government has become known as one that's bark is bigger than its bite. Why do you think every big tech company (e.g. Facebook, Google, Amazon) has their regional headquarters in Singapore? Well, the satay

is great, but it probably helps that instead of debating what policies will draw the most tech talent to the area, Singapore is handing out money in the form of subsidies, tax breaks, and grants to up-and-coming entrepreneurs.

Of course, Hong Kong has some systems in place to support founders (check out startmeup.hk's swanky new website to see for yourself), but it takes a while to get anything done in Hong Kong. Just try to open up a corporate bank account — it can take up to three weeks, which is half a lifetime in startup time. And once you get your account, you will probably find it a little bit unfriendly. A lot of corporate banking in Hong Kong feels a lot more about the bank making money than the bank supporting companies.

It is not all bad though, promise. Hong Kong has a very simple tax scheme, a great physical location, and amazing infrastructure — all important selling points. But when you are known as an international financial center and your arguably most cutting-edge tech, the Octopus, is 20 years old, you need a push in the right direction. It is great to know that you can step off the MTR, catch a bus, and buy a meal with nothing but a shiny plastic card, but let's not forget the panic you have when you misplace your card, think you've lost \$700, and wonder why Hong Kong runs on such an unsecure system. It is time to make some changes or risk getting left behind.

Back to the “Greater” picture

The Greater Bay Area definitely has the potential to become the most innovative and productive bay area in the world, but first, the 9 cities, 2 SARs, and the Chinese government need to get on the same page. Every party will need to respect every other party in order to optimize policy for the area as a whole — science parks and manufacturing plants are useless if they're empty. Second, perhaps even more importantly, there needs to be a distinct mindset shift from a focus on safety to a focus on innovation — failure should not be treated as a black mark. As the new saying goes, fail early, fail often, and we got this, guys.