

Silicon Valley: a production space integrated at local, regional, national and international scales.

California
 Surface area: 423 970 km²
 Population: 39.5 million inhabitants
 Capital: Sacramento
 GNP per inhabitant: US\$ 70 000

Situated in the West of the USA, Silicon Valley is a high tech cluster with 3 million inhabitants located to the south-east of San Francisco. The strong relationship between businesses, financial institutions, engineers and students has created an innovative metropolitan environment.



Silicon Valley

Principal businesses in Silicon Valley

Principal Universities

Key figures for Silicon Valley

Inhabitants

Employees

Unemployment rate

A new geography of work

Fine architecture, accommodation, restaurants, shops, sports halls, banks, green spaces of contemporary art, large parks, electric buses, bike stations ... No, it's not about the amenities of a city centre, but the new headquarters of the giants of technology. Already known for their huge, ultramodern campuses, Apple, Google, and Facebook, the three biggest symbols of Silicon Valley's global dominance, are moving up a gear. These companies, respectively the first, second and sixth in terms of world stock market valuations, have recently expanded or will soon spread, to become "cities within the city".

Visiting the headquarters of these digital companies, located a few dozen kilometers from one another in the heart of Silicon Valley, to the south of San Francisco, is an atypical experience. Their "campuses" – a reference to the huge American universities, which are both places of life and work - are first of all demonstrations of power...

Thought down to the last detail, hyper modern, designed by renowned architects, the primary function of these majestic headquarters is to promote well-being at work to get the best - and above all the maximum - of employees. Thus, in Mountain View, the "Googleplex" of more than 20 hectares where more than 10,000 employees work, the model worker can practically spend his life in a closed ecosystem. Private shuttles bring him or her to work in the morning. A daycare centre can take care of his children. He eats for free, from morning to evening, in several organic canteens and restaurants, and can enjoy all the services he needs, from the bank to the pool, through to the doctor and pharmacy.

Adapted from Sylvain Roland, 'Google, Facebook, Apple: when business become a town within a town, La Tribune, 26 June 2017

The Googleplex



An integrated human network

What makes Silicon Valley different from other clusters? Silicon Valley is an ecosystem of innovation composed of complementary and interdependent economic actors. Between San Francisco and San José, there are well-known big companies [... and] other actors, particularly in the field of research: the Xerox Park, the SRI [Stanford Research Institute], major universities such as Stanford, Berkeley [...]

But two actors are often neglected. The lawyers, first of all. At the heart of the business model of startups. In the heart of Silicon Valley, at Palo Alto, the firm Wilson Sonsini has 1,500 lawyers specializing in new technologies. [...]

Nationality networks appear very quickly when one examines partnerships or funding. Chinese and Indians make up more than 50 percent of Silicon Valley's engineering population. [...] In video games, as at Electronic Arts, one comes across lot of French people. The second major type of network consists of those who have already worked together [...]: former colleagues, former partners, who already know each other and can rapidly evaluate the potential of a proposed partnership.

These networks promote the flow of information, access to resources and collaborations. Finally, there are university-related networks. Graduate networks of Stanford, Berkeley, Harvard or MIT students underpin many collaborations and groupings of entrepreneurs. It is not uncommon to see Stanford students initiate a collaboration during their studies. This was the case for David Filo and Jerry Yang with Yahoo! and Larry Page and Serguei Brin with Google.

Adapted from Michel Ferrary, 'Silicon Valley, a cluster of capital risk takers?', parisinnovationreview.com, 21 September 2017.

The power of GAFAM

GAFAM is the acronym for the giants of the Web, Google, Apple, Facebook, Amazon and Microsoft. [...] The development of these five Web giants is part of the digital revolution or the third industrial revolution, taking place at the beginning of the twenty-first century. Data is their raw material. [...] GAFAM has a lot of influence in the Western world. In 2017, GAFAM spent a record \$ 50 million in lobbying the US government. In Europe, Microsoft and Google are among the US companies that spend the most on lobbying the European Commission. Their influence is more limited in authoritarian countries where networks are controlled by the state [...]. The amount of personal information collected by these companies and their dominant position can influence the policy of a country or the results of research in the case of Google, which may downgrade sites deemed negatively by institutions such as the Ministry of Defense of the United States

Adapted from Wikipedia

The mounting power of BAT

China invented gunpowder, the gang of Four feels targeted. Google, Apple, Facebook, Amazon - the so-called Gafa - are not alone in discovering the exasperation that their almost totalitarian practices are arousing in their customers. Behind the Great Wall, they thought there weren't any challengers. With the new Chinese dragons Baidu, Alibaba, Tencent - BAT - they have discovered very high level competitors who might one day beat them.

Indeed, their stock market value trends and activity levels are growing for the most part faster than those of their American peers. There is no need to have invented the compass, another Chinese discovery, to understand that these curves are destined to intersect.

They have already started to do so. Last November, Tencent joined Facebook on the stock market and surpassed the threshold of 500 billion dollars. Alibaba is also in the process of joining the very closed club of five groups worth more than 500 billion (Apple, BAT or BATX: acronym for Chinese companies Baidu (search engine), Alibaba (virtual commerce platform as Amazon), Tencent (email account provider) and Xiaomi (phone manufacturer), Amazon, Google, Microsoft and Tencent). Facebook has been kicked out. Of course, the weight of GAFAM still remains much higher, the turnover of Amazon equals six times that of Alibaba, Google enjoys a turnover ten times that of Baidu, but the trend is there. "It's about time that Silicon Valley becomes paranoid," writes "The Economist."

You do not know Tencent? Every day, 50 million players connect to its "Honor of Kings" video game, and it's impossible to live, pay, play, send messages in China without its WeChat application. It has 1 billion users. [...] Alibaba, in addition to its huge e-commerce network, also has the first online video platform, a bank (Ant Financial), and a payment system (Alipay).

Adapted from Sabine Delanglade, 'The shock of the cyberpowers', Les Echos, 3 April 2018

A supremacy under threat?

