

Mecca for innovation and entrepreneurship

Out of the Box

Tony Chan Fan-cheong is president of the Hong Kong University of Science and Technology. He has spent his life pursuing his dreams relating to teaching and research, and has unique views on education, scientific and technological development, and nurturing the young.



MANY TODAY KNOW where Silicon Valley is, but few know when and how it was founded.

The credit for starting the Silicon Valley is often given to a former Stanford dean of engineering Frank Terman and his two student mentees, William Hewlett and David Packard. In 1939, with the encouragement of Terman, the two started their company in a garage with US\$538 in capital – and their company would later become the famous HP. The garage is now reconstructed as an exhibit in the main Stanford engineering building to inspire current students.

In 1951, Stanford and Terman proposed the creation of a research park using part of the vast land Stanford owns, sowing the seed for Silicon Valley.

This critical decision – to provide space for start-ups to thrive – would lead to the creation of an ecosystem. Stanford's unconventional decision to use its property

on something unproven at that point of history was a leap of faith, but it has paid off.

Over the last four decades, Stanford's reputation has risen dramatically in the global public's mind as a university, and also as a place where ambitious people who want to make an impact in the world. With influx of the best talents from around the globe, Stanford is the engine behind Silicon Valley.

There is a wall at the Engineering School named "Stanford Engineering Heroes," and it features icons like Hewlett, Packard, Yahoo's Jerry Yang, Google's Sergey Brin and Larry Page, and Netflix's Reed Hastings.

Engineering is a very popular choice as a major among Stanford undergraduates, and 40 percent of engineering students major in computer science. This is so different from Hong Kong.

Last week, I met former Stanford president John Hennessy, and he confirmed my own observations. In the earlier days of Silicon Valley, the focus was mainly on making hardware, such as computer chips.

Big computer firms like IBM and DEC were originally based in New York and Boston, but then the world went through several changes: the advent of the personal computers (with Apple and IBM, before it was acquired by Lenovo), the internet, world wide web, social media and today AI. Each one of these tectonic shifts tilted the balance of power from the East Coast to the West Coast and Silicon Valley.

Today, an ambitious professor looking for a university environment that allows and values the commercialization and expanded impact of ideas from his/her research will be looking at Stanford as the No 1 choice. The university has nurtured a culture and value system that supports such endeavors.

It helps that there are successful role models around to ask questions and seek advice from, and the same goes for students.

Stanford has many cases of students who founded companies while still in school, which later turned into

hugely successful companies (Yahoo, Google and Snapchat).

The campus is full of multitudes of opportunities that allow an uninitiated student who has an idea to take a plunge into entrepreneurship.

Stanford Business School now gets more acceptances of admission offers

than Harvard's Business school, among those who get admitted to both.

One of the main reasons is the atmosphere of entrepreneurship, multidisciplinary collaborations at Stanford and the Silicon Valley.

The connection of the university to the private sector goes all the way to the top leaders.

Hennessy was recently appointed as the new chairman of the board of Alphabet, the mother company of Google, where he had served as a board member since 2004. He has also been on the board of Cisco.

He himself is a successful entrepreneur who founded two computer hardware companies.

The new president Marc Tessier-Lavigne is also an entrepreneur. After a long career in academia, he was recruited by Genentech to be a senior vice-president, and later he founded two companies of his own and on whose boards he continues to serve (one as chair) while being Stanford president.

It is rare, if not frowned upon by SAR university councils and society, for university presidents to even have any formal connection with the private sector.

The Stanford board, though, sees this blending of academia as mutually beneficial and is one of the secrets of success at Stanford and Silicon Valley.

There is much more to Stanford's success than meets the eye.



Tony Chan with new Stanford president Marc Tessier-Lavigne.