

City needs a shift in attitude to lead innovation

Victor Zheng and Roger Luk say HK should emulate the Anglo-US development model, rather than mirroring Singapore or the mainland, to halt its slide down global rankings

When the Innovation and Technology Bureau was set up in late 2015, aspirations were high and promises made. However, Hong Kong has fallen three places, to 16th, in this year's Global Innovation Index. Why have all the government efforts in the past 20 years or so proved ineffective?

The Global Innovation Index 2017 report, covering 127 economies, offers much insight. The main index is comprised of the input and output sub-indexes. It has five areas of innovation "input": institutions, human capital and research, infrastructure, market sophistication, and business sophistication. The two areas of "output" are knowledge and creativeness. The ratio of output to input reflects innovation efficiency.

Two changes have happened in the past four years: Ireland replaced Hong Kong in the top 10 in 2015, and Germany replaced Luxemburg in 2016. Singapore has hovered between sixth and seventh. Despite renewed government commitment, Hong Kong's area ranking has tumbled from 10th in 2014 to 16th. Nevertheless, our efficiency index is still comparable to Singapore's.

However, Singapore ranks high in the "inputs", but low for "output", where it is below mainland China. Thus, its efficiency ratio is below the global average, and it is not a good example for Hong Kong to mirror. Hong Kong lags behind particularly in human capital and research, as well as business sophistication. Mainland China is catching up in business sophistication but still lags behind in other areas.

A further breakdown of the index shows that the mainland and Hong Kong both lag behind in tertiary education and research. Moreover, Hong Kong is weak in knowledge workers, innovation links and knowledge absorption. Here, Singapore is the leader and the mainland is catching up. Hong Kong's problem is its poor performance in "output", in particular its knowledge and technology area ranking.

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If Hong Kong wishes to advance its innovation efficiency, the development models of European and American economies may prove more rewarding. The statistics of Nobel laureates are enlightening. Since 1901, there have been 881 recipients of academic prizes, of whom 553 have come from US universities; 129 from the UK and 107 from German universities. Only three each have come from India and China.

Why are Anglo-American institutions breeding grounds of discoveries and innovations? Their comparative advantage is cultural. The spirit and rule of law safeguard academic freedom, knowledge exploration, intellectual property and a market economy. More importantly, they are governed by scholars, have financial autonomy, abide by academic freedom, and believe in knowledge and intellectuals.

Hong Kong is losing ground in global rankings because of falling output. In particular, its creativeness index has dropped significantly. There is no better way to sustain innovation and improve efficiency than through the Anglo-American experience. We should redefine the roles of government, industry and institutions based on their comparative advantages. Also, we should encourage academic research and development, strengthen links with industries and foster the application of discoveries.

The Global Innovation Index and rankings are not conclusive, but they are indicative of the effectiveness of different models. The mainland Chinese model is efficient but restrictive. The Singapore model is comprehensive but inefficient. The Anglo-American model is dynamic and unrestrictive, and shows that an environment for innovative matters more than public input. The 2017 report sounds the alarm for Hong Kong, which is at a crossroads. The choice is obvious.

Above all, what counts is attitude. The secretary for innovation and technology has been criticised over the handling of Uber in Hong Kong. Some do not accept that it is a matter of legitimacy, not technology. Octopus has been criticised over its technological obsolescence. Many do not realise it is a matter of efficiency. Innovation is about more than Uber, and fintech is more than mobile payments. If we are so ignorant of the horizons of science and technology, how can we ever recover lost ground in innovation?

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Hong Kong's innovation chief Nicholas Yang Wei-hsiung addresses the Information Security Summit. Photo: ISD