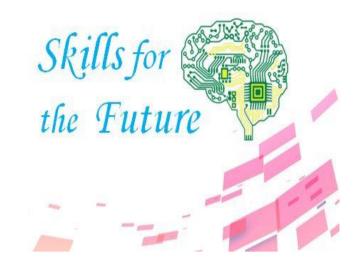
Jobs & Future Skills

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The economic situation ahead is a gloomy one. In Singapore, the Deputy Prime Minister was quoted recently that the country's GDP will come in the lower end of its official forecast of 1-2% this year given the weaker global growth outlook.



To prepare for the medium term, the Singapore Committee of the Future Economy (CFE) has identified "Jobs and Skills for the Future" as one of its 5 key focus areas. Creating jobs has been one of the government's priorities so let's take a brief look at how Singapore has been preparing its workforce over the years.

Export-led industrialisation through multinationals

As a young nation, Singapore's founding leaders with foresight chartered its destiny through the development and successful implementation of exceptional economic strategies of its time. To survive, Singapore during the 1960s to 1980s, aggressively promoted export-led industralisation while concurrently attract global multi-corporations to achieve industrial growth.

During those two decades, Singapore moved from labour intensive manufacturing to value-added engineering industries, e.g. electronics, petrol chemical and precision engineering. With electronics as the underpinning growth engine (~30% of total manufacturing value-add in 2013), Singapore accounts for one in 10 wafer starts in the world and 40% of the global hard disc media manufactured.

Recognising the needs for engineers, Nanyang Technological Institute (aka Nanyang Technological University) was set up in Aug 1981 with the charter to train three-quarter of Singapore engineers. Many of my cohorts including myself became the pioneer batches of NTU responding to the government drives to support value-added engineering industries.

However, Singapore went into a recession in 1985 despite the growing global economy hitting the initial batches of NTU graduates. In 1986, unofficially estimates indicated over 50% of civil engineering graduates were unable to find jobs in construction related industries.

Liberalisation and the rise of modern services

1985 was the turning point in Singapore economy signalling the start of the new phase known as "Liberalisation and the Rise of Modern Services" from 1985 to 2010.

It was during this period that saw the acceleration of the liberalisation and consolidation of the financial, telecommunication and utilities services and schemes to drive Singapore businesses to tap growth in the regional markets.

During these 15 years, 7 local banks consolidated into 3 while expanding their networks into the region. The telecommunication market was liberalised resulting in the current 3 telco.

Accountancy, banking/financial services and Information Technology became top pursuit for tertiary education. Investment bankers, lawyers, accountants, financial service advisers and property agents were drawing much higher salaries than doctors, dentists and engineers.

The global economic crisis from 2008 pulled the plug on the run-away economic growth founded on questionable elements. Everything grind to a halt and the new slogan emerged at that time was "Back to Basics" as the new normal.

Demographic slowdown and economic restructuring

According to the MAS, Singapore is entering its 3rd phase of economic history from 2011 to 2025 "Demographic Slowdown and Economic Restructuring" whereby resource constraints (land, manpower and infrastructure) become significant challenges hitting the entire economy instead of selected sectors.

The government's response is to shift to a productivity-driven growth model through 3 key areas:

- 1. Reduction in the foreign worker dependency ratio ceiling
- 2. Financial incentives to firms to improve productivity through adoption of technological solutions
- 3. Programmes to help Singaporeans to develop and master skills in new growth clusters

So what are these new growth clusters?

Two clusters namely, education and health care were identified.

Singapore is currently positioning itself as a choice location for quality education for a growing Asian middle class and by 2025, to become the premier education hub of Asia. Concurrently, the health care sector was opened up to transform Singapore to become a multi-faceted medical hub hosting the world's top medical professionals and multi-national healthcare companies.

On 30 Sep 2016, the newly minted Info-communications Media Development Authority (IDMA) announced its charter to help Singapore seize opportunities in the converging infocomm and media sectors.

But for those who are not keen to pursue education or career in these three sectors, what are the options?

Preparing for the Future

Below are some take-away I would like to share:

- 1. Trying to predict the economic cycles to develop our education and skill development roadmap could be like trying to time the bull and bear runs of the equities markets. This becomes more challenging as there is always a time lag between acquiring the qualification/skills and matching the immediate needs of these sectors.
- 2. Plunging into "hot" careers; e.g. in Fintech could be a short-lived one as previous experience from dot.com could be a lesson for all. Think instead of what are the core factors driving the Fintech frenzy. As an example, BlockChain, one of the hottest technologies besides Big Data,

VR-AR, AI, etc currently being pursued by many banks for trade finance could also be solutions for accounting, logistics, fulfilment and even the healthcare industry!

- 3. Disruptions arising from digital revolution will hit the economies and societies across the world affecting governments, organisations and individuals. Ability to adapt and embrace changes quickly become essential life skills. In Singapore, we are fortunate to have the SkillsFuture scheme make use of the credits.
- 4. Beyond getting a satisfying job with an attractive pay, what is the purpose of education? While there is no universally defined purpose, majority of educators in the world agreed that education is meant to prepare each individual for life, work and citizenship. Critical thinking, creativity, interpersonal skills and a sense of social responsibility should be core components in any sustainable educational curriculum but these likewise must be our individual's goals.
- 5. Finally, to stay ahead of the curve and to live and work alongside robots in the knowledge economy, we need to be more critical in our thinking, ask questions and define problems, investigate, analyse data, design solutions, evaluate options and communicate information. To do all these, we need to excel in 3 areas: a strong command of a widely used and accepted language, deep understanding in science and a good foundation in mathematics. So it has been a big circle going back to: Language, Science and Mathematics!

Changing Mindset

Whatever the approach taken, there is also the need to be prepared to move away from the well-entrenched contract of service (permanency of employment) to contract for service (ad-hoc) nature of employment.

Going forward, it is envisaged that a large pool of professionals each with specific domain knowledge coming together to collaborate and deliver a project on a less rigid structure. Upon completion of the assignment, roll off and re-assemble based on demands in the future. Such idea frightens many who still believe the future is about medium to long term employment.

Two weeks ago, I overhead a listener calling a local Mandarin radio programme catering to the silver generation. She said "要活到老,就要学到老". Translating to "If one desires to live to a ripe age, one has no choice but to embrace live long learning!"

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