

Institute of Policy Studies report

Finding ways to adapt to shifts in tech, skills

Report flags scenarios S'pore may face in future, and ways to cope

Pearl Lee

It is 2020 and Singaporeans have wholeheartedly embraced artificial intelligence and innovation.

Heart surgeon Bruce Wayne-Tan joins a team that has created a high-precision machine that can perform surgery remotely. As its precision is still somewhat off the mark, he uses it to train new surgeons.

Four years later, the machine has caused some senior surgeons to be out of jobs as they are no longer needed to train young surgeons. It is also being grossly misused, as criminals have got their hands on it and are using it to make illegal drugs and explosives off-site.

This dystopian scenario, where the adoption of artificial intelligence negatively impacts societies,

is one of 12 imagined by a Singapore think-tank of various situations the country might encounter over the next decade, till 2026.

Through this exercise, the Institute of Policy Studies (IPS) hopes to spark discussion on how Singapore can prepare itself for the future.

About 100 academics, civil servants and private-sector leaders took part in scenario-planning workshops last August and September to discuss how trends in skills, innovation and longevity could impact Singapore. Their scenarios, and strategies to tackle them, were compiled into an Action Plan Singapore report put together by IPS and made available to the media last week.

One way to avoid the above dystopian scenario from playing out is to commission a comprehensive review across industries, looking at the positive and negative impact of new technologies, the report said.

Findings can be used to craft programmes and policies to mitigate

downsides, while playing up the advantages. To ensure workers are not completely replaced by artificial intelligence, ad-hoc training programmes can be replaced with mandatory industry-specific courses, under what the IPS has termed a Stay Ahead Scheme.

It also suggested that jobs and skill sets most likely to be displaced by artificial intelligence should be publicised, so that the Government and industries can target specific groups of workers to reskill them.

IPS senior research fellow Faizal Yahya said: "We have a scenario now where a degree doesn't guarantee you a job. Employers are looking at skills relevant for their companies, for the future."

It is necessary to have a framework to support displaced workers as such situations will become more commonplace as new technologies are developed, said Dr Faizal, who led discussions with participants on how innovation will affect Singapore's social landscape.

Apart from coming up with future scenarios, participants also thought of strategies to help Singapore deal with the trends. IPS research fellows Christopher Gee and Teng Siao See led discussions on Singapore's ageing population, as well as skill sets of Singaporeans.

One pertinent issue concerning the skill sets of employees is the difference between content taught in educational institutions and the skills required in the workplace.

Said Dr Teng: "We are also hearing (cases of) graduates lacking soft skills, referring to cultural and emotional intelligence, adaptability, the love of learning and creativity."

IPS' report suggests developing academics with industrial experience, by sending teachers to various industries for a year, where they will be paired with industry experts to plan study modules. These teachers could draw up an academic syllabus that integrates workplace exposure and soft skills with educational content, Dr Teng said.

Also suggested was an index to measure if an employee has the necessary capabilities for an industry. This way, employers have a better idea of what they are getting and workers are motivated to reskill themselves to remain relevant.

Participants who have suggested specific strategies will meet again this year to talk about how their ideas can be implemented. The outcomes will be presented at an IPS conference in November.

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While Singaporeans are living longer, they are also having fewer children, who are the traditional caregivers. Participants at the Institute of Policy Studies' scenario-planning exercise suggested ways to deal with the ageing population here, including ideas on overcoming age-based workplace barriers and rewarding caregivers. ST PHOTO: KUA CHEE SIONG

Fresh ideas on dealing with ageing population

Nur Asyiqin Mohamad Salleh

The year 2021 gets off to a bleak start for housewife Auntie May and her husband Joe, who has dementia.

The couple, both 75, have long depleted their Medisave funds. The costs of employing foreign domes-

tic workers have skyrocketed, following severe clamps on manpower outflows from source countries.

General practitioners in neighbourhood clinics are untrained in handling dementia. The only option seems to be a nursing home, an idea the couple are repelled by. Joe soon turns to thoughts of assisted suicide.

But in this gloomy scenario – one

of four on how Singapore might deal with its ageing population – the Institute of Policy Studies (IPS) predicts an upbeat ending.

When a desperate Auntie May confides in her neighbours, she discovers that they face the same problems, and they rally together to come up with solutions. By 2022, they have formed a cooperative

that taps its members' different skills and pools resources to care for sickly seniors in their estate.

Longevity was one of the key themes at IPS' scenario-planning exercise, which threw up several strategies to help Singapore handle its ageing population.

These include introducing a time-banking system for volunteer caregivers, called Eldersave. The scheme would reward caregivers with credits that can be used when they themselves need care in future.

While Singaporeans are living longer, they are also having fewer children, who are the traditional caregivers.

IPS senior research fellow Christopher Gee said: "It's that whole idea of being able to 'pay it forward'. The time spent caregiving is societally valuable, but it is not being recognised at this point."

Chipping away age-based workplace barriers was another strategy that participants in the scenario-planning exercise hoped to see play out in the future. Ideas included internships for those aged 50 and above, and an Ageless Scorecard to grade companies on how inclusive they are to workers of all ages.

The final strategy was end-of-life planning – something Mr Gee feels has not been discussed enough.

He said: "It's the end point that will define how we live our lives. And if we get that right... it will relieve and help our caregivers. It will help society."

An End-Of-Life Toolkit could be given to people to tell them about their care options, and the practical and emotional issues involved. An End-Of-Life Office could spear-

head conversations and efforts.

A "whole-of-society" effort is needed, with voluntary welfare organisations, employers, caregivers, the community and the Government working together.

It was an idea that appealed to architect John Ting, who participated in the exercise. He raised the example of a nursing home in the Netherlands, where students can stay in vacant rooms there in exchange for 30 hours of volunteer work a month, spent interacting with elderly residents.

"This conversation really calls for society to come in, instead of leaving the Government to do everything, and society (just sitting around going) 'oh my goodness, oh my goodness'," he said to laughter from the other participants.

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MANAGING THE LATER YEARS

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IPS SENIOR RESEARCH FELLOW
CHRISTOPHER GEE, on how end-of-life planning has not been discussed enough.