Committee on the Future Economy report

Strategy 3: Strengthen enterprise capabilities to innovate, scale up

Boost IP regime, start-up ecosystem and fund-raising options

Chia Yan Min
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A stronger intellectual property regime, a more vibrant start-up ecosystem and a wider variety of fund-raising options for high-growth companies.

These are some essential ingredients to make Singapore a choice location for innovative companies developing products and solutions for the world, according to the Committee on the Future Economy (CFE).

"Our economy is only as strong and resilient as each of our enterprises can be competitive," the committee noted, adding that this effort requires government agencies, industry and other stakeholders to work together to build an ecosystem for innovation and enterprise growth.

The committee made a number of key recommendations aimed at developing the innovation ecosystem.

First, it suggested that Singapore's intellectual property (IP) regime be strengthened to help enterprises commercialise research findings and IP from research institutions.

This includes growing the community of IP and commercialisation experts and developing a standardised IP protocol to be adopted by all public agencies and publicly funded research entities – such as the Agency for Science, Technology and Research institutes, autonomous universities and hospitals.

"We are starting from a position of strength. We already have a critical mass of high-tech sectors in Singapore, a vibrant start-up and financing ecosystem, world-renowned universities and research institutions, and a strong global pool of research scientists and engineers," the report noted.

The committee also called for further boosts to the start-up ecosystem by enhancing mentorship, helping to raise the profile of Singapore start-ups and expanding the entrepreneurial pipeline.

This means remaining open to entrepreneurial talent from around the world, and facilitating mentorship and networking within the start-up community so that experienced individuals can work with up-and-coming entrepreneurs.

Ultimately, Singapore needs to be more open to change and risk-taking in order to survive in a world where disruption has become the norm, said Trade and Industry (Industry) Minister S. Iswaran.

Mr Iswaran, co-chairman of the CFE, added that the Government, enterprises and individuals cannot become "ossified in their position". "We must be prepared to learn from (failure), learn to fail fast, fail smart and recalibrate," he said.

The CFE also made recommendations aimed at helping companies to scale up. These included a call for deeper collaboration between large and small enterprises, for instance, through corporate venture funds.

The panel also suggested that high-growth enterprises receive more dedicated and customised help when venturing abroad, as well as more support for raising capital.

"For enterprises based here to scale up, more smart and patient growth capital – long-term capital which brings along ideas and expertise – is needed," the report said.

"We should encourage a variety of private-sector funding sources, including banks, venture capital funds and private equity funds. Where appropriate, the Government can partner these funds to invest for growth."

A simpler regulatory framework for venture capital firms would help boost the ecosystem here, the committee said, adding that the Government should look into encouraging more private equity firms to invest growth capital in Singapore-based companies looking to regionalise.

The committee suggested a private market platform for Asian enterprises to access financing from a wider network of investors.

It also said that the Government should permit dual-class share structures for listed companies, while instituting safeguards to promote market transparency and mitigate governance risks.

The sum of all these efforts should create a "strong base of globally competitive enterprises", which will in turn "support our economy to grow and create good jobs".

An integrated ecosystem supporting innovative growth companies from the start-up phase to late-stage growth is critical in strengthening the capital market, said Dr Steven Fang, chief executive of CapBridge, an online platform that allows companies to raise capital from a global pool of investors.

"While ample funding for early-stage start-ups is important, it is equally critical to have funds for late-stage enterprises, and here is where we see the gap," he added.

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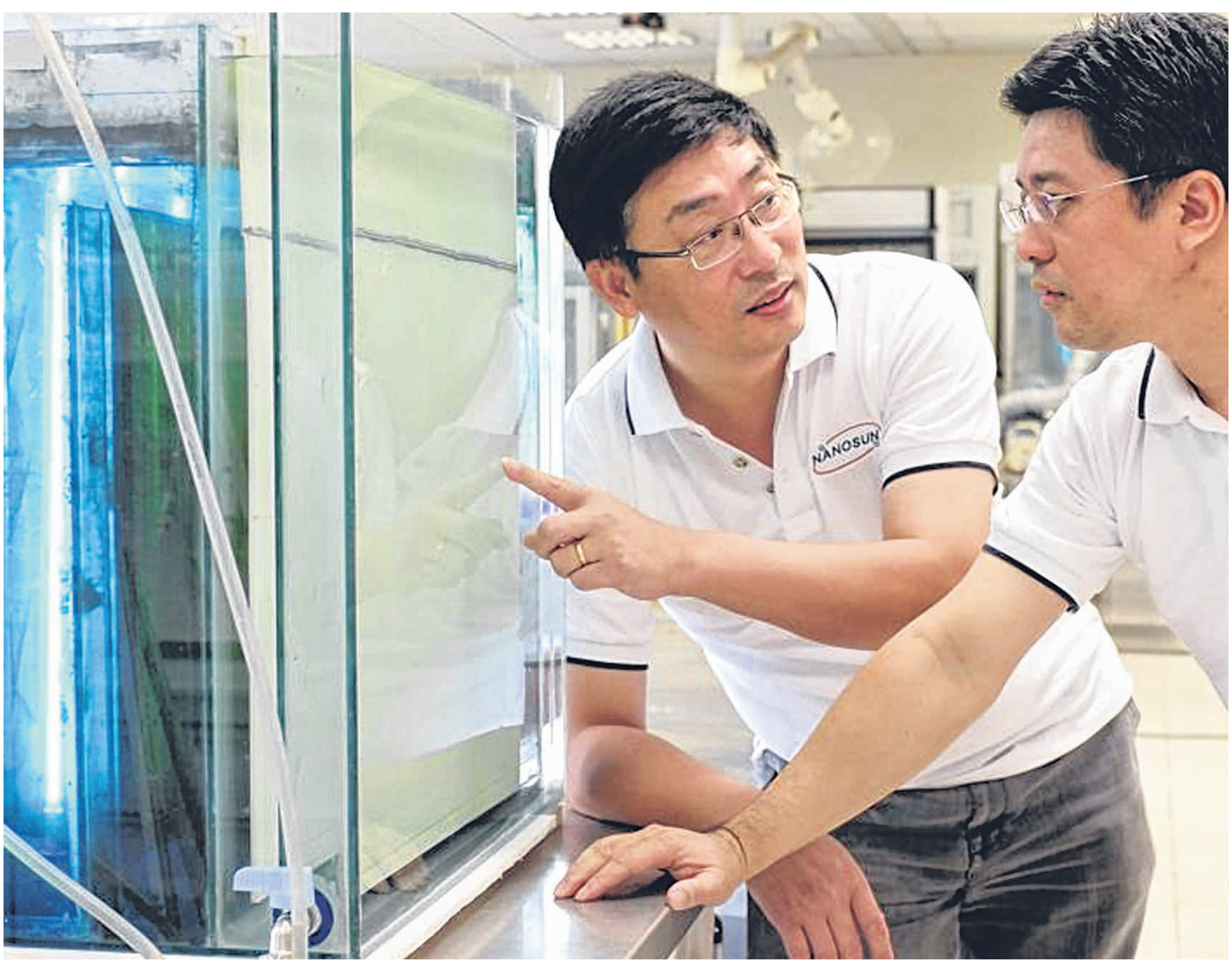

The co-founders of NanoSun, Prof Sun (left) and Mr Wong, intend to expand the water treatment start-up further. The company has developed a way to produce self-cleaning, 3D-printed microfiltration membranes, and is now looking for expansion capital to scale up operations in the region. PHOTO: NANOSUN

Local start-up going places with its water treatment technology

The Singapore-headquartered firm now has a presence in China, Indonesia, the Philippines, Vietnam and India.

A local water treatment start-up spun off from Nanyang Technological University (NTU) is making waves around the world.

The company recently secured $12 million in funding, and is now looking to raise a new round of funds to help it scale up.

NanoSun has developed a way to produce self-cleaning, 3D-printed microfiltration membranes.

These membranes last longer than conventional ones, and are also more efficient, allowing more water to be treated even with a smaller plant. The company's patented titanium dioxide nanotechnology also kills bacteria and breaks down material that clogs up conventional membranes.

NanoSun was founded in 2013 by Associate Professor Darren Sun of NTU's School of Civil and Environmental Engineering and Mr Wong Ann Chai, an adjunct professor at Nanyang Business School and a former investment banker.

The company developed its water-filter technologies in close collaboration with national water agency PUB.

NanoSun has expanded rapidly over the years – it started off doing small-scale projects, but has since moved into the big league.

In 2015, the company inked a $4.3 million deal to deploy its advanced membrane technology to treat industrial wastewater in the Qingdao National High-Tech Industrial Development Zone, a 20 sq km industrial zone in Shandong, China.

The Singapore-headquartered firm now has a presence in China, Indonesia, the Philippines, Vietnam and India.

Its revenue crossed the million-dollar mark last year, and is on track to reach $7.5 million to $8 million this year, said Mr Wong.

"We have grown from plankton to a garoupa, but we want to be a shark," he added.

After raising its latest sum of $12 million in funding, NanoSun is now looking for expansion capital.

It has a team of 12 in Singapore, and intends to ramp up its presence in China to 30 people.

"We hope to anchor our manufacturing and development in Singapore even though costs in China might be lower," said Mr Wong, adding that the company intends to use Singapore as a base for further growth abroad.

Chia Yan Min

Report a blueprint for S'pore's future

Yasmine Yahya
Assistant Business Editor

The report of the Committee on the Future Economy (CFE), after more than a year of discussions, may not have offered ground-breaking ideas, but it does serve as a comprehensive blueprint for the economic principles to keep Singapore sturdy in an uncertain future.

This, in short, was the feedback from economists, business chambers, business leaders and consultants who perused the report after its release yesterday.

OCBC Bank economist Selena Ling said the CFE recommendations, which call for deeply skilled workers, innovative firms, an efficient Government and a connected city, "are not intrinsically different or totally ground-breaking from earlier government strategic plans".

However, they "reinforce the growing need to stay connected even amid an emerging shift by some of our key trading partners towards protectionism and insular growth", she noted.

Singapore Business Federation chairman Teo Siong Seng praised the CFE recommendations for providing "timely guidance for companies", but added that "the CFE recommendations will not be a panacea for all the challenges confronting Singapore".

Singapore must continue to build on the strong foundation of its people, institutions, rule of law, trust and assurance of high levels of service and quality. At the same time, businesses must be nimble and innovative, he said.

The Singapore Chinese Chamber of Commerce and Industry's president, Mr Thomas Chua, said that companies should refer to this report as they plan their strategies.

"Importantly, the future success of Singapore's economy depends on how well we build collective ownership, including our businesses, workers and ordinary Singapore citizens, to execute these CFE strategies to produce results."

The CFE report has also sparked interest among companies, especially those in high-technology fields.

Mr Ashwani Kohli, the Asia-Pacific head of UiPath, a robotic process automation provider, noted that the continued drive towards higher productivity will require an embrace of automation, which will free up Singaporean workers to do higher-value activities.

"Automation will augment Singaporeans' skills, not replace them. Of course, there will be a certain amount of disruption in terms of jobs, but the Government's initiatives surrounding skills training for workers to help them switch industries is the right way to address this."

Dr Sam Choon Yin, the dean and head of the School of Business and Management at PSB Academy, said his takeaway from the report was that risk-taking will be more important than ever.

"Gone are the days when an innovation can help to create a big fortune that can last for generations. Singapore needs to grow risk-taking and innovation in its social culture, as these are qualities the global economy rewards," he said.

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ENHANCING WORKERS' SKILLS

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