Joint investment by Temasek, NTU and NUS will help new ventures go to market

Russell Tham, Temasek’s head of emerging technologies and joint head of the enterprise development group (Singapore), said deep tech involves using science-based principles from domains such as physics, chemistry and biology to come up with a new invention or innovation. He cited the examples of new material classes that can capture carbon better, or new chemistry processes that can turn iron ore to iron before it is made into steel.

A memorandum of understanding signed by Temasek, NTU and NUS on Tuesday.

Mr Tham said the future of computing and cognition refers to innovation in next-generation computing technologies like quantum computing. Artificial intelligence (AI) and generative AI also fall under this area.

Mr Tham said that when university researchers make a scientific breakthrough and Temasek assesses that the innovation can be commercialised, its wholly owned subsidiary Xora will help the researchers from a new company.

Xora will bring in seasoned entrepreneurs, who will mentor the researchers on how they can bring their innovations to market, provide the capital and funding support they need and link them up with global experts and other investors.

He added that Temasek is not limited to investing in the three areas. “If there is more interesting research coming out from the universities, we are happy to take a look at it,” he said.

Mr Tham also explained how potential deep tech start-ups will be brought to market.

He said that when university researchers achieve a breakthrough, Temasek assesses if the innovation can be commercialised and looks at whether there is a business case to form a new company.

The eventual aim, he said, is to have a public listing for the start-up and economic value for Singapore. “This journey, if successful, will create new employment in Singapore,” he added.

Professor Tan Eng Chye, president of NTU, said the collaboration with NTU and Temasek will combine the three organisations’ expertise and resources in research, innovation and entrepreneurship.

Mr Tham said that if a venture is successful, he would consider it “a blockbuster”.

Nvidia Technologies, which specialises in advanced materials and coatings, was an NTU alumnus which benefited from deep tech investments and eventually listed on the Singapore Exchange 20 years later, in October 2020.

Mr Tham said tech giants Google and Nvidia are global examples of successful start-ups which started small - a path he hopes local start-ups can follow. “It is about how to start one, and then grow it to a world-class champion,” he said.

He added that Temasek will not endeavour to commercialise every single innovation. “We must feel that the innovation is very promising, and if we do the research and development properly, it creates a unique proposition for customers and investors.”

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