

Few tech start-ups here have their own inventions: Study

*Many are of lower calibre
and supported by Govt funds
as they are rarely profitable*

TAN WEIZHEN AND ANGELA TENG
tanweizhen@mediacorp.com.sg
angelateng@mediacorp.com.sg

SINGAPORE – Technology start-ups here have more than an even chance of surviving beyond five years, a bet-

ter rate compared with their counterparts in the United States and the United Kingdom, a survey by the National University of Singapore's Entrepreneurship Centre showed.

However, the picture is far from rosy, and the relatively high survival rate masks deeper problems: Few of the tech start-ups here have their own inventions, and they are mostly propped up by funding — including from the Government — because they are rarely profitable, the researchers

found. They added that many tech start-ups here are of “lower risk, lower growth” calibre, and there are not enough deep-tech start-ups that, despite being riskier ventures, could reap greater rewards.

The two-year study was funded by the National Research Foundation. Among other findings, it found that high-tech start-ups — defined as those belonging to sectors with high research and development (R&D)

● CONTINUED ON PAGE 4

Few tech start-ups here have their own inventions: Study

● CONTINUED FROM PAGE 1

expenditure — have a better survival rate compared to non-high-tech ones.

Between 2004 and 2015, the number of start-ups here doubled to 48,071. Among these, 5,111 were high-tech start-ups. Overall, 52.7 per cent of all start-ups formed in 2010 were still in business by the end of 2015.

Noting the higher survival rate compared to the US (48.7 per cent) and the UK (41.7 per cent), Professor Wong Poh Kam, director at the NUS Entrepreneurship Centre, who led the study, said this was “not necessarily a good thing”.

He pointed out: “What it might mean is that we are not investing enough in high-growing, high-risk types of start-ups. Rather, we tend to be investing in slow-growing, barely profitable start-ups.”

There were not enough deep-tech start-ups that developed intellectual property (IP) such as patents, he added. Part of the problem, he said, was that the Government has been fund-



What it might mean is that we are not investing enough in high-growing, high-risk types of start-ups. Rather, we tend to be investing in slow-growing, barely profitable start-ups.

Prof Wong Poh Kam
NUS ENTREPRENEURSHIP
CENTRE DIRECTOR,
WHO LED THE STUDY

ing too many start-ups in Internet and mobile services, whose “risk profile is not too high”.

“(Investors would be thinking) why throw S\$250,000 into a single deep tech start-up when they can invest the same amount into many more start-ups doing Internet services?” he said.

Prof Wong suggested that the Government allocate more funding to translational research, or research that supports testing to ensure products are fit for the market. This would go a long way towards lending a hand to start-ups keen on developing their own products, he said.

Industry players said investors are drawn to start-ups with consumer-facing products and services, which require a shorter time to commercialise and deliver quicker returns.

Mr Derek Maggs, managing director (Asia) for Veniam, which builds Wi-Fi mesh networks for vehicles, said it is especially difficult for deep-tech start-ups to get funding in Asia.

“People may struggle to see the val-

ue of the deep tech unless you translate it into ‘real terms’, describing how it can be used, and make its value visible in the short-to-medium term,” he said.

He added: “Funding for deep technology needs to be encouraged. A lot of research papers in universities never get much further, we need to work with universities to get the ideas out of the papers and making it commercial.”

Agreeing, Mr Shamir Rahim, the founder of automated transport management systems provider VersaFleet, nevertheless felt that this was to be expected, given that investors may not grasp deep tech as easily.

Often, his company gets questions from investors that are geared towards the “traditional matrix” of research and development. “In modern tech such as artificial intelligence and data analytics, there is no patent ... and the intellectual property is in the tech know-how (which) is a trade secret. Often we spend more time justifying the work and its value,” he said.

Ms Doreen Chai, general manag-

er of life sciences company MiRXES, noted that in general, start-ups face an “uphill challenge” getting funding within their first three years.

However, particularly for work related to research, start-ups have to do more to convince investors of the commercial value or returns, and who the end-consumers are, for example, she said.

The study also surveyed 530 start-ups to find out how well they are doing: It found that almost a quarter of those surveyed have not earned any revenue. Less than a third (29 per cent) have generated revenue but their cash-flow is negative, while 23 per cent have achieved positive cash-flow. The remaining start-ups have sufficient cash flow to sustain their future growth.

Among the respondents, 64 per cent had receiving funding from at least one Government support scheme, with schemes offered by Spring Singapore being the most prevalent.

Over half of the start-ups have made forays abroad, with their overseas sales accounting for 26 per cent of their total sales, on average. Their top three most-preferred markets were China, South-east Asia and India.