The Edge Singapore
Published 27 November 2017

Corporates are outsourcing innovation to start-ups – is the approach paying off?

by *Benjamin Cher* and *Trinity Chua*

DeClout Investments, a self-styled builder of next-generation companies, has been experimenting with data analytics with the help of two local start-ups. "We talk to them every three to four weeks. When there are business opportunities, we [may bring them along]. Our business units also meet up with them if there are opportunities to feature their products," says Kelvin Tay, executive director for incubation at DeClout.

If the start-ups are promising, DeClout will acquire a stake in them through its venture fund, De Clout Ventures. DeClout has committed $10 million to the fund, which is part of the National Research Foundation's Early Stage Venture Fund III (ESVF) scheme. The NRF will match DeClout's funding.

In DeClout's business model, start-up investments are one of its primary means of generating revenue and creating shareholder value. "In the short term, there might be some near-term increase in sales," says Tay. "In the long term, there are chances of capital gains or new revenue streams." But DeClout is not the only local corporate working with start-ups.

In fact, the NRF ESVF III also includes locally listed property developer CapitaLand and agri-food giant Wilmar International as well as privately held logistics player YCH Group. And, according to KPMG Singapore, 20% of local corporates have some kind of external innovation programme today – up from just a handful five years ago.

The list of corporates with start-up engagements includes some of the country's biggest blue chips. Singapore Telecommunications runs a $250 million venture fund called Innov8 and an accelerator called Innov8 Sparks. Singapore Technologies Engineering has set aside US$150 million ($202 million) for a corporate venture capital unit and opened an engineering-based incubator called Innosparks. CapitaLand's C31 Ventures has $100 million to invest in technology start-ups. DBS Group Holdings hosts the DBS Accelerator in partnership with Hong Kong-based accelerator Nest. United Overseas Bank's (UOB) accelerator FinLab is a joint venture with the government-owned start-up builder SGInnovate. Oversea-Chinese Banking Corp operates its own accelerator – The Open Vault. And 189-year-old conglomerate **Boustead Singapore** has an accelerator programme and will soon run a co-working space.

These companies are not funding start-ups to make money, but rather to seek out newer and better ideas and technologies. "I don't want to give a sweeping statement to say that corporates cannot survive without innovation from the outside … [but] they must believe that for all the wisdom they have, they will never be able to be bigger than the wisdom on the outside," says Janet Young, head of channels and digitalisation at UOB.

Last year, home-grown accelerator JDFI switched its focus from running accelerator programmes to helping corporates run accelerators instead. "History has shown that corporates are really bad at radical innovation," says Hugh Mason, JFDI co-founder and CEO. "We came from a world with fairly static technology [changes] where you can invent something and sell it for 10 to 15 years. But now, if you are a car company, you have to release new models every few months and you have to compete with new entrants."

Are start-ups the best consultants?

Large enterprises have long sought external help for a range of issues – everything from risk management to compliance and finding new business ideas. In a survey by the Singapore Institute of Directors, released on Nov 7, 95% of the 680 Singapore-listed respondents said they had sought professional advice from external advisers. But only 9% sought advice on technological innovation and 2% sought advice on data analytics, with the vast majority (77%) seeking legal advice.

Yet, technological innovation is, arguably, an area that large companies need the most help with. Telcos such as Singtel are struggling to stay relevant as the likes of WhatsApp become key communication interfaces. Retail landlords such as CapitaLand face disruption from e-commerce. Banks such as DBS, OCBC and UOB could one day be replaced by digital-only fintech providers.

Jan Reinmueller, head of the digital village programme at KPMG Singapore, points to the successes achieved by the likes of Google and Facebook from start-up investments. Google's investments have included home automation start-up Nest, which has helped enhance the attractiveness of smart home software Google Home. Facebook bought Instagram and integrated the picture-driven social media app with its own interface. "[The incumbents] want to learn from them … If they had followed what they have always done, they would be out of business in the next 10 years potentially," says Reinmueller.

In theory, corporates and start-ups can get a great deal from each other. Corporates benefit from exposure to the latest technologies and ideas, which can be used to solve short-term business problems or offer their clients more services. Start-ups, on the other hand, get a chance to test out their products and potentially sign commercial deals.

ST Engineering's venture fund invests in start-ups in the aerospace, electronics, land systems and marine sectors, which are its four primary business areas. In return, the company offers start-ups access to its clients and distribution channels. Similarly, start-ups working with CapitaLand can test-bed their solutions at CapitaLand's properties. In exchange, the property behemoth can keep tabs on emerging technologies.

In practice, the rewards for corporates may be quite limited. A study this year by global start-up investor 500 Startups looked at 100 corporate innovation programmes across the world. It found that four out of five corporates say fewer than 25% of their start-up pilots resulted in commercial deals. Also, 37% of corporate innovation programmes result in less than five pilot projects with start-ups each year.

The survey blamed slow corporate processes. Start-ups had to deal with more than 10 departments to close deals, and the reporting structure within corporate innovation programmes is often unclear. This may have resulted in long-drawn-out commercialisation processes. In most cases, it took six months to close a deal with a start-up. For an early-stage company with limited cash flow, six months is too long to wait.

"The reality is that start-ups and large corporations are not the most natural fit," says Christine Tsai, founding partner of 500 Startups. "While some start-up engagements have materialised into success stories, the corporate-start-up landscape requires careful navigation, strategy and execution."

Differing models

For most companies, working with start-ups involves taking a minority stake, then co-operating to develop and test new technologies. "This will ensure a better fit between the start-ups we are invested in and ST Engineering's lines of business," says the company's chief strategy officer Low Ka Hoe.

Young of UOB thinks a small equity stake can take the bank a long way. "We are investing because with that small stake, we have a commitment to a long-lasting relationship. A lot of corporate accelerators [refuse to be involved] after the programme. Because of the investor-investee relationship, as their seed funding investor, we would have a long-standing sustainable relationship," she says.

On the other hand, OCBC's Open Vault does not offer capital investment. Rather, it focuses on helping start-ups test out their offerings with the bank's clients or staff for a period of three months. The bank has seen about 14 start-ups over two cycles and signed commercial deals with six start-ups.

"If you look at the trend, you need to reach a thousand start-ups to find one that works; it is not an efficient use of capital for a bank," says Altona Widjaja, vice-president at OCBC's fintech and innovation group. "The [disadvantage] here is I don't get the full transparency of the company's technologies, which is why we run a proof-of-concept phase with them. If I am a board member, I get to see everything under the hood. But it is a question of how much you are willing to pay to see under the hood."

There are other pros and cons to both models. Some start-ups shy away from corporate accelerators due to the low valuations that corporates tend to pay for their stakes. Australian telco Telstra Corp launched a convertible notes scheme to get around this difficulty. Its accelerator muru-D first provides $75,000 in seed capital to a start-up in exchange for notes. At the start-up's next round of fundraising, muru-D can convert the notes into an equity stake based on the new valuation with a certain discount. "That allows us to get a broader range of companies," says Paul Meyers, head of muru-D Singapore.

Making progress

Local corporates seem to have made some headway with their start-up ambitions. CapitaLand says it has struck 18 deals in Singapore and China so far. "Through C31 Ventures, [we] pilot a spectrum of proptech initiatives that would tech-enable our tenants and customers by extending our offerings beyond physical real estate to complement other lifestyle choices that are part of a customer's journey," says Ng Kok Siong, chief corporate development officer at CapitaLand.

ST Engineering has commercialised a product with a start-up. On Sept 19, the company launched the Black Computer L100, an industry-first hardware-based cybersecurity solution. Developed in collaboration with US-based cybersecurity provider Janus Technologies, the computer can detect and remove malware with a simple system reboot. The same day, ST Engineering's corporate venture unit ST Engineering Ventures announced a US$5.8 million Series B investment in Janus Technologies.

"Our investment in Janus Technologies will benefit not just the group's cybersecurity business but also enable Janus Technologies' organic growth as it will have access to our established business networks and channels," says ST Engineering president and CEO Vincent Chong in a statement.

OCBC worked with start-up CogniCor to develop a chatbot called Emma. She specialises in home loans and has helped OCBC sign on $70 million worth of home loans so far. OCBC has also conducted a trial run with artificial intelligence start-up Silent Eight. The latter's technology is supposed to be able to detect potential money laundering cases 10 times faster than the bank's current process.

At UOB, Israeli payment keyboard start-up PayKey is now integrated with UOB's mobile payment app Mighty. Another start-up, Card Up, makes payments for users to merchants that do not accept credit cards. CardUp then charges the user's credit card for the payment, allowing the user to earn credit card reward points for transactions such as mortgage payments, income tax payments and school fees – which typically would not chalk up points. UOB now owns CardUp, and the start-up's backend technology is powered by the bank.

DBS, meanwhile, claims that its cohort of entrepreneurs has helped solve 33 problems for the bank. For instance, machine-learning platform Tookitaki has helped create a new model for DBS to sieve out at-risk cheques. Impress AI has developed chatbots that will help the bank screen potential hires.

Boustead is piloting a drone project with one of its start-ups. The drones created by this start-up have a longer battery life and can carry four times the load of their competitors, says Leslie Wong, managing director of **Esri South Asia** – one of **Boustead's** geospatial technology units. The drones work hand-in-hand with **Boustead's** geospatial technology unit to collect and interpret data. "By working with the drone partner, it gives us new [capabilities and experiences]," Wong says. "We will have a new solution bundle that incorporates the drone and geospatial platform to sell to existing customers."

An elephant and a mouse

Tech firms are expected to grab more revenue in the next five to eight years. In fintech alone, Citigroup Research predicts that start-ups' revenue will leap 10 times to exceed US$100 billion in the next four years. By 2023, fintech would account for 17% of consumer-banking services in North America, or US$203 billion. How much will accelerator programmes help corporates stave off that disruption? Are companies throwing good money after bad ideas? Would they be better off pursuing innovation internally instead?

Sarah Cheah, associate professor at the department of management and organisation, National University of Singapore, says that big corporates have little in common with start-ups. "Such venture-nurturing activities may be difficult to execute as business units have their own immediate performance goals that may not be congruent with the goals of the portfolio companies, which are likely to take a longer time to realise."

For corporates to reap the full benefits of start-up innovation, a cultural change may therefore be necessary. "The really hard part is when a corporate meets a much smaller company, it's usually a bit like a mouse and an elephant. It is very hard for corporations to understand that they need to change, and not that startups need to change to fit their procurement processes," says JFDI's Mason. "It is [the corporate] that needs to change or it will be disrupted; [but this] goes against their culture."

OCBC's Widjaja is among those who recognise the need for cultural change. "Ultimately, we need to change the way people do things in the bank," he says, adding that he has seen some improvements in recent years. For instance, 40 OCBC staff members have come forward with new ideas for the bank. Some of them are being piloted at The Open Vault today.

Around the world, large firms are thinking along the same lines, hoping to pick out staff that can work like entrepreneurs and come up with disruptive technologies. One of these companies is oil and gas giant Royal Dutch Shell, which started the Strategos Ideation Lab to engage employees. Today, 30% of Shell's exploration and production research budget goes to ventures from the lab.

Over time, Cheah expects large companies to take a more proactive approach in their innovation outreach. "We see an increasing level of openness and expectation among firms to give their corporate accelerators and ventures the latitude to invest over a longer period of time in innovations that are more radical but also more risky," she says.

For most of these companies, the funds involved are not huge – meaning the risk of failure from dabbling in start-ups is limited. **Boustead**, for instance, is investing technology supports and services worth $250,000 in each start-up that it selects for its Jumpstart programme. In Australia, start-ups get support worth AU$250,000 ($256,600). Multiplied by the estimated 35 start-ups that it is already working with or plans to work with, the company would have invested in resources worth a total of $8.9 million. **Boustead's** geospatial division reported revenue of $108.3 million for FY2017 ended March.

Some corporates are even generating returns from their programmes. Singtel says Innov8's returns are on a par with a typical venture fund. UOB's Young says the FinLab programme is currently "in good, positive territory" in terms of returns. And as these programmes grow, so do the potential rewards. Young says: "As a result of the programme we do, a whole new group of tech companies is coming to us because of the reputation we have."