



◀ SWASHBUCKLING

Pirate3D co-founder Brendan Goh (left) says that the possibilities of 3D printing are endless

to manufacturing delays, we are in the midst of issuing refunds, and should finish by April 2015.

For backers who have received their printers, feedback shows that they have been pretty happy with the things that they have printed. What they like is that if they encounter bugs with their printers, fixes can be promptly done right here and by our staff in Singapore, because everything is connected via an online cloud service and Wi-Fi.

Those who wish to get their hands on the Buccaneer can buy it at US\$999 from our website or Amazon or from any Challenger retail store in Singapore. We're also working with a few overseas distributors to sell our printers outside the country.

Right now, we are focused on improving the stability and quality of the Buccaneer. The goal is to make it as easy as possible for people to use it, but of course, this makes it harder for our engineers. Manufacturing 3D printers is after all a precision technology. It takes about four hours to make a printer from start to finish, including testing it after it's done.

Also, we manufacture all our printers entirely by ourselves in a small factory here in Kallang Bahru. With about 27 staff, we manage just under a thousand printers a month at maximum capacity.

It may come as a surprise but manufacturing costs in Singapore are actually as competitive as that in China, especially for precision engineering.

Just last September, we closed a Series A funding round of about S\$2.5 million, which was led by angel investors from Singapore and mostly channelled for production and shipping purposes. We started our next round of fundraising in February, primarily for manufacturing purposes.

Would you recommend crowdfunding to startups?

I would definitely recommend Kickstarter. I think it is the most legit crowdfunding platform. It has more stringent procedures than others, but also the most number of successful crowdfunded projects. Pirate3D's success on Kickstarter was not entirely unexpected, and it helped that it got us a lot of free press.

Startups which are considering crowdfunding should bear in mind the following: they should set a realistic goal, have a solid business plan and always seek professional help. It would be useful for instance, to have someone who understands product development and have worked through an entire product cycle.

More importantly, campaigners on crowdfunding platforms should always be open with their backers and communicate with them as much as they can.

I've noticed that there are increasingly more homegrown crowdfunding platforms in Singapore, though this doesn't really make sense to me. The market here is too small, and people in the US are generally more trusting and open and want to be part of your idea or technology, compared to Singaporeans.

So I would always recommend using a global platform like Kickstarter or Indiegogo.

That said, if Kickstarter launches a localised platform here, that would work. ■

PIRATES AHOY

Pirate3D is synonymous with two things: 3D printing and being a homegrown crowdfunding success, having taken just 10 minutes to reach its US\$100,000 goal on Kickstarter and going on to raise over US\$1.4 million for its Buccaneer 3D printer in 2013. A year later, despite falling behind on deliveries and even having to issue refunds to some 350 backers due to manufacturing delays, the startup said that it is far from sinking. According to co-founder Brendan Goh, Pirate3D will finish building and shipping printers to its remaining backers, and continue on its quest to make the Buccaneer the world's easiest-to-use 3D printer.

AS TOLD TO JACQUELYN CHEOK

Who are Pirate3D and what is the Buccaneer?

We are a company founded by four guys – Tsang You Jun, Roger Chang, Neo Kok Beng and myself. You Jun and I were material science students at the Nanyang Technological University (NTU). Through a mutual friend, we got to know Roger, then a business student at the National University of Singapore (NUS). Initially, the three of us wanted to start a 3D printing service business but Kok Beng, an adjunct associate professor at NUS Business School, suggested that we run a scalable business and make 3D printers instead.

That's how our company was born. We needed a name, and we thought pirates were cool so we named the company Pirate3D. We named our 3D printer the Buccaneer, after the Buccaneers, pirates who attacked Spanish ships in the Caribbean Sea in the 17th century.

The Buccaneer is designed to be a 3D printer that everyone can use. We've had users as young as six years old use it and make prints, so I think that kind of speaks to our ambition.

Our buyers – most of them are not from Singapore – are people who use it to print toys, ornaments, replacement parts and random things for their homes, as well as professionals, who use it for fast prototyping, making interior design models and buildings etc.

Our users include students who, while learning

modelling software such as AutoCAD, use the Buccaneer to print their models – which makes learning all the more interesting and practical for them.

Users generally design their own products, but we also have an online pool of ready-made designs for people to choose from and print. Users can contribute their own design ideas to the pool, which we actively moderate and curate.

For now, the Buccaneer prints items using only 100 per cent corn-based plastic, which is very safe, and it takes anywhere from 15 minutes to six hours to make a print, depending on the complexity of the product.

The printing possibilities are quite endless, and it's only when a person uses a 3D printer often enough that their creativity starts to grow. So yes, I would say 3D printing is still in vogue. A recent Gartner study has projected that end-user spending on 3D printers will increase from US\$1.6 billion in 2015 to around US\$13.4 billion in 2018.

What is happening now at Pirate3D?

We are in the midst of manufacturing and shipping printers to the last of our Kickstarter backers . . . manufacturing around 100 printers a month to meet that fulfilment.

For backers who have opted for refunds due

