



Entrepreneurs' Responsible Innovation

by Raphael Tay and Ko Chia Chea
featuring Stuart Thornton, Jack Cheong Jin Xi
and Johann Benji Wong

The growth of tech firms in recent years has been so remarkable that the terms “tech giants” and “tech unicorns” have become ubiquitous in daily news and conversations. A “unicorn” company refers to companies valued at over US\$1 billion, while a “decaunicorn” means those valued at over US\$10 billion and a “hectocorn” is used for those valued at over US\$100 billion — Ant Financial, Didi, WeWork, Airbnb, Grab and Stripe to name but a few.

As a result of the immensity and global reach of these tech firms, their products and operations have a significant impact on the well-being of society and the environment. In response to this, a new movement of “responsible innovation” has begun to take root. It is based on the principle that innovation should be pursued in a way that is ethical, sustainable and targeted at the betterment of society — rather than simply being a commercial pursuit.¹

The European Commission (EC) has introduced this concept in its European Framework Programme, referring to it as “Responsible Research and Innovation” or “RRI”.² In December 2018, Google created a “responsible innovation team” to monitor and safeguard ethical use of artificial intelligence (AI).³

We sought out entrepreneurs in the region, with whom our team has had the privilege and honour of working with or engaging in the past, for their thoughts and experience on the subject.

STUART THORNTON is the CEO/co-founder of Hoolah, a Singapore-based startup focused on driving footfall and conversion for retailers by enabling responsible consumer affordability. As CEO, his role is to drive the company’s strategy and growth. Prior to setting up

- 1 Jonathan Hankins, “What Does ‘Responsible Innovation’ Mean?” *IEEE Spectrum* (24 June 2015) <<https://spectrum.ieee.org/tech-talk/at-work/innovation/what-does-responsible-innovation-mean>>; “Framework for Responsible Innovation” Engineering and Physical Sciences Research Council <<https://epsrc.ukri.org/index.cfm/research/framework/>>
- 2 “Responsible Research & Innovation”, European Commission <<https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>>
- 3 Jillian D’Onfro, “Google Launches Advisory Council to Help Company Question Assumptions on Ethical AI” *Forbes* (26 March 2019) <<https://www.forbes.com/sites/jilliandonfro/2019/03/26/google-launches-advisory-council-to-help-company-question-assumptions-on-ethical-ai/#3c83523e7942>>

Hoolah, Thornton's career spanned five countries in both the telecommunications and fintech industries. Originally from the UK, he has lived in Asia for over 15 years and has fallen in love with startups and creating solutions to problems.

JACK CHEONG JIN XI is the CEO of Poladrone, a leading UAS (drones) solutions company founded in Malaysia. He was a recipient of the "Forbes Asia 30 Under 30" award in 2019 for Poladrone's work in the agriculture sector. To date, Poladrone has analysed over 300,000 hectares of land within ASEAN with deep understanding on how drones can increase productivity. He is a certified remote pilot and holds an aerospace engineering degree from Monash University. He believes that analytics and automation is key to achieving sustainability across all industries.

JOHANN BENJI WONG is a Malaysian entrepreneur who has founded and managed companies across various industries and has a passion for building businesses that create positive and meaningful impact in people's lives. He is currently in the thick of developing an online escrow payment app called "Yay!" that aims to greatly reduce the incidences of cyber-scams for consumers when buying and selling online.

(1) Is responsible innovation important? Why?

Thornton: We are driven by a need to find economic returns to fund the basics of an economy and society. To continue this return and growth value, innovation is vital to exploration and for society to progress. It's the genesis of the startup world to drive innovation and seek new ways of doing things and then commercialising them. However, someone has to be a check for the enterprise, as many recent examples show its importance in protecting society's values.

What is key for me, however, is that the outcome and the deliverables of innovation should ultimately be responsible.

Cheong: We believe that responsible innovation is fundamental for every business. As engineers and developers, it is in our nature to build solutions to solve problems and make lives easier. However, for an engineer sitting in the office or lab, lines between solving problems for the betterment of or detriment to the world may be blurred due to a lack of understanding, lack of exposure or even manipulation by external parties. Thus, it is crucial for technologists to understand what they are building and how it impacts the lives around them because I truly believe that, as an engineer, no true technologist will ever knowingly produce something that harms. After all, a technologist's mantra is to solve problems, not create them.

Wong: Recent technological advances have led humans to achieve amazing heights, greater than could have been imagined only 50 years ago! However, if used wrongly, technology can also lead to strife and societal issues, as witnessed by the recent shootings in El Paso, where the online messaging board 8chan is alleged to have been the breeding ground of the shooter's hateful and bigoted ideology. It is so easy for technology to be developed for less than desirable purposes and it's up to tech companies and entrepreneurs to ensure that innovation is done responsibly and ethically.

(2) What are the positive or negative impact of responsible innovation to a business?

Thornton: As a startup, one of the elements that you seek and work hard for to validate your business is

that of trust. Marketing a responsible focus is great — living it is more important. The minute you break the trust of your early adopters and advocates, the likelihood of that advocacy returning is minimal — if anything, the negative outcomes will spread quicker.

Cheong: Building solutions that contributes to the world is a compelling reason for driven individuals to come together under one company and strive towards success. This ensures that everyone is motivated to give their best and ultimately leads to improved productivity. However, being responsible may result in some losses to the business, as profitable businesses taking shortcuts are often operating in the grey (or dark) areas — meaning that someone is profiteering from another party's losses. These short-term advantages will ultimately impact a business's reputation. In the long run, a business that is responsible will always prevail over one that is being irresponsible and taking shortcuts.

Wong: Responsible innovation is a “short-term pain, long-term gain” issue for tech companies. The short-term pain comes from investing time and money (which a lot of startups do not have the luxury of) to plan, develop and implement the necessary checks and balances in their innovations to ensure that it is not easily misused by any party. In the long term, however, tech companies practising responsible innovation will benefit because it builds confidence and trust among their users, which will then lead to continued usage of the innovation and brand loyalty.

(3) **What are the ways in which a business can promote responsible innovation?**

Thornton: From our experience, this takes three forms. We have “responsible” in the company's vision which leads into our marketing — making a connection

with our customers. Secondly, the people whom we work with defines our values as a company — whether it's customers, merchants or partners. Finally, it's vital that a business is clear in its communication through its legal definitions and proactively shares this information with its stakeholders — be it a simple conversation on Facebook or the privacy terms that sit on a website.

Cheong: The best way in which a business can promote responsible innovation is to provide exposure and clarity to its technology team in understanding how the solutions that are being built are affecting the world in a positive way. This will inject a positive energy throughout the organisation and promote further innovation.

Wong: I would like to think that responsible innovation is self-promoting. Tech users are becoming savvier and are increasingly vocal regarding their thoughts on a product or service. They are capable in discerning whether an innovation was developed with good or bad intentions and have no qualms about voicing out their opinions on social media, which will automatically force businesses to adopt responsible innovation practices. A very good example of this is the intense backlash received by the developers of the DeepNude app, which forced them to remove the app completely from the internet.

(4) **Is there any particular business value or ethics which you find is lacking, or needs improvement, in your country?**

Thornton: Singapore is a wonderfully run country with strong government guidance and regulatory bodies, like the Monetary Authority of Singapore (MAS), that are focused on supporting enterprises and innovation, yet making sure that society is protected.

Cheong: In Malaysia, I believe that too many technology companies are trying to be the “Uber for Malaysia”, or the “Airbnb for Southeast Asia”. While it is good to replicate successful business models, it is also crucial to understand the problems happening locally and to create solutions to solve them.

Wong: I won’t say that there are values or ethics that are lacking here in Malaysia. However, as a general rule, I believe that innovators and entrepreneurs should apply a moral compass and conscience when developing the principles, values and goals that guide their innovation. This ensures that thought is given to how the innovation will impact society and how to minimise any potential harm, if any.

(5) **What are the legal challenges that entrepreneurs face in bringing innovation in your industry?**

Thornton: I don’t think there are any, as long as the leadership and cultural values are aligned to being responsible.

Cheong: One of the biggest challenges for businesses to pursue responsible innovation would be to survive amidst competitors who are pursuing short-term gain for profitability. This often makes it tough for responsible companies to offer the same solutions at the same price in the short term, sometimes leading to financial issues and desperation which influence previously responsible companies to take a different approach.

Wong: I believe that entrepreneurs pursuing responsible innovation need to invest significant time in developing the idea concretely enough to ensure minimal negative impact to society and minimal chance for misuse. However, because of the need to rush out an innovation due to low barriers to entry

and a very competitive landscape, businesses tend to cut short the planning stage to be first to market, which results in overlooking certain risks.

(6) **What are the challenges for a business to pursue responsible innovation?**

Thornton: The law is designed to upkeep the values of society. However, the law is primarily based on a historical view. Innovation can sit outside of these laws — not because they are irresponsible or because they can impact society’s values, but because new models and ways of doing things have not been considered in writing the law. What happens, therefore, is that the law tries to put this innovation in a pre-defined box which can inhibit the outcome of the innovation — even though the innovation could actually be solving some of the issues the law was designed for in the first place. An open-minded and innovation-focused government and regulatory bodies can resolve this issue.

Cheong: The biggest legal challenges facing our industry (UAS/Drones) adoption in Malaysia are legacy regulations. It is well proven across the world that drones help improve efficiency across a multitude of industries, from reducing human contact with harmful pesticides in agriculture — thus reducing the need for working at height for telecommunications tower inspections — to augmenting a search and rescue team’s operations. However, regulations for drones have not been updated for years and require operators to apply for permits from multiple agencies and ministries before any flight takes place. This slows down innovation and adoption drastically. The regulations must be changed for the industry to improve.

Wong: The key legal challenge that entrepreneurs

face here in Malaysia is when there are attempts by the government to implement new regulations in an industry where tech is making an impact. There's this period of limbo and uncertainty for businesses where information is scarce, and entrepreneurs are unable to make the necessary plans to take into account the upcoming regulations. By the time the business receives sufficient information, it might have already invested a significant amount of resources in developing the innovation and further resources are now needed to be in compliance of the new regulations. This can potentially kill startups which are already swimming against the current and have very limited resources.

Our views

The answers from these entrepreneurs show that they do in fact value and strive to practise responsible innovation. They may or may not be representing the entrepreneurial community at large, but even if they represent only a part of it, it is certainly a good start because, as they have eloquently explained, responsible innovation is critical for sustainable innovation.

An interesting distinction from the answers, in particular to the fourth question, is this: Will responsible innovation be best pursued by the regulators or the entrepreneurs themselves? The former is demonstrated by Thornton's appreciation of Singapore's strong governance and regulatory system, while the latter is demonstrated by Cheong's and Wong's instinctive reference to the personal values and ethics of the entrepreneurs themselves. We can see both trends in the world, from our earlier examples of the EC's RRI programme for the former and Google's responsible innovation team for the latter.

In our opinion, it is best that both the regulators and the entrepreneurs play a part in the movement. It will also be most effective if it is pursued in the form of best practices or guides — rather than laws which, by their regulatory nature, may inhibit or restrict the pursuit of responsible innovation instead of cultivating it.

In fact, if the corporations take the initiative to develop their own responsible innovation policies and operating framework, the corporations can set their own standards and the regulators may well adopt it "as is" if it is well formulated. As a result, the corporations may be one step ahead of the regulators.

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