

The Arc Reactor for Sustainable Entrepreneurship

How we build ventures with infinite power to impact the world



Gabriyel Wong
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At Reapra, we are obsessed with people and the culture is palpable.

The start of each day is dedicated to the discussion of people development among the senior management, and thereafter cascaded to every team member. For Reapra, the future is a statement for better societies and sustainable businesses, built by people with strong values and entrepreneurship qualities.

One of the reasons that I was sold on Reapra's mission was that we set ourselves apart from other venture capitalists by looking at an infinitely long investment horizon. The key to manifesting this ultra-long view approach, is by unlocking the blueprint of the construction and development sustainable industries. To achieve this, research and practice, shall pave the way.

Research is the dynamo behind Reapra's investment decision model, and the fuel that powers this dynamo is the aspiring entrepreneur who desires to change the world we live in.

At the juncture of every investment opportunity, we harness the science of people and markets to drive us towards our ambition – and these form the core faculties of the Reapra research team

Before I joined Reapra, sustainability is nothing more than just a corporate buzzword. Unpacking sustainability for businesses, is no mean feat. It is a new challenge that my team and I undertake on a daily basis because of a key belief—that future generations will reap the benefits from the results of our work.



“Founders are nurtured, not born.”

Entrepreneurship Dynamics

While the Internet revolution has accelerated business life-cycles tremendously, that does not come without costs. Entrepreneurs today need to grapple with increasing complexity about the connected world we live in, and the state of volatile economies, in order to carve and craft their niche.

That is why the Research team is highly invested in studying Entrepreneurship Dynamics, to enhance the founder’s ability in managing complexity, a critical skill we emphasise in Reapra. So how then, do we define complexity? To which, how does Entrepreneurship Dynamics attempt to solve it?

Complexity is multi-dimensional

We see complexity as spanning across multiple dimensions that goes beyond space and time. This is not Einstein’s fifth electromagnetic dimension, but one which requires meta-multilateral thinking

– the ability to connect dots and extrapolate across domains, which will enable entrepreneurs learn faster and better in our complex world.

Complexity is dynamic

Complexity is dynamic, and more often than not, unpredictable. To manage such dynamism means that entrepreneurs need to constantly adapt and be in a cyclical process of learning and unlearning.

Creating this learning process is one of our core missions as we nurture entrepreneurs, in building sustainable industries with positive impact on societies. Through our research on Entrepreneurship Dynamics, we seek to realise this objective, by addressing the development of entrepreneurship as a scientific discipline. While at the same time, we also look to promote its efficacy on the economic, social and cultural contexts.

Molding the Ideal Entrepreneur

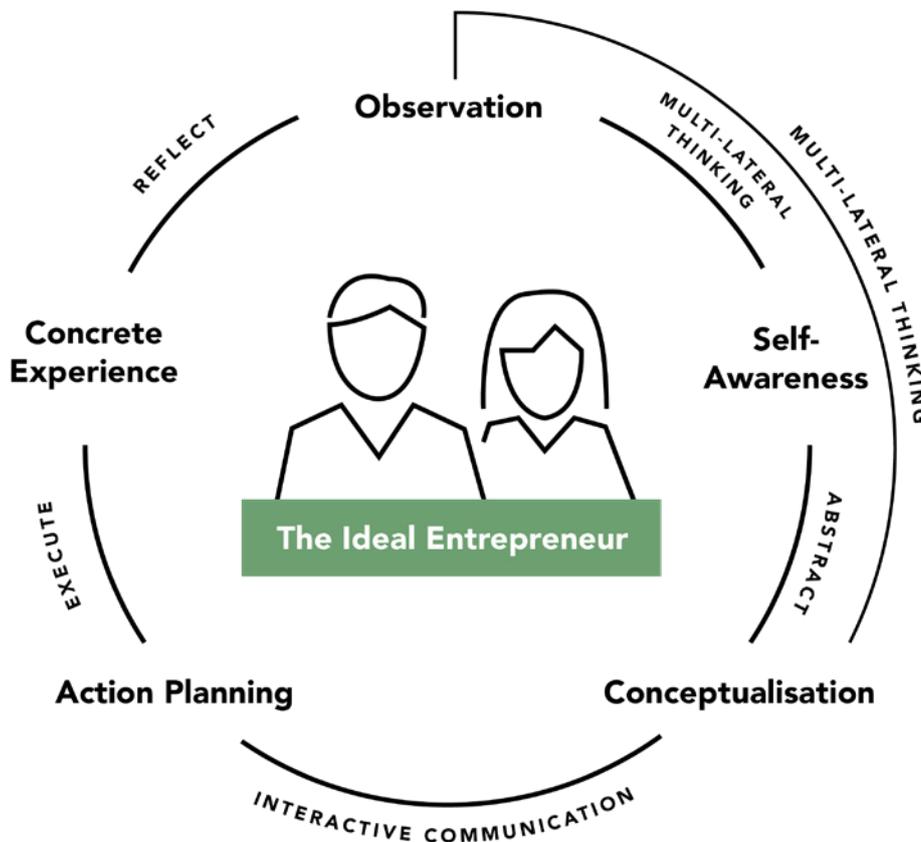
Our enlistment process considers entrepreneurs based on a selection of key personality and capability traits, which we believe is central to sustainable entrepreneurship.

Unlike other venture capitalists, Reapra does not perform “fire-and-forget” investing. Rather, we provides continual support to entrepreneurs through an educational process that would help him or her achieve the mastery of her trade. This is achieved through connecting entrepreneurs with our support functions and plugging them into our ‘Learning-by-Doing¹’ culture.

At the heart of our research in Entrepreneurship Dynamics lies Reapra’s thesis that the “malleable” human is the key element to sustainable enterprises. This is not only applicable at an individual level, but also collectively, through purposeful organization design and culture.

In Reapra, entrepreneurs don’t walk alone. Apart from science and philosophy, we allow sparks to fly from interactions among founders in our ecosystem so that we constantly un-learn from our theses to re-form hypotheses to improve, one person at a time.

The Reapra Entrepreneur Development Model



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“Not everything that is counted, counts.”

Market Analytics

As an investor, the team at Reapra does not only look at the financial ratios of our subsidiaries from the bench. Rather, we are passionate and determined in helping them succeed.

The research team is constantly building tools that enable us and our subsidiaries to be better and faster at identifying market opportunities. We deploy state-of-the-art machine learning techniques to extract insights and prediction, to guide us in our investment decision-making.

Our business analytics research is undergirded by the following tenets.

1 *Actionable insights*

Just as data is useless without being actual information, the same applies to insights if they are not actionable to bring change. Our goal is to transform every nugget of insight into an executable task by working closely with our stakeholders.

2 *Causality, not correlation*

Data story-telling implies finding the narrative behind the data, and not just correlation between variables. Even as neural learning techniques have advanced by leaps and bounds in recent years, we are still far from the ability to account for the causality in many real world systems. This is where our business analytics team creatively marries human and artificial intelligence to curate our data story.

3 *Prediction by failing fast*

Because we focus on the long term, finding the right signals from an increasingly complex and noisy world can be very challenging. Moreover, disrupting business models mean precedents wouldn't exist for regressive learning. Therefore, we work on prediction models complemented by nimble tests so that course-correction of our strategies can happen fast.

Uncovering Promising Business Fields

To be ahead of the game, we need to be able to synthesise our learning across businesses and markets in order to identify **Promising Business Fields** – a key investment criterion in Reapra. To facilitate this process, we developed a methodology that qualifies business opportunities by evaluating relevant micro and macro level indicators.

The Promising Business Field canvas is an important fulcrum for our investment deliberations. It is with this tool we amalgamate business efficiency, industry conditions and Reapra’s philosophy to arrive at a view on the opportunity’s potential.

The Reapra Business Canvas

<p>Low Cost of Sales and Operations</p> <p>High profit margin, low cost of sales, asset light</p>	<p>Product Extensibility</p> <p>Not a single product focus business in long term</p>	<p>No Dominant Players</p> <p>Nascent industry, few but no dominant players with majority market share</p>	<p>Market Entry Complexities</p> <p>E.g. regulation, complex production value chain</p>	<p>High Scalability with Digitized Business Model</p> <p>How an existing business model may gain scalability with digitization</p>
<p>Cash Generation Agility</p> <p>Short sales cycle and cash generation cycle</p>	<p>Niche Focus and Clear Value Proposition</p> <p>Ability to address a problem/opportunity with clarity on value proposition</p>			
<p>Alignment with the Reapra Way</p> <p>Is the proposed business model sustainable? Does it have the potential to create new industries?</p>		<p>Supporting Macro-economic/Demographic Trend</p> <p>Economic growth, industry segment growth, consumer behavior trend</p>		

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Towards a Limitless Future

The entrepreneurship journey is undoubtedly arduous with a survival rate² of one in ten, if not worst. However at Reapra, we do not neither believe sustainability is a myth, nor that it only exists in science fiction. Our mission is to fill this gap through systematic study of Entrepreneurship Dynamics and Market Analytics – none by which is a standalone faculty and certainly mutually corroborative.

Research is a journey of discovery, sometimes daunting, certainly not aimless and always fulfilling. For me, the excitement from even a prototype of this Arc Reactor^{3 4} for sustainable entrepreneurship is akin to Newton's discovery of the first principles of physics (and that keeps me awake at night). So now, you can forget the imaginary Arc Reactor because we are building one that is really going to change the world.

References

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The Author

Gabriyel joined REAPRA in June 2018 as Chief Research Officer. Prior to REAPRA, Gabriyel held senior leadership roles with several global unicorns (Rocket Internet, Skyscanner) and listed multi-billion corporates (Expedia, Media Nusantara Citra) overseeing product strategy, management and investment in Asia. He was the co-founder of Singapore's first game technology research lab in NTU and was faculty member of the University's Computer Engineering School. In 2011, Gabriyel co-founded his 3D technology start-up that sold visualization systems to Intel and Motorola. Gabriyel holds a PhD and Master's degree in Electrical and Electronics Engineering from NTU Singapore and a MBA with University of Illinois (Urbana Champaign).

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