Entrepreneurial Foresight

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Discovery of truly transformative ideas is the brass ring for which aspiring founders strive - yet most innovators struggle to find truly novel ideas. I have seen this challenge time and time again as I work with promising young entrepreneurs that are searching for concepts to develop into new business ventures. Entrepreneurial foresight can amplify the idea discovery process, enabling students to spot emerging opportunities and pursue breakthrough innovations that others may overlook.

As an entrepreneurship educator, I strive to stretch the imaginations of my students. Unfortunately, the traditional discovery research process can actually reinforce the incremental innovation trap, as prospective customer's needs are expressed through the lens of their existing options. Their perspectives and expectations are shaped by what they understand, and as a result the idea space gets constrained in close "cognitive proximity" to the status quo. Henry Ford is famously quoted as saying that if he asked his prospective customers what they wanted, they would have said a faster horse. Similarly, how many Sony Walkman users would have expressed a need for iTunes? The process of entrepreneurial foresight can help innovators stretch the cognitive proximity of their ideation and shine a light on these unarticulated needs.

Entrepreneurial Foresight can enable innovators to stretch their minds and envision a wide range of new and surprising ideas to fill the innovation pipeline with ideas that break the grip of the status quo. The process leads us to aim for turbulence – which is where breakthrough opportunities can be found. The pathway towards these entrepreneurial insights follows the following three steps:

1. **Stretch Your Cognitive Proximity**
2. **Explore Pockets of the Future in the Present**
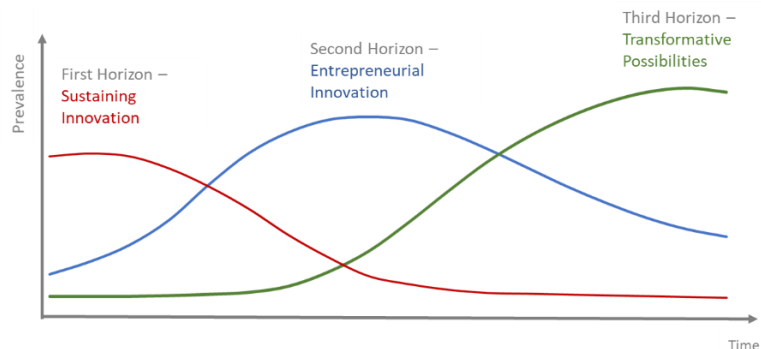3. **Innovate on the Second Horizon**

Step 1: Stretch Your Cognitive Proximity

Breakthrough entrepreneurship requires what entrepreneur and author Peter Thiel calls "**Zero to One" innovation** – new to the world ideas that create distinctive and durable advantage in the market. The reality is that the deck is stacked in favor of more modest,

incremental improvements to the status quo – with known markets, predictable outcomes, and more immediate results.

To stretch the innovation frontier, founders will need to balance the urgent need to gain traction in the short term with the longer term need to capture emerging, unoccupied strategic high ground. A model known as The Three Horizons strategic framework can be useful for helping entrepreneurs serve both of these strategic priorities.

Three Horizons

First Horizon – Sustaining Innovation

Second Horizon – Entrepreneurial Innovation

Third Horizon – Transformative Possibilities

Prevalence

Time

The Three Horizons framework is really quite straightforward, which is why it can be so useful in business. It defines the existing landscape where customers, markets, and competitors currently exist.   We call this the **First Horizon** – or **H1**. It also provides an understanding of the visionary **Third Horizon (H3)** where the transformative possibilities of tomorrow will live. This is the world of, for example, mainstream 3D Printers, Autonomous Vehicles, Virtual Reality and Carbon-Free Energy and a long list of other imagined futures.

In exploring to uncover and understand emerging third horizon opportunities, innovators need to overcome the tendency to "push" status quo (H1) perspectives onto the future. One effective approach in this quest is to strive to get to know a person that William Cockayne and his team at Stanford's Foresight & Innovation program refer to as the *Future User*. Using an approach called *Future Telling*, we can immersive ourselves in non-obvious emerging needs, and enable the third horizon possibilities to "pull" ideas towards the future in a way that overcomes the status quo mindset [Cockayne].

It is important during this stage to leverage the power of creative story telling. Immersive scenarios done well will create "memories of the future" which can be a powerful way to build empathy with the needs, priorities and aspirations of the future user [De Geus, 21]. Building empathy with the future user can help to create a sharp comparison of how the future user's use cases and preferences may be distinct from those of the present "H1" user.

A second aspect of entrepreneurial foresight is the importance of pushing the limits of plausibility. The goal is <u>not</u> to create reliable predictions, but rather to stretch our understanding and imagination – breaking the death grip of the status quo. As futurist Dr. James Dator states in his second law of the future, "Any useful idea about the future must at first sound ridiculous". Breakthrough innovators aim to explore for possibilities, not to create reliable predictions.

When pushing the limits of plausibility, one needs to be aware of the phenomenon known as "**capture**". Too often the perceptions and expectations of the current paradigm can influence the interpretation and reception of truly disruptive ideas. Take for example the case of the emergence of ATM machines – a clear Zero-to-One innovation ready to revolutionize banking. Consider however the initial adoption model for this innovation – that for the first decade or so most ATMs were installed in the front entryways of existing banks. This was driven not by some technical or regulatory need to be hardwired to the bank, but rather because of societal expectations around where and how banking was done.

Step 2: Explore Pockets to the Future in the Present

To quote science fiction writer William Gibson, "the future has already arrived, it's just not very evenly distributed". Which is to say that all around us at any moment are weak signals of transformative change – if only we can sort them from the noise and interpret them in useful ways. For users of the Three Horizons framework, spotting weak signals (pockets) of the future in the present is a huge priority.

"Pockets of the Future in the Present"
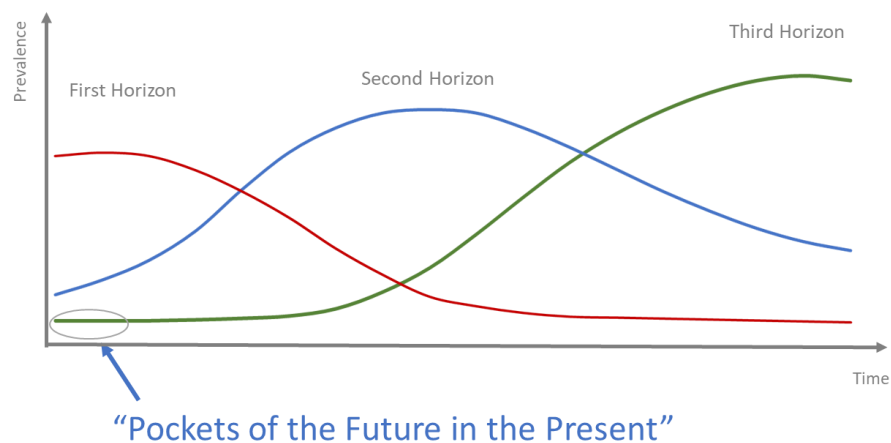
A useful example stems from the recent activity in the autonomous vehicle sector. There is a lot of discussion these days as to how fast the transition to driverless vehicles will occur and how this shift may impact jobs and the economy. Today it all seems very plausible.

Yet in 2004, the landscape seemed to point in another direction. In March of that year DARPA (the Defense Advanced Research Agency) hosted its first $1 million Grand Challenge autonomous vehicle competition in the Mojave Desert. The first driverless vehicle to navigate the 142-mile course and cross the finish line could claim the cash. Yet in that first competition, the most successful of the 15 competitors (Carnegie Mellon University) advanced only 7.32 miles, with most competitors failing to cross the starting line – in the desert, with no traffic or stop lights or pedestrians. No prize money was awarded in this first year of the competition.

Many observers looked at this event as a bit of a failed side show. However, innovators armed with the Three Horizons perspective were well positioned to imagine a world where driverless vehicles may safely and economically chaperone passengers and packages on busy highways and city streets. It seems leaders from some entrepreneurial innovators such as Google, Velodyne (Lidar), and VisLab (computer vision) had a higher degree of clarity of these H3 possibilities than others did, empowering them to set about the work of becoming innovative market leaders as the era of autonomous vehicles moves towards the mainstream.

Step 3: Innovate on the 2nd Horizon

Even for companies that have the foresight to envision H3 scenarios, the challenge of **mobilizing** to capitalize on these insights can be daunting. Urgency demands that resources get deployed to serve H1 markets and opportunities to gain early traction. Innovators that can develop **ambidexterity** to serve both core (H1) innovation opportunities and transformative (H3) possibilities will be better positioned to succeed with disruptive innovation.

The key is to frame H2 innovation as really two adjacent aspects of the process.

Ambidexterity
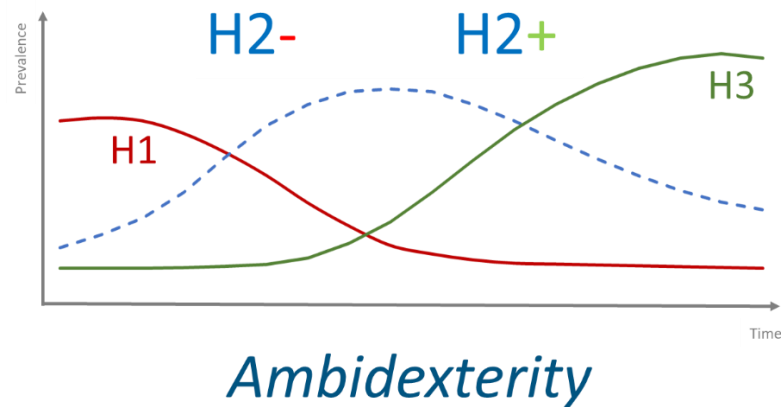
H2- innovation is the type of innovation that serves to enhance or extend a market opportunity on the first horizon. The goal here is to frame the H2- ideas with a view towards how the visionary H3 horizon may shape future needs. H2- innovations help build beachhead presence and help the venture gain traction towards its more visionary, longer term strategic goals.

H2+ innovation works to position the venture for success as a pioneer in the emerging third horizon. The initial progress gained from the H2- innovations can help propel the venture towards the third horizon and in fact hasten its arrival.

Apple, for example, clearly understood the potential of the digital music, and had great success creating an entirely new business model to capture the lead on this emerging third horizon. However, their innovation pipeline followed the H2-/H2+ innovation pathway. Apple was well-positioned as a device designer that created uncommonly satisfying user experiences. As they navigated onto H2, Apple developed and launched the iPod, a super-cool and innovative device that fit into their market position in the mind of the market. With their position as a leading provider of digital music devices shored up, Apple was well-positioned for the more transformative (H2+) launch of iTunes, which created an entirely new line of business and changed the rules of success for an entire industry. H2- paved the way for H2+.

By taking steps to pro-actively explore H3 scenarios, companies can put themselves in a great position to understand the needs and priorities of the future user and by managing the terrain of H2, they can mobilize to gain near-term traction as they navigate the fuzzy front end of the process to identify, develop, and launch disruptive innovations. For more detail on the

Three Horizons model, I recommend the book *Three Horizons: The Patterning of Hope* **by Bill Sharpe**. This book provides some great context on how business can take advantage of this innovation framework.

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