Playing Out of the Innovation Bunker

Recognizing those Cognitive Traps to avoid

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The Innovation Bunker Series

The Cognitive Traps We Often Find Ourselves In.

A short series discussing cognitive traps that are often causing us to play into innovation bunkers that can be hard to sometimes play out of.

Recognizing the traps and innovation bunkers - how to play out of them

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Our Cognitive Traps Lie within the Innovation Bunker

I suspect we are all cognitively trapped most of the time. We are all more 'hard-wired' than we would care to admit too. That cognitive bias that 'permits' us to make constant errors of judgement, ignore often the advice around us and certainly gloss over the knowledge provided or staring us in the face. Innovation does need us to break out of these cognitive biases if we want to really develop something very different, more transformational.

We should all recognize this constrain we all have, it might help our innovation activity. We are often guilty of being overconfident, actually staying nicely in a rut. Just how many times do we offer ill-framed challenges from lazy thinking or fail to offer the proper context into the discussions early enough, to avoid conversations that wasted our times or reduce the recommendations based on inadequate information. We also simply allow poor idealization because we did not prepare enough or we want to immediately link back something new into our realm of experience, screening out emerging alternatives. *We do these*, *all of the time*.

Have you ever checked out the number of [cognitive biases](#) we have? Do, it is staggering. They are everywhere, in our daily decision-making, in our belief systems and of course our behavioural stances. We have social biases, memory error ones that are just within us. We simply want to make sense of the world and you take it back to your experiences, your rationalities, those specific conditions so you can replicate it, map it back to something.

We all end up in the worst innovation bunkers

For innovation we often fall into the equivalent of the worst bunker in a round of golf and then what happens next can often make or break your day (like your golfing round). We firstly try to make sense of the situation before deciding on the course of action or do we simply resort to our past experiences as our norm? Often we quickly fall back and rely on past experience, and 'blast' away, in our wishful thinking that we are all Tiger Woods, not recognizing the need for a certain detachment and more rational assessment by having the right combination of experience and the tools to do the job. We end up in even worse traps.

Recently for me cognitive thinking has been triggered twice.

Firstly, the first trigger was one comment made by [Henry Chesbrough](#) at the recent Business Design summit. He suggested boards of many large organizations are "cognitively trapped"

when it comes to opening up to new Business models and different thinking and approaches. Often it seems, that our leaders ignore new ways to do things, to understand, claiming either no time or the approaches look complicated. They chose to not explore new business models as they are often simply cognitively trapped.

Henry Chesbrough has written about this in his books, one being "**Open Business Models: How to Thrive in the New Innovation Landscape"** and how the prevailing wisdom is so entrenched, it looks only to fit existing logic and simply filters out any variance or alternative. This dominating logic becomes their trap, in not recognizing the changes taking place before their eyes, dismissing all the growing logic of exploring new business models. They are in the locked-in innovation trap. They ignore what is actually going on around them and then get caught out. How can we change this?

The second was in an article written by Andy Zynga, the CEO of NineSigma International on "The Innovator Who Knew Too Much". Here he brings out the 'curse of knowledge' and cites the book "Made to Stick" by Chip and Dan Heath on this 'curse of knowledge' leading to communication failures. In an article they offer this thought "The problem is that once we know something—say, the melody of a song—we find it hard to imagine not knowing it. Our knowledge has "cursed" us. We have difficulty sharing it with others, because we can't readily re-create their state of mind."

I wrote back to Andy: "The curse (of knowledge) goes well beyond that of a particular industry, it is the curse of specialization in a given field, subject, research topic, etc. Cognitive bias sits in the boardroom, throughout organizations holding innovation back. The barrier for open innovation is to not be allowed to challenge this – the increasing difficulty is to structure an appropriate brief, set clear screening target that often just simply dismiss everything looking "left field" is placing constraints in our thinking"

Our early thinking is the very time we should keep our thinking as open as we can, so as to allow more evolution or engagement to 'permeate', it is later we should apply the criteria. We should remain open to possibilities.

So we are both equally cognitively trapped and cursed with existing knowledge. Not a good place to be when it comes to innovation.

Also we seem to "lock-in" our decisions far too early

I've offered up before that much of the "fuzzy front end" seems to ignore or downplay so much that could be more than helpful to us in exploring innovation that 'makes a real difference'. In a past argument of mine I have suggested we need to extend the innovation funnel back before we bring it into the more traditional innovation funnel process. In an article on this "the New Extended Innovation Funnel" I am suggesting we spend far more time in the depth of (alternative) evaluation, well before even the idea stage. It can offer up a different richness of thinking.

We need to start thinking more in 'concepts' where we can explore as so many of the different connecting points that we can come across from our increasing open networks that can offer such a variety of trigger points. Today we screen these out as the brief is encouraged to be 'tightly written' or the time we have been given is ridiculously limited. If we could only open this up and use the open innovation principles more in ourselves being

more receptive in thinking and possibility, we might see different innovations emerging that offer a more 'transforming' effect on our innovation activities..

If we could allow our minds to be open to possibilities that whole lot earlier, being less fixated, to explore richer possibilities that might be far more transformational, we might have less incremental moments. We lock in to ideas that 'simply' aligned to what we already do they ignore real innovation breakthroughs . We need to open up our thinking to these nascent concepts. Ones that show early signs of where there might be some 'weak signals' that should be picked up upon as offering promise if we work on them and make the different connections to make these transforming to our business.

We often allow our fixations, bias and the consequences to make it all intensive on the incremental, this huge bias on the 'here and now' for the necessary delivery within the existing time horizons. My very argument for seeing innovation across three horizons is this lack of breakthrough in products, in our thinking, that organizations need and eventually this leads to the innovation deficits that catches so many organizations unaware.

We need to open our minds to possibilities

We need to challenge our cognitive bias far more. Hopefully in that less pressured early concept stage, to allow the 'forming' idea to 'percolate' before it enters the established and traditional innovation funnel. You know the one, that magical place, where it has to perform in jumping the hurdles, crossing the barriers that we have lovingly set up to make us more efficient and productive in our innovation processes. Sadly those that often give us even more self-inflicted wounds where logical fallacies take hold to win arguments.

Why do I suggest trying to make connections so early on, doesn't that conflict with cognitive bias and that aspect of our need to make our necessary connections? We don't want to relate it to our own set of experiences so that we can filter and judge it. No, because we do suffer from this 'curse of knowledge', our personal bias thinking the more we know, the more we make a personal judgement, that can often be so wrong or just really is simply outside our existing experiences.

How can we overcome cognitive bias by tackling this differently?

We need to fight those very cognitive traps as the more it is like something we know the more we will shape it to this. That is the very reason we must open our minds, to allow a new fresh thinking to emerge into something more transformational, more new to the world and challenge our existing thinking.

I believe there are ways we can tackle these traps, solutions are actually all around us if we can make some new connections.

In my next article I'll attempted to tackle some of my thoughts that might reduce our cognitive bias traps and allow us to get out of our innovation bunker in better ways.

Getting Out of Cognitive Traps Found Within the Innovation Bunker

Help seems to come from new quarters – unlocking our minds and breaking free from our cognitive biases. *Part two of the Cognitive Traps we find ourselves in.*

So how can we break free from what holds us back? As we have these cognitive biases then we have to consciously work on reducing their effect in our judgements, decisions and actions. We need to break out of those cognitive chains that can hold us back and limit our innovation thinking

I think there is so much help at hand

If I take www.innovationgames.com, as one example. This is where Luke Hohmann and his team are taking us in exploring games to stimulate our thinking. I think there is this important and emerging 'rush' into games-based tools partly because they can significantly help offset cognitive bias. They allow us to become more engaged in collaborative thinking.

On http://www.innovationgames.com site they offer this as their value statement: "*our on-line and in-person games help organizations solve problems across the enterprise by using collaborative play to tap into true innovation*". "Games bring your ideas into Action" in our ability to come together and then actively collaborate, helps you discover market opportunities and uncover customer needs and challenge your thinking in new and stimulating ways. Engagement in imaginative ways allows you to break free of some of your cognitive traps.

Have you explored the different books around games, for example *Gamestorming: a playbook for innovators, rule breakers and change makers*. They state "*we're hardwired to play games. We play them for fun. We play them in our social interactions. We play them at work. That last one is tricky. "Games" and "work" don't seem like a natural pairing. Their coupling in the workplace either implies goofing off (the fun variant) or office politics (the not-so-fun type)*".

The authors of *Gamestorming*, have a different perspective. "*They contend that an embrace and understanding of game mechanics can yield benefits in many work environments, particularly those where old hierarchical models are no longer applicable, like the creatively driven knowledge work of today's cutting edge industries*"

I'd suggest that in any industry there is this <u>pressing</u> need to open up the thinking to see 'things' in new ways. The challenges are becoming more complex, faster paced and needing far more agile minds. These game storming approach are allowing us to alters our cognitive biases in new ways.

Have you read the article by Jordan Shapiro on "[How gamed-based learning can save the humanities"](#) where he discusses example of game-based learning platforms that uses the magic of interactive storytelling–video game design–to bridge the catastrophic gap that undervalues the humanities in education. He goes on to suggest "Metaphors, signs, and symbols are useful. As the building blocks of language, they let us articulate our experiences through a shared system of meaning-making". Any shared language reduces personal bias.

Take a look at this slideshare "[Building a sustainable innovation ecosystem](#)" for exploring translation pathways to new ways of learning in the 21ˢᵗ century. Game-based learning is significant to alter our perceptions and challenge our thinking.

The Blank BM Canvas

Following the success of Alexander Osterwalder's [Business Model Canvas](#) we are all getting more comfortable in building off a 'blank' canvas our new business models. Since this canvas there are countless other alternatives that can help us to overcome bias and prompt different thinking around most of the aspects of business design.

Collaborative and visualization tools are equally making a difference

We are seeing the art of storytelling, of taking part in simulation work, making better use of the different visualization techniques and we are opening up in allowing ourselves more time for strategic and concept conversations.

If we take the Heath brothers suggest in their book "[Made to Stick](#)" I certainly believe this can help in 'chipping away' at cognitive bias. It reduces bias though drawing out, more often than not collectively and giving time to debate. This shifts our personal perspectives and allows us to see things differently as 'I' moves to 'we' in association and assembled knowledge of the broader community engaged in the conversations and exploring.

Can we use the tool from "Make It Stick" for reducing cognitive traps?

For example in their book "Made to Stick" they (Heath brothers) lay out the critical elements of a sticky idea of Simplicity, Unexpectedness, Concreteness, Credibility, Emotions, Stories. This encouragement makes for more conversations, both within our own minds and in greater participation with others. This idea for structuring conversations will be great offsets to our cognitive bias in my view. It certainly can become a great starting point.

So taking the Heath Brothers suggested acronym of 'SUCCES to reduce Cognitive Bias

- **S**imple — find the core of any nascent concept and allow it to permeate.
- Look for the **U**nexpected —let it surprise us so we can see its possibilities
- **C**oncrete —Grasp it and its potential effects to share this new insight with others
- **C**redible — work on the association to give it 'growing' believability
- **E**motional — help people see the importance of this to achieving innovation that transforms.

- **S**tories and Narratives — for crafting a compelling narrative to change our cognitive biases into new logic and value propositions.

Knowledge diffusion I believe can reduce cognitive bias also

For me the more we can diffuse knowledge, the better, for recognizing its potential new value in enabling innovation to be translated into "exploitive learning". I've previously suggested absorptive capacity as a help in knowledge adapting. I wrote a piece called "Moving towards a more distributed innovation model" can allow your thinking to absorb and have a greater flow.

Envisaging different states for innovation needs clear application.

Scenario thinking is a more than helpful place to go for changing our perspectives. What we have to guard against is that these do not become another cognitive trap where we want scenario thinking as long as it is on 'our terms'.

I believe if we only ever construct scenarios in one 'mindset' we miss so much. As many who have been reading my posts I strongly prescribe the three horizon methodology for approaching innovation. Take a look at mapping innovation across the three horizons to see where this can 'shift' our thinking beyond accepted present day thinking norms for innovation to be advanced more effectively.

Langdon Morris wrote in a book called "The Innovation Master Plan" there are four devious mindset traps of 1) fixation on the status quo , 2) short-term thinking dominates at the expense of longer term, 3) too much incremental innovation and 4) ignorance of the real meaning of change, its rate and impact. We need to radically alter these traps. Fixation, biases simply do have innovation consequences.

Seeing across multiple horizons 'frees' us from many cognitive traps

I believe we can go well beyond the present value of 'just' fitting your existing innovation portfolio and directional management into a one-dimensional framework, viewed in our present 'here and now' mindset. You can see opportunities completely differently beyond the existing mindset and activities, if you think in different time horizons. These different thinking positions take innovation from tactical to strategic, then into foresight in your three different mindset evaluations. This three horizon approach challenges your cognitive biases as you really do just have to let go and open your mind right up, to see and that is in different thinking frames.

Perhaps I can go one step further, a final step, by reflecting back.

So in my final post coming up (*part three*) on the Innovation Bunker and our Cognitive Traps I offer a simple framing technique that I think has value. One that we all can relate to it, not so much to each other's cognitive biases but on how we can manage innovation and its progress in a 'common' approach- It can reduce differences and allow for better results.

We certainly do need to encourage adoption and decrease the rejections in innovation.

The Innovation Bunker – Playing to Avoid Cognitive Traps

Often we forget to look back as we constantly get into that habit of always wanting to simply keep moving forward. So, sometimes I would recommend we stop and reflect. I, for myself, keep returning to great thinkers in innovation to remind me and these can often bring me back on track in avoiding certain traps.

Part Three of the Cognitive Traps that we can often we find ourselves in.
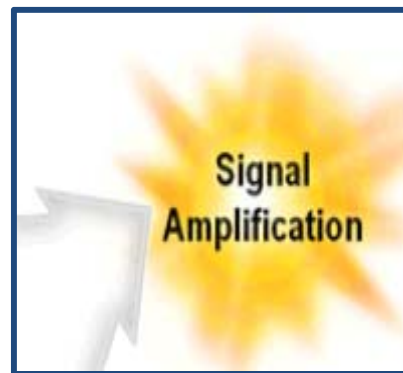
I've always valued one terrific observation of Professor Clayton Christensen (of many thoughts) where he talks of the core theories of innovation. One small part:

He states "*theory helps to block out the noise and to amplify the signal*"

So I looked back at a theory to go forward to reduce our cognitive traps

If we link back into Everett Rogers Diffusion of Innovation for much, it is not a bad place to go. He firstly offers us his five stages of adoption or the decision stages of the innovation-process of Knowledge, Persuasion, Decision, Implementation and Confirmation.

Within this five stage approach he raises the issue of cognitive dissonance, where people do have the (eventual) motivational drive to reduce dissonance by altering existing cognitions, adding new ones to create a consistent belief system, or alternatively by reducing the importance of any one of these dissonant elements

Rogers also teaches us that knowledge acquisition, risk evaluation, value acceptance, social/economic/political constraints, adaptation to specific situations, time, money, and the expertise of change agents all influence the adoption of an innovation. We need to bring these far more into our thinking so they can, over time, alter our cognitive biases to allow for 'greater' innovation.

In his work it is suggested we must encourage more comparisons that allow us to make greater connection, attempt to understand the innovation-decision (thinking through) process, encourage all around us changing attitudes, different behaviours and supporting structures and finally mitigate the risk and consequences when we push for adoption.

Isn't there within all these connections a cognitive resolution pathway?

The more we share, the more we learn. The more we participate in open communities the more we can gain. The more we spend time in seeking new knowledge the more we see fresh alternatives.

Everett Rogers' <u>Diffusion of Innovations</u> can be a more than useful frame for our learning strategies for gaining adoption that we are presently struggling with. In our board rooms the cognitive bias is partly because much of the thinking is based on *their* past experiences, often gained in different times and circumstances. They are often more uncertain than you are, due to these increased complexities and volatiles, feeling less equipped to deal with them, so our role is to increasingly bridge these anxieties.

The challenge we have as innovators is to convince those within the boardrooms that there are new tools, new ways, new approaches that do not place the core business at more risk but can provide the foundation for experimentation, for exploring in new ways. If there is no pushing of our thinking and staying within our comfort zones, well it leaves us at greater risk. So we need to have a clear approach to allow this wanting to experiment but for it to occur in 'concurrence' and support by those that are around us.

We need an adoption process to take into the boardrooms

If we agree still with Everett Rogers characteristics of innovation then perhaps we can start here for raising change in our board rooms more often. To overcome these cognitive traps spoken off by Henry Chesbrough and others, then we do need a framework to unify around and use. We need a clear thinking through process to work through to reduce these cognitive traps. One that engages others in this agreed structure.

I think we have a terrific one offered up by Everett Rogers to tackle cognitive traps.

To get anyone out of their own thinking trap we need to associate it to what would be valued. We can offer an uniformed path based on Everett Rogers five steps principle

- What we must always offer in any conversation is a clear *relative advantage* to what is presently available, so we can gain permission and set about to explore better alternatives, to clarify this and gain general acceptance.

- If we can offer *compatibility* with our own and other people's existing values, and explore a migration path from their past experiences we might get more space to experiment. We need to draw others in and so we have to align ourselves to their experiences to frame it to their thinking bias. This becomes a job-to-be-done on unearthing unmet needs or the needs that can be improved upon.

- The new tools, methods and techniques can certainly help us to explain *complexity* to reduce the perceived difficulties of adopting new practices. The whole gambit of gaming, the canvas techniques, visual mapping, design thinking all help considerably here.

- We then can offer new ways for *trialability* to experiment in safe and limited risk ways. Lay out a clear path of experimentation and result milestones to manage expectancies and gain increasing support commitment. Steve Blank's contention of "getting out of the building" and his customer development process offers one of many ways to learn, pivot and progress in bite-sized steps.

- Finally, we can provide *observability,* so others can see the results we can make progress. By keeping this open, it can be clearly challenged and blocked in many ways but openness and transparency does eventually reduce resistance. If we can clarify change and our progress in learning we give others understanding. It is when we fail to communicate what they need to hear, we are more likely to be blocked or our project cancelled. We need to 'demonstrate' progress and show its value.

Everett Rogers five steps might offer up a possible pathway to unlock much within innovation and reduce our cognitive biases we all have that traps us often not to move forward.

We need to break free of our personal and collective cognitive traps.

To innovate differently, we need to open our thinking to as much of the diversity that is going on all around us as possible. We need to unlock innovation in new, imaginative ways. The more we open our minds, our organizations and allow new tools, new thinking in concepts, experiences and ideas, then the more we permeate and change existing beliefs. We need to start looking around us and see the multiple ways we can get out of our traps and biases in thinking.

Our rationale and reasoning change progressively as we expose ourselves to new experiences and new knowledge, then innovation can surely follow. I think we do 'play' into to many innovation bunkers. We can't ignore the cognitive traps all around us but if we become more conscious of them I do believe with constant practice we can easily avoid many of them with the right mind frame, the right approach and the awareness of what others are seeking within the collective frame we need to work through.

Avoiding the cognitive traps needs consciously working upon in discipline and resolution.

Cognitive traps are not good for any innovation, especially transformational work. They are vital to understand if we are reliant on others. We can work far more consciously at surfacing differences but within a clear, open and transparent approach. A cognitive bias is a mental error that is often consistent and predictable. We can often anticipate them and be ready to offset them, in ways that 'appeal' to those with these biases.

So by making innovation a process where we work on reducing all those places of variance where we might not have a clear process, structures and design for innovation we might get less (cognitive) resistance. Equally if we can work more consciously being open, showing 'increasing' evidence, talking through probabilities, risks and returns and finally working harder on understanding the pressures, uncertainty and needs of others we might reduce many of the (hidden) barriers and 'draw out' those that have reservations.

Open conversations based on mutual knowledge can go an awful long way to reduce these cognitive barriers. Irrespective we need to be constantly aware of others and their opinions.

So we need to consciously craft the alternative.

I leave you with this final contribution of "we need to craft an alternative path" a visual by John Hagel. It sums it all up at the end: "*our actions individually and collectively will determine whether opportunity or challenges prevail*".

For me, innovation needs the challenges of working collectively together, so we all can move towards the opportunities, We need to avoid those cognitive traps and play out of the innovation bunker well and the best way to do this is to learn to seek out knowledge.

We need to recognize, to value and exploit together in open and collaborative ways to reduce these personal biases and cognitive traps we can often fall into. We need to leverage all of today's cognitive structures all around us that include *mental structures, mental tools*, and *patterns of thought* offered to us in new exciting ways with a little bit of older theory perhaps, thrown in.

Keeping positive

We do need to play our way out of the Innovation Bunkers we often find ourselves 'locked into' with our cognitive biases.

Are you 'willing' that ball to drop? Just open the mind

About Paul Hobcraft

I simply enjoy innovation. I got 'hooked' ten years ago and have increasingly focused upon it until it is 100% of my business thinking and activities. I research across innovation, look to develop novel innovation solutions and frameworks that have real potential value to apply to different problems we all face in managing innovation. I provide these through a range of solutions that underpin my advisory, coaching and consulting work at www.agilityinnovation.com on supporting innovation for individuals, teams and organizations.

For me, innovation needs to enter the DNA of our organizations and our own individual make-ups. Here on this site, I try to work across different aspects to offer thoughts, ideas, advice and concepts to help each of us to understand innovation that little bit more.

My areas of focus

Through my business, **Agility Innovation Specialists**, we deliberately set out to help grow your body of knowledge on innovation. Having this 100% focus we believe does provide the necessary _additional_ intensity of focus needed for innovation success that someone who specialises can provide.

We research topics that relate to innovation for the future, applying what we learn to further develop organizations core innovation activity, offer appropriate advice on tools, techniques and frameworks so clients can achieve positive and sustaining results from their innovating activities. Web site: www.agilityinnovation.com

Recently a dedicated site for exploring the components of our 'fitness' make-up for innovation, is outlining my working towards an approach that can model what is dynamic or not, that improves innovation performance. There are clearly dependencies and this evolving model attempts to provide answers to current performance gaps, to improve the innovation performance engine in capability and capacity building, to raise the game and align it more into the strategic needs. This dedicated site can be found at www.innovationfitnessdynamics.com

Finally www.hocaconsulting.com HOCA consulting contributes to those emerging areas of Corporate need to link the new approaches we need to have in place to meet the different challenges we are faced with today.

The personal journey makes up a set of unique experiences and understanding

As for my personal journey of how I got to this point I can only say it has been varied, challenging but full of fun and learning. This has taken me to live and work in Saudi Arabia, Kenya, Malaysia, Switzerland, the Netherlands, USA, Australia, and recently eleven years in Singapore, starting up businesses, turning them around or simply accelerating them and achieving their footprint within the world.

In mid-2008 I moved back to Switzerland from Singapore and presently focus my time between Asia and Europe for this innovation practice and its **related sister company** (www.hocaconsulting.com) that focuses upon related subjects important to growing organisations capability in today's world. I work and move between my preferred bases of Switzerland and Singapore.

Innovation as a source for our growth fascinates me. I hope I can share some of this passion with you here on this site as I search for the DNA makeup of innovation.

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Paul Hobcraft was voted into the top three innovation bloggers for 2011 and also for 2012 on a leading Global Innovation Community- Innovation Excellence- , go to

http://bit.ly/tWE1oX

Also in 2012 Paul was voted as one of the top 50 tweeters on the subject of innovation su.pr/4U9EBB .

"These accolades are highly appreciated and valued- they inspire me to keep innovating in my own unique way and style. These recognitions help me believe I can contribute to the wider innovation community we are all part of"

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