Require A Dual Mind Set of Exploiting & Exploring

The ability to exploit and explore simultaneously

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Dual thinking is required for Innovation- to think both in exploiting and exploring mind sets needs separation.


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Establishing a new mentality for innovation

Visual two heads....different mindsets, different thinking about innovation but working together, a duality of thinking and managing innovation going forward. We must learn to explore and exploit at the same time, both in parallel and where needed, in separate ways, or entities.

If we ‘subject’ all of our innovation thinking to go through the same process we lose so much. How can you treat incremental innovation in the same way as radical or breakthrough innovation? You need to apply a completely different thinking and approach to the type of innovation you are thinking through. You must be prepared to abandon established thinking if it is not resolving the problems you are facing.

I have been drawn to this ‘dual’ system of ambidextrous as it helps resolve one of the consistent stumbling blocks for innovation to ‘take hold’ and evolve. Innovation is constantly fluid, needing to be adaptive as we learn and adjust to new learning and this is constantly requiring a very change orientated approach. Often innovation comes up against a rigid system and for many “just seems not to fit”

Innovation struggles as it often remains outside the prevailing system. Innovation constantly challenges against the dominant mindset within organizations, who like the idea of innovation but are mostly measured to drive efficiency and effectiveness, keeping highly focused on the short-term performance as their role, reward, advancement and key to ongoing career success, so innovation ‘sits outside’ their domain of focus”

The need is for us to get thinking in ‘dual’ minds for ‘greater’ innovation delivery.

_Exploitation_ <=> _core transformation_, i.e. doing what you are currently doing in a fundamentally different way

_Exploration_ <=> _strategic transformation_, i.e. changing the very essence of a company

The thinking in dual ways is a really important part of bringing innovation thinking into the boardroom
The measurement of how each organization is improving its ‘advancement’ needs some rethinking.

Organizations extract all the available juices out of efficiency and effectiveness; they even like to pulp the remains.

For me exploitation and exploration holds the key. Those offer more of the promise of advancement in my opinion they allow us to balance the everyday need with those more demanding new forms we need through innovation. Both need to be present within our organizations but we need to treat them differently, they are separate mindsets.

It is these two dynamics of exploitation and exploration we should be leveraging for our innovation and future growth. Of course, we need to hold onto what we have in our need for efficiency and effectiveness and leverage this for what we need in the future. Yet efficiency and effectiveness must become far more ‘sitting’ in the background delivering the profitable results we require in the present, this space will allow us to focus on this exploitation and exploration as our new emphasis, so we can extract and leverage, for extending but in our continued need for growth and sustainability.

We need to recognize that efficiency and effectiveness need to always be around but underpinning the new need of exploring and exploiting. This is what is going to make the difference.
I have recently been in some different discussions about the merits and balances required to manage incremental and radical innovation. Partly this is in preparation for a workshop later this month but partly from a conversation, I am having with a sizable, well-respected organization, with its head office based here in Europe.

In the conversation within the organization we were discussing the breakdown in their treatment of incremental and radical and they suggested this was being managed within an “ambidextrous structure” yet I was not convinced. I have to point out this was only a part of a broader story on the difficulties of managing conflicting innovation demands that they were having.

One key constraint in their thinking I felt was not having distinct units as they were trying to manage incremental and radical through the same process and that, for me, is a basic mistake.

I feel to truly claim an ambidextrous organization you have to be working towards the conceptual model offered by Reilly and Tushman on the “Ambidextrous Organization”

Reilly and Tushman’s argument was to truly flourish, not only do you need to maintain a variety of innovation efforts but it does need more of a recognition of the full organization to manage these differently, not in isolation or selected parts of your organization. You need to consciously address the differences and build those into the twin process of managing incremental and radical. Let me offer my take on this.

**Simultaneous the need is to manage the differences in Exploration & Exploitation.**

I love how two words have such potential in their meaning and approach. It is the same as ‘divergence or convergence’. They clarify distinct differences, you don’t merge them, and you treat them as one leading into the other (divergence into convergence) or running in parallel (exploration & exploitation) for good reason.

Exploring and exploiting do need separation, at least in our thinking or applying. In organizations that practice ambidextrous design, they separate the new, exploratory units from their more traditional, exploitative ones, allowing for different processes, structures and cultures to emerge but it is at the senior management level they maintain tight links. This way you can pioneer more breakthrough or even disruptive innovation while allowing
the incremental gains to be focused, and optimized without this consistent set of distractions of trying to balance the two within the same resource pool or trying to squeeze it through the same assessment and timeline process.

It is very different when you have to go on exploratory expeditions which are harder to determine and the last thing is having the constant pressure of balancing for time and between types of innovation. Exploration & Exploitation approaches need really different measuring metrics also.

It is at the senior leadership level any conflicts are managed not within the unit or organization department or even by a head of the unit if the organization does not manage in this ‘ambidextrous’ way. If you attempt to manage these together I think you don’t extract the full benefits you can gain from having this more dedicated focus, working on distinctly different innovation needs.

**What does radical mean to you?**

The other issue I have is the use of ‘radical’ within the discussion. This can create such different meaning for each of us and can certainly be preconceived, so it already becomes hard to let go or change. Also ‘radical’ is often felt in larger organizations as something that simply does not fit as they are not a radical organization but a careful, often too cautious one.

So ‘breakthrough’ seems to be a more natural fit and sits opposite of ‘incremental’ far more in my mind and it seems most others, worried over the ‘radical’ label. For incremental you exploit through upgrading, adding more choice or building on what you presently offer, whereas you explore far more for breakthrough projects.

You can rightly point out there are numerous different type approaches and I recently wrote on what is the appropriate design within our organization ([http://bit.ly/zdUhKp](http://bit.ly/zdUhKp)) using radical I know. Your type is partly determined by your structure and its degree of optimization of its potential flexibility and what you need to achieve.

**So what are differences to be recognized for Exploring and Exploiting?**

The understanding has to come back to alignment, the alignment to strategic intent (of the innovation need) and the recognition of distinct differences in critical tasks. It is defining the differences is the role of the leader, who is either managing incremental or breakthrough innovation, as they should focus on different competences, controls, rewards and the environment you are expected to work within, to deliver these as effectively as possible. It is difficult to ‘flip’ between the two as they call for distinct mindsets.

**Again it is the power of the difference in thinking about these.**

Using the comparison of exploitative versus exploratory in this two-word comparison that I love, does give you the real differences in the focus that needs to be recognized and undertaken.
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<tr>
<th><strong>Exploitative focus</strong></th>
<th><strong>Exploratory focus</strong></th>
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<td>Incremental</td>
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<td>Directive, top-down</td>
<td>Visionary, involved</td>
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I’m sure you can extend this list even more but the point is that the difference in mindset is significantly opposite. Can you apply these within the same business group or unit? I seriously doubt it.

**Eating from the same innovation stew pot everyday might not be the best solution.**
As we think of innovation we have to be careful not to limit ourselves, not just in approach or types but in the way we set about and manage this. Trying to bring all aspects of innovation activity into one ‘pot’ means you end up with an often underwhelming stew. It simply fails to really deliver, as you failed to do the necessary separating and distinctive preparations that all the parts needed to be achieved as your end result, to meet the different market needs that are around.

You need to separate, the innovation that sets about protecting the core, building and strengthening it and that that pushes and extends the business beyond. These really require really different mindsets in approaching and managing across the organization. Not just in isolated pockets struggling to balance the different demands being placed on them.

Within these ‘collective’ silo’s they can’t differentiate distinctly enough and until this is fully understood it constrains and adds unnecessary pressures. Unless you address this it is never fully appreciated across the organization on what is needed to be going on and how you should support and measure it’s results. Bundled up it all becomes a compromise.

There needs to be this realization that incremental and breakthrough are so different in activities, processes, structure, cultures and metrics to attempt to achieve the optimized effect, you need this ‘dual effect’. Having a clear separation in managing incremental and breakthrough innovations is more effective and efficient but please don’t tip them in in the same pot, but distinct and separate innovation ‘cooking’ mediums, to achieve a more outstanding and differentiated set of results where compromise was not down to being mixed into the same general approach.
We never seem capable of adapting as well as we should do. Adapting always seems a work-in-progress, or it is often something where we are simply making little or no progress!

We often stay ‘stuck’ in the way we do ‘things’ around here, never seemingly able to break out into something new or different.

To adapt we need to open ourselves up to learning and adjusting our organizational ‘form’ in new ways.

In business there should be a constant battle to reconfigure the assets and extend the existing capabilities. Yet often these stay ‘static’ not learning or improving. In our innovation activities there is an even greater pressing need to build into our thinking the ability to find more dynamic capabilities. It is a constant innovator’s dilemma to think through and get right.

What might help?

Recognizing our need to think differently

Here I want to outline some opening thoughts for you to consider in becoming a more adaptive organization.

There has been a lot of discussion about finding new organizational forms that need to somehow reflect on pushing out and developing around unique combinations building into our existing structures these four distinct ‘classification’ states: a) collaborative, b) learning, c) emergent and finally d) ambidextrous.

These ‘states’ are viewed to be really helpful in accelerating an organizations growth potential and improve greatly on the innovation cycles.

Partly this is being driven by a recognition that we are becoming more dependent on a growing set of challenges that include: a) gathering and synthesizing far more knowledge
than ever before, b) the fact we are increasingly becoming dependent on the performance of others, c) the assets that we simply own and have in place are just not good enough today and d) our abilities to “read, react and respond” to changes occurring that just seem to be constantly accelerating away are becoming more difficult to keep adjusting too in our present organizational structures.

Somehow we need to respond in more agile, fluid and adaptive ways. Roger Martin suggested some time back “that modern leaders need integrative thinking to embrace complexity, tolerate uncertainty and manage tension in searching for creating solutions to problems”. It is learning to make different choices in a far more creative process, often more disruptive to our established norms.

All these are challenging our existing organizations systems, structures and processes and it is a growing process of understanding that will emerge to form these new ways of operating, far more reliant on technology, rapidly available and adaptive systems and flexible thinking and design.

The need to become bolder in our thinking

We need to encourage fresh and bolder investments in knowledge, in infrastructure, in systems and in managing these. Ones that focus on activities that pursues new approaches that lead to exciting innovation, that really does spurs growth. These are about learning, searching and delivering the winning value on the new innovation value scale of ‘new generation activity’ from recognizing how we balance out exploitation (extending the life) and exploration (new understanding). We need to appreciate the separation effect for innovation.

Most of our organizations today struggle with applying the ‘appropriate’ resources into these two ‘dual’ approaches, many try to separate them, often hiving off the more radical innovation development part to protect it from being overwhelmed by the often overbearing focus on the short-term and exploitation. Yet this is a real mistake, as they are in necessity to be combined to improve what we have, as well as add in significant change to keep the business healthy (efficient and effective) and equally growing (though innovation)

We are living in a world of apparent contradictions

We need to manage with one eye on austerity, the other on emphasizing the need for innovation. The popular ‘answer’ to this is simultaneously exploring and exploiting, yet these two organizing and managing styles are hard to find the right balance we need. We want to have a stable environment but we need to equally be dynamic, constantly improving and introducing new innovation.

These are a significant range of questions we have to consider before we decide to establish the ‘appropriate’ position of how much we need to emphasis on exploit and explore, both needed to be balancing the stable and delivering the dynamic. Much is dependent on the diversity and dynamism of the business environment we are operating under, the resources
we have available or can call upon, the market conditions we are facing, as well as predicting where all of it is heading. Easy huh!

**Equally it is dependent on what we are attempting to do.**

Exploitation is the “refinement and extension of existing competencies, technologies and existing knowledge” whereas exploration is “our ability to experiment with new alternatives” and each are certainly built on our learning and accumulating experiences. Exploitation on its own, or if heavily emphasized to the exclusion of exploration, can eventually lead to failure, where as too much exploring and experimentation can limit exploitation. Each can become a “failure trap”.

The “success trap” is when exploration leads to exploitation and exploitation to more exploration, a reinforcing cycle through a clarity of mind-set and managing between routines and experimentation. These can have very different activities to manage and are the cause of many of the tensions within the balance needed in organizations to innovate the new and manage the existing. Each is often competing for scarce resources, a constant interplay.

The argument for establishing an ambidextrous organizations has proffered different opinions for pushing for variations based on:  

*a) clear separation,*  

*b) developing the abilities to switch,*  

*c) become self-organizing or*  

*d) using an external ecosystem thinking to establish the right mix between exploit and explore.* Each is determined by a unique mix of considerations.

The answer for each of us is that it really does depend. It has a paradox only you can solve in your unique situation. It comes down to trade-offs. So what do we need to consider? Do you tightly couple these or seek degrees of separation?

**We need to seek balance, strive for dynamism and accelerate innovations**

With this ever-increasing set of tensions we are in real need to shape capabilities. It has been suggested * that we have to resolve four closely interrelated ‘tensions’ to help us in leading to understanding what, where and how we design ambidexterity into our management within organizations. We need to consider how we would balance these four tensions:

1. **Differentiation and Integration.** How do we separate our exploitative and exploratory activities into distinct organizational activities or units? Integration is deciding the mechanisms that can address these. This deciding point between these two will often boil down to the degree of importance placed on the need for exploitation and exploration; these should not become mutually exclusive positions. We must balance in constantly adaptive ways this duality. It is the specific task or activity that can largely determine this but it needs a conscious designing in.

2. **Individual or at Organizational level.** The ability to ‘fuse’ any approach across multiple levels of need at organizational design and the individual’s ability to explore and exploit together, or at separate times, needs resolving. Having different teams, one exploring, one
exploiting, or having individuals who have a higher propensity for one or the other, to be blended into a diverse team solving a complex challenge that needs this dual thinking purpose are some suggested approaches. Again it comes back to the challenges that need to be addressed, as the management of contradictions and conflicts need different alternatives, in our creative thinking. Orientation between the short-term and longer-term need equally to be well thought through. We need to fit innovation into its appropriate context, contributions and characteristics of the people working on this. Finally here, it is the diversity in knowledge coupled with experiences. that give us richer linkages for innovation. It is the working consciously on the alignment and adaptability within the mix and at these different levels required. There is a fluid need to move between these levels of design and need.

3. **Static versus dynamic perspectives.** We do need to find a way to simultaneously pursue the two activities of explore and exploit. We need to reduce the static and emphasis the dynamic, by constantly adopting ‘certain’ configurations to meet the innovation needs we are working towards. Achieving a sequential state or pushing for a simultaneous pursuit of the two becomes the key consideration. The key is to repeatedly and intentionally orchestrate the firm resources; it is striving to gain interactions not separating them. Hiving exploring off into a discrete unit creates problems in any down the line handing off back to the operating unit responsible for the execution of innovation. These is this real need to think through a **more comprehensive innovation life cycle** here, as innovation is certainly far **more dynamic** (or should be)

4. **Internal versus External Acquisition and Interplay.** The need is to gain and utilize knowledge and this ideally comes from both internal and external resources. The stronger we have in place alliances, outsourcing arrangements and partnerships, we are building our ‘combinative capabilities’ and how we can consciously apply a more **absorptive capacity** approach to synthesize, apply, acquire and absorb knowledge. This allows us to develop a higher degree of knowledge flexibility across organizational boundaries and find different ways to integrate this into our innovation thinking. We are always in need for novel, diverse and alternatives within any innovation thinking. Knowledge diffusion becomes vital to manage the exploit and explore and this needs to flow across the organization, not stay limited within one part, reducing the opportunities to leverage this acquired knowledge. Here lies the seeding of corporate renewal.

*Each of these interrelated tensions needs a high-level of resolution.*

The level of insights into the strategies, structures and processes that allow them to be in these ‘**dynamic tension**’ for innovation to occur, is one we must constantly strive towards a balance and harmonization between the two activities of exploitation and exploration. These tensions will actually require a high level of constant and often contradictory level of requirements. How can we design this into the fabric of the organization?

This set of challenges does require this deeper thinking about the development of a more ambidextrous approach to innovation. The how can the organization be designed in adaptive ways around this constantly evolving innovation need.
The real hard questions to answer will eventually lie in asking “what are the similarities, differences and interactions between the individuals, a group’s and an organization’s creative capacity, diffusion capacity, absorptive capacity for knowledge and risk-taking capacity”.

Where are the balances needed to be achieved in organizational adaptation, innovation need and learning? How can we design the type of dynamic environment that I believe can evolve by an appropriate design unique to you, one that I regard is requiring the understanding of building our innovation fitness landscapes

Building these changing landscapes to meet opportunities and situations to respond too, at you need to adapt, manage and operate within; then determining what you need to have available, knowing the how to go about bridging the gaps, to arrive at a state of being constantly adaptable as your goals adjust and change?

It is certainly complex and we all need to learn, adapt and work through this balance in our exploitation and exploration needs. It is one critical part of a future organizational design. It does need individually working through to meet your own specific needs for growth and protection. It does mean that the level of sensing, seizing and re configuring is critical to work upon and that means it has to be highly dynamic, in building the dynamic capabilities required for innovating because nothing can be static for very long in today’s world.

Key reference used is drawn from the paper “Organizational Ambidexterity: Balancing Exploitation and Exploration for Sustained Performance” written by Sebastian Rush, Julian Birkinshaw, Gilbert Probst and Michael Tushman . This paper has been at the core of the post.
So how do you manage exploiting and exploring for Innovation?

So how do businesses organise their structures to be able to simultaneously manage the needs to exploit and explore innovation?

In this post I wanted to explain my thinking through on this ability to be ‘ambidextrous’, knowing the difference of when to exploit and when to explore as essential to leveraging innovation, in all its forms and watching out for some of the traps in not managing this well.

Managing this, in all honesty, though, is hard to get the balance right but highly valuable if you do achieve it, it can transform the business. Many of our organisations struggle to manage both successfully as they tend to focus more on separation mostly in organisational structures alone as their attempt to become ambidextrous. It is far more than ‘just’ this. Get the balance right across the organisation’s design and in its leadership management, it becomes a very powerful mechanism for accelerating performances by delivering significantly new innovation and equally sustaining and leveraging the core business you have today.

Recently I contributed a blog post over on the Hype Innovation Blog “Balancing Exploitation & Exploration for Changing Performance” that opens up the subject but then extensively dives into three examples of Apple, GE and Google that are working in highly ambidextrous ways, pursuing exploiting and exploring in their own unique ways.

The important point is that the make-up of how, when, what and where to exploit and explore, can certainly be very different for each organisation, all dealing in their different contextual settings. You need to develop a “dual mentality” in managing and be watchful for dealing with this as it can create a real deep-lying set of tensions, yet it is within these tensions and how they are managed will determine eventual success of getting this balance right.

We often face conflicts on knowledge acquisition, absorption and translation
How do you switch from the pursuit of efficiencies, from what is often well-established, into the probing of the unknown or not easily quantifiable? We need to balance the interplay between the two.

As we pursue the alignment and adaptation of the two, this is where we get into a serious conflict by attempting to manage this in one fixed ‘state’ or the other. You start questioning, looking for synergies, searching (often by default) for the complementary, attempting definitions, drawing connotations and meaning from these far too early and this has consequences. You muddle your thinking between when to exploit and when to explore effectively. Management is often looking to close something down, to make a decision based on the present known facts, exploiting as quickly as possible what we do best, yet there are many occasions they should stay open, wait and allow time to explore more, to gain more insight. Knowing when to do one or the other is the judgement needed.

You can so easily get into further conflict as exploitation tends to be built on past knowledge, or pursuing and acquire new knowledge to build on existing knowledge. Whereas the kind of knowledge needed for exploration, is significant new knowledge acquisition and requires rapid absorption, and one might not be necessarily helpful to the other, as the purpose and need are sometimes radically different.

You struggle to find the consistency of purpose or even commonality when the type of knowledge that is required can be so starkly different, built either on the known or in pursuit of the unknown. This is why gaining an absorptive capacity understanding becomes important in the context of what you are attempting to do. Knowledge ‘feeds’ advancement and equally provides the ‘fuel’ for innovation but they mostly come at you differently to manage, absorb and translate into their meaning.

Managing exploit and explore depends on your situation

Unless you have a “guiding star” that comes partly from a vision market understanding and mission, that can help you decide the emphasis between these two, it makes managing these dual activities as simply difficult. Is it one that is focused on productivity, cutting costs, ensuring ongoing quality and building reputation, or one pushing out by experimenting, adapting constantly and searching for viability and its validation, how can you determine where you put your emphasis?

I would argue it really does depend on your orientation and what you want to achieve. It is where the organisational focus lies and the necessary defining conditions and the market dynamics will mostly decide that? How volatile or challenging is the market, is it growing steadily or rapidly undergoing dynamic growth? Do we have to pursue a more radical agenda of innovation or can we evolve on a more incremental path? Do we place our emphasis on consolidating our core or searching for concepts that radically alter our position?

Are you in pursuit of a logical and hopefully, coherent business model, leveraging all the efficiencies which need to work in an orderly, functioning, well planned and managed ways, one where you are making sure your innovation activity is built into its well-established
structures and processes? Or are you wanting to encourage a greater freedom for individuals to make personal decisions and encourage the taking of initiatives to be more radical and distinctive in their innovation approaches, deliberately introducing this into their work design, offering high levels of flexibility and self-organizing, allowing for an emerging model to emerge as against fitting into a well-established and often rigid model.

The case for clear separation

There is a number of highly respected people who suggest clear separation must occur. They pose the questions: "Are exploiting and exploring at two ends of a spectrum?" Are they not so different that they need clear separation? We need to separate out the present day-to-day work, with the innovation future work. This has merit.

I think if you foresee a radically different business emerging then this clear separation makes greater sense but how do you reconcile some of the underlying values? How important is the culture, the history, the brand or image, how do you rotate or attract the necessary talent. How do you fund the ‘emerging’ business, does this existing business finance this and if so, will it constrain the new business in open or hidden ways? if you create distinct entities, giving them completely different operating environment, will they be capable of being merged back later?

In my examples I used on the Hype post, (see the next post) the one that is a real test of management is the Google decision to separate out its moonshot’s from its core, by creating a new holding company, Alphabet, to treat them distinctly differently. As the founders, their view has been: “the whole point is that the Alphabet companies should have independence and develop their own brands”, then separation becomes a clear decision. Yet it does seems there are some initial tensions occurring that will need well-managing and different management thinking to manage this transition, it will be an interesting one to watch how this evolves.

A dual management approach

The argument goes and it might surprise you, by supporting core businesses and new emerging innovation units actually requires leadership to be constantly inconsistent. They must totally live the dual agenda otherwise, it fails. It needs significant management attention to managing the tensions this duality brings. When leaders do take this ambidextrous approach, they are forcing change but it can be very demanding to get this exploit and explore balance right.
Balancing Exploitation & Exploration for Changing Performance

Posted by Paul Hobcraft on Aug 31, 2016

“Being ambidextrous” in organisations is the ability to successfully combine the exploiting of all the investments that have been made to date, to constantly build on these achievements by exploring new areas and opportunities. This calls for dual thinking and organisational design to optimise the two orientations.

We are striving to maximise the existing utility, usually through continuous improvements, exploiting incremental advancement, combining this with the need of exploring beyond the existing core competencies, adding in new knowledge, capabilities and competencies for new possibilities, preparing the organisation to discover and shape the new market, products and services.

The question becomes how do you engage in enough exploitation to ensure and keep improving the current viability of an organisation and equally provide enough additional focus on the exploration to ensure future viability? Perhaps a classic chicken and the egg dilemma- if you don’t have an egg, how do you get a chicken but if you don’t have a (healthy) chicken then how can you produce any eggs?

We are constantly dealing with balancing the interplay between the two.

Exploiting is mostly dealing with the current business, whereas exploring is new territory, in terms of new technologies, markets, positions, products, services and business models. The two when successfully brought together bring about a unique competitive position but the paradox is that these require different mind-set’s, skills, structures and processes and these begin to get into conflict very easily in their management, in the necessary focus and in the overriding pursuit of efficiency and effectiveness.

It is not easy to switch one off, and then bring the other one on, in complex organisation settings, or well-established structures. We need to separate out the actions of exploit and explore consciously. It is not like our often unconscious ability to simply switch hands, or the way we can make a conscious change in our thinking when we prepare to adapt and adjust mentally for these different activities at a personal level. In an organisational setting, it is far more complex.
Let me provide three example here of Apple, GE, and Google working in highly ambidextrous ways

They all are efficient in the pursuit of short-term performance but are equally building the continuous innovation capabilities of exploring in new ways, pushing the boundaries of exploration.

They all are pursuing a high level of scale, in big bets by practising this dual discipline of exploiting and exploring but in uniquely different ways.

Apple- the masters of fusion locked in

For years, Apple has been known to be excellent exploiters of breaking technologies, adapting them as well as supporting the user base, to constantly update through continuous fine-tuning and regenerating of their products with new features. It is a prime master of exploiting but then being able to translate this exploiting into new concepts and value propositions that transform existing thinking and markets.

Apple equally does an excellent job of exploiting its position in its app store, through its supply chain, customer service and its personalised services in the Apple Retail Stores. It has become the master of engagement, extracting and exploiting all the touch points into its customer base but it explored numerous new boundaries for this customer engagement process.

They have become proven explorers with the new products emerging of the iPod, iPhone, iPad and I-watch these have been highly explorative as they created new competitive spaces and categories.

So they are exemplary exploiters and equally real explorers, as they are seeking ways to take technology, design and functionality out in completely different, market shaping ways, extending and attracting new users but locking in the loyalty as well through the integrated closed design systems they provide.
At present we are seeing more exploiting, as you could say the next generation phones are extensions on the existing, created more through exploitation means not exploration discoveries but they do have the ability to ‘fuse’ the two.

Apple seems to possess this dual level of organisational ambidexterity in all of what they do. We regard them as highly explorative and exploitive as they have achieved a high level of blending between the two.

**GE - the 124-year-old software start-up.**

GE is presently undertaking a transformation from its heavy-industry roots and is undertaking building a computer operating system on a huge industrial scale- the equivalent of Microsoft Windows or Google Android for factories and industrial equipment, defined as the Industrial Internet.

They have defined digital technology, using inexpensive sensors, powerful computing and clever software as the defining technology layer that connects the machines they make and shifting the selling of machines into “business outcome” solutions, like fuel saving, downtime management, energy efficiency or early warning of problems for predictive maintenance.

**Changing the very heart of GE**

GE is very well known as being an extremely well-focused organisation on its bottom-line and highly focused on its quarterly performance. It is highly exploitative in its market position. Most of its products are high-cost capital items (jet engines, locomotives and gas turbine, and health scanners) that might have long lifetimes but it is a consistently high investor in research and development to push advanced manufacturing in design, engineering and manufacturing.
GE is building on its prowess in engineering and research by building in more cohesive and intelligent systems, exploring ways to do this through the application of technology and new materials; it is investing in 3D printing to create entirely new parts with new properties, achieving greater speed in the production of the parts, gaining real advantage in it composition strength and reducing the weight of essential parts in jet engines for example.

To achieve this, GE has adopted a lean methodology to increase concept to market speed by adopting a lean prototyping, testing, adjusting to improve versions. It has moved from reactive to preventative maintenance, fixing machines before they break down, reducing unplanned downtime and raising the efficiencies of the machines. It is constantly building into the research and development the practice of exploiting and exploring. It is leveraging the resources available and building multiple teams tasked to find breakthroughs and leverage on existing platforms and applications.

It is pioneering the Industrial Internet through its Predix Platform Technology, offering software-defined machines, industrial big data and opening up its software development to developers. Here it has set about simultaneously exploiting data and exploring through analytics the information flowing in from on-line machines to improve on its existing performance. The combination of exploiting technology embedded in the Machine with exploring options for machine performance is dramatically altering the GE value proposition across its entire business, embracing ‘intelligent technology’ revolutionising the machines ability to perform at improving levels and reducing downtimes, essential on high capital items that are critical to our infrastructure.

**Adapting and responding to the changes required within its management structure**

To adapt to rapidly changing conditions in different industries and markets GE has structured its management accordingly between functional and geographical depth and expertise, to deliver on growth and competitive advantage to meet local needs. GE is striving to bring hi-tech, deep science and domain expertise together. They are structured globally to focus on specifics and manage the diverse, meeting individual market and client needs.

By 2020 it is estimated that the "Industrial Internet Market", (or more commonly known as "The Internet of Things" which incorporates low costs sensors and high power computing at its very core), will be worth approximately $225 billion. Jeff Imelt (Chairman & CEO of GE) has recently announced GE’s intention to be a "Top 10" global software company by 2020.

Recognizing the value of knowing performance in real time by putting more and more knowledge into these machines through technology applications and then extracting this data via its own platform management, by using the cloud and offering predictive analytics at global scale, changes the value proposition significantly to a point that the data could someday be as valuable as the machines themselves makes this a massive shift. The world of high tech industrial manufacturing is being matched with the digital world.
If G.E is truly going to be a digital-industrial company then it cannot be separated, it needs even more integration and fusing exploiting and exploring and certainly makes GE a very ambidextrous organization in my view.

**Google, Moonshots and Alphabets**

![Alphabet Diagram]

Google is a rare company; it is constantly challenging conventional management thinking. They made a radical big bet last year. They created a new holding company called Alphabet. They took away the safety umbrella of being inside Google’s more mature business where search and advertising on Google Maps, YouTube, Chrome and Android were the massive revenue and profit powerhouses and created the “other bets” division, clear separate entities that have the chance to become their next big moonshots.

The majority of these moonshots are “pre-revenue” meaning they are cash absorbers, not generators so these were separated out to be give them potentially greater freedom to grow and not be caught up in the internal needs of the core businesses equal needs to grow.

They decided that Google’s more mature business is driven by scale, efficiency and rapid incremental improvements, rapidly integrating acquisitions to enhance the core business. The other bets are more “Alpha-bets”- projects that have perhaps lower levels of probability of success but also the potential of very significant upsides if they come off, requiring a very different management focus.

This distinction has perhaps brought strategic ambidexterity into life, in a highly visible public way
We are watching a company’s ability to explore new practices, products and business models while exploiting existing ones at the same time—a capability which is both remarkably valuable and equally hard in practice and is again pushing management boundaries.

In forming this new holding company Alphabet, Google have decided to separate out and determine the right approach to strategy and execution for each part of the business—and the approaches will be determined at each unit or divisional level as circumstances change or each business evolves in pursuit of its moonshots.

**Hard nose reality is pitted against big cash bets that might not payoff**

Yet what has been emerging recently, *only nine months into this change*, is that an increasing level of fiscal discipline has descended on these “other bets” divisions, who have had to totally lean on Google for financing them. Being “unmasked”, they are cut increasingly loose from Google cash cow, of search and advertising, the core profit earner and these new bets that need to become even more entrepreneurial, the growing validating and showing distinct progress for constant injections of new funds will be highly charged, as Google is presently the only resource of funds and it has now separated operating management determined to grow its own business core.

Google’s core is not slowing down developing their own moonshots that might actually compete with those in the “other bets” division, and as Google generates the money this will be a difficult balancing act at the holding company level. Google is pushing for more investment in machine learning, cloud computing, virtual reality platforms, AI and other breaking technologies, all advancing and ever-changing.

Investments and decisions will be competing for the same pot of gold, as well as Google’s core needing to continually invest in integrating acquisitions, to keep advancing in exploiting technology and exploring new potential.

**Growing tension points**

The present high tension point is balancing speculative research with ‘reasonable’ limits on spending, no different to any other organisation balancing exploiting and exploring, but when you are seeking those defining “moonshots” that must scale, expectations rise, pressures mount as well as managing the calibre within the personalities charged with making their part work in building new company powerhouses as the hyper growth opportunities expected is a huge call and set of pressures.

The balance of providing continuous high levels of funding to explore is hitting the reality of asking the core to fund them. Presently while the Alphabet “other bet” companies sink only 5 percent of Google search business sales, investors can be patient but those bets will quickly need to show signs they will pay for themselves.

**Summary - a dual management approach**
The argument goes and it might surprise you, by supporting core businesses and new emerging innovation units requires leadership to constantly evolve, they must totally live the dual agenda otherwise, it fails. This is why it is incredibly hard to operate in this dual thinking mode, it raises the risks but if it achieves a higher result, it can be significantly rewarding.

When leaders do take this ambidextrous approach, they are forcing change; they are highly focused on forward-looking debates about the tensions at the heart of the business. Balancing exploiting with exploring is managing often opposing tensions and how these are successfully managed will determine the eventual success.

They are extracting all the opposing objectives, in needs and constraints, to then set about to fuse them together, sometimes in unconventional ways, to deliver a combined business that performs at higher levels of success. The difficulty lies in how this is determined, structured and the resolution process of the tensions that this causes are effectively managed. It raises the stakes to extract the reward.

I simply enjoy innovation. I got ‘hooked’ fifteen years ago and since then have increasingly focused on innovation until it is 100% of my business thinking and activities today.

I research across innovation, looking to develop novel innovation solutions and frameworks where appropriate. I provide possible answers to many issues associated with innovation with a range of solutions that underpin my advisory, coaching and consulting work at www.agilityinnovation.com.

The aim is to support individuals, teams and organisations, in their innovation activity, applying what I have learnt to further develop core innovation understanding, so clients can achieve positive and sustaining results from their innovating activities.

For me, innovation needs to enter the DNA of our organisations and our own individual make-up. In my writing, I try to offer a range of thoughts on different aspects of innovation to help each of us to understand this subject better.

Innovation as a source for our growth fascinates me.

As for my personal journey

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, Hong Kong, Australia, and recently twelve years in Singapore. Today, I live in Switzerland, my adopted home.

I’ve worked in a number of senior positions within global corporations, in global, regional, country and functional levels tackling different challenges that have included start-ups. turn-rounds and significant re-engineering and operational design or automation across a global network.

The work has been varied, the challenges diverse coming from starting up different businesses in emerging markets, turning difficult ones around in challenging economic and market conditions more than once, re-engineering a global organization over a three year period choosing to live permanently out of a suitcase (or two) for months at a time in each
of the major global locations as the best way to deliver the changes, and finally simply accelerating companies, getting them through to critical mass points, for achieving their positive contributing footprint, within the world.

In 2000 I went into my own business of consulting and advisory work, firstly based in Asia and then in recent years, based in Switzerland.

After I moved to Ticino in Switzerland, from Singapore I am spending different times between the two regions, although Europe holds an increasingly more central role. All the time my focus is on innovation and many of the related topics that move it increasingly towards a core within organisations. Innovation understanding does ‘simply span’ globally and I have been fortunate on building on the foundations initially laid down in Asia and advanced while in Europe through an ever-expanding network of collaborators, knowledge and insights.

My present focus is spent building this innovation practice, providing advice on building the right capabilities and capacities, into organisations or individuals wanting to advance on what they have already in place; to improve, accelerate and develop their innovation competencies and understandings of the ‘fit’ of innovation.

**Paul Hobcraft** has been voted into the top innovation bloggers over a consistent period from 2012 on a leading Global Innovation Community- Innovation Excellence-.  

“They 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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