HYPE

The Evolution of the Innovation Landscape
How can you maintain your competitive edge?

HYPE Innovation White Paper

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1. Summary

This paper assesses how corporate innovators are responding to changes in the global competitive landscape and defines the critical elements to create and sustain a competitive innovation ecosystem.

As global markets change, often disrupting once stable value chains, innovators are seeking more and more ways to secure competitive advantage for their companies. This is no longer just about a search for great ideas. Innovation has never been a static area but it, too, is now the object of many changes, including finding new ways to respond creatively to the impact of external economic conditions.

Innovation has become a complex area that needs careful management across many functions in the organization. Innovation also, often, takes place in the context of changing corporate culture. In this paper, we first describe the interplay of innovation practices and changing competitive conditions, then look briefly at eight new areas of need in enterprises that have active innovation programmes.

To help innovation practitioners understand the changing relationship between external environment and innovation practice, we introduce two terms: the innovation architecture and the strategic options portfolio. We then go on to consider the changing roadmap for the development of innovation capabilities. Finally we assess how to think about the short, medium and long term return on innovation factors of this new environment.

We start by posing five questions that the paper will answer.

2. Five Questions

The practice of innovation in the enterprise is changing dramatically as companies respond to a new global economic environment. What are the big questions that innovators need to ask themselves?

What is state of the art in innovation management today?

What are the most significant changes taking place in innovation practice?

How might an innovation platform help me and my company?

What is the roadmap?

What do I need to know about ROI?

3. Introduction

Going back five years, the innovation "game" looked simple in outline. Companies in most sectors of industry and commerce tapped into Front End of Innovation (FEI) management systems that allowed them to multiply the number of ideas they could use to spur their downstream innovation opportunities.

The basic principle driving FEI is that enterprises need more and better ideas and can acquire them by reaching out to new groups (of employers, customers, experts or the public). Innovation management then has to focus on evaluating ideas and guiding the chosen ones through a stage-gate process to the market.
This system began to show signs of age very quickly. Generating ideas is important but ensuring a match between idea generation and market needs, and then finding the optimum moment to exploit new products, can be elusive regardless of how many ideas are in the ideas' pool.

As innovation management has begun to mature, it has become pressingly obvious that idea generation may not even be the most important part of the new innovation architecture. Good innovation management requires companies to adopt a range of innovation strategies, not just FEI. In addition to idea generation, they also need to create a dialogue around specific needs with key customers; they need to develop strategic options, not just ideas; the culture of the organization has to be open to doing things differently; and they also have to be hyper-alert to changing market conditions. They need processes that truly enable them to be responsive to new market opportunities.

Over the past two years these Back End of Innovation concerns have begun to rival FEI in the minds of Chief Innovation Officers. A number of changes to the innovation environment have also caused innovators to take stock of their situation.

It is generally understood that innovation in a variety of industries takes place against the backdrop of significant **systemic innovations**, or changes in overall economic, competitive conditions. Such systemic change would include, for example, exponential increases in computer processing power or the spread of ubiquitous mobile communications. Historically the speed of communications has been a big driver of change. Recently, mobile telephony has created global instantaneous connectivity and the impact of "anytime, any place" communications is now permeating other sectors outside telecommunications. These systemic chances impact on all areas of innovation.

It is worth noting that many significant innovations in mobile telephony applications, such as money transfer, which arose from pre-paid card trading among Philippine migrant workers, have not been created within formal innovation systems. They have been spontaneous adaptations by users. Added to that is a growing realization that customer-led innovation can be organized and does not just rely on ad-hoc activities by customer pioneers. Analysts from Forrester Research also point out that something similar is happening with employees. Empowered by mobile devices and consumer grade software, they are solving customer problems in innovative ways often without reference back to the enterprise (which of course often fails to capture those innovations[1])!

Finally, arguably, the most significant innovation of the past decade is Apple's App Store, which represents not so much a technological innovation as an innovation in how business is done. Rather than invest in app development, Apple managed to attract over 300,000 developers to create apps for the App Store. This ecosystem of innovation was entirely new at this kind of scale and represents a dilemma for many companies. Is it possible to replicate in some form the development of a mass partnership that creates both a production community and an advocacy community?

This and other systemic level innovations are driving change – for example Cloud computing and Big Data – are allowing new, small companies to generate significant market leverage very early in their lives. Remote document-storage pioneer Box.Net, for example, had 75,000 corporate customers before it had 100 employees (this particular instance relied on consumer innovation in what became known as Bring Your Own computing). Cloud computing and Big Data also enable larger companies to experiment with new business models (business model innovation is one of the big memes within the innovation community).

This broader innovation environment means that innovators in the enterprise need to master FEI, back end of innovation, and the more chaotic innovation ecosystem represented by App Stores and Bring Your Own computing. Systemic changes are pervasive. The rise of a global middle class estimated by some to exceed 4 billion by 2030, the impact of mobile computing, embedded communications, the rise of Cloud infrastructure, and a real-time global business environment, set the scene for innovations over the next decade.
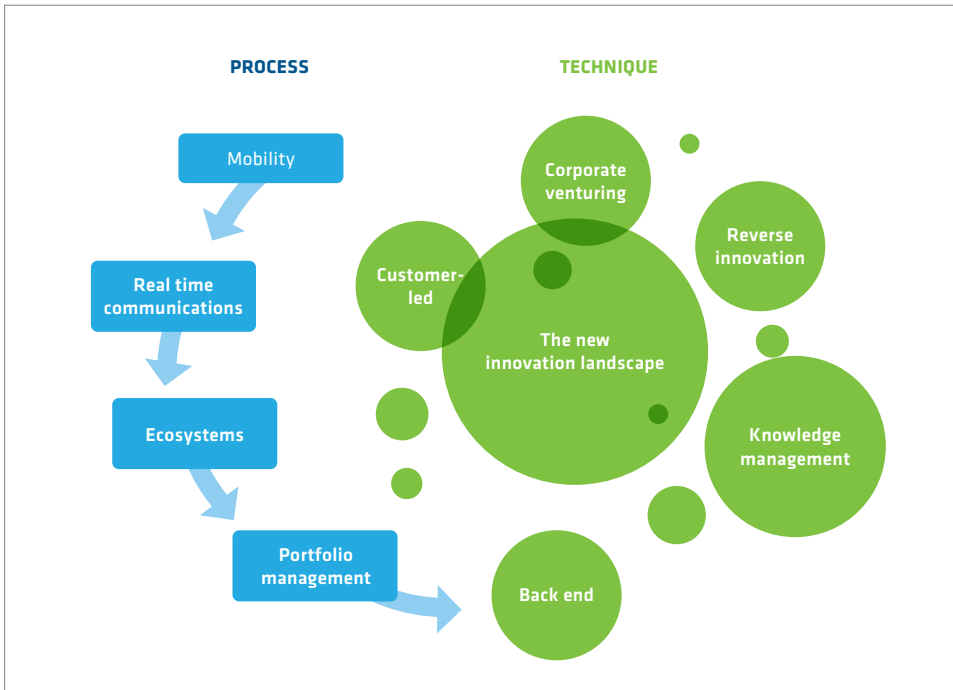
HYPE ⬤

PROCESS

Mobility

Real time communications

Ecosystems

Portfolio management

TECHNIQUE

Corporate venturing

Reverse innovation

Customer-led

The new innovation landscape

Knowledge management

Back end

Figure 1: The evolution of new business processes and new innovation techniques

The big issues for innovators tend to revolve around specific sector requirements – how can I innovate in my industry? And generic systematic innovations – raising questions such as what does mobility mean to my company?

But the global uptake of these key technologies sets a new agenda for rapid change to come. Innovation nonetheless continues to create economic conditions where more people can afford more objects and services. And that is happening around the globe.

The innovator's challenge is to marry these various factors: sufficient knowledge of systemic change and the potential it opens up; knowledge of specific market conditions and how they are changing; sector-specific technical know-how; customer insights; and profound knowledge of the company itself, its culture and its expertise levels.

Companies need a proficient innovation platform because the scope of innovation has become so broad and the management tasks that go with it are beyond simple, one-focus solutions. An FEI platform that helps generate ideas will not necessarily help to manage the flow of information that companies need to keep abreast of market change and competitor offers, nor will it help manage the intricate issue of IP, internal ecosystems of innovators, growing portfolios of innovation "work-in-progress", or customer-facing innovation programs.

In the rest of this White Paper, we are going to examine some of the most significant changes in innovation practice and how an innovation platform can help innovation managers to flourish. We'll round off with a typical innovation roadmap that plots where innovation activities might start, before broadening out, within a large organization.

a. The changing innovation landscape

In the years since P&G began its Connect and Develop program, companies around the world have adopted a wide variety of new innovation techniques. Open innovation still captures our attention, of course. The practice of reaching out to open communities for ideas has become a mainstay of innovation. But in reality the techniques of innovation management vary widely[2].

GE for example has had success with reverse innovation (generating new products from the needs of people in emerging economies). We also see a more spontaneous form of reverse innovation in mobile money, which emerged most strongly in Africa and is now being adopted in the USA. Apple has brought fresh attention to design thinking. Public bodies are pushing service innovation. Eric Von Hippel has successfully documented the use of consumer-led innovation, especially in consumer sports such as hang-gliding and skateboarding. Older incremental innovation practices such as Kaizen still hold a lot of relevance. Crowdsourcing and crowdfunded innovation have a new lease of life. Corporate venturing departments are still seeking their breakthrough moment. And more recently – back to GE – we have seen a new type of ecosystem evolve in programs like ecomagination and healthymagination.

This variety is very significant to how innovation is managed, overall, within the enterprise.

As a discipline or profession we tend to conceive of innovation as a funnel where ideas come in and then need managing through stage-gates so that they can become products. Companies such as Procter & Gamble, Bombardier Transportation, and Nokia Siemens Networks, however, no longer restrict their innovation practice to funnel and stage-gate innovation management. Innovation, in effect, has changed. And it is time to catch up.

b. Market factors

Most companies that have major innovation management requirements are global companies who need to find competitive advantage across the supply chain as well as in their customer-facing markets. And most are now impacted by economic uncertainty.

In the new phase of globalization, a new middle class is emerging in countries such as India, China, Russia and Brazil (soon to be joined by South Africa and Turkey, with Mexico and Indonesia playing an under-appreciated role in global growth opportunities).

According to recent data, "North America's share of [global] middle class consumption plummets from 26% in 2009 to 10% by 2030; Europe from 38% in 2009 to 20% by 2030; the Asia Pacific from 23% in 2009 to 59% in 2030. Central and South America falls from 7% in 2009 to 6%."[3]

The new global middle class sets the agenda for new infrastructure and a new type of differentiation in products.

Five other major factors affect how companies innovate.

The first is value chain disruption. In a range of industries, we now see companies making more adjacency moves – for example the American computing and telecoms infrastructure companies Cisco and HP are invading each other's markets in order to maintain growth. Amazon.com too is a very visible example of a company disrupting its own value chain by creating the Kindle reading device and entering publishing.

In more uncertain markets, additional risk lurks in the willingness of companies to make adjacency moves. But, secondly, global markets are uncertain anyway, in part because of emerging competitors but also because, by definition, freer markets have fewer buffers to protect against market fluctuations.

The third change is the socially connected, and empowered, employee. Employees are demanding more meaning and fulfilment from their work at the same time that companies are expecting more contribution from their workforce.
In late 2009 and 2010, the phenomenon of Bring Your Own disrupted corporate IT management, as employees forced innovation onto their employers by insisting on using their own smartphone and their own collaboration software[4].
Employees, in other words, are demanding culture change. Employers are signalling that they want corporate culture to be more collaborative and creative. Both sides of the equation want change.

And fourth, we pointed out earlier that mobility is changing the competitive landscape by creating anytime, any place instantaneous communications. That means more real time interaction and a higher set of expectations, among consumers for immediate resolution of complaints, but also among business partners.

Finally the fact of networked behaviour is creating a new asset base – Big Data, or data on human behaviour, is beginning to make market responsiveness easier. But it brings innovators even closer to the need for managing a real time environment.

c. The Growth of an Innovation Architecture and a Strategic Options Portfolio

Smart companies know they are faced with stronger global competition, new market structures, changing demand patterns and a move to more real-time business.
In this more variegated environment, they also find ideas for potential innovations in many places, in discussion with key customers, from ideation platforms, from the observation of new markets, even from old ideas' campaigns.

Five years ago, it seemed as though the role of innovation in these challenges was simply to develop a raft of new ideas to get big companies out of a rut.
This rather patronising view is surely no longer tenable. The role of innovation is to help create the strategic options that allow a company to respond to fluctuating, transformative conditions. To do that, though, requires a more considered approach, something approaching an architecture[5] rather than a simple workflow, a strategic options portfolio rather than an ideas platform.

What do we mean by strategic options portfolios?
Think about the old "model" of innovation.

Stage-gate innovation presupposed a static economic environment, one where customers were patiently waiting for a new innovation. The decisive factors were – enough new ideas and a good governance process to get good ideas into products. Today a company needs to be ready with multiple options for many markets. They need a set of strategic options primed to go when market conditions are right, longer term innovation programs that might disrupt markets, as well as incremental programs to keep improving the competitiveness of their products.

A case in point: Procter & Gamble currently manages hundreds of innovation projects, many within its marketing cycle that are aimed at providing the "new and improved" products we are familiar with, others that can reposition the company and its brands deep into the future. All of these have to take place within a commonly understood governance structure. The most senior executives in the firm need a periodic snapshot of the promise behind all these projects and the maturity cycle. In the brands, senior managers need more granular detail and clarity on when products will be ready for the P&G product launch model (SIMPL).
"Without a common platform for managing the portfolio", P&G FEI Capability Development Owner Mike DiPaola, reports, *"we would lack the necessary visibility and data conformity for leaders to be able to make sound decisions."* With that in mind, P&G is using HYPE's software platform to capture information about innovation projects from across the company. The significant point is that Procter & Gamble's innovation engine manages hundreds of concurrent projects, with different levels of opportunity and timing.
Companies can't afford the luxury of only developing new products on the back of a good idea, they need to have multiple options continuously in development. And they are likely to draw on a wide variety of sources for their ideas and improvements (with that broader definition of innovation's role goes an even more demanding role for IP management).

Today, a company's innovation practices are likely to be marked by considerable diversity. They will embrace stage-gate and front end platforms but they will also be making use of reverse innovation, crowdsourcing, customer sourcing, scouting, venturing, design and service innovations, among many other options.
The company needs to manage this diversity in conjunction with other areas of innovation – like the move towards big data streams that alert executives to new opportunities. They also need to manage the intellectual property consequences of sourcing ideas through a variety of channels.

The reason we refer to an innovation architecture in this context is that companies need to have the over-arching philosophy and processes in place to maximise the outcomes all of this activity. They need to have a platform that allows them to manage these different dimensions of change.
This architecture consists of the management platform, the appropriate people internally with clearly designated roles, permissions (e.g. a governance structure for what different people
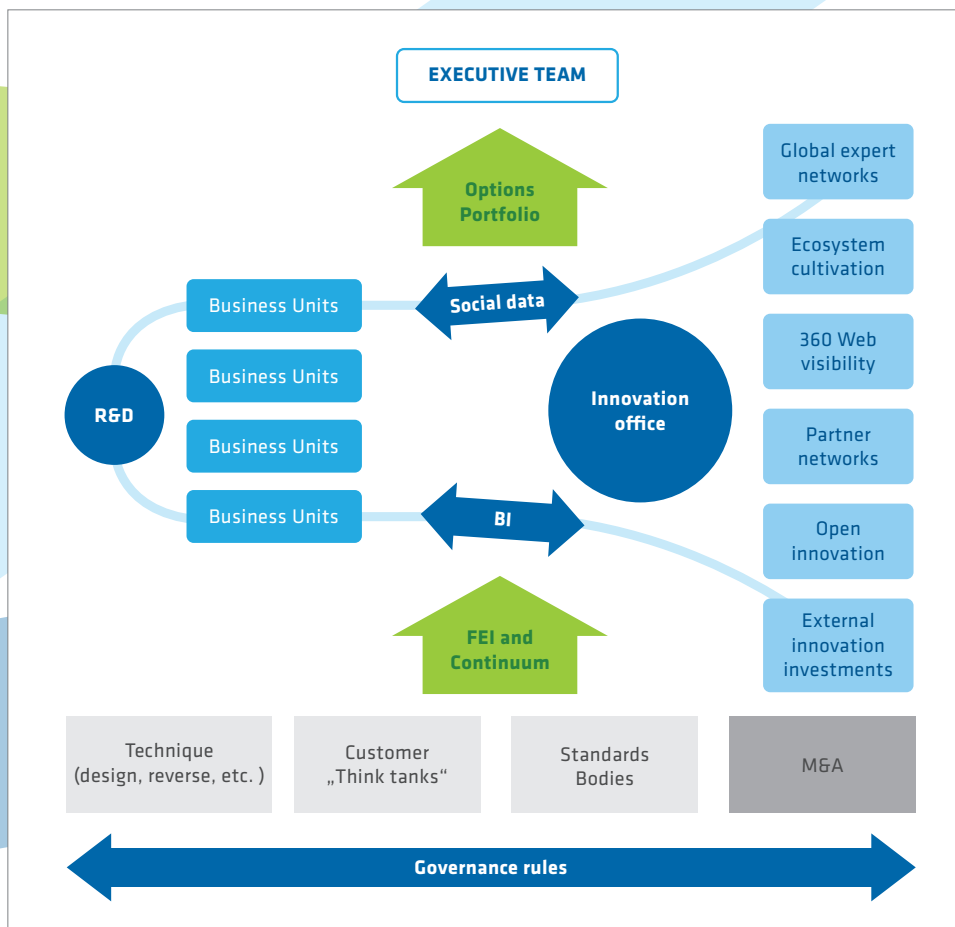
Figure 2: A simple Innovation Architecture

are allowed to do), budgets, connection points between diverse groups in the organization, connectivity with diverse groups outside the organization, mechanisms to synchronize product development and market need, executive oversight, and the metrics to make good judgments about launch times and to keep a running record of overall success and future resource needs.

Innovation in other words is now changing itself and the two most important emerging concepts are the **innovation architecture** that allows companies to manage diverse activities in a broad range of markets, and the **strategic options portfolio** which allows companies to manage multiple options, in a time-sensitive way, for their different markets.

They need a software platform that integrates capabilities to serve all of these requirements.

4. The needs of corporate innovation

a. Emerging needs

i. Managing the knowledge pool

Information is a prize asset in innovation processes. However, the type of information companies need is changing. Nokia Siemens Networks, for example, undertakes critical innovation tasks in partnerships with its customers. Any customer can initiate an innovation round. In order to manage this activity, NSN use the HYPE platform to organise customer **Think Tanks**.

The Think Tank concept allows a customer to initiate an innovation process based on information to which they, the customer, have unique access. NSN responds by creating a turnkey solution for clients using the Think Tank.

Bombardier Transportation, on the other hand, find that their existing internal ideation platform has created a unique knowledge pool for executives to dip in to when they need to initiate new projects. In 2011, three new Bombardier R&D projects were initiated using the knowledge pool[6]. When they initiated a new lightweight material program, they found 80 ideas in the knowledge pool that they could use to frame the program.

Procter & Gamble, famously, uses the World Wide Web as its knowledge pool. In 2009 P&G invested in Inno360, a deep web mining company, to ensure it had access to the best available knowledge from the web.

Many major companies also make use of Nine Sigma for structured expertise searching or Innocentive's global networks, for uncovering talent.

In short having access to a comprehensive knowledge pool and being able to manage and exploit it are key competitive advantages. This is only going to become more important and more exposed to the winds of change, as the behaviours of markets themselves are wrapped into the knowledge equation. But data in theory brings the knowledge generated by network behaviour into the innovation domain.
But that is just the content, so to speak. The content is irrelevant without a connection to the right people. Innovation platforms are perhaps the only way to reliably connect knowledge with people, and a purpose. That is one of their core purposes.

ii. Enhanced configurability

Companies that truly master innovation are finding that they need to evolve their innovation practices, continuously. Innovation itself becomes the subject of change.

HYPE client NSN, for example, has evolved from a simple front end system that captured ideas to a complex architecture that stretches across different functions within the company and now embraces even non-core functions such as real estate management. Like many companies, they have evolved from front end to back end management issues.
Bombardier, which focuses more on the front end, look for ways to engage different types of

expert groups in their idea generation, so they need to configure their platform to different internal communities. They might also require a variety of ways to evaluate projects and proposals in the funnel or in the knowledge pool.

An innovation platform needs to evolve with the enterprise as well as to be configurable for these different needs.

iii. Supporting the innovation continuum
In turn companies need new ways to manage innovation along the continuum from idea to market. They are expanding the channels that bring new projects to maturity. A typical innovation architecture will now include a variety of innovation techniques: the traditional innovation funnel; exclusive innovation work with customers to create new turnkey solutions; corporate venturing; technology scouting and associated M&A, are four such channels. A good innovation platform will support the intricate, time-critical decision-making in this final stage of the maturity cycle.[7]

iv. Responding to mobility
Increasingly companies are expanding their range of innovation activities by making use of mobile devices. A smartphone with picture and tagging capabilities can be used to capture complexity "in the field" or around factory and warehouse real estate. That means field engineers or factory operatives, away from the desk, can now be full participants in the innovation process. But it also means a bigger management task in ensuring that the ideas are captured, processed, respectfully treated, and free of IP constraints.

v. The accelerated innovation cycle
There are many reasons for an accelerated innovation cycle, not least global competition. But the inclusion of a software element, the use of Cloud infrastructure, and mobility, all reduce product lifecycle times. In the auto sector for example, Ford's use of social software technologies means it is now able to offer new products and services on a completely different cycle, down from the 6 – 8 years of automobile development to the six months of a new app.

vi. Supporting strategic options building
These new facets of innovation reflect a growing strategic need within companies. That is, to develop strategic innovation, or to develop a portfolio approach to new product development and new market penetration.[8] It's no longer enough to generate ideas that pass along a funnel. Companies need to accelerate innovation and develop portfolios that give them market readiness.

Most markets are diversifying. Companies serve a global market where wealth levels are growing. But the **market** is segmenting in new ways: by geography, customer preference, income levels, and by risk factors. Companies are forced by this fragmentation to consider a wider range of product options: new products for new markets, and different types of functionality or standards within a product line, for different market segments.
This new refresh mentality can be seen with startlingly effective products like Apple's iPad. The

iPad was launched only 2 years ago but is already in its third incarnation. During that time, the Apple team have been able to acquire customer feedback and new use-cases for the product from all over the world. With each iteration of the product they face an array of choices for functionality innovations, connectivity options and new hardware innovations.

The reality is that, like the iPad, many new products can no longer be defined by any single innovation. They are made up of many innovations, which need to be integrated into a product in a process. They also need to be aligned with what the company knows about market dynamics. The product in effect becomes a strategic options bundle that the innovation platform must support.
That requires a more detailed approach to innovation, with new management tools, typified by highly configurable innovation management platforms.

vii. Supporting an innovation architecture

Because of the complexity of multiple projects, innovation officers and their colleagues increasingly need to think in terms of the overall architecture of the company's innovation activities. The idea of an innovation architecture is new. It signals the fact that companies tend over time to accelerate and broaden their innovation activities. As well as becoming more dependent on innovation activity (healthily so), companies are finding that the innovation portfolio is becoming more critical to overall strategy and for the ability to view where they can generate future growth.
A good innovation platform supports a company as its innovation activity penetrates deeper and broader into corporate strategy. It does so by creating a good overview of the range of activity, the maturity cycle of projects, their exploitation potential in the marketplace, and the potential for growth.

viii. Collaboration and employee engagement

Companies using strong innovation platforms report experiencing culture change as part of the process. What seems particularly powerful in innovation platforms is their ability to draw people into participation with innovation.

15,000 employees at the transportation division of global engineering company Bombardier can access their innovation management platform. In 2011 the company had more than 6,000 registered users with 2,000 regularly engaged. In the 2011 employee survey, Bombardier experienced an 18% increase in information sharing and transparency in the transportation division. They attribute the majority of this to innovation management support by tools like HYPE, even though the success is quite early in the tools' adoption process.

Studies have shown that there is a correlation between engagement and innovation. The most engaged employees, according to surveys by Gallup, are more likely to share their most creative ideas and to take innovation forward.[9]
Reciprocally, innovation processes are more engaging for employees. Innovation is perceived by employees as enhancing the firm's competitive advantage, and data shows that innovation is a cause of wage increases over time[10]. In addition, there is the psychological benefit of adding meaning and fulfilment to work through being part of a creative process.

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b. Established needs

i. Ideation and open innovation

Ideation, front end of innovation and open innovation processes retain significance even as the trend in innovation is towards greater breadth and strategic innovation management.

ii. Geographically dispersed innovation and crowdsourcing

Another need that arose with front end of innovation was to manage innovation processes across geographical distance. The modern enterprise is likely to be dispersed across the world. Bombardier report operating in more than 60 locations globally. *"Bringing expertise together from this widely distributed activity is a major challenge,"* says Chief Innovation Officer Martin Ertl. *"Ideally we would do that in face to face meetings but that is impossible. It has to be done virtually and this is where the web-based platform "Innovation Express" comes in."* Having an innovation platform allows Bombardier Transportation to address very specific challenges to its engineers wherever they might be working.

Martin Ertl,
Chief Innovation Officer
Bombardier

iii. Incremental change

Finally incremental change retains significance too. Casa Pellas is a diversified conglomerate operating mainly in the auto-sales and service sector in Nicaragua. The company has a partnership with Japanese auto-maker Toyota and therefore focuses its innovation practices around Kaizen. Prior to using an innovation platform, Casa Pellas managed ideation with employees through handwritten notes. Since it implemented HYPE, the continuous improvement system has flourished.

In 2008 prior to HYPE implementation, the company received 97 ideas. In 2011 they received 1,529. This is significant for Casa Pellas because in a continuous improvement program every small idea counts. Of the 1,529 ideas, 983 were implemented. Casa Pellas uses its continuous improvement experience as a basis for more radical innovations. On the back of continuous engagement with employees, the also push out specific challenges to address priority areas and they invite more radical change ideas and interaction with customers.

Rebeca Rivera,
Innovation & Kaizen Manager
Casa Pellas

Those are some of the new, and established, needs of innovators. The growth in complexity of needs means companies have to seek out better management tools, and partners that have a focus on developing new management tools in response to change. What do these changes mean for the innovation roadmap?
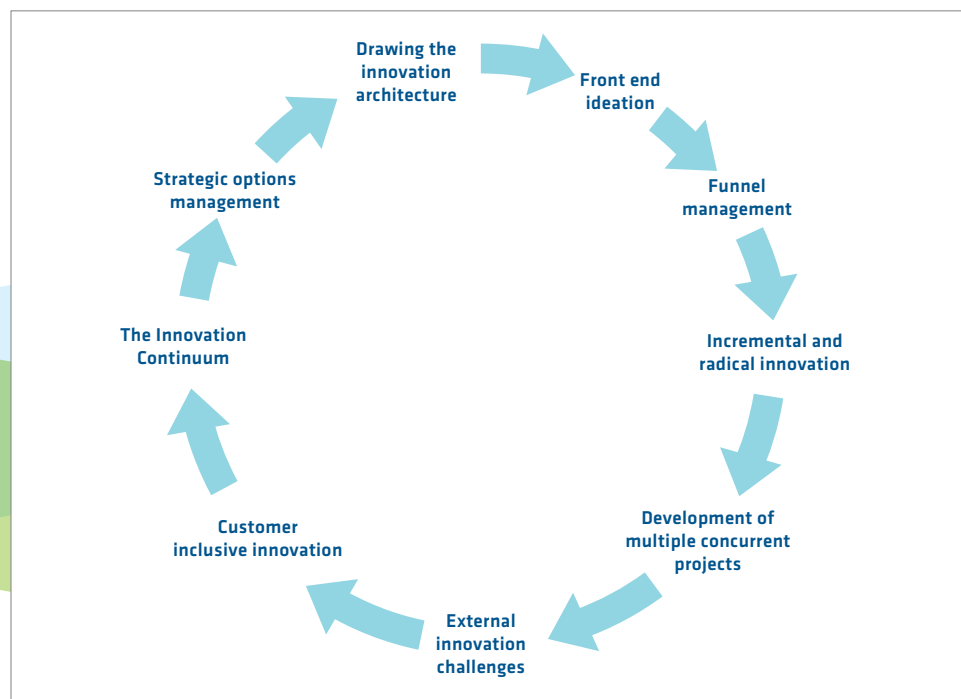
5. The roadmap

Innovation can be described along four major dimensions:

- **The depth or breadth of activity across functions**
- **The internal or external focus**
- **Front end or back end of innovation focus**
- **The degree of sophistication in managing multiple activities.**

These dimensions don't map easily to a linear progression from a **beginner** to an **experienced** innovation culture. The roadmap is somewhat circular. For example a strong innovation architecture will allow a company to develop new competencies quickly across the whole innovation life cycle.

Companies might be approaching a comprehensive innovation strategy for the first time or they might already be experienced innovators looking for better management practices as their activities expand. They can be in search of incremental gains through Kaizen practices or six sigma or they might be driving a new radical innovation agenda. They might be drawing on the wider variety of customer experiences they now draw on, for example in rapidly emerging economies. Or they could be approaching innovation through design thinking.

What we are now learning about innovation is that there is a variety of places on the innovation roadmap, any one of which can be the starting point.

The roadmap is best described, then, as a circular process. Competency will grow with experience, the availability of key market data and product iterations.

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6. The ROI

ROI is the most important consideration in any innovation process. Over the past five years the idea of ROI has resonated beyond simple metrics like revenue. Cultural issues such as employee engagement or the extent of a company's external networks are metrics that indicate some additional potential and they belong in a metrics suite if a company wants to measure its innovation programs as a work in progress.

Still, there is no point in avoiding the main issue. Innovation has to contribute substantially to revenues. It also has to reposition the company for new markets. These are probably the two largest goals of innovation champions.

The latter though introduces a problem for measurement and expectations. In helping to reposition the company for new markets, the role of the innovation process is intricately bound up with strategy, marketing, and strategic options decision making. And it can be a long process, five years or more before the results are in.

We need a way to judge innovation processes that doesn't duck the issue of long term benefit but which also holds the calendar open for an appropriate length of time.

Innovation needs to be judged on different dimensions: the incremental gains it can bring, the longer term strategic contribution, and the matrix of medium term benefits.

Short term, incremental gains

Short term incremental gains from innovation platforms are the easiest to measure. Casa Pellas has enjoyed considerable success with their open internal innovation program. One of its priority topics recently was "velocity". How could the company speed up internal processes across many departments, such as accounting and tax processes, IT help desk response times, and vehicle repair times? To collect ideas from employees, they ran a velocity campaign for three weeks and received 300 ideas, awarding prizes to the top three. One idea suggested a new online process for tax accounting. It brought down Casa Pellas's accounting procedure in tax reporting from 2 days to 15 minutes. That time saving was a spectacular metric for a velocity campaign.

Other KPIs that companies use to monitor the short term are, for example, implementation ratios. What proportion of ideas at the front end make it through the stage gates into an R&D project? That metric would establish the efficacy of the front end process, without prejudging the long term.

Casa Pellas also runs radical innovation programs through HYPE. In its radical innovation program, it has generated 15 ideas which – when implemented – created additional revenues of $ 2 million. One of these is a new mobile car servicing offer that quickly contributed 23% of Casa Pellas's service revenues.

In terms of innovation timescales all of these are relatively short and concrete.

The long term strategic gains

Over the long term, the strategic gains from an innovation platform should be measurable in revenues, though that is only one measure. As an example, Nokia Siemens Networks measures their revenue gains from using the HYPE platform, rising from a negligible amount in 2007 when they began their program to 500 million Euros in 2010.

Patents used to be an important measure of innovation capacity, and we've found that companies with substantial innovation programs do invest in evaluating the IP potential of all ideas that flow through their systems. In one respect this is also a useful defensive measure, in case IP is integrated into products without its origins being known.

The gains can also be measured in terms of the strategic options that a company has available. Not all options, like not all acquisitions, turn into successes. However, they position the company to compete in fluctuating markets. But obviously the acid test is: how much revenue did the company gain directly from innovations?

The medium term gains

Well managed innovation programs spawn a variety of medium term gains that contribute to long term success, and these can be measured in a variety of ways. However, these medium term cultural factors often have to be measured by non-revenue metrics that infer new capabilities rather than illustrate successes.

For example HYPE customer Bombardier measures employee sharing as a positive attribute. Since implementing HYPE, they have found a significant increase in sharing and collaborative behaviour.

The sharing behaviour often relies on a significant change to a company's knowledge management practices. For example, Procter & Gamble places great store in the relationship between innovation and data. Without a willingness to surface and free-up data, it is difficult for employees to share information that might be key to a market insight or a technical advance. Data openness can be used as a predictive indicator of innovation down the line. This is similar to the concept of the knowledge pool. Companies can and should make use of all kinds of information, but they do need to invest in the capabilities to do so, if the overall innovation program is to succeed.

Companies like P&G can also measure their potential through the extent of their external networks and the number of specialist communities they are in touch with. In an open innovation environment, extensive expert connectivity also provides a well of potential problem solvers. This too is something of a predictive indicator. Few companies will exploit their innovation potential fully without creating an extensive external network.

Medium term metrics are by their nature indicators, but they often coincide with other objectives that a company might have high up on the agenda – employee collaboration would be the most obvious of these metrics. It's worth examining your firm's cultural objectives to see where innovation can make a measurable contribution.

7. Conclusion

We began by asking five questions;

- **What is the state of the art in innovation management today?**
- **What are the most significant changes taking place in innovation practice?**
- **How can an innovation platform help me and my company?**
- **What is the roadmap?**
- **What do I need to know about ROI?**

In the course of the paper we've looked at how innovation has to become a more comprehensive management discipline. It has extended well beyond front end ideation and now involves a new management architecture or governance process.

We've also looked at the importance of managing the knowledge pool – that diverse set of channels from which important knowledge might emerge – and the importance of working with a highly configurable platform that will help you grow and extend your innovation architecture.

At the back end, change is significant as companies seek new, cost effective ways to grow a strategic portfolio of options so that they can respond quickly to market developments. New considerations like how people work more effectively together, especially as they are likely to be in dispersed geographical locations, are coming to the fore.

To the most relevant question for this paper: An innovation platform can help you to manage what is now a multi-dimensional challenge. Innovation is not just about generating new ideas, or taking a few of those ideas through a funnel into the market. It is really about how your company evolves, how it positions and repositions itself, and how it creates multiple options so you can respond dynamically to fast changing market conditions.

To be at the forefront you need to work with a platform that supports your company as it becomes more innovative and dynamic. To do that a platform needs to be configurable and extendable and you need to be working with a partner who will develop the platform for your needs. A platform can support all this if it is co-creating new processes with you.

There is no single roadmap for this journey and no single point of entry. What we've described instead is a series of options for where you start and how your progress.

Finally on ROI we have discussed how to focus on and measure incremental change as well as how to go for the big picture. Innovation is really about addressing both of these levels, and what lies in between, the culture of your organization, how it evolves so that people work well together, how you collectively create new, multiple opportunities and enjoy the successes that come with being a great innovator.

Energy, Simplicity and Customer Delight: Bombardier's innovation management practices

The areas "Energy, Simplicity and Customer Delight" form what Bombardier calls its focus fields, which identify areas of strategic interest for the company. Based on this, so-called R&D cases are being launched with the aim of producing generic solutions applicable to more than one project over a time frame of three to five years.

The budget for the cases is ring-fenced so that it will not be touched even within haircut times. The case is run by a project manager that reports into product management. The cases are supervised by the R&D Status Board that consists of the CEO, the CTO, the VP Sales, the VP Strategy and the Chief Innovation Officer.

Bombardier manages its innovation front end through a series of challenges, some of which are distributed generically to all staff, others having a narrower focus on specific expert groups. The challenges are clearly defined, have a clear start and end point, with a very clear description of what is needed. They each have a senior sponsor who has the budget and authority to fund a winner. Indeed, one of the emerging facts about innovation is that the challenge is itself a critical asset. Successful companies are learning to frame their challenges in ways that elicit the most valuable types of ideas.

Like many other companies Bombardier has appointed innovation managers that form the front line of their innovation system. The innovation manager's main responsibilities are:

• Supporting challenge owners to define the scope, outputs and logistics of challenges
• Distributing information about challenges
• Being the first line of evaluation, interacting with the proposer, deciding on the type of focus the challenge needs (does it go to the knowledge pool or the division?)
• Sending ideas to relevant experts for assessment
• Managing the challenge KPIs
• Liaising with contributors to flesh out the idea if necessary
• Finalising assessments and sending relevant ideas to a divisional innovation board

Bombardier's patent officers evaluate ideas for patentability. When the innovation manager sends an idea to the Divisional Innovation Board the idea reaches decision time. It can be rejected or it can be included in the overall pre-development landscape (which means it will have access to the priority case budget) or it can become a standalone project that needs its own budget justification.

The Innovation Board consists of the core innovation managers of all divisions and meets five to six times a year. The divisional innovation board is coordinated by the innovation managers and drives the decision on proposed ideas and the investment into them. Members of boards are usually the head of engineering, product management and sometimes sales.

P&G

## Procter & Gamble's Innovation Continuum

Procter & Gamble has been a model for innovation management over the past decade. The company currently uses HYPE's software platform for managing its innovation portfolio.

"From the inception," says the FEI Capability Development Owner, Mike DiPaola, *"we realized there is more to innovation than having a good idea, so we took just enough of the discipline of our downstream execution process and applied that to the front end of innovation. We also knew from the start we would need a way to track and manage a portfolio of these front end innovation projects.*

In fact the front end of innovation was not a new concept to us. We'd been practising it for decades, though it sometimes lacked transparency and some projects became money pits – taking years of investment while showing very few breakthroughs that would be a 'wow' for our customers."

Procter & Gamble's execution model is famous for building billion-dollar brands and maintaining them over generations. The processes used for product innovation launch is called SIMPL and guides managers in selecting projects based on the brand's goals and available resources. By bringing product launch and ideation together, P&G effectively manages innovation as one process from idea to market.

P&G now manages its multiple front end innovation projects along the innovation continuum using HYPE.
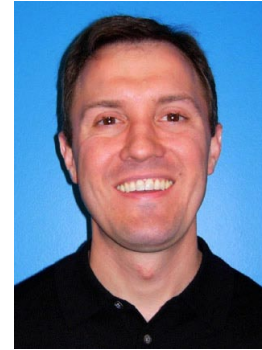
Mike DiPaola,
FEI Capability Development Owner
Procter & Gamble

Evolving innovation practices at Nokia Siemens Networks

2007 was very much a period of experimentation. NSN had 50 users on the platform, generated only 70 ideas and implemented approximately only 0.5% of these.

2008. NSN decided to open up the funnels and to increase transparency and sharing, and to encourage cross-boundary collaboration within their organization. They had to take on the company's culture to make it more collaborative. In place of boundaries they needed community and so worked with HYPE to develop new community tools. They also decided to refer to the platform as an **Innovation Mall** where their managers could go to shop for ideas, people and budgets. They appointed champions whose role would be to bridge across different parts of the organization, to connect people and to identify and highlight good ideas.

At this point they had 200 users, 5 innovation champions, 400 ideas and the first revenues – Euro 20 million. The implementation ratio rose to 2%. However the experience was confined to the innovation departments of the business units.

2009. The next phase for NSN was to introduce the idea of challenges. In a challenge, the innovation managers put out specific requirements to the employee community. NSN called them **innovation campaigns**.

In 2009 they held nine campaigns and extended the platform to 5,000 participants. Apart from core product development participation, they had IT, the venture arm and even real estate looking to use HYPE. At this stage, they had 80 innovation champions, an implementation ratio of 8% and revenues of Euro 170 million from their innovation efforts. 8% is a good implementation ratio but there was more to come.

2010. NSN extended the practice of internal campaigns to campaigns with customers. *"We put the platform out onto the web and anyone who wants to collaborate with us now can,"* says Fabian Schlage, Head of Idea and Innovation Management. In 2010 they also introduced the idea of the **Think Tank** and the **Think Tank agent**. The Think Tank is directed towards external idea sharing.

In 2010 the platform had 9,000 participants, nearly double the 2009 number. There were 160 innovation champions, 35 campaigns, 3200 ideas created and a 9% implementation ratio. Revenues from innovation were 500 million euros.

2011. NSN had 13,500 users, 200 champions, 47 campaigns, 4,100 ideas, 4 Think Tanks and an implementation ratio of 11%.

2012: 18,000+ users!

NSN has now begun to cater for **bootstrapped innovation** (smaller projects initiated at the grassroots of the company) and the platform is about to go to **mobile-driven innovation**, which NSN believe will give them more access to incremental innovation ideas across the business, as people in the factories will now be able to photograph key processes and attach ideas to these.

NSN are also moving away from the concept of innovation as an ideas' generation and collection process and are looking to move innovation into **rapid prototyping** and **demonstration opportunities**. That means de-emphasising ideas in favour of action, backed by small investments that create a new reality from an idea, quickly and effectively.

Fabian Schlage
Head of Idea and
Innovation Management
Nokia Siemens Networks

About the Author

Haydn Shaughnessy is a writer and consultant on innovation and business change. He writes the Re:Thinking Innovation blog at Forbes.com and is the co-author of The Elastic Enterprise, a structured overview of the key economic and management transformations that are giving companies new ways to scale their growth. He has worked as a science officer at the EU, in advanced communications, as well as serving as a Partner at social agency The Conversation Group, and a television and print journalist. He is a visiting fellow at the University of California, Irvine.

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[2] This broadening of techniques is also driven by the need to respond to highly variegated markets and is referred to as polycentric innovation.

[3] Steve Clemons **The New Power of the Global Middle Class**, The Atlantic (online) February 21st 2012

[4] See the Forrester report cited above

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HYPE

About HYPE Innovation

HYPE Innovation, a trusted innovation expert for over 10 years, delivers enterprise software and business solutions in 17 languages to customers around the globe. HYPE's powerful software platform enables the convergence of crowdintegrated idea generation, open innovation, and intelligent idea selection with value-creating idea concept, continuous improvement, and front-end portfolio management. Companies select HYPE for our flexible, scalable software, our client-centric team of experts, and our experience in successfully delivering solutions across the entire innovation spectrum. Our global customer community includes leading innovators such as General Motors, GE, P&G, Bombardier, DHL, Roche, Nokia-Siemens, Daimler, Airbus, General Mills, Saudi Aramco, Bechtel, Clorox, Deutsche Telekom, and many others.

Visit our website at **www.hypeinnovation.com** to learn how HYPE enables companies to transform their best assets – employees, customers, partners, and suppliers – into dynamic and engaged innovation communities.

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