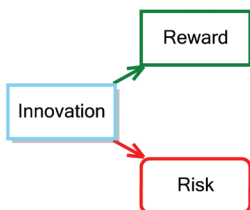


Measuring Innovation

Sustaining competitive advantage

by turning ideas into value.

Nine key messages on how to make Innovation work for you.



Contents

Innovation Perspectives (creator versus consumer)	4
What is Innovation? ...How do we do it?	6
Some example Innovation models and benefits	8
The ever increasing need for Innovation	10
Measuring and Managing Innovation	12
Outcome driven Innovation	12
Opportunistic Innovation	12
The connected organisation; people + knowledge ⇒ solutions	13
Developing a formal Innovation Process... for sustainable success	14
Innovation value stream analysis	16
How to measure we are creating increasing value from Innovation	17
Some example Innovation KPIs	18
Innovation Management	20
Creating an Operating Model for Innovation	22
Key Questions	23
What are the main benefits related to the control of Innovation processes?	23
Why is Innovation management relevant for business growth?	23
How can we be more effective in addressing our key problems?	23
Further Information	24
Contact Details	24

“Sometimes it seems like money is being poured into creating solutions that meet no customer need.”

Equally, what are often seen as mistakes and discarded because they have little relevance to the problem at hand can be of great value if only you can find the right context in which to apply them.

Ideas don't necessarily occur in the “right order” (or to the “right people”) and problems can jump up when least expected.

Recognising insights when they occur and being open minded enough to give them air time brings us closer to having a “self-aware” or even “self-innovating” organisation.

The challenge is to fully utilise our finite resource by managing Innovation towards the best outcome.

Ideas from others may at first seem difficult to comprehend

... but rejecting them out of hand could represent a missed opportunity that could set you apart.

$\forall \text{ Problem } \exists \text{ Person} \rightarrow \text{Idea} \bullet \text{Work} \otimes \text{Idea} \Rightarrow \text{Innovation} \in \text{Solutions}$

For every problem there is a person with an idea that if worked on could yield Innovation that solves that problem

$\forall \text{ Innovation} \rightarrow \text{Solution} \exists \text{ Innovation}' \rightarrow \text{Solution}' \bullet \text{Solution}' > \text{Solution}$

For every Innovation that yields a solution there is another Innovation that yields a better one!

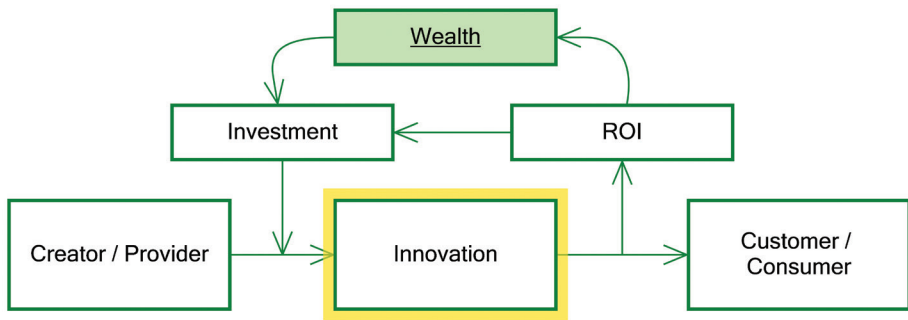
\therefore Keep Innovating

Innovation Perspectives (creator versus consumer)

“Innovation” means different things to different people but fundamentally there are two main perspectives: those creating or providing the Innovation and those buying, using, or consuming it. The creators invest in the Innovation, which they then sell to generate a Return on Investment (ROI) that can either be re-invested or converted into wealth. Consumers look for things to improve their lives.

The most useful definition is the one that enables us to grow the business in the most successful and sustainable way. We need to recognise the context in which we are innovating:

- ▶ Customers are becoming more demanding; wanting better, cheaper and more convenient solutions
- ▶ Competitors are continually striving to meet these demands and close gaps in the market
- ▶ Trends in the market emerge from complex social interactions that are often unpredictable



Creators of Innovation draw on many talents from many fields



Brand image and market positioning can make or break any Innovation endeavor



Customers consume products and services from increasingly diverse channels

Recognise what it takes to innovate:

- ▶ **Being ready to exploit opportunities in the market;** Barclays have continually innovated; enabling Londoners to combine their bank and oyster card for travel on the underground; enabling convenient payments for small amounts without having to enter their PIN, and even sponsoring the London bicycle rental service; Barclaycard logos are now seen all over London streets. Barclays have understood that convenience is important and how to create it.
- ▶ **Being prepared to invest in developing revolutionary new products and services;** Apple's iPod, iPhone, and iPad each changed the game in their respective spaces – in the case of the iPad, this created an entirely new market. In the case of the iPod it revolutionised the way we buy music. The iTunes store made purchasing music convenient and instant. It also created lock-in and wiped out the competition. Apple were in serious trouble and they invested massively in radical and unproven ideas. They are at the top of their game as a result.
- ▶ **Recognising Innovation can be disruptive and if we are not prepared to cannibalise our business, our competitors will;** Cassettes replaced records, CDs replaced cassettes, MP3s replaced CDs, streamed music replaces MP3s. This example is a trend from physical products towards virtual services. It's characterised by an apparent reduction in quality but an increase in convenience and diversity or freedom of choice; Low price products will find a place at the low end of the market. Some will displace high-end products and services.

- ▶ **Being open-minded enough to survive game-changing Innovation, and being the first to initiate it;** The RAC provide roadside vehicle maintenance. When Innovations in manufacturing improved vehicle reliability, reducing breakdowns, their market started to shrink. In fact, there were more people on the roads travelling greater distances than ever. Problems were now to do with congestion and navigation. The RAC adapted their business model and invested in route-planning and real time traffic information systems. In one sense, the RAC provide the same service, helping us get from A to B, and yet they have completely changed what they do.

Seeing the bigger picture surrounding your products and services and taking into account the customers' changing "job-to-be-done" can be essential to survival in a changing market.



Key Message 1

It's not just about cost and quality. Products and services are bought by human beings. For some, brand is everything; for others, convenience is king, taking the bigger socio-economic picture into account. Innovation must be proactive and responsive simultaneously.

What is Innovation? ...How do we do it?

Definition: Innovation is the process of turning ideas into value

Innovation is the fuel of continuous improvement; it is the exploitation of opportunity to create market differentiation & competitive advantage. As described on pages 8-9 Innovation has many forms; point, disruptive, open, swarm; all may coexist, interacting and fuelling each other as part of an ecosystem, as part of a value economy.

How do we do it?

“Begin at the beginning and go on till you come to the end: then stop”

– The King from Alice in Wonderland ... (although we don't stop, we then exploit)

Just to be clear, we should also address one more question: What isn't Innovation?

“Sentence first – Verdict afterwards... [Off with her head!]”

– The Queen from Alice in Wonderland

(i.e. prejudging ideas before their value can be ascertained stifles Innovation, but also Innovation isn't just bright ideas; it's convincing others and turning ideas into value; it's work!)

There are many Innovation models. The best ones for you will depend on your culture, your market, your products and services, and your business model. How you manage Innovation must evolve with your business. Performance management can stifle creativity and prevent new approaches in favour of tried and tested ones. As Heisenberg observed in his uncertainty principle, “No system can be observed without changing it”; the measures must therefore motivate the right behaviours.

You need to be able to train people too, which requires many levels of observation. Some organisations create “Innovation zoos” to demonstrate the principles, this may work to an extent, but Innovation needs to be observed in the wild to build experience and true understanding.

If you put Innovation in a cage so you can observe it you may find it becomes docile and fails to produce any progeny. Observers intending to go out into the field glean only a weak understanding and underestimate the effort and risks involved and fail to recognise the full potential for advancement.

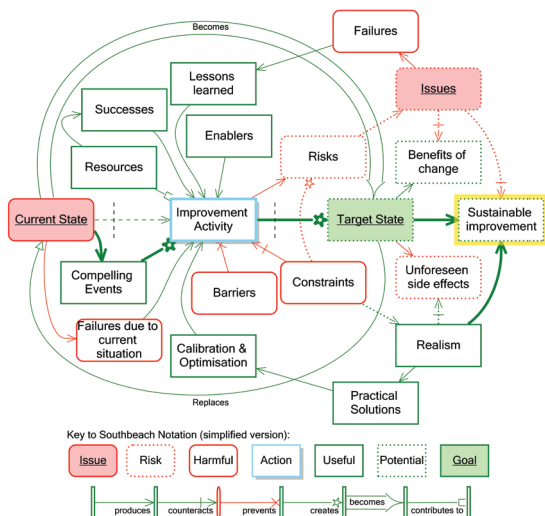
When it comes to deciding how to manage and measure Innovation in your organisation it's necessary to agree what Innovation means to you and your customers. Whatever Innovation paradigms you adopt, there will be concrete KPIs that can be developed by formalising your Innovation process.

Innovation is a journey comprised of many steps. It may start with recognising a need in others and seeing that there is an opportunity to meet it, or discovering a problem and wanting to solve it.

Whatever creates the desire for Innovation; whatever it is about the current state that provokes that urge to drive change, to initiate some activity to improve or capitalise on the situation, the end result is a transition from a situation that is either considered harmful or at the very least has not realised its potential... into one that is useful, and realises some latent potential.

Innovation always happens in a context. Some factors in that context may be useful to us, others harmful. This Southbeach Notation Model shows useful factors in green and harmful ones in red. Effective Innovation recognises the use and harm in a situation – the barriers and constraints, past successes, enablers, lessons learned, and whatever resources are available to drive improvement, and manages each appropriately.

This model is an example from a formal method for Innovation. Such methods can be used to structure creativity and analysis of Innovation resources and options to reduce risk and increase confidence in the Innovation approach. Every symbol and colour has a meaning. It can also be used to apply rules to automatically generate all kinds of scenarios, or apply pre-agreed risk management assessments. As it stands, it says that the current state is harmful, but insufficiently harmful to cause any improvement activity. This improvement activity is actually created by a compelling event that is a result of this harmful situation. Recognise this pattern? The compelling event is inevitably harmful but actually here we are considering it useful because it's actually kicked us into action. This improvement activity would create a target state, which is useful and results in sustainable improvement as long as there is realism in the Innovation. Notice it is subjective – whether something is useful or harmful is a matter of opinion... so this kind of approach can aid dramatically in stakeholder alignment; a key ingredient of Innovation.



Key Message 2

Innovation is often inspired by insight and bright-ideas; creativity will certainly open up possibilities; but in the end a tenacious appetite for improvement and overcoming adversity combined with realism and a fervent will to succeed is necessary to overcome barriers, avoid issues and produce sustainable results.

Some example Innovation models and benefits

Model	Description	Benefits
Innovation is “new stuff”	The least formal model for Innovation is merely to recognise that Innovation is the creation of something new, or the changing of something existing to operate in a different way. The trick is validating that new value was really created. Innovation can be incremental small change, or revolutionary. “New stuff” is a tried and tested way of staying ahead of the competition.	New products and services can capture new customers as well as retain existing customers. Maintenance, inventory and supply chain costs are reduced as old manufacturing processes are phased out in favour of new production techniques.
Innovation funnel	Ideas flow through a “funnel” and are assessed and filtered against various criteria such as fit to business strategy, practicality, capability to implement, commercial viability, market potential. Different subject matter experts are involved in each stage of the evaluation. Ideas progress to prototype, field-test, implementation. Typically some kind of incentive is provided at the funnel entrance, and rewards given depending on how successful ideas are.	Better investment transparency in Innovation, especially when such funnels are managed by software tools that automate the process and provide business intelligence on IP, conversion ratios, and time to market. Connects ‘people with problems’ to ‘people with solutions’. Management control of risk and collaboration on opportunities.
Innovation Lab (‘Model Office’ or ‘office of the future’)	Usually a physical place where people and ideas can be brought together outside the usual office environment. A place where experimentation is welcomed and tradition is challenged. Can also contain prototypes, tools, creativity aids, brainstorming and other collaboration tools.	Can break the psychological inertia often created by the normal work environment, which reinforces norms. Can be used to demonstrate the art of the possible, enabling people to get used to new ideas.
Disruptive Innovation	Often disruptions start out as lower quality but cheaper and more convenient in some way. Sales grow due to convenience despite poorer quality, which improves over time. Revenue comes initially from the long-tail. Eventually the higher quality product or service is displaced.	Enables revenue in a market to be sustained beyond the normal retirement time of the solution S-curve by overlapping new product development at the immature end of the curve.

Model	Description	Benefits
Open Innovation 'Ecosystem'	This is based on the principle of sourcing problems and solutions from outside the organisation and has accelerated with the increasing capabilities of web2.0 and social media. Ideas may be crowd-sourced from customers or the general public, as may opportunities for selling or partnering.	Access to many more experts as well as ability to validate concepts with the market; Access to markets with problems solved by 'by-product Innovation'; faster Innovation cycles; less cost; partnering opportunities
Swarm Innovation 'outsourcing Innovation'	Rather than sub-contract supply of components for a system of in-house design, create a framework design and competitively tender the combination of design and build.	Suppliers can create designs using specialist knowledge of resources and production processes to deliver lower cost & higher quality.
Defensive Innovation	Create proprietary solutions that force lock-in, or use 'patent fencing' to protect IP. Hiding or better, protecting, the mechanisms of your success can prevent others replicating them.	Follow-on ideas from product Innovation are protected and can become revenue earning even if you have no intent to manufacture.
Follow-the-leader (let others take the risks)	Innovation involves risk and reward. If you want to minimise your risk but still exploit some of the reward, identify leading practices of other organisations and copy it. You don't have to be on the "bleeding edge" to innovate but beware: copying success is not always easy. Doing this well requires a research department.	Learn from the mistakes of others, and perhaps avoid them. In some cases you will get just as much return in the long run. In others you risk losing market share or missing the boat. Use this strategy carefully.

Key Message 3

Your organisation has probably been innovating for some time... to thrive, or to survive! Innovation happens organically; it's human nature. Introduction of formal Innovation metrics or processes needs to recognise and reward existing practice whilst building Innovation Management as a critical process.

The ever increasing need for Innovation

In order to succeed, organisations need to continually adapt to changing market pressures to ensure customer satisfaction is achieved in a way that creates growth for the business. In its broadest sense, Innovation includes any business change that results in new value being created. Searching for opportunities to create new value from which we can build sustainable growth is an on-going business challenge, one that is made harder by competitors who are all striving for their share of the pie.

To compete effectively it is necessary to monitor and measure our progress along three axes;

- ▶ Recognising and understanding market threats, opportunities and associated challenges
- ▶ Stimulating, developing and refining ideas to address challenges and exploit opportunities
- ▶ Implementing rapid and targeted change based on practical applications of ideas to challenges

It is important to recognise that there are several key stages in the Innovation life-cycle, each having quite different qualities; concepts may grow into ideas that may be developed and manifest in the real world through invention. Even this invention is not yet of value until it can find some practical application and become part of a value ecosystem. **Innovation results in wealth of some sort.**

Once opportunities have been identified, implementing the necessary change to turn ideas into value is often difficult, costly, and introduces risk that if not managed could end up harming the business.

So if businesses must innovate in order to succeed, in order to grow, then understanding what is involved in Innovation and how to assure success and learning how to repeat it, is essential.

Understanding the problems we are trying to solve and the approach we are using to do that is just the first step. Once we have some process in place we need to be able to refine it – to improve it; to continue to differentiate ourselves against our competitors. This requires that we measure ourselves, our customers, the market, our competitors, and we feed this back into the Innovation Process.

Furthermore, sustainable success requires that the process of Innovation itself must evolve, and our ways of measuring and refining it must be continually calibrated to ensure we can take the business in the direction we want, despite the competition, taking into account technology and market trends.

Innovation is often disruptive but this disruption may not be apparent until it's too late. New technologies are being created all the time, and exploited despite not being fully mature. Those organisations that have the confidence to **experiment in public** in this way; learning from the trial and error of deploying untested technologies and ideas, working with customers to build communities – to build **movements**, have the advantage of experience when it comes to fully exploiting the next generation of the technology.

Take “the digital revolution” as an example. Organisations have been digitising their processes so they can measure them, evolving their products to incorporate digital elements or be entirely virtual digital services, and changing the way they interact with their customers to make it more convenient for the customer and provide more information that can target sales.

This transition to digital, with all the power of web2.0 with its social networks, multimedia, GPS enabled real-time experiences changes the game; New and amazing opportunities are created and at the same time paradoxes are created.

Realising the benefits of Innovation means being able to adapt to the changes that Innovation causes and recognising that sometimes new problems or paradoxes are created that need to be addressed.

Once the level of Innovation is beyond mere incremental improvement, such as the shift to fully exploiting digital channels, the whole game can change, thus making Innovation an imperative. Take the choice versus recommendation paradox; Insurance is a highly competitive market that has driven Innovation to the point of commoditisation. Pervasiveness of aggregators and similar products make it difficult to differentiate. Innovation has moved from the middle ground of the product space to efficiency in back-office claims processing and front-office marketing strategy. Why would you look at the small print yourself when you can get a meerkat to do it for you?



Illustration based on a graphic from the book “Addressing Customer Paradoxes in the Digital World” by Eric Falque and Sarah Jayne Williams.

Key Message 4

Innovation is happening all the time. Everything can and will be replaced by something better; if not by you, then by someone else. Find the white space.

Measuring and Managing Innovation

In order to understand how to innovate more effectively, to determine what to measure, it is necessary to consider several aspects of Innovation:

- ▶ What outcome we want, e.g. what Innovation means to our customers
- ▶ Where we must change our Innovation Process to achieve this sought-for Innovation
- ▶ How to measure that we are creating increasing value from Innovation
- ▶ What is the maturity of our Innovation management and how can we develop this?

Outcome driven Innovation

For businesses to be successful they must provide value to their customers. To compete effectively in the market, they must provide better value than their competitors, or they must be differentiated in some way. Innovation takes many forms partly because different people value different things. Some people are prepared to pay for the prestige of a brand, others require fast service, others look for quality; for some they need to be able to scale, and to do this cost-effectively over time. Increasingly, customers are looking for products and services that adapt and evolve with their changing needs, and they expect this even when they cannot predict what those needs will be.

Defining the required outcomes of Innovation may not be easy – and the outcomes may not be specific. In fact, if you define your outcomes too specifically this stifles creativity and prevents you exploiting the Innovation potential in your people and assets.

Opportunistic Innovation

3M have one of the most innovative cultures on the planet. Every year they churn out around 400 new products and 500 new patents. They achieve this diversity by having outcome driven Innovation that is not too specific. For example, one of their goals is to generate 35% of sales from products that are less than 4 years old, and 10% of sales from products that have only been around for one year. This sets a high target for the pace of Innovation. How can they achieve such pace? For a long time, they have had a model where staff can spend up to 15% of their time on Innovation related work. This means the staff can choose what to spend that time on. This has become its own ecosystem within 3M, whereby if one person has an idea, but they need some experts, a project manager, and someone from sales to help them make sure it's really a marketable product, they convince people from those other functions to invest their 15%, or some of it, in this project. 3M has become a hot house of Innovation incubation projects. Once the individuals involved in the latest hair brain idea believe their idea has matured enough to become a formal project, there are formal processes to do that. 6.5% of sales are reinvested into R&D. 50% of that investment is applied to “new to the world” products. One of the projects was to create a new, stronger glue. One of the formulas resulted in a glue that was “sort of sticky” and at the same time “not sticky at all”... this turned into the post-it note. Because 3M operated a culture of Innovation, the value of this ‘mistake’ was not lost; it was turned into one of the most successful products on the planet.

The connected organisation; people + knowledge ⇒ Solutions

Innovation can come from many places; innovative organisations exploit insight from all levels and exploit opportunities when they arise. “Fortune favours the prepared mind” ... whatever services your organisation provides, recognising the key problem patterns that characterise your customers’ needs and aligning your resources accordingly can make a massive difference in your ability to respond.

A case in point is the solution BearingPoint created for the researchers at the South London and Maudsley NHS Foundation Trust (SLaM). By linking genetic data to patient life experience and natural history, patient records, researchers are now able to identify the risk factors associated with a particular condition, to identify who is more likely to be predisposed to that condition, and similarly, who is more likely to respond to a particular treatment or drug. Researchers at SLaM can now test out ideas in seconds when before it took months, taking out 80% of the waste in the current treatment process.



Key Message 5

Everything is a potential resource that can be used to fuel the Innovation process. The ability to connect people with ideas or solutions to people facing risks or problems is key to creating a self-sustaining, flourishing organisation.

Developing a formal Innovation Process... for sustainable success

How can you formalise and **manage** something that at its heart is creative, even against the flow?

Artists are often cited as archetypes of the more creative side of human expression. They are famous for their rebellious nature; they are also famous for their ability to incite and communicate social Innovation and reform. It is this rebellion that drives progress. From classical art through renaissance, romanticism, realism, impressionism, expressionism, surrealism, to modern abstract art, all have either instigated or reflected and amplified social evolution. And yet, within each movement, the style of each artist was as consistent and important as a brand is to a business today; even across different artists within a movement, there has been consistency and repeatability; there has been science in the application of resources and technique. Art schools and famous teachers of art have been renowned for the degree of discipline that has been drilled into their students. Think of the performing arts.

Scientists can be even more unmanageable. Theories can be so close to belief they require martyrs to break them. Even here it has been an uphill struggle to convince people that systematising Innovation was a good idea. Genrich Altshuller, a Soviet inventor and engineer, suggested there were ways of systematising creativity to enable engineers to solve problems more effectively without relying on chance insights and “random” inspiration.

Challenging the wisdom of a regime may have been political suicide; Stalin sent Altshuller to the Gulag, but vision and insight can create a passion that burns hotter than any constraint can hold. When the labour camps were disbanded in the 1950s Altshuller was released and formally developed TRIZ, the Theory of Inventive Problem Solving. This approach incorporated many methods and techniques as well as knowledge repositories of inventive principles. This has since swept the world and is used not just in engineering but in product design, marketing, and business improvement. The Southbeach Notation models we use in this paper to define what is useful and harmful about an Innovation process is based on these methods.

Business lies somewhere between art and science. It certainly can benefit from some formalisation of creativity and Innovation. The process of innovating within an organisation to create new value for customers varies by organisation and within organisations it varies by product, sector, and segment.

Innovation Process: To really innovate within your domain, and expand your reach, it is necessary to step back and understand what is necessary for you to innovate – how are you succeeding (or failing)? It is not just a matter of what differentiates you – it is a question of *what could differentiate you?* Whilst there is no pre-canned answer to this question that can be preached and reused, there are clear and simple approaches to developing KPIs. It starts with understanding the business process for Innovation. You may not have formally documented such a process, it may not be governed, or have budget assigned, but to be sure – it exists and is operating in your organisation today... perhaps disconnected from the leadership, perhaps under another name, perhaps in disjointed pools of Innovation throughout the organisation.

Sustainable growth: All change has impact beyond its design. In the past you may have been tasked with designing a brighter light-bulb. However, the world has become increasingly energy conscious and this concern has been increasingly formalised as regulation has grown. Today if you are designing a better light-bulb it must be brighter and lower-energy. This apparent contradiction is familiar of course; all businesses are trying to create higher quality for lower cost. For the benefits of Innovation to be sustainable, Innovation must be seen in the broader context as part of an ecosystem. This ecosystem will inevitably be based, at least in part, on monetary value but money is just another means of measure; some brands attract far higher prices than others, some products result in tipping-point crazes. Today even ideological measures such as carbon emissions are regulated and

converted to cash – in some cases as penalties for over-emission, in others as reward and stimulation to create collaboration such as in carbon trading where emissions reduced below mandated levels can be sold to other organisations who need more time to re-engineer their operations. Ultimately, if we can add value to our customer's businesses, or our partners, or even our competitors, then it can add value to ours.



Ask yourself:

- ▶ How much does your customer reduce cost or increase profit by using your products and services?
- ▶ Which of your customers see your products and services as key to differentiating them in the market?

Key Message 6

Recognise that the end-points of your Innovation process may be outside your organisation and put measures in place to sense and influence these. Ultimately, creating sustainable success for your customers creates sustainable success for you. Be aware of their needs, and how others are meeting them!

Innovation Value Stream Analysis

The following diagram shows an example Innovation process. This process has been modelled in Southbeach Notation, a formal visual language for Innovation. Useful functions are shown in green, harmful functions are red, functions with variable usefulness are shown in grey. Whatever processes, causes, effects, opportunities, you have, and whatever objectives, goals, you want to achieve, or risks and issues you want to avoid, you can model how they are all connected.

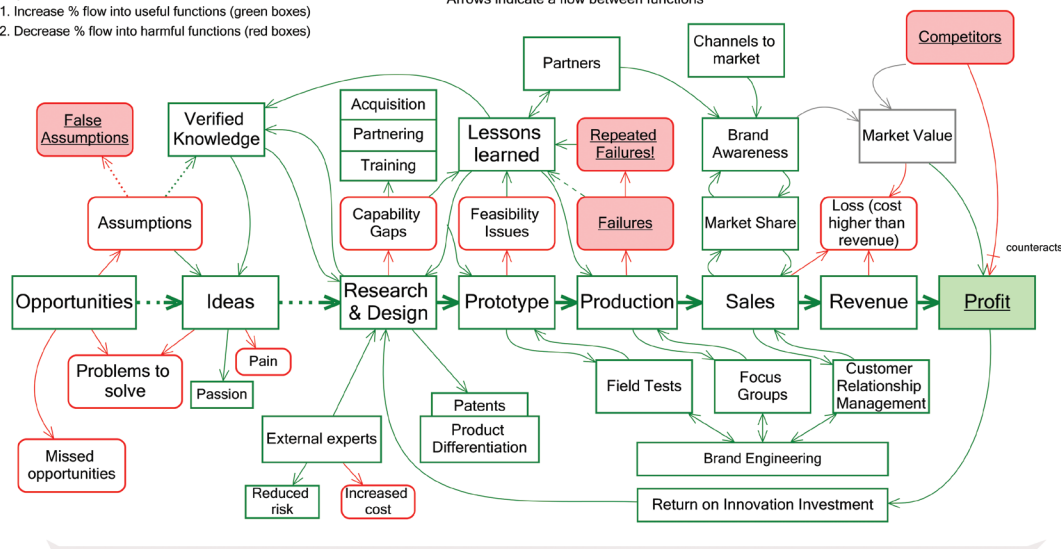
Once you have done this, and you have agreement about what is useful and harmful, then you can start to create KPIs for measuring how effective your Innovation process really is. Of course, you can also measure how much risk you are generating, and what your potential for future Innovation and value creation is.

Key Performance Indicators:

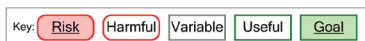
1. Increase % flow into useful functions (green boxes)
2. Decrease % flow into harmful functions (red boxes)

Innovation Value Stream

Arrows indicate a flow between functions



End-to-End Innovation Process



A Southbeach Notation Model

How to measure we are creating increasing value from Innovation

To take our simplified Innovation process example, each arrow represents a flow. There may be opportunities or known problems to solve (on the left), which result in ideas that are based on assumptions as well as verified knowledge; some of these ideas may be taken forward into research and design; some designs may result in prototypes, which may be taken into production, with the aim of selling products or services to generate revenue that yields a profit.

All of the green boxes on this diagram are the useful functions of the system, and the red boxes are the harmful functions. The arrows represent the flow between them. Of course, not every idea results in a research and design project; some products result in revenue but no profit. To create an end-to-end set of KPIs, measure the flow between the functions. The conversion ratio at each stage in the process provides a KPI for that part of the process. Broadly speaking, Innovation will be increased if you increase the flow into useful functions and reduce the flow into harmful functions. However it's not always that simple; endless ideas just result in wheels spinning

and no motion. There must be balance. Ultimately this portfolio of KPIs must be understood over time. The relationships between them may not be obvious. Business Intelligence tools such as predictive analytics and correlative analytics can be used to find trends and relationships to inform investment decisions.

The profit generated is determined by the market value, which is a variable. Therefore it's not just important to have a balanced portfolio of KPIs but for these KPIs to be continually monitored and fed back into the system; some will create positive re-enforcement of useful functions, others will result in negative feedback to counteract or constrain harmful functions. Any variable functions such as the value put on a product or service by the market, must be continually monitored so that the effect of that valuation can be determined and the ROI projections, new product development and sales models refined accordingly. Techniques such as open Innovation may be used to licence products with dwindling profits to other organisations whilst you focus on the next Innovation.

Key Message 7

Whether you have a formal Innovation process or not, you have ideas, and effort being spent on those ideas, flowing around your organisation. Know where they are and stimulate the idea economy to drive conversion into value.

Some example Innovation KPIs

Note that all KPIs are indicators and should be combined with specific facts to inform specific business decisions on how to improve.

Innovation is all too often about balancing tensions and ensuring conversion of ideas or investment or sales leads into tangible value. Many of the KPIs below are expressed as ratios, for example: the ratio of **new product revenue : old product revenue** provides a measure of the pace of Innovation; if this ratio decreases it indicates that Innovation is falling behind obsolescence, so costs could increase and new revenue decrease.

Conversion Ratios for each step in the Innovation process / value stream

- ▶ Ideas : Ideation campaigns
- ▶ Ideas that reach concept design : Ideas
- ▶ Implemented designs : Concept designs
- ▶ Ideas that sell : Implemented ideas
- ▶ Ideas that make a profit : Ideas that sell
- ▶ Sales leads : Target customer base
- ▶ Sales : Sales leads

Financial & market measures

- ▶ Revenue from new products or services
- ▶ Profit from new products or services
- ▶ New customers from new products or services
- ▶ New segments and sector entry from new products and services

Holistic ratios for the rate of renewal of the organisation

- ▶ Sales from new products & services : sales from existing products & services
- ▶ Profit from new products & services : profit from existing products & services
- ▶ Customers on the new products : customers on the old products
- ▶ Rate of transfer of capital investment to new capabilities



Balancing the desire to innovate with risk management

- ▶ Verified knowledge : Unverified assumptions
- ▶ Effort spent on implementations : Effort spent on concept development

Innovation Competency / Effectiveness / Discipline / Repeatability

- ▶ Use of formal creativity tools & techniques
- ▶ Use of formal idea management tools & techniques
- ▶ Use of formal problem solving tools & techniques

Growth and sustainability measures

- ▶ Revenue from new products & services; Profit from new products & services
- ▶ How much have your customers increased their success (quality/sales/revenue/...) or reduced their cost due to use of your products and services
- ▶ Rate of return on Innovation Investment (how sustainable is your Innovation)
- ▶ Market share growth from new products & services
- ▶ Brand awareness and Stickiness (those who stay on new product : those who leave)
- ▶ Patents created per year; Market share protected by patents
- ▶ Revenue protected by patents; Revenue generated from licensing patents

Everyone has a different view of what Innovation is – and how to best innovate to improve company performance, or better help clients. Setting clear KPIs are a way for the leadership team to get everyone pulling in the same direction – both in terms of what they are trying to achieve, and how they are trying to achieve it. More sales can be achieved by reducing price, increasing quality, improving brand awareness, creating “product stickiness” and a thousand other ways... but typically you need a focused strategy to succeed and avoid confusion amongst your staff and your customers.



Key Message 8

Deliberate Innovation is more effective & more focussed. Don't leave it to chance. Use a balanced portfolio of metrics, evolved over time, to guide and drive sustainable improvement.

Innovation Management

Recognising the importance of measuring Innovation and understanding the different ways in which it can be measured is a critical first step along the path to focussing Innovation on creating more value for your organisation. However, being able to use these metrics to competently manage the process of Innovation and continuously improve your return on Innovation investment requires discipline which only develops over time. Intel came across precisely this problem when trying to get more out of their internal IT. They realised the value of frameworks and found many but none that were overarching enough to enable them to maximise Innovation whilst also managing value for money; they wanted to **manage IT as a business**. They formed the Innovation Value Institution (IVI). IVI is industry led whilst also having membership from academia and a few select consulting firms. They have since developed a body of best practice and formal techniques for measuring capability maturity and prioritising improvement activities. The IVI IT Capability Maturity Framework (IT CMF) has 32 Critical Processes (CPs). One of these is Innovation Management.

The CMF recognises that each Critical Process must be underpinned by certain capabilities. The Innovation Management process as well as each of these underpinning capabilities is described from the perspective of each of five maturity levels ranging from Initial through Basic, Intermediate, Advanced, and Optimising. Taking the same approach as the original Carnegie Mellon Maturity Index (CMMI), guidance is given on how to move from each level of maturity to the next. The formal IVI assessment ranks the current maturity, expectation, and priority for improvement for each critical process from different perspectives to enable comparison between IT and the business or different divisions or process areas. It also provides comparative industry benchmarks for your market sector.

Maturity frameworks are not just a way of comparing your capability with your competitors. They are also a way of assessing the perception from within different areas of your organization and opening up discussion about where there are opportunities to improve. Stake holder management is usually necessary to create significant change in any complex organization. Understanding how different groups support each other, and which ones agree or disagree can be a powerful way of stimulating debate and aligning perspectives. Often disagreements arise from differences in terminology or awareness. A marketing perspective informs the debate in a completely different way to finance or engineering, yet all are necessary.

IVI defines various “capability building blocks” for Innovation Management. These are shown in the table on the next page.



Category	Capability Building Block	
Strategy & Management	Vision	Vision for IT Innovation needs to be defined, communicated and reacted/realized.
	Strategic Planning	Broadly defining scope of impact of IT Innovation in line with business strategy.
	Funding & Resource Allocation	Broader funding and appropriate allocation of resources based on prioritisation.
	Portfolio Management	Visualizing Innovation activities within the life-cycle for decision making.
People & Culture	Management Leadership	Visibility of the direction how to drive Innovation and the support from leadership.
	Acceptance of Risk Taking	Level of attitude towards taking creative risks.
	Collaboration	Level and the scope of collaboration at the employee level.
	Capability Development	Skill development and performance management of individual employees.
	Roles & Responsibilities	Penetration of Innovation activities as everyday work at the employee level.
	Rewards & Recognition	Scheme of rewarding people based on contribution to IT Innovation.
Processes, Tools & Metrics	Innovation Processes	Integration of the processes within the whole life-cycle of IT Innovation.
	Innovation Frameworks	Sharing and leveraging methodologies and tools for Innovation.
	Measurement of Impact	Measurement of impact from IT Innovation.
	Communication of Value	Communication of impact from IT Innovation within IT, to business, to externals.

Key Message 9

There are well defined and proven paths for developing your organisation's Innovation management capability and prioritising improvement. A structured approach will maximise your ability to exploit your latent Innovation potential.

Creating an Operating Model for Innovation

A Target Operating Model for Innovation?

Your Operating Model defines how you operate across your organisation, people, processes & technology to create value for you and your customers. If you want your organisation to be sustainable then your operating model better not just enable Innovation but embed it.

The market is changing and competitors are evolving to meet increasingly diverse and demanding customer needs. Many of these needs can only be exploited through a change in business model. Continuous improvement of the operating model itself is necessary to sustain competitive advantage in this context of fast-paced change.

Creating a more loosely coupled and extended operating model that includes partners and strategic suppliers can be an effective way to exploit open and swarm Innovation as well as cater for different parts of the business potentially needing different business models to survive.

Benchmarking versus Sustainable Innovation

It's natural that we want to understand what our competitors are doing; that we want to keep pace. That's why so many consulting engagements involve comparative benchmarking along with a structured framework for assessing your people, processes and technology against leading industry practice.

But do you just want to improve... to "keep pace"? Or do you want to **set the pace**?

If all you do is copy your competitors, then actually you are creating a 3-5 year strategic plan to do what your competitors are doing now... in other words, you are committing your business to lagging behind because

in 3-5 years' time, they are sure to be doing something better.

Clearly it would be stupid to ignore what competitors are doing, but let's face the facts and recognise that this kind of Innovation, whilst it might be new to your organisation, when considered in the broader market context, is nothing more than playing catch-up.

Playing Innovation leap-frog

The most successful firms are constantly looking for ways to move into the white-space in the market – the virgin ground that no competitor has yet ventured into. Why? So they can establish the ground rules, define the space, and dominate that market. Sometimes this involves risk, as all change does. It also represents massive opportunity. Like so many simple ideas, it sounds obvious but it can be very difficult to find and clearly define where this white-space is. It can be even more difficult to predict how any potential market in that space might react because by definition it's all completely new to everyone – so there is no benchmark! Leading firms are called this for a reason.

How can we succeed in this space? It's necessary to be open to possibilities and to be playful. We need to be able to experiment, and simulate within our own organisation. We need to be able to involve our customers – using social media, and IRL (In Real Life) with field trials. We need to be prepared to explore with our customers what they really want.

You need to decide where it makes sense to lead the field and where you should allow others to do the experimenting for you. Early adopters can still win a massive slice of the cake, especially if you can find a way to transfer Innovation from adjacent markets to your own. In this way you can become the leader in your market by following leaders in others.

Key Questions

What are the main benefits related to the control of Innovation processes?

Controlling Innovation processes allows us to unlock potential and create new value whilst minimizing the risk of change and the cost of R&D. Successful Innovation is the result of creativity; not something we want to control so much as exploit. Innovation is also the result of exploration of the art of the possible; also something we want to exploit. The trouble with Innovation is it's so damned exciting! It's all too easy to get carried away with ideas and never implement anything - or to spend vast amounts of cash on ideas that simply won't fly. It's important to recognize that Innovation involves risk as well as the potential for reward. This is where the control comes in. Innovation must be practical. We must be balanced in our approach. Management of the Innovation process should reduce business risk whilst maximizing opportunities and fully exploiting the brand, asset base, and creativity, skills and experience of people.

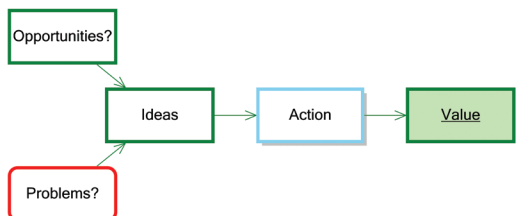
Why is Innovation management relevant for business growth?

Ultimately, Innovation is what makes a business sustainable. The world is changing all the time. Customer expectations are rising and competitors are working harder than ever to compete across an increasing number of channels, often in a global marketplace. Innovation represents a way of changing the game - of turning things to your advantage... but it also represents business risk. Lots of creativity without prompt action to validate and turn ideas into reality just wastes time and money.

The Innovation process – the process of IDEA to VALUE is, in the long term, more important than ORDER to CASH... It's what drives the business forward. If you are not controlling that then how do you know what direction of travel the business will take?

How can we be more effective in addressing our key problems?

At the end of the day, most problems are a combination of technical challenges and human perspectives. The real world is often at odds with the vision we have for ourselves or our business. Different parts of our business often have slightly or even wildly different perspectives on how to make progress. Experienced teams often jump to conclusions about the solution before fully defining and agreeing the problem – or the priorities. Most problems have multiple aspects to them, and most organisations have many resources available that remain untapped in addressing their most critical challenges. Effective problem solving involves recognizing the value in synthesizing the differences of opinion as often those differences are not so much disagreement about what to do but different views of the problem that reveal different angles from which to attack it. Formal methods for defining and breaking down problems can lead to improved creativity and thoroughness of options analysis that reduces business risk and amplifies Innovation. Why leave it to chance when proven techniques are available?



Further Information

If you are interested in any of the following:

- ▶ Innovation value stream analysis – how to optimise your Innovation processes
- ▶ An IVI Assessment, either at a high level across all IVI processes, or as a deep dive on Innovation Management
- ▶ Refining your Operating Model to better support and embed Innovation
- ▶ Applying formal problem solving in your organisation
- ▶ Setting up any of the Innovation models described in this paper

Or if you would just like a chat on leading industry practice, or simply have some tough problems you'd like another perspective on, please get in touch.

Contact

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