IP strategy
Innovation environments and influencing factors

in cooperation with i3PM

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29 March 2018
About Donal O’Connell

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Opinions expressed in this presentation are those of the speaker and not necessarily those of the European Patent Office.
Series One - IP Strategy

- Module 1: “IP Strategy at the heart of Business Strategy 1”
- Module 2: “IP Strategy at the heart of Business Strategy 2”
- Module 3: “IP creation strategies to generate value”
- Module 4: “IP value extraction strategies to realize value”
- Module 5: “Innovation environments and influencing factors”

During first 4 modules …
- Various innovation examples sprinkled those presentations.
- References to some innovation models were made.
- Various links between IP & innovation were established.

Now onto Module 5 …
Agenda

- Innovation
- Environments that encourage innovation
- Why innovation fails
- The role of management
- Final thoughts
Innovation
Definition

“A new method, idea, product, etc.”

“The act or process of introducing new ideas, devices, or methods”
It starts with thinking differently

It is a process of questioning, experimenting, learning and adapting.

It requires an appetite for risk, a willingness to question, and an open mind to look at things without preconception.

Perhaps most importantly, it requires patience and perseverance.
It can take many forms

- It can be disruptive, transformative, radical, breakthrough, incremental or step improvement in nature.

- It is most important to recognise and appreciate all these different forms as often the simple step or incremental form has a tendency to get overlooked.
It consists of several stages

- Generating or creating the idea is often seen as the first stage, but it is not the only one.
  - Discovery
  - Evaluation
  - Execution

- Thomas Edison did not invent the first electric light bulb; instead he invented the first commercially practical incandescent light.

References:

The Four Areas of Innovation beyond Just the Fuzzy Front End, Article written by Adris Mootee, posted on his Innovation Playground blog, September 2008.


The Stone Age did not end because they ran out of stones.

The innovation process involves ambiguity, controversy and non-linearity and this poses a certain challenge to many companies.
Innovation is a team sport

Despite the enduring myth of the lone genius, innovation does not take place in isolation.

It requires the meeting of minds from myriad perspectives (technical, operations, marketing & sales, distribution, test, quality, legal & IP, finance, etc.)
Market driven or driving

Companies are constantly exhorted to become more customer or market driven.

But companies whose success has been based on radical business innovation are better described as market driving.

While market driven companies are excellent in generating incremental innovation, they rarely produce the type of radical innovation which underlies market driving companies.
Not just product innovation

Innovation can impact any or all of the following.

- Products
- Services
- Processes
- Business models

In recent years, many of the new entrants into the Fortune 500 owed their success to business model innovations that either transformed existing industries or created new ones.
Environments that encourage innovation
Understanding innovation isn’t enough

Understanding and appreciating innovation is crucial, but it may not be sufficient to get the innovative and creative juices flowing in an organisation.

The triggers or environments which encourage or stimulate innovation also need to be understood and exploited.
The Seven Cs

- Challenges
- Changes
- Convergence
- Competition
- Collaboration
- Competencies
- Culture
Challenges

- Challenges are seen as opportunities by the innovation community.

- Bigger picture issues such as poverty, disease, pollution, water shortages, climate change or security, at first glance seem insurmountable challenges.

- At an enterprise level, challenges may appear in a variety of areas – quality, costs, functionality, logistics, service. Etc.
Changes

There is typically strong resistance to change as people are afraid of change, or rather the “unknown” that change will bring.

Many people believe that things are fine as they are today and that forecasted changes will not really happen or will not impact them and there are also many who are cynical about change.

Innovators, however, are delighted when changes occur and embrace them with a passion.

Business 2010: Embracing the challenge of change, The Economist Intelligence Unit global survey of senior executives, 2005
Convergence

Convergence is an occurrence of two or more things coming together.

Convergence has significant implications for industry and the consumer.

It will challenge and is challenging existing business models, patterns of consumption, shared values and common experiences, which will in turn pose challenges and provide opportunities for all the parties involved.

Innovators are delighted when convergence occurs.
Competition

- A competitive spirit is having the will to win and striving to be number one and innovators are often by nature competitive.

- Competition in business and economics encompasses the notion of individuals and companies striving for a greater share of a market to sell or buy goods and services.

- Competition therefore acts as a self-improvement incentive, stimulating innovation and encouraging efficiency.
Collaboration

Traditionally, internal innovation was the paradigm in which most companies operated.

However …
- Not all of the smart people work for you
- Complexity means that you probably cannot do it all yourself anyway
- Simple economics means that you probably cannot afford to do it all yourself
- Trying to do it all means that you may lack focus
- Your internal innovating is not succeeding

Innovators move in a world of formal and informal networks and the act of collaboration is second nature to them.

Open Innovation: The New Imperative for Creating and Profiting from Technology, Henry Chesbrough
Competencies

Competencies are the knowledge, skill and attitude that will enable a person to effectively perform the activities of a given occupation or function to the standards expected.

Innovators are always striving to grow their competencies and skills.
Culture

Culture basically refers to the attitudes and behaviors that are characteristic of a particular group or organization.

Innovators are appreciative of both a supportive and learning culture, yet questioning and challenging culture.

It should be a ‘no fear’ culture with a passion for innovation.
Why innovation fails
It can fail

- Part of creativity is the fact that you are delving into the unknown

- As such, one cannot predict the result of an uncertainty, which many would find to be too great a risk.

- A good, thorough, comprehensive innovation process means finding the right delicate balance between a few successes and the many failures that are inevitable.
Reasons why innovation fails

- Cultural flaws
- Weaknesses in the innovation process
- Other internal factors
- External factors

Ref: Organizations and Failure: Why Don’t We Learn More?, Stefan Lindegaard
Cultural flaws

Culture flaws may include …

- poor leadership
- poor organisation
- poor communications
- poor empowerment
- poor knowledge management
Survey findings

The top innovation challenges include:

- fostering an internal culture of experimentation and innovation (57%);
- juggling competing internal agendas and goals (56%);
- overcoming the middle management “permafrost” layer (45%);
- moving forward despite deferred commitment and delayed action (33%).

Ref: Crowd Companies’ research for “The Corporate Innovation Imperative”
The innovation process

The five stages of innovation

- Preparation
- Generation
- Incubation
- Evaluation
- Implementation

"Everyone who has ever taken a shower has had an idea. It’s the person who gets out of the shower, dries off, and does something about it that makes a difference."

- Nolan Bushnell (Atari)
Weaknesses in innovation process

Such weaknesses may include:

- poor goals / objectives / targets
- poor specifications
- poor alignment of actions to goals
- poor participation by the team
- poor monitoring of results
- poor communications and access to information
- poor risk management capabilities
Other internal factors

These are usually linked to mis-alignment issues:

- Innovation efforts not guided by marketing or customer requirements.
- Innovation efforts not guided by functional capabilities (e.g. manufacturing, distribution).
- Innovation process not properly supported by the organisation's functional processes.
- New product or service not accompanied by changes in marketing and sales strategies.
External factors

β PESTLE macro-environmental analysis failures
  • P for Political, E for Economic, S for Social, T for Technological, L for Legal and E for Environmental

β Industry specific sector analysis failures

β Competitor analysis failures

β Technology analysis failures

β Customer analysis failures
The role of management
The role of management

- Clearly management plays a key role

- Both leadership and management is required. Leadership is doing the right thing while management is doing things right.

- Management …
  - sets the context.
  - guides the innovation process.
  - clearly communicates reasons.
  - shields creative teams.
  - appreciates distinctiveness in people and their thinking.
  - welcomes change.
Many current performance management models are stacked against innovation.

Ensuring a large group has the burning drive of an inspired entrepreneur over a sustained period is next to impossible.

There is some evidence that suggests that bottom-up "discovery" has a superior record in comparison with "top down 'deliberate' strategies from HQ."
Practical examples

Management can …

- Foster effective cross-functional product development teams
- Encourage projects and teams to work outside the business.
- Allow time off for scouting
- Invest in the occasional high risk project
- Bring in the right skills and competencies
- Give the personnel involved the right tools and resources needed
- Provide a strong support network
Motivate vs de-motivate

Stay out of the way, but check in periodically to see how it is going and determine what help management can provide.

To de-motivate an innovative team is very easy, whereas to keep motivating an innovation team is a little more challenging.
Final thoughts
Innovation

Although the word “innovation” is widely used there is a complexity to this subject which is not always very well understood or appreciated.

Those environments which encourage innovation need also to be understood and appreciated, and then harnessed.

The reasons why innovation often fails also need to be properly understood and addressed.

Part of innovation is the fact that you are delving into the unknown and as such, one cannot predict the result.