



Enterprise Innovation notes

Enterprise Innovation and markets (Western Sydney University)

ENTERPRISE INNOVATION & MARKETS NOTES

What is innovation?

- 'innovation' as 'change' > 'to make something new'
- 'the successful exploitation of new ideas'
- These ideas don't need to be completely new
- Growth, about recognising opportunities for doing something new and implementing those ideas to create some kind of value.

Six aspects of innovation

- Innovation is about identifying or creating opportunities, new ways of serving existing markets, growing new markets, rethinking services, meeting social needs & improving operations – doing what we do but better

1. Identifying or creating opportunities

To see connections to spot opportunities & to take advantage of them

2. New ways of serving existing markets

Its not just about opening new markets; It can also offer new ways of serving established & mature ones (enhancing – advancing)

3. Growing new markets

Ability to spot where & how new markets can be created & grow

4. Rethinking services

e.g. online banking > improve the efficiency

5. Meeting social needs

social standards > e.g. woolworths bags, following the social norms

6. Improving operations – doing what we do but better

ability to keep it running & productive depends on a workforce able to contribute innovation ideas on a continuing basis

Understanding innovation & entrepreneurship

- Innovation matters but it doesn't happen automatically. It is driven by entrepreneurship a potent mixture of vision, passion, energy, enthusiasm, insight, judgment and plain hard work which enables good ideas to become reality.
- Entrepreneurship plays out on different stages in practice. > entrepreneurship matters just as much to the established organisation which needs to renew itself in what it offers and how it creates and delivers that offering

- **Innovation** – as a process which can be organised and managed, whether in a start up venture or in renewing a 100 year old business
- **Entrepreneurship** – as the motive power to drive this process through the efforts of passionate individuals, engaged teams and focused networks
- **Creating value** – as the purpose for innovation, whether expressed in financial terms, employment or growth, sustainability or improvement of social welfare.

STAGE IN LIFECYCLE OF AN ORGANISATION	START-UP	GROWTH	SUSTAIN/SCALE	RENEW
Creating commercial value	Individual entrepreneur exploiting new technology or market opportunity	Growing the business through adding new products/ services or moving into new markets	Building a portfolio of incremental and radical innovation to sustain the business and/or spread its influence into new markets	Returning to the radical frame-breaking kind of innovation which began the business and enables it to move forward as something very different
Creating social value	Social entrepreneur, passionately concerned to improve or change something in their immediate environment	Developing the ideas and engaging others in a network for change — perhaps in a region or around a key issue	Spreading the idea widely, diffusing it to other communities of social entrepreneurs, engaging links with mainstream players like public sector agencies	Changing the system — and then acting as agent for the next wave of change

1.2 Difficulties in managing innovation – an uncertain and risky process

- Taking those ideas forward is not quite so simple and most new ideas fail
- New ventures often fail but it is the ventures which are failures rather than the people who launched them,
- Failure is an essential part of the process. They learn from their mistakes, understanding where and when timing, market conditions, technological uncertainties etc. means that even a great idea isn't going to work.
- But they learn some useful insights to carry over to their next venture
- Some don't see or recognise change. By the time they realise there is a need to change it may be too late.
- 'core competencies' (things which helped them to achieve success) become the things which make it hard to see or accept the needs for change.
- 'not invented here' the new idea is recognised as good but in some way not suited to the business
- The pace of change appears slow and the old responses seem to work well.
- Sometimes change can happen from outside the industry – and by the time the main players inside have reacted it is often too late.

1.3 Sources of innovation within companies or industries

- **Unexpected occurrences** – unexpected successes and failures are productive sources of innovation because most people and businesses dismiss them, disregard them and even resent them
- **Incongruities** - these occur whenever a gap exists between expectations and reality.
- **Process needs** – these exist whenever a demand arises for the entrepreneur to innovate as a way of answering a particular need.
- **Industry and market changes** – there are continual shifts in the marketplace, which are caused by changes in consumer attitudes, advances in technology and industry growth.

Sources of innovation in the social environment

opportunities exist outside a company in its social and intellectual environment:

- **Demographic changes** – of the external sources of innovation opportunity, demographics are the most reliable
- **Perceptual changes** – sometimes the members of a community can change their interpretation of facts and concepts, and thereby open up new opportunities. What determines whether people see a glass as half full or half empty is mood rather than fact, and a change in mood often defies quantification.
- **New knowledge** - making innovation those based on new knowledge – whether scientific, technical or social rank high. Knowledge-based innovations differ from all others in the time they take, their casualty rates and in their predictability as well as in the challenges they pose to entrepreneurs

Different types of innovation

- Ideas generation (creativity), ideas evaluation (innovation) and ideas implementation (entrepreneurship) can overlap and are not necessarily a linear process.
- These three stages essentially consist of creating new knowledge, which is developed and formulated through different types of social network.
- **Incremental innovation** – are improvements of existing products that enhance performance in dimensions traditionally valued by mainstream customers.
 - steady improvements
 - based on sustaining technologies
 - obedience to cultural routines and norms
 - can be rapidly implemented
 - immediate gains
 - develop customer loyalty

TYPE OF INNOVATION	PRINCIPLE AND EXAMPLE
Extension	Improvement or new use of an existing product, service or process, such as the development of desktop, notebook and laptop computers based on the mainframe.
Duplication	Creative replication or adaptation of an existing product, service or concept. Duplication can take place across different markets or industries, e.g. fast-food chicken outlets such as Chicken Treat or Red Rooster in Australia were adapted from the Kentucky Fried Chicken model from the USA; or the franchise may be adapted to suit a variety of sectors such as petrol stations, cleaning and childcare, with the concept having originated in the fast-food industry.
Synthesis	Combination of an existing product, service or process into a new formulation or use, such as the fax (telephone + photocopier) or the multi-purpose smartphone (telephone + camera + organiser + internet + music player + GPS).

- **Disruptive (radical) innovation** – conversely, disruptive innovation change the value proposition. Disruptive innovations such as personal computers, underperform existing products but they are also simpler, less expensive, more convenient, adequate and easier to use.
 - fundamental rethink
 - based on disruptive technologies
 - experimentation and play/make-believe
 - need to be nurtured for long periods
 - worse initial performance, potential big gains
 - create new markets

- **Cost innovation** – traditional thinking associates innovation with new product/service development or added functionality, for which customers are expected to pay a premium. Cost innovation can be delivered in three ways:
 - Selling high end products at mass market
 - Offering choice or customisation to value customers
 - Turning niches into mass markets
 -

1.5 what do successful innovators and entrepreneurs do

1. explore and understand the dimensions of innovation

- Product – changes in the things (products/services) an organisation offers
- Process – changes in the ways these offerings are created and delivered
- Position – changes in the context into which products/services are introduced
- Paradigm – changes in the underlying mental models which frame what the organisation does

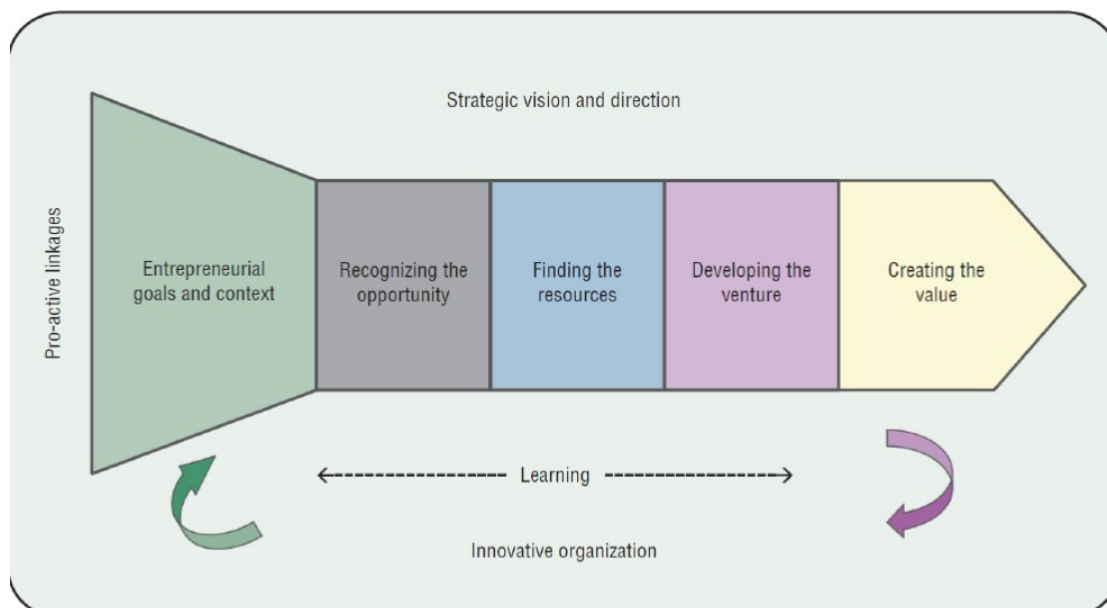
2. manage innovation as a process

- Recognising the opportunity – they could take the form of new technological opportunities or changing requirements on the part of markets.
- Finding the resources – the trouble with innovation is that it is by its nature a risky business
- Developing the idea
- Capturing value- we could capture valuable learning about how to build our innovation capability

The content of success

basic process for turning ideas into reality in place.

- Clear strategic leadership and direction, plus the commitment of resources to make this happen
- Innovative organisation in which the structure and climate enables people to deploy their creativity and share their knowledge to bring about change.
- Proactive links across boundaries inside the organisation and to the many external agencies who can play a part in the innovation process: suppliers, customers, sources of finance, skilled resources and of knowledge etc.



3. Develop innovation capability

- E.g. what are the actions involved in innovation and how can we use this understanding to help us manage the process better? What comes into our minds when we think of innovation taking place?

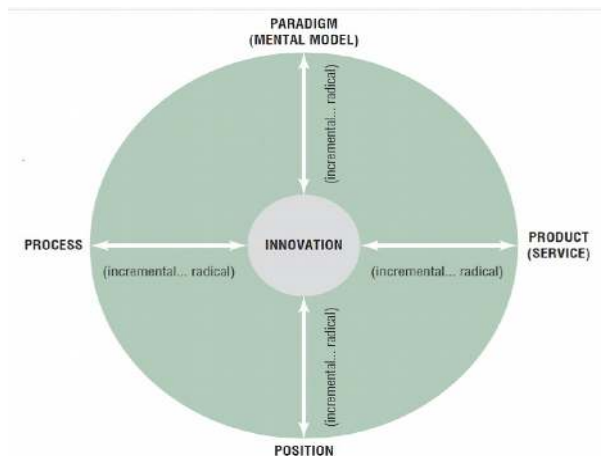
IF INNOVATION IS ONLY SEEN AS...	...THE RESULT CAN BE
Strong R&D capability	Technology which fails to meet user needs and may not be accepted: 'the better mousetrap nobody wants'
The province of specialists in white coats in the R&D laboratory	Lack of involvement of others, and a lack of key knowledge and experience input from other perspectives
Meeting customer needs	Lack of technical progression, leading to inability to gain competitive edge
Technological advances	Producing products the market does not want or designing processes which do not meet the needs of the user and are opposed
The province of large firms	Weak small firms with too high a dependence on large customers
Breakthrough changes	Neglect of the potential of incremental innovation. Also an inability to secure and reinforce the gains from radical change because the incremental performance ratchet is not working well
Associated with key individuals	Failure to utilise the creativity of the remainder of employees, and to secure their inputs and perspectives to improve innovation
Internally generated	The 'not invented here' effect, where good ideas from outside are resisted or rejected
Externally generated	Innovation becomes simply a matter of filling a shopping list of needs from outside and there is little internal learning or development of technological competence

4. create an innovation strategy

- Building a capability to organise and manage innovation is a great achievement, but unless that capability is pointed in a suitable direction the organisation risks being all dressed up with nowhere to go

MECHANISM	STRATEGIC ADVANTAGE	EXAMPLES
Novelty in product or service offering	Offering something no one else can	Introducing the first (Walkman, fountain pen, camera, dishwasher, telephone bank, online retailer, etc.) to the world
Rewriting the rules	Offering something which represents a completely new product or process concept – a different way of doing things – and makes the old ones redundant	Typewriters vs. computer word processing, ice vs. refrigerators, electric vs. gas or oil lamps
Reconfiguring the parts of the process	Rethinking the way in which bits of the system work together (e.g. building more effective networks, outsourcing and coordination of a virtual company)	Zara and Benetton in clothing, Dell in computers, Toyota in its supply chain management

- Putting an innovation strategy together involves three key steps, pulling together ideas around core themes and inviting discussion and argument to sharpen and shape them. These are:
- Strategic analysis: what could we do?
exploration of innovation, where could we innovate and why would it be worth doing so. These are tools to help start a discussion and to reflect on what resources the organisation can bring to bear. The strengths and weaknesses



- Strategic selection: what are we going to do, and why?
choosing out of all the things we could do which ones we will do and why? (decision)
- Strategic implementation: how are we going to make it happen?
it is to plan for implementation. Thinking through what we are going to need and how we will get these resources, who we may need to partner with, what likely roadblocks may we find on the way – all of these questions feed into this steps

5. Build dynamic capability

Most of the time innovation takes place within a set of rules of the game which are clearly understood, and involves players trying to innovate by doing what they do (product, process. Position etc.) but better.

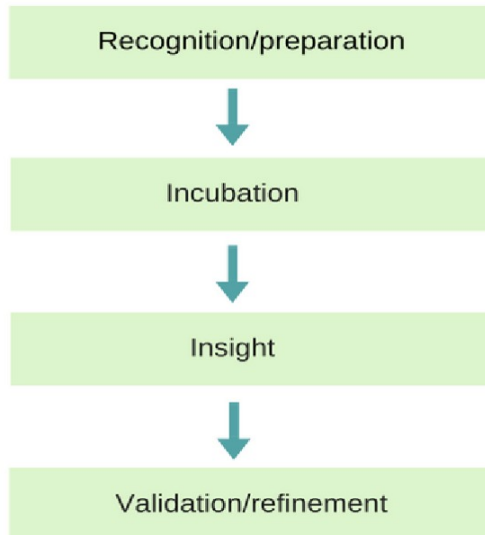
2.1 The nature of creativity & feature of creativity

Creativity defines as 'the use of imagination or original ideas to create something'

Thinking skills are:

1. Associations-
 - E.g. daydreaming or coming up with ideas while we sleep is often an important part of the story; these are times when the unconscious brain is able to relax and forge new and unexpected links
2. Incremental and radical
 - Creativity is about breaking through to radical new ideas
 - New ways of framing the problem and new directions for solving it.
 - The pattern of innovation is one of occasional flashes of inspiration followed by long periods of incremental improvement around those break through ideas. Creativity matters throughout this process
3. Divergent and convergent thinking
 - Divergent thinking – is about making associations, often exploring round the edges of a problem. We need divergent thinking to open them up, explore their dimensions and create new associations
 - Convergent thinking – is about focus, homing in on a single 'best' answer. we need convergent thinking to focus, refine and improve the most useful solution for a particular context
 - Mostly require a mixture of the two thinking skills.
4. Left and right brain thinking
 - brain is made up of two hemispheres.
 - Left hemisphere is particularly associated with activities like language and calculation. 'logical' processing
 - Involved in associations, patterns and emotional links| people with damage to the right hemisphere are often incapable of understanding humour or feeling moved by painting or music.
 - The both hemispheres are involved and play different roles. This has important implications for developing the skills of creative thinking
5. Pattern recognition
 - Creativity is particularly about patterns and our ability to see these.
 - Sometimes it is about finding a new pattern which make sense. One of the challenges in creativity is that it sometimes involves breaking rules, changing perspectives, seeing things differently.
6. Individual and group creativity
 - It is also important to recognise the power of interaction with others.
 - We are all different and have experience and approach and these differences mean we see problems and solutions from different perspective
 - Combining our approaches, sparking ideas off each other and building on shared insights are all powerful way of amplifying creativity.
 - 'two heads are better than one'

The creative process



- It's a key resource for us in thinking about how we can build creativity. If it's a process then we can map the stages, understand what's going on and provide some resources to help.
- This process takes place almost instantaneously, we recognise the problem and can retrieve a solution almost simultaneously.
- This also links to divergent and convergent thinking of seeing the creativity process is as a mixture of divergent and convergent cycle.

1. Recognition/preparation

- Creativity starts with recognising we have a problem or a puzzle to solve and then exploring its dimensions.
- Working out the real problem, the underlying the issue, is an important skill in arriving at a solution which works.
- Redefining and reframing are key skills here, being able to see the underlying pattern of the core problem

2. Incubation

- Sometimes redefining and exploring the problem is enough to lead to a solution but very often we are left with a problem and no obvious answer.
- Allow new connections to be made, and typical ways of helping this include relaxing doing something different, going for a walk, sleeping on the problem etc.

3. Insight

- Half formed ideas.
- Techniques like brainstorming make much of the act of writing down ideas.

4. Validation

- Where the idea, the core insight becomes refined and developed.

- It involves trying the idea out – prototyping – and using feedback from that to adapt and develop it.

2.3 Components of creativity and creativity techniques

The three components of creativity

1. Creative thinking skills
 - It refers to how people approach problems and solutions – their ability to combine existing ideas and knowledge in new formations.
 - The skill itself depends on personality as well as on how a person thinks and works
2. Knowledge
 - Expertise or knowledge encompasses everything a person knows and can do.
 - This knowledge can be acquired in different ways – through formal education, practical experience or interaction with other people
3. Motivation
 - Knowledge and creative skills are a persons raw material – the persons natural resources,
 - Two types of motivation :
 - extrinsic: originates from outside a person, whether the motivation is a 'carrot or a 'stick'. This 'makes' employees do their jobs in order to get something desirable and to avoid something painful. The most common extrinsic motivation that managers use is money, which does not necessarily stop people from being creative.
 - intrinsic: involves engaging in a behaviour because it is personally rewarding; essentially, performing an activity for its own sake rather than the desire for some external reward.

Creativity technique

Several techniques can be used to get the initial 'creative spark' and most can also be used to fine tune an entrepreneurial opportunity during the innovation stage.

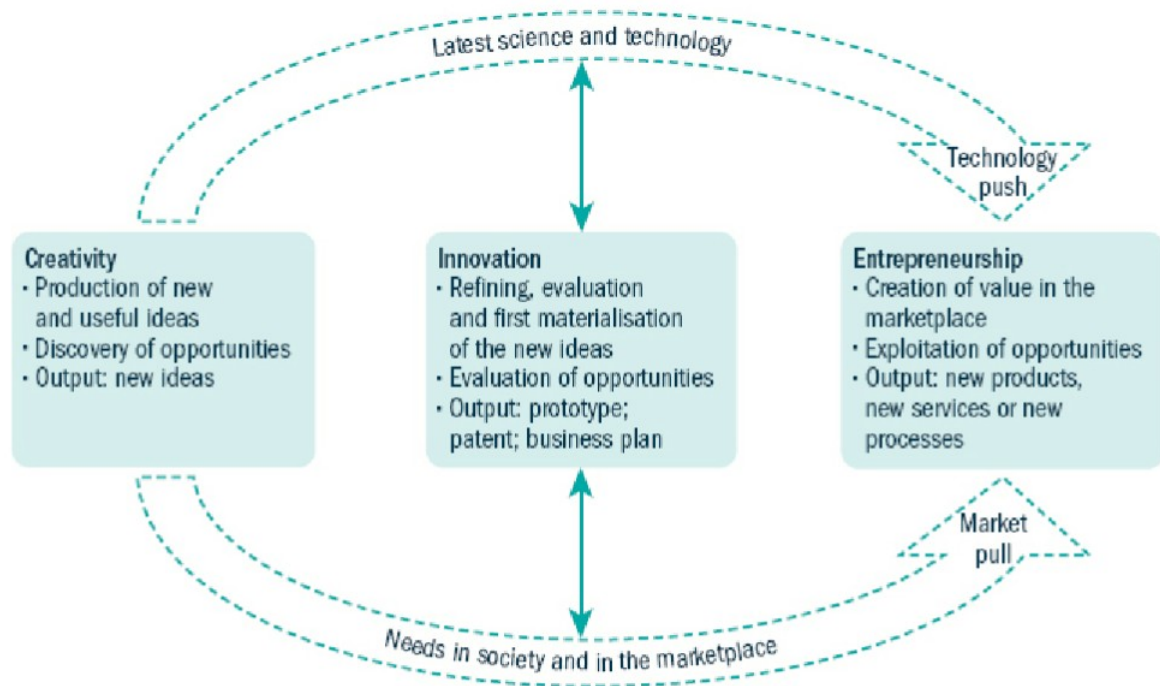
1. Problem reversal
 - This technique is based on the premise that the world is full of opposites.
 - Any attribute, concept or idea is meaningless without its opposite.
2. Forced analogy
 - Is a useful and light hearted way of generating ideas
 - This technique takes a fixed element such as the product or some idea related to the product and forces it to take on attributes of another unrelated element.
 - This forms the basis of a free flow of associations from which new ideas may emerge
3. Attribute listing
 - This ensures that all possible aspects of a problem have been examined.
 - After all the ideas are listed evaluate each idea –bringing to light possible improvements that can be made to the design of the product

4. Mind maps
 - Comparing, integrating and synthesising
 - Mind maps are an effective method of note-taking and useful for the generation of ideas by association
 - It involves writing down a central idea and thinking up new and related ideas that radiate out from the centre.
5. Brainstorming
 - It is the principle of suspending judgement

Factors influencing creativity

1. Encouragement of creativity – encouragement of generation and development of ideas appears to operate at three major levels within organisations:
 - Organisational encouragement plays an important role. Taking and of idea generation, valuing innovation from the highest to the lowest level of management and fair supportive evaluation of new ideas
 - Encouragement from supervisors indicates that project managers or direct supervisors can promote creativity.
 - Encouragement of creativity can occur within a group itself, through diversity in team members' backgrounds, mutual openness to ideas, constructive challenging of ideas, and shared commitment to the project.
2. Autonomy
 - Creativity is fostered when individuals and teams have relatively high autonomy in the day to day conduct of work and a sense of ownership and control over their own work and their own ideas.
3. Resources
 - Perceptions of the adequacy of resources may affect people psychologically by affecting their beliefs about the intrinsic value of the projects they have undertaken
4. Pressures
 - Some degree of pressure can have a positive influence if it is perceived as arising from the urgent, intellectual, challenging nature of the problem itself.
5. Mental blocks
 - Creativity can be impeded at the individual level because of various mental blocks.
 - Prejudice and functional fixedness are two examples of mental blocks

2.4 Linking creativity, innovation and entrepreneurship



Screening opportunities

During this process ideas will be assessed to determine if they represent an entrepreneurial opportunity – a situation where sustainable value and wealth can be created.

Any tool that aims to assess an opportunity should address three critical issues:

- Product feasibility – is it real? Can the product be made or service delivered using currently available, or at least feasible, technology?
- Market feasibility – is it viable? Does anyone want it? Has the product any features that someone values and would be ready to pay for?
- Economic feasibility – is it worth it? Can the product be developed, manufactured and distributed while generating a profit?

Is it real?

- Is it novel?
- Is it patentable?
- Is it technically feasible?

Is it viable?

- Is it better than rival products?
- Does somebody want to buy it?
- Can we make it with our resources?

Is it worth it?

- Is there a sizeable market?
- Are forecasted returns greater than costs?
- Are the risks acceptable?

Is it real? Establishing the novelty, patentability and technical feasibility

1. The first step of the process consists of determining the novelty, the patentability and the other technical feasibility of the product or service delivery.
2. Is it novel? – quite a few ‘inventions’ are not novel – findings in one field turn out to be known in another, a situation not helped by specialist scientific jargon and acronyms
3. Is it patentable? - a patent is a right granted for any device, substance, method or process that is new inventive and useful.
4. Is it technically feasible? - one way is to conduct a peer review.

Is it viable? Showing the superiority of the product and market interest

1. is it better than rival products?
2. Does anyone want to buy it?
3. Do we have superior resources

Is it worth it? Showing positive return

1. What is the market size and attributes

5.1 Elements of marketing mix

Marketing mix – term given to a set of variables that a marketer can exercise control over in creating offering for exchange.

- The 4 P's framework: (first approach to the marketing mix)
 - Product
 - Price
 - Promotion
 - Place
 - 5 P's > adding 'people'
 - 6 P's framework which added 'process'
 - 7 P's framework which added 'physical evidence'
-
- Markets are heterogeneous – they are made up of many different people with many needs and wants.
 - A target market is a group of customers with similar needs and wants. Not all customers will have the exact same needs and wants but they are more similar than different.

5.2 Product

- the marketing process comprises creating, communicating, delivering and exchanging offers that value for customers
- product is defined as a good service or idea offered to the market for exchange

The total product concept