

How Surveying Professionals can change the world from within.

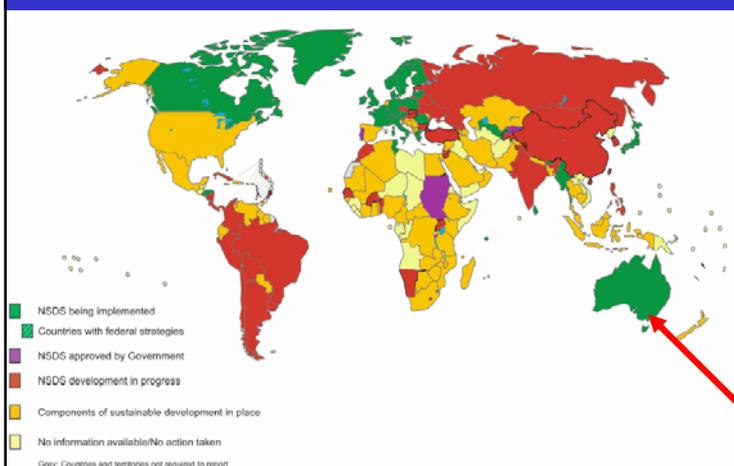


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FIG Working Week

Ts 6C The Profession

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Australia

Where do I come from?



Here!

Contextual factors leading to innovation and change

- Globalisation
- Climate change
- Social equity across the world
- Population structural changes
- Technological developments
- Land management reforms
- Sustainable development
- Environmental sustainability
- Economic competitiveness

The Winds
Of Change

Innovation definition

The successful exploitation of new ideas

UK Department of Trade and Industry (DTI, 2003)

Innovation must involve an inventive step and result in meaningful improvement in the business or organization concerned. (NESTA, 2007).

Why is innovation important?

Innovation is the central issue in economic prosperity.

Michael Porter, Harvard Business School

Innovation is a central driver of economic growth and social development.It propels productivity, spawns new industries and transforms existing industries. Economies which can effectively foster and commercialise innovations will grow faster and will generate more jobs and higher living standards.

Investing for Growth, Commonwealth of Australia, 1997[37]

It seen as equally essential in developing new approaches to seemingly intractable social challenges such as climate change, inequality and an ageing population.

NESTA, 2007,p.4.

Agents for change - Intrapreneurs or entrepreneurs inside organisations

1. Individuals who make a difference
2. People who spot and exploit opportunities
3. Those who find the resources required to exploit opportunities
4. Those who add value
5. People who are good networkers
6. Those with the ``know-how" and ``know-who"
7. Those with the ability to manage risk
9. Determined in the face of adversity and overcome organisational indifference and conservatism
10. Intrepreneurship involves creativity and innovation

How does Australia compare with the leading innovators ?

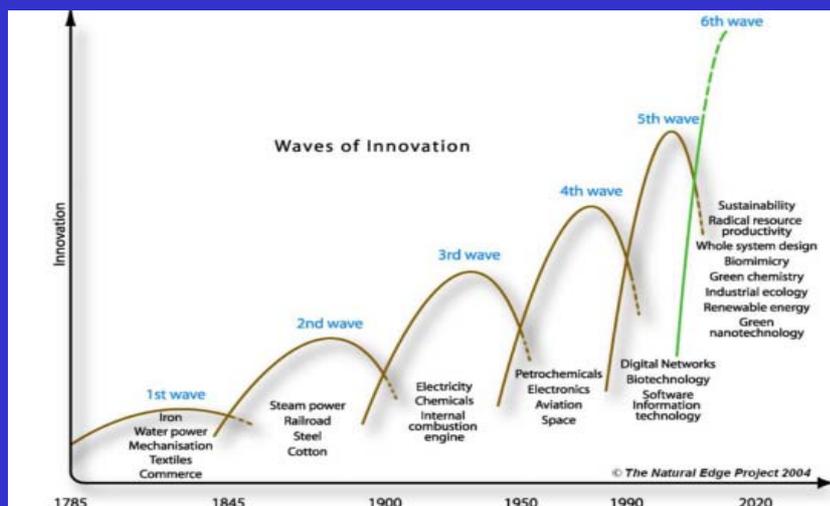
External collaboration by firms

	EU27	Den.	Ire.	Fin.	Neth.	Swed.	Australia
Innovating enterprises	42%	52%	52%	43%	34%	50%	34%
Collaboration with clients or customers	14%	28%	25%	41%	22%	28%	12%
Collaboration with suppliers	17%	28%	23%	41%	30%	32%	11%
Collaboration with universities or other higher education institutes	9%	14%	10%	33%	12%	17%	2%
Collaboration with public research institutes or govt. agencies	6%	7%	6%	26%	9%	6%	3%
All types of external collaboration	26%	43%	32%	44%	39%	43%	28%

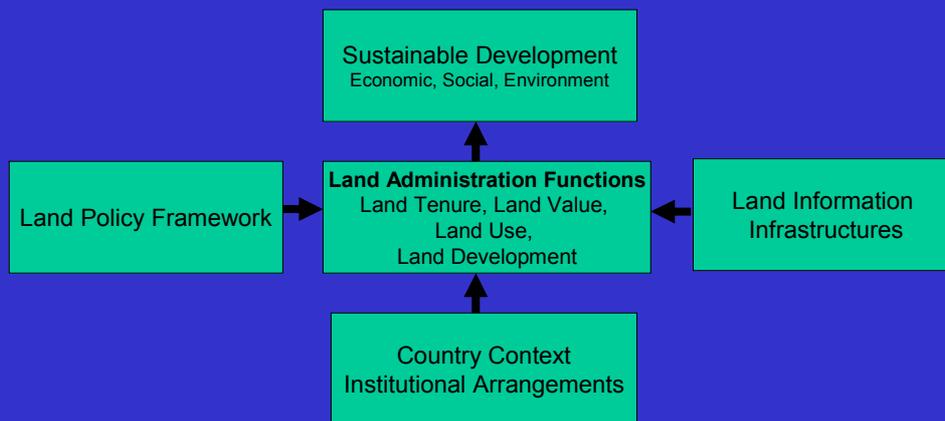
From Steen ABF (eurostat news release 27/2007 22 Feb. 2007 and ABS Cat. 8158.0)

External collaboration by innovating firms in the EU (2002-04) & Australia (2004-05)

Waves of innovation of the first and the next industrial revolution



Innovation and change within the context of the Land Management Paradigm



Adapted from Stig Enemark - 2004

Land management professionals as change agents and innovators ?

Environmental sustainability

Foundation of economic life

Social capacity building

The form of the Victorian land management industry

- 1. Scientific measurement sector** – typified by innovation around product development that is driven by technological change.
- 2. Organisationally based sector** – land policy and administration sectors.
- 3. Small business sector** – service delivery by land management professionals operating a practice, they tend to be small to medium organizations.

Scientific measurement sector

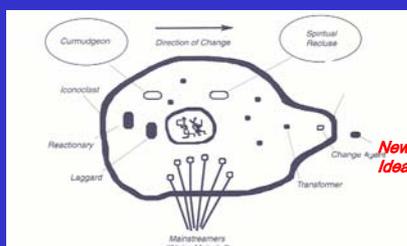
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- In high innovation sectors innovation is increasingly 'part of the day job' across the whole organisation.
 - Includes spatial sciences equipment manufacturers and Universities and research organisations.
 - Suppliers and intermediaries play a major role in developing and diffusing innovations.
 - Effective sectoral systems of innovation generate, develop, implement and diffuse innovation rapidly and efficiently.
 - Supporting industry activities and sharing knowledge allows other parts of the industry to share in the innovations

Organisationally based sector

- Mostly larger organizations that have an important influence over industry development.
- Government is an important player Australia. The land management function is delivered through the Department of Sustainability and Environment.
- Within government bureaucracies internal change agents or 'intrapreneurs' can play a critical role in driving innovation and change.
- However the public sector is often poor at innovation from within and poor at learning from outside. It contains many innovative people but isn't good at harnessing their talents and imagination.

Why is innovation constrained?

- **Short term thinking due to limited time-horizons**
- **Reluctance to risk public money on experimental innovation**
- **No-one's job**
- **Risk aversion**
- **Too many rules**
- **Uncertain results**
- **High walls around activities create silos**
- **Unsuitable structures**



How can this be overcome ?



1. Leadership and culture:

- Teams and networks dedicated to organizing innovation;
- Internal processes that back innovation;
- Human resources policies that encourage and support innovative and creative people including intrapreneurs;

2. Pulls and pushes:

- Pro-innovation governance supported by the people in power;
- Markets for outcomes achieved rather than adhering rigidly to rules.

3. Sophisticated risk management:

How can this be overcome ? Cont'd



4. Creativity and recombination:

- Support for the public sector's hinterland gaining new ideas from industry, universities and the professions involved in delivering services;
- Ensuring the public sector engages in open innovation.

5. Prototypes and pilots:

- Options for flexible experimentation including pilots and prototypes;
- Investment for research, trials, training and evaluation.

6. Scaling and diffusion:

- Investment in diffusion of ideas including learning how to do this effectively and ensuring service deliverers understand how to successfully implement new services.

Small business sector



Open innovation

- Size prevents direct funding of research and development.
- Can adopt and absorb new ideas from other parts of the sector or other industry sectors
- Success depends being able to draw on a 'hinterland' of ideas from related sectors and is often a global process.
- Professional organizations locally and globally play a major role in providing networks and frameworks for providing and sharing ideas.
- Important role is played by those in the scientific measurement sector in transferring information and ideas.

Key role of young professionals and students



Student's and young professional's are a great source of the most up to date thinking and practice.

- Study found 50 % of innovation came from middle managers and front line workers. (Borins,2001)
- Group had younger people who are close to cutting edge thinking and are usually high level users of information technology.
- Being close to day today operations allows them to apply their knowledge in an innovative way.
- **Integrating the young professionals into a practice can have a positive impact on innovative service delivery.**

System wide approach to innovation

A systems approach to implementing innovation in land administration would achieve ongoing innovation at a consistent level.

It would be;

- driven by a coherent and well supported policy
- supported by organizational mechanisms that encourage innovative activity
- tap into ideas from the hinterland of the industry, academia, professionals and service users



Disclaimer: The views in this presentation are my own and are presented for the purpose of academic and professional research and do not necessarily reflect the policy or views of the Department of Sustainability and Environment;

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