

# Foresight International Seminar: From Theory to Practice



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Australian Centre for Innovation & International Competitiveness

## 21st Century focus



## Where we work



The Australian Centre for Innovation works with public and private organisations around the world to better address the challenges of the future through innovation...

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- Innovation in a Global Knowledge



# Foresight – an evolving scope

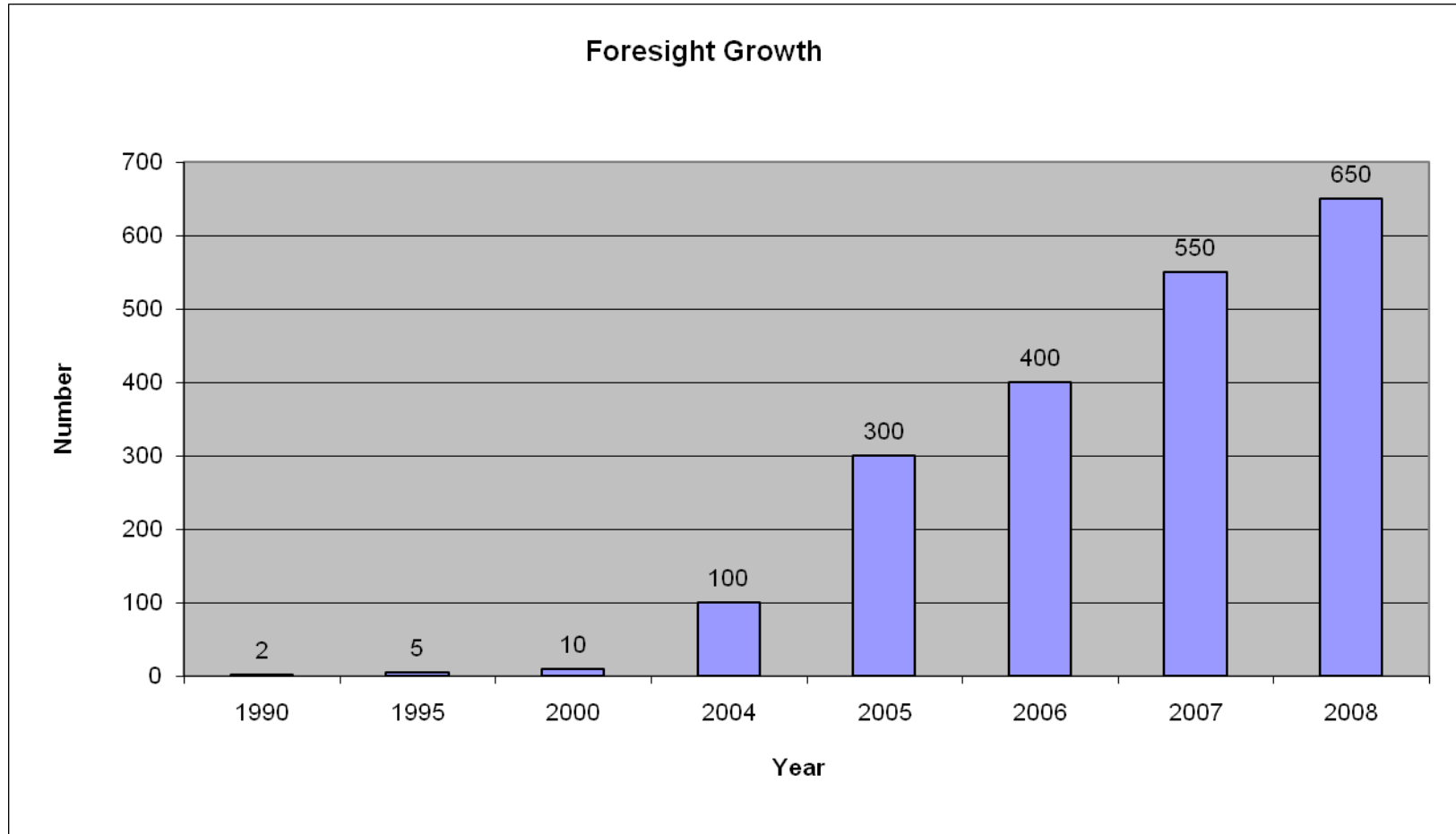
From

“a systematic means of assessing those scientific and technological developments which could have a strong impact on industrial competitiveness, wealth creation and quality of life” (Georghiou, 1996)

To

“a systematic, participatory, future intelligence gathering and medium-to-long term vision-building process aimed at present-day decisions and mobilising joint action” (Forlearn 2007)

# Growth of Foresight Activity



# Transformation of Foresight

- Emphasis – from methods to outcomes and policy
- Tool – from specialised to embedded
- Focus – from national to regional/sectoral/local/organisation (Companies, Govt Departments, Universities)
- Application – from priority-setting for public research to strategy, planning, decision-making, innovation
- Scope – from technological to socio-economic
- Scale – from ‘macro’ to ‘meso’ and ‘micro’
- Increasingly IT/Internet-enabled
- Growth in foresight infrastructure capacity

# Impacts of Foresight

- Generating strategy
- Prioritising resources and maximising realisation
- Building partnerships/networking
- Enhancing intelligence
- Early warning systems
- Enhanced societal learning
- Knowledge management
- Enhancing innovation

# Changing Mindsets

- “Foresight is about changing mindsets - it is a process where we generate, and keep generating, a shared sense of where we wish to go as a society. It is about being better prepared for the future” (MORST, 1997)
- One among 18 impacts of foresight is ‘changing mindsets’ (FTA Seminar Anchor Paper, IPTS, 2008)
- ‘Building strategic visions’ (FORLEARN, 2007)

# What is a Mindset?

“a **mindset** is a set of assumptions, methods or notations held by one or more people or groups of people which is so established that it creates a powerful incentive within these people or groups to continue to adopt or accept prior behaviours, choices, or tools.” Wikipedia



# The Deep Constraint of Mindsets

- Experts, in particular, appear to have extreme difficulty in questioning the foundations for their belief – think of Kuhnian paradigms.
- This is because we can only view our world through our mental paradigms or mindsets.
- These have evolved so that we can respond automatically to things of importance but leave us intrinsically prejudiced.
- Because we are constrained to look at the world through our mindsets, the only way to see more is to acquire more mindsets.

(developed from A. Snyder, Centre for the Mind, 1996)

# The Need to Challenge Mindsets

1. The scale and scope of the challenges we face
2. The loss of legitimacy and authority of knowledge and institutions
3. The increasingly 'wicked' nature of problems
4. The disruptive nature of the world we live in

# Profound Challenges

- Food availability and price
- Energy availability and price
- Water availability and price
- Climate change
- Population and demographics
- National and personal security
- Cyberspace transforming effects
- Managing increasing complexity

# Loss of legitimacy and authority of knowledge and institutions

- In the age of Internet-based social networking, traditional expert knowledge is losing its former authority
- Every person has one relevant fact and no-one can explain the nature of a system
- Emerging power of narrow sectional interest groups
- Reduced legitimacy of central governments, but paradoxically, greater expectations on them

# Emergence of problems with new characteristics

**Type 1** - Simple isolated problems – *address tactically one at a time*

**Type 2** - Inter-connected problems – *requires a strategic approach; leads to bureaucratic hierarchy, centralised control; government in charge*

**Type 3** – Dynamic interactive problems – *changes in one problem area affect others, so multiple claims of responsibility; government and governed must cooperate to address problems*

**Type 4** – Aggressive interactive problems – *they have a momentum of their own, high uncertainty, impact of interventions are unpredictable; the resulting turbulent environment requires government and governed to work closely together to address problems where there may be no obvious solution*

# How to Challenge Mindsets?

Recognise that the 'rules' which have been evolved to design and conduct embedded or adaptive foresight with the objective of consensual change are not appropriate to the pursuit of changed mindsets and new perceptions. A different type of approach is needed.

# Techniques for Mindset-Challenging Foresight

- Dialectical inquiry – role-play development of opposing alternatives
- Devil's advocate – deliberate opposition/adversarial critique (Schweiger et al, 1989)
- Creation of more extreme scenarios
- Inclusion of 'remarkable people' (Wright et al, 2009)
- Challenging 'wild cards'
- Science fiction/fantasy
- Stretch targets/possibilities



# Charter of Good Practice in the Managerial Application of Foresight

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- A well-resourced over-the-horizon scanning capacity
- Significant analysis of weak signals of change
- Planning and decision-making conducted within a significant future-oriented environment
- 'What if ?' analysis embodied as a regular component of risk analysis and management
- Regular web-based engagement of multiple perspectives
- Strategic conversation as a recognised KPI
- Routine roadmapping towards defined objectives
- All staff trained in use of foresight tools





# Charter of Good Practice in the Transformative Application of Foresight

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- A Strategic Intelligence Unit (SIU) at the level of the Cabinet Office, or equivalent
- SIUs or SI capacity in every major government department and agency
- Mechanisms for collaboration, coordination and exchange of information between all SIUs
- Application of transformative foresight techniques
- Regular production and communication of SIU analysis and findings
- Establishment of an appropriate community of practice around each SIU
- Open communication models with all information routinely available to the public
- Engagement with all forms of media to promote a reflective future orientation