The Tools of Foresight and their Effective Use

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Australian Centre for Innovation & International Competitiveness
A Time of Turbulence!

- Global Financial Crisis
- Geo-political transformation
- Instability of Governments
- Growing and visible inequity
- Social breakdown
- Mass migration
- Rogue states with WMD
- Loss of confidence in systems of governance

Some Approaches to Thinking about the Future

1. Apply rigorous scientific knowledge
2. Forecasting and modelling
3. Rely on past experience
4. Resist it
5. Resort to some external guidance
6. Develop a capacity, both intellectual and organisational, to address the future — foresight or strategic intelligence
Foresight – an evolving scope

From

“a 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” (Foren Project, 2008)

Growth in the Use of Foresight

![Foresight Growth Chart](image)
Two basic approaches to Foresight

Exploratory approach: what would we expect to happen if this event happens or if that trend develops?

Knowledge about the present

What if
What if
What if

Alternative futures

Normative approach: what to do now to make the “best future” happen?

Present actions

What to do

Alternative futures

Source: Keenan/PREST

Landscape of Future Studies

Focus on Markets and Business Environments (economic, political, societal, ecological) = non-technological driving forces

Short/medium term perspective

Technology Foresight (e.g. Delphi-Studies, Technology Monitoring)

Technology Assessment (e.g. Offices for technology assessment)

Long term perspective

Scenarios of Future Societies (e.g. Political think tanks)

Global Trends (e.g. World Bank, Worldwatch Institute)

Focus on Technologies

Technology Monitoring

Innovation and Technology Analysis

Product Impact Assessment

Prospective Economic Analyses

Strategic Marketing and Trend Research

Strategic Market Research

Competition Analysis

Today

+ 5 years
+ 10 years
+ 15 years

Focus on Markets and Business Environments (economic, political, societal, ecological) = non-technological driving forces
Methods across the Foresight cycle

May use formal methods to identify and classify key sectors and problem areas.

Formal methods to identify, recruit and manage stakeholders:
- Stakeholder analysis;
- nomination; steering groups, panels, working groups, etc.

Methods to:
- Gather information: horizon scanning, brainstorming, etc.
- Identify and explore developments: extrapolation, impact assessment, Forecast Delphi, etc.
- Analyse systems and explore alternatives: modelling, scenario analysis, etc.

Quantitative/Qualitative
Expert interaction/creativity/evidence
Participatory, top-down...
Recent Major Advances in Foresight/Strategic Intelligence

- Widespread use in major companies
- Increasingly embedded in government planning processes
- Development of comprehensive databases of foresight projects - eg European Foresight Platform
- Growth in systematic horizon scanning - eg UK Horizon Scanning Centre with a web-based database of scan results, Netherlands Horizon Scan
- Systematic development of methods for analysing ‘Wild Cards’ and ‘Weak Signals’ - eg ILTD and OLBU
- Application of data mining tools to technology-related data such as patents - major focus in US and China
Different Perspectives on Foresight – Business and Government

- **Industry** are interested in the extent to which foresight can lead to new business and market opportunities - their driving interest is to increase divergence in order to identify new possible futures.

- **Government** officials are interested in the extent to which foresight can be applied to reduce uncertainty in their decision-making and provide guidance about possible technological developments and their consequences i.e. to reduce or remove possible surprises. Their driving interest is in increasing convergence i.e. moving from having to consider multiple possible futures to a single probable/preferred future which is more amenable to their analytical skills, and well-tested policy mechanisms.
Charter of Good Practice in the Managerial Application of Foresight

- 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 Internet-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

- 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
- 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
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