# Knowledge Society Organizational Foresight

Angela Ioniță

Romanian Academy

Research Institute for Artificial Intelligence

Dan Grosu

National University Research Council

Executive Agency for Higher Education and Research Funding

1. **DEFINING FORESIGHT**
2. **LEARNING CICLES OF FORESIGHT**
3. **ORGANIZATIONAL FORESIGHT**
4. **FUTURE CORPORATE FORESIGHT**

# Foresight

Foresight means "care or provision for the future".

Oxford English Dictionary

Foresight is a tool or set of tools used "to survey as systematically as possible what chances for development and what options for action are open at present, and then follow up analytically to determine to what alternative future outcomes the developments would lead."

Martin and Irvine (1989)

Foresight is "a systematic, participatory, future intelligence-gathering and medium-to-long-term vision-building process"

Cassingena Harper (2005)

# Vann diagram



**Values Norms**

**Social**

**Politics**

**Science & Technology**

**Ecology**

**Economic**
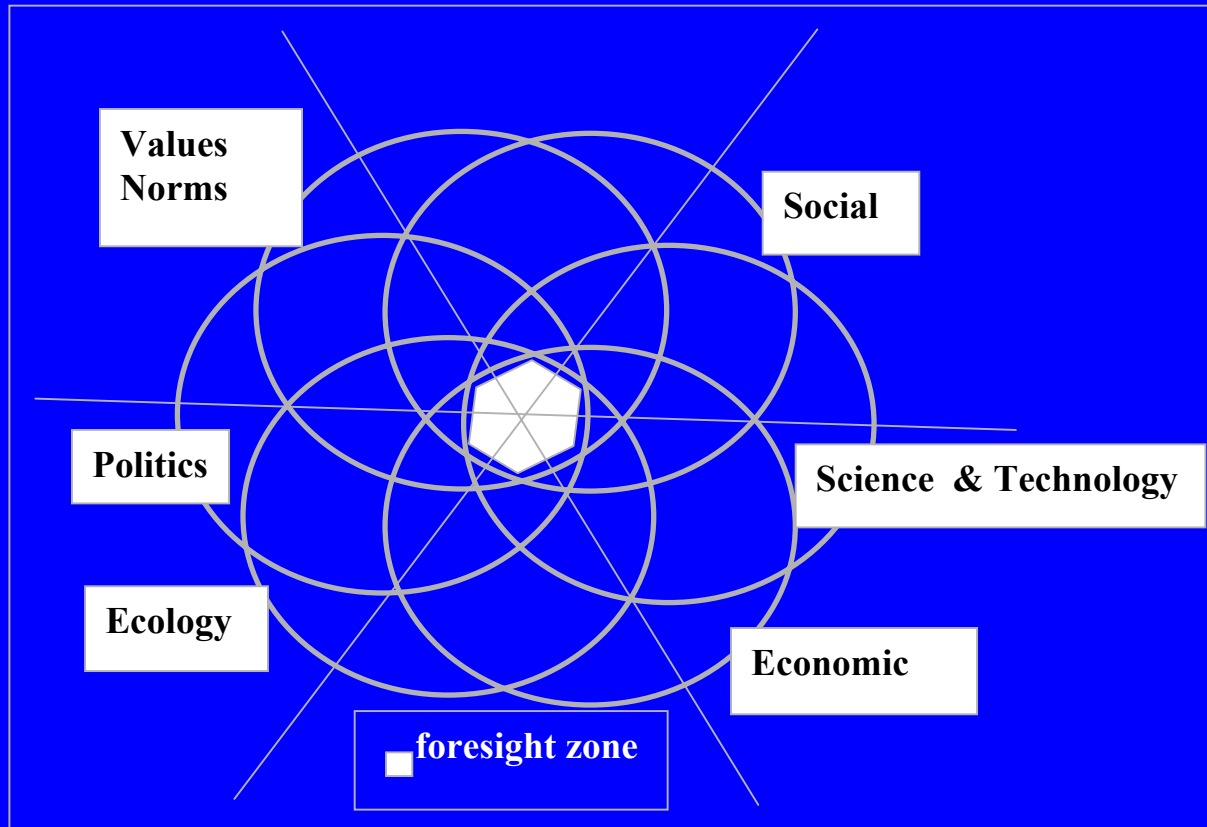
**foresight zone**

General objective of foresight is to anticipate future developments in science, technology, economy, politics and society.

*Source: Loveridge(2001)*

*Dan Grosu, 10.13.2005*

# Reasons for Foresight

Policymakers seeking to set priorities

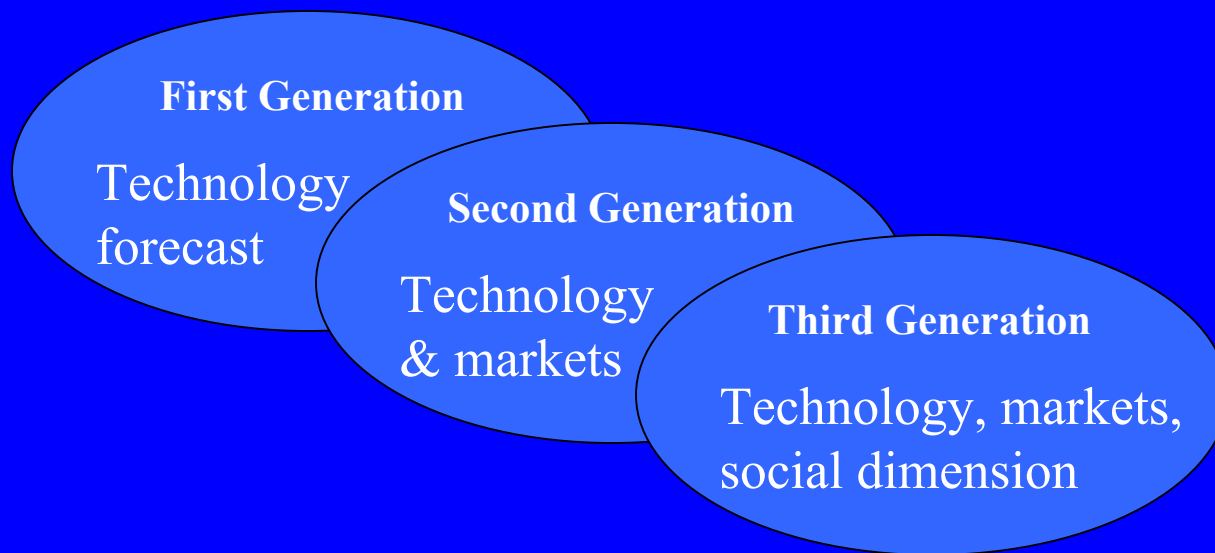   … budgets, competition, networks …

Companies trying to innovate

   … customers, regulators, collaborators …

Creating a shared strategic vision with reduced uncertainty
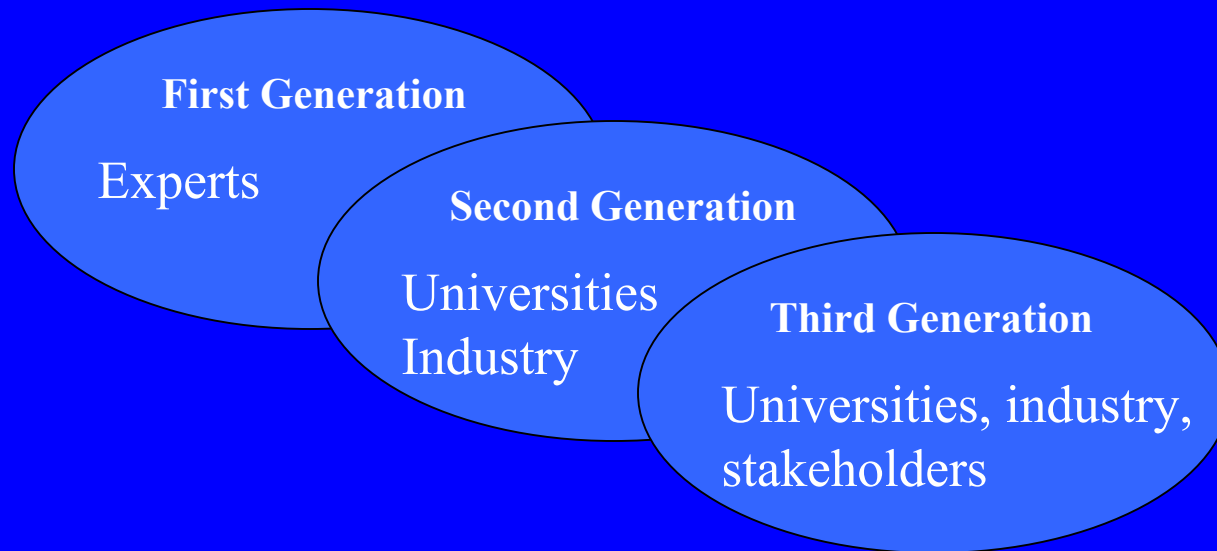
# Genealogy of National Foresight

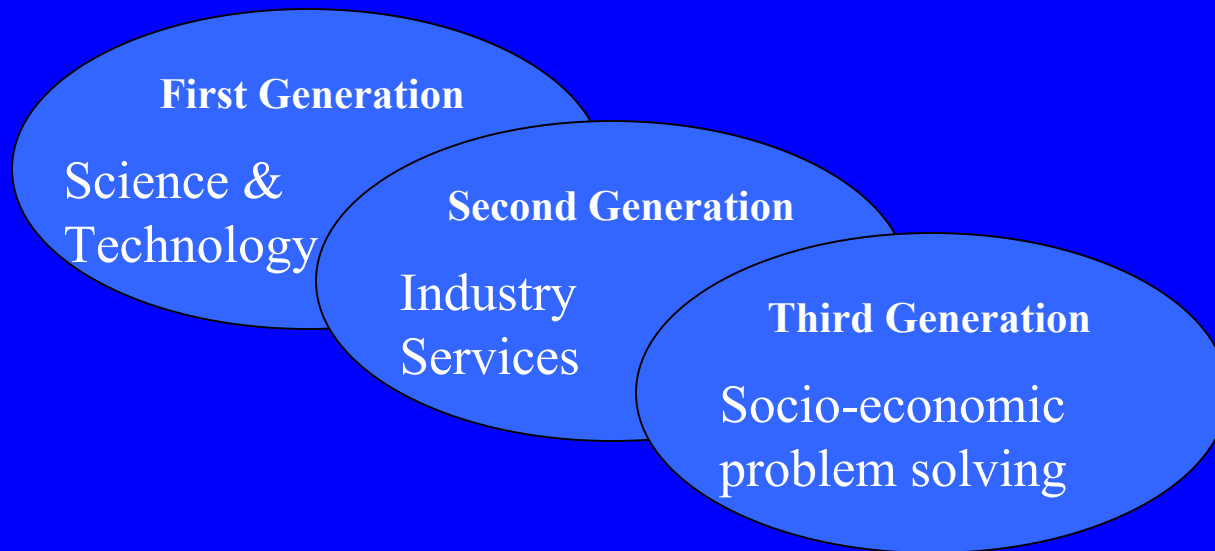| | Delphi | Mixed | Panel / scenario |
|---|---|---|---|
| 1970s | 30 years in Japan | | |
| 1989 | | | Netherlands |
| 1990 | 1st German | | |
| 1991 | | | Critical Technologies USA |
| 1992 | | | New Zeeland |
| 1993 | South Korea | | Germany |
| 1994 | France, Japan / Germany | 1st UK TF Programme | |
| 1995 | Japan – Germany Delphi | | 100 key technologies France |
| 1996 | | | Australia, Netherlands |
| 1997 | | OPTI Spain | Ireland |
| 1998 | Austria | Hungary | South Africa, New Zeeland, Sweden |
| 1999 | | | 2nd UK TF Programme, FUTUR Germany |
| 2000 | | | 2nd 100 key tech. France, Portugal, Italy |
| 2001 | 7th Japanese Delphi | | Czech Rep., Malta, Cyprus, Estonia |
| 2002 | | Turkey | Bulgaria, Romania, 3rd UK TF Programme |

# Generations of Foresight

**First Generation**

Technology forecast

**Second Generation**

Technology & markets

**Third Generation**

Technology, markets, social dimension

*Source: Gheorgiou(2005)*

*Dan Grosu, 10.13.2005*

# Key actors

First Generation

Experts

Second Generation

Universities
Industry

Third Generation

Universities, industry,
stakeholders

*Source: Gheorgiou(2005)*

# Programme structure

**First Generation**

Science & Technology

**Second Generation**

Industry Services

**Third Generation**

Socio-economic problem solving

*Source: Gheorgiou(2005)*

# Important lesson!

- "Common space and joint ownership elements of foresight definition imply that foresight should not be in a linear relationship with implementation, but rather that foresight should move into the implementation space."

Luke Gheorgiou (2005)

# Systemic approach to Foresight

| Activities | Methods |
|---|---|
| Identifying change | Time Series Analysis, Scanning, Structured Brainstorming Workshops, Delphi Survey |
| Impacts of change | Cross-impact analysis, Focus groups, Paradigms |
| Imagining alternative futures | Scenario Building, Scenario Analysis, Econometric models, Statistical Models, Stochastic Models |
| Visioning preferred futures | Future Workshops |
| Planning and implementing | Action Plan |
| Monitoring and evaluating | Evaluation Models |

Infinite foresight loop

*Dan Grosu, 10.13.2005*

# Public vs. Private Foresight

| | PUBLIC | PRIVATE |
|---|---|---|
| **General objective** | To describe future developments in science, technology, economy, politics and society. | |
| **Specific objectives** | ideas and visions for technology development and innovation<br>related policy measures | opportunities and risks in markets, technologies, business environment<br>strategic options |
| **Experts** | scientist and science managers<br>industry, business<br>public officials, civil society | strategic planning units<br>R&D units<br>think tanks |
| **Time-frame** | 10-50 years | 2-15 years |
| **Duration** | 1-3 years | 3 months – 1 year |

# Corporate Foresight

**"The Collecting Post"** - firms with a low degree of foresight activities

    basic background information for the decision-making processes in strategic areas

    collecting future related information developed by others

    examples: Lufthansa, Procter & Gamble, Volvo.

**"The Observatory"** - autonomous foresight unit

    analysis of existing data, generate future-related knowledge for long-term strategic intelligence

    networks composed of specialists

    examples: Deutsche Bahn, IBM, Eni.

**"The Think Tank"** - group of full-time futurists, experts and researchers

    critical issues in the business environment, socio-economic sphere

    global networks of experts

    examples: Ericsson, British Telecom, BASF, Decathlon, EdF, DaimlerChrysler, Philips.

# Future Corporate Foresight

- Distributed model of foresight embedded at multiple levels within the innovation system
- Acquisition of corporate knowledge about the future relates more towards the ability to scan and network
- Main drivers are self-organizing and bottom-up, while multi-level governance provides starting points
- Digital foresight – development of personalized scenarios

*Dan Grosu, 10.13.2005*

# Thank you!