

Benchmarking UK Strategic Futures Work

A report for the Performance and Innovation Unit

June 2001

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The Annex has been prepared and submitted in a separate document.

1 Background

Many public and private sector organisations engage in strategic futures work. They attempt to illuminate and understand the future and to use this insight to inform strategy and policy. In March 2001 the Performance and Innovation Unit (PIU) of the Cabinet Office issued a brief to benchmark UK strategic futures work against that of other countries and to identify best practice in the use of strategic futures work to inform policy making.

The Henley Centre, an independent consultancy with extensive experience of strategic futures work, was commissioned to carry out the assignment. This report benchmarking strategic futures work is the first of two summarising the findings of The Henley Centre's work on strategic futures. It seeks to describe the current futures landscape, and to place work done in this field by UK government within it. A second report explores examples of best practice in the strategic futures field.

Definition of Strategic Futures Work

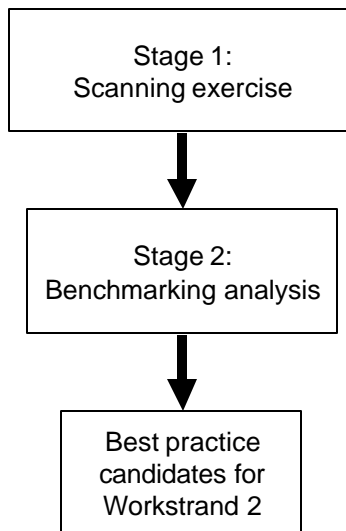
Most organisations engage in informal, ad-hoc consideration of the future as part of the normal process of planning and developing strategy. For the purposes of this analysis we have concentrated on formal strategic futures work carried out explicitly to create an understanding of how the world is likely to change over at least a 5-10 year timeframe and how such changes will affect the organisation, its work, and its role. For all organisations this involves some interpretation of current conditions and relationships, an understanding of the drivers and direction of change, and the extrapolation of conditions and relationships into the future. The output often takes the form of a number of different scenarios which portray possible future outcomes.

2 Methodology

2.1 Overview

The benchmarking analysis involved a two-stage process. The first was the identification of the organisations to benchmark. This was achieved through a scanning exercise using the internet, recommendations from the PIU, executive interviews with leaders in the strategic futures field, as well as existing Henley Centre knowledge and resources. 85 organisations were scanned and of these 52 were chosen for further exploration in the benchmarking exercise. At the end of the benchmarking analysis a number of organisations were selected for further analysis to identify examples of best practice in the use strategic futures work. The results of this work are explored in a second report by The Henley Centre entitled "Assessment of Best Practice in the Use of Strategic Futures Work".

Figure 1: Project Process



Source: The Henley Centre

2.2 Scanning Exercise

The scanning exercise cast the net wide. Countries within the OECD were scanned as well as faster growing economies outside the OECD (eg, China) and countries undergoing rapid political/social change (eg, South Africa). A diverse range of organisations were assessed, including:

- Government departments;
- Universities, major charities and NGOs;
- Think tanks and commercial futures consultancies;
- Commercial companies across a range of sectors.

Wherever possible, information available in the public domain was used for the scanning process. As a result, organisations were taken at 'face value' and the material presented to the world treated as a realistic

representation of their activities. Where necessary publicly available information was supplemented by interviewing members of the organisation in question.

To supplement the scanning exercise and to provide inputs to the benchmarking and best practice analysis, interviews with seven respected practitioners in the field were carried out. These were:

Name	Organisation	Position
Bob Tyrrell	Sociovision (France)	Director of Sociovision
Joop de Vries	Sociovision (France)	Director of Futures
Oliver Sparrow	Chatham House (UK/International)	Forum Director
Dr Ian Christie	Ex-member of the Policy Studies Institute, The Henley Centre and current associate of Demos (UK)	Freelance consultant/writer
Prof. Rod Coombs	University of Manchester (UK)	Executive Director
Hugues de Jouvenel	Futuribles (France)	Director General
Slawa Shumowski	Wolff Olins (UK)	Head of Futures

Of the 85 organisations included in the scanning exercise, 52 were selected for the benchmarking analysis. They were chosen on the basis of the depth of their experience in strategic futures work or because an aspect of their approach was particularly interesting. Where possible, a balance of organisations of different types was obtained and a wide geographical spread was aimed for. A full list of the organisations included in the scanning and benchmarking analysis can be found in the Annex (published separately).

Notable Gaps: Russia and China

Because Russia is experiencing tremendous change it should have been an interesting case to consider in the assessment of strategic futures work. However, the recent political, economical and social turmoil in Russia has limited the availability of corporate and/or government finance for strategic futures organisations. It has also led to resource problems, as organisations find it hard to access expertise. The current system has evolved so that politicians maintain influence over the activities of these bodies. Consequently they are susceptible to changes in leadership and political opponents find it easy to dismiss their output. The results of the scanning exercise suggest that Russia remains heavily dependent on the West for strategic futures insight, although the situation is improving.

As for China, the results of the scanning exercise suggest that where futures work is carried out it tends to be of a statistical nature, for example, analysis of population trends. Strategic futures work, such as scenario planning, does not appear to be a priority in China. Little evidence has been found of substantial strategic futures work carried out by the Chinese government, and certainly none that is available to individuals outside the government itself. The Chinese government does fund some research centres in China, the most notable

being the International Technology and Economy Institute (ITEI), which was included in the benchmarking analysis.

2.3 Benchmarking Analysis

The objective of the benchmarking analysis was to assess different organisations' approaches to and outputs from futures work and compare the UK's efforts relative to that of other nations. The work was conducted in April and May 2001. The table below shows the number and type of strategic futures organisations benchmarked in each country.

Table 1: Organisations Included in the Benchmarking Analysis

Country	Government Department	Independent Institution	University	Private Company	Private Consultancy	Total
UK	5	4	1	1		11
USA		3	3	2	3	11
International		5		2		7
Germany	1	2		1	1	5
Japan	1			2		3
France	1				2	3
Netherlands	2		1			3
Singapore	1	1				2
Australia	1					1
China	1					1
Finland		1				1
India	1					1
Norway	1					1
South Africa		1				1
Sweden				1		1
Total	15	17	5	9	6	52

Each organisation was assessed according to a number of criteria. These are defined below under four main categories: 1) objectives and remit; 2) scale and scope; 3) methods and approaches; and 4) impact on policy.

1) Objectives and remit

- ownership
- stated aims and objectives
- timeframe of futures analysis

2) Scale and scope

- length of experience in strategic futures work
- frequency with which strategic futures work is carried out

- staffing and organisational structure

3) Methods and approaches

- breadth and type of analysis
- tools and techniques employed

4) Impact on policy

- whether and how the impact is assessed

The detailed results of the benchmarking assessment for all of the 52 organisations included in the analysis can be found in the Annex (published separately).

It is worth noting that some futures work has purely promotional objectives. Publishing a futures report is a relatively low cost way to attract publicity and/or justify the existence of a strategic futures unit. The practice is common in the private sector and can also be found in the public sector. It is evidenced by media references to futures reports. This kind of futures work was excluded from the benchmarking analysis due to its lack of strategic intent. It deserves mention nonetheless as an illustration of the importance of understanding the underlying motivation for futures work.

Methodological Note

There was considerable variation in the definition and role of strategic futures work across the 52 organisations benchmarked. This is partly a function of the breadth of the analysis, which spanned a wide range of organisations with diverse aims, scale, resources and outputs. It is also because strategic futures is a diffuse discipline, if indeed it can be called a discipline at all, rather than an approach.

In carrying out the analysis, we were careful to avoid making comparisons between organisations which are entirely dissimilar or aggregate findings across organisations that cannot legitimately be grouped together. Taking into account these constraints, we analysed the significant qualitative differences in the way that strategic futures work is approached. A number of findings emerged, which are summarised in the next section.

3 Key Findings from the Benchmarking Analysis

3.1 Objectives and Remit

Anchored in History

Futures organisations and new paradigms in futures thinking tend to emerge from moments of social or political crisis. They are, at least implicitly, about making uncertainty less uncertain; about trying to discern order within disorder.

A few examples will suffice. Britain's oldest futures organisation, the Royal Institute of International Affairs (RIIA), was created in the wake of World War I to promote greater understanding of international issues. The German group Friedrich-Ebert-Stiftung (FES) was formed in 1925 under the Weimar Republic, and sought to foster social democracy and mass political participation. It was banned by the Nazis and then re-established in 1947. The French organisation Futuribles was created in 1960, as the Marshall Fund which had financed much of the reconstruction of post-war Europe was dissolved. At the time there was widespread concern about the stability of Europe's public institutions, made more acute in France by the crisis of the 4th Republic in the late 1950s.

The establishment of the Club of Rome, in 1968, was influenced by the social and cultural challenges represented by *les evenements* in France and elsewhere in its desire to address social, political, and cultural issues rather than the military and ideological matters which dominated Cold War politics. The scenario planning process of Shell seems also to have emerged from this, born of a belief that in uncertain times the linear certainties of conventional strategic planning were no longer an adequate vehicle for understanding the future. And one of the youngest organisations reviewed in the benchmarking process, the South African Association for the Management of Technological Innovation, SAAMOTI, which works together with the government, universities, and the private sector, could have emerged only in the wake of apartheid. Appropriately perhaps, sustainable and inclusive institutions such as SAAMOTI were identified in a famous set of scenarios, the Mont Fleur Scenarios, as essential if South Africa was to manage the transition from apartheid without political collapse.

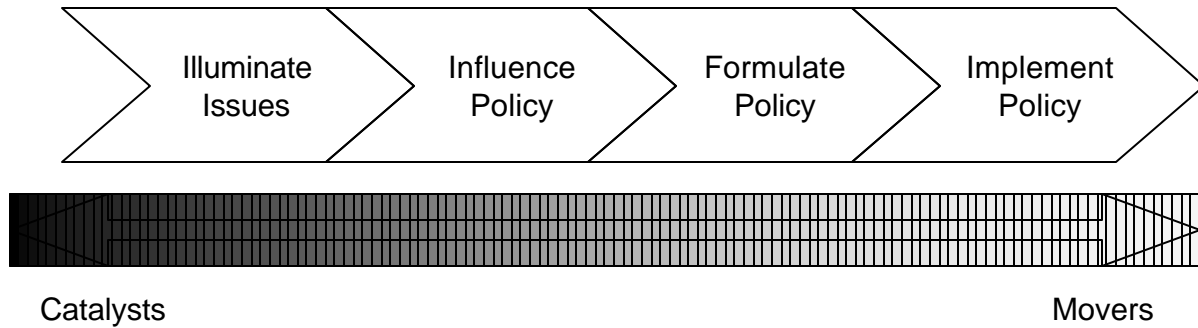
Although remits adapt over time, the period in which an organisation was created often remains a powerful influence on its ideological underpinnings, the issues it seeks to address and the approaches used. This historical legacy is a striking characteristic of many of the organisations benchmarked.

Catalysts versus Movers

It is important to be clear about the objectives of any strategic futures work. A key point of differentiation is the extent to which the aim is to:

- *Illuminate* the future and/or issues impacting the future;
- Use strategic futures work to *influence* policy, either directly or indirectly;
- *Formulate* policy using strategic futures insight;
- *Implement* policy, using strategic futures work to enact policy change.

Figure 2: Objectives of Strategic Futures Work



Source: The Henley Centre

Some organisations – the ‘catalysts’ – concentrate towards the left of this model whereas others – the ‘movers’ – concentrate more on enacting change.

Different skills, competencies and organisational structures are deployed at each stage. For example, to illuminate issues comprehensive research skills and creative thinking are required, and external perspectives are frequently sought to open up thinking. Influencing policy tends to take place via formal channels or relies on the efforts of particular individuals. The skills required are less tangible, involving liaison and persuasion, thus more experienced personnel are desirable. Formulating policy requires a detailed understanding of the ‘legislative’ process in the particular country or company, as well as of the various stakeholder groups whose views need to be taken into account. Implementing policy requires a long-term approach. Continuity of staff throughout such a process is desirable, given the length of time it typically takes to implement change. This is an area which is discussed further in the best practice report.

Illuminating Issues

All but two of the organisations assessed include in their remit the aim of illuminating issues shaping the future and evaluating the impacts for their particular sphere. The two organisations that do not are the Australian Agricultural, Fisheries and Forestry Department and the UK’s Design Council. Both believe that this is a job being done comprehensively by other organisations within their fields. The Design Council sees its role as that of facilitator, rather than idea generator, and encourages others to share their insights and working methods. Similarly, the Australian Agriculture Department’s objective is implementation rather than idea generation.

Four organisations define their remit as *solely* to illuminate issues. These are The Finland Futures Research Centre, The Centre for Entrepreneurship at the Massachusetts Institute of Technology in the US and two German organisations – the Z Punkt and Wissenschaftszentrum Berlin (WZB). The Finland Research Centre and MIT’s Centre for Entrepreneurship both train students in futures thinking, and limit their futures work to illuminating issues which will be of help in this process. The two German organisations see their role as generating theories and data, and they then communicate their results to the scientific and policy making communities.

Influencing Policy

Approximately half of the benchmarked organisations include in their remit the aim of influencing policy. The majority of these operate independently from government or companies and include strategic planning consultancies, think-tanks and research institutes.

Encompassing All Four Objectives

Around a quarter of the benchmarked organisations extend their remit to include all four of the areas identified. These include four government departments in the UK and two in the Netherlands, one academic institution (the University of Tilburg in the Netherlands) and companies such as Shell, Ford, Orange and ICL. The challenging nature of this extended remit is explored further in the discussion section.

Time Frame of Futures Analysis

The vast majority of the organisations assessed concentrate on understanding issues more than 5 years into the future and many examine issues over a 10-20 year timeframe. A smaller number of organisations examine the longer-term future. For example, Norway 2030, established at the turn of the millennium, has an unusually long-term focus, allowing it to examine all aspects of public policy. Considerable short-term political pressures have not prevented UK government departments from managing to retain longer-term objectives, for example the Department of Health's 10 year strategic plan.

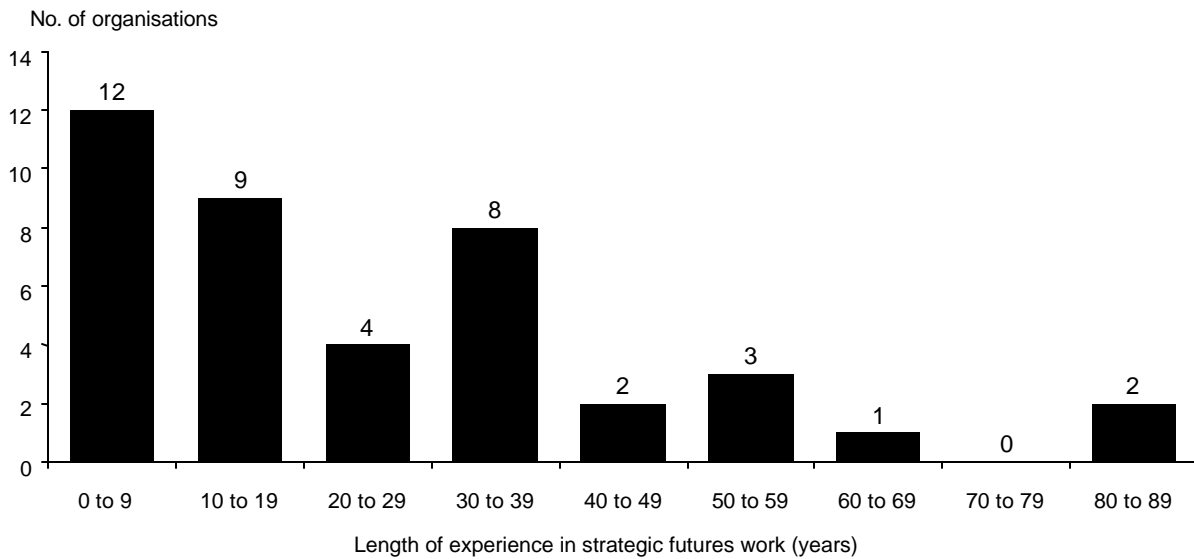
The optimum timeframe to adopt for strategic futures work is examined in the best practice report. A general observation is that the timeframe should be far enough into the future to allow the organisation to see past day-to-day management issues. It should also be appropriate to the planning cycle. Thus sectors such as transport or pharmaceuticals where long-term investment decisions need to be taken are likely to require a longer timeframe for strategic futures analysis than sectors with shorter planning horizons.

3.2 Scale and Scope

A Long Standing Tradition

The significant length of time for which many strategic futures organisations have been operating is striking. Among the 52 organisations assessed the length of experience ranged from 1 to 85 years (the oldest being the Brookings Institution in the US). Just over half the organisations assessed had been in business for less than 20 years, with the majority of the rest being in business between 20-40 years.

Figure 3: Duration of Futures Organisations



Source: Benchmarking analysis

The total is less than 52 due to the unavailability of the data for some organisations

Length of experience in strategic futures work is a useful indication of the extent to which the practice is institutionalised within the organisation. In this regard, it is interesting to note that the UK includes some of the oldest and newest strategic futures organisations.

The UK government department with the longest tradition of strategic futures analysis is the Planning Unit within the UK's Foreign and Commonwealth Office. This is mirrored in most developed countries where there is a long standing tradition of strategic futures analysis in foreign policy and defence, and is particularly the case in the US.

Other examples of long standing government funded strategic futures programmes include the Institute for Southeast Asian Affairs in Singapore (33 years old) and the Social and Cultural Planning Office of the Netherlands (28 years old).

The South Africa Association for the Management of Technological Innovation (SAAMOTI), Norway 2030 and several of the futures units within the UK government department make up the newest additions to the strategic futures field.

Ongoing Commitment

Many of the government and public sector organisations assessed carry out formal strategic futures work on an ongoing basis. In contrast, in the commercial sector Shell and ICI's sustained commitment to strategic futures work is rare. In most private companies project-based work is the norm and strategic futures projects are commissioned to support business planning, often to answer a particular strategic question.

The advantages of the project-based approach are the specific nature of the work and the discipline of working to a limited timeframe. The disadvantages are a tendency to reinvent the wheel and a lack of understanding of the findings on a company-wide basis. The benchmarking analysis suggests that the optimal approach is to

combine a team with continuous responsibility for futures analysis with project-based assignments focusing on specific aspects of policy. This issue is further explored in the best practice report.

Staffing and Organisational Structure

In almost all cases it was not possible to obtain information about the funding for strategic futures work as this information is rarely made available publicly. It was, however, possible to assess the level and nature of most of the organisation's staffing arrangements for strategic futures work.

A distinct activity?

A key issue is the extent to which strategic futures work is regarded as a distinct activity or subsumed into general strategic planning. The specialist consultancies included in the benchmarking analysis certainly regard strategic futures work as a distinct activity. For example, the Global Business Network in the US and Sociovision in France justify their existence on the basis that strategic futures is a complex process requiring specific skills and experience.

It is striking, however, that strategic futures consultancies are small in comparison to global management consultancies such as Accenture or McKinsey. Part of the explanation may lie in the cultural embeddedness of strategic futures work – an issue explored in the discussion section. Another explanation is that much strategic futures work in commercial organisations is carried out by strategy and marketing departments, rather than strategic futures units. For example, within Ford, strategic futures work in many different guises is carried out - including forecasting, trend analysis and creative projections. However, this work is typically subsumed into the general process of developing business strategy. As a result, strategic futures tends not to exist as a distinct activity within the organisation, but is nonetheless a critical element in the development of strategy.

Whilst many companies engage in strategic futures analysis, few do so in a sustained and focused fashion. Significant factors limiting the commercial sector's use of strategic futures work are short-term financial pressures and the limited tenure of staff. For example, the average tenure of a marketing director in the UK is between 12 to 18 months. When strategic futures work is undertaken it is often delegated to middle management. This can diminish the perceived importance of the work within the organisation and thus lessen its impact.

Within government, the UK included, it is increasingly common for specialist strategic futures units to exist, reflecting a growing recognition that the field is not only important to policy making but a specialist area in its own right.

A dedicated core

Almost all of the government organisations assessed have at least some staff dedicated permanently to strategic futures work. A notable exception is the strategic futures unit within the UK's Department of Health (DoH) which appears to operate entirely on the basis of part-time involvement.

The lack of full-time staff in the DoH strategic futures unit could be thought to affect the continuity of the work and prevent the organisation from building up 'futures capital' (the knowledge benefits gained from the continuing analysis of futures work). However, the staff of the futures unit are seconded from elsewhere in the National Health Service and related organisations. They therefore have a wealth of experience directly related to the issues with which the futures unit is grappling, and can make connections between the long-term

thinking and strategic implementation. The benefit of such insight is clear in the DoH's scenario project 'The 10 Year NHS plan', in which the futures unit played a central development role. It also helped the implementation of the plan, which is well-regarded within Whitehall.

Around half of the organisations benchmarked augment a core team of permanent staff with part-time, seconded or contracted staff. In some the core team is very small (literally 1 or 2 people) and thus the unit is mainly comprised of part-time or seconded staff.

A network of contributors

Many of the organisations assessed involve people from outside the unit in illuminating issues and developing strategic futures insight. A smaller proportion also involve external people in making use of the output and formulating policy. The strategic futures units in UK government departments appear less inclined to look externally for assistance in making use of strategic futures output and instead focus on incorporating external stakeholders' input at the early stage of the process. The optimal use of external resources is explored further in the discussion section and in the best practice report.

The benchmarking analysis suggests that a limited network of people contribute to much of the strategic futures work carried out within an individual country. This is evidenced by the same people cropping up in different strategic futures initiatives and the many links between the web sites of the strategic futures organisations. For example, in the US scientists are often 'in residence' at the Santa Fe Institute for up to a year, but may also collaborate with the Brookings Institution and also advise US Government Congressional Committees on science policy.

Such overlaps have both positive and negative effects. The individuals become familiar with the issues of contention and can be a consistent presence within a particular sector's approach to strategic futures thinking. However, the dominance of a few individuals in any one sector of futures work limits diversity of thinking, which can inhibit the development of new ideas and insight.

High calibre personnel

The seniority and experience of staff involved in strategic futures work provides an insight into the capabilities of the organisation. For example, Resources for the Future (RFF), an American environmental think-tank, has a Board of 23 members, as well as over 40 researchers. The researchers have an advanced level of education and each individual specialises in a particular area of environmental policy, such as climate change or electricity utilities. This research base allows RFF to look at a range of issues and quickly incorporate new and emerging ones. This offers the organisation both authority and flexibility.

The involvement of senior management in strategic futures analysis at ICL and Shell demonstrates the priority given to this work. ICL's scenario planning process is facilitated by a questionnaire to all managers, as well as input from the board. The central part of their process is the annual 2-day strategy board review, which follows 6 months preparation. At Shell, scenario planning is a key element of strategy development, thereby ensuring that there is commitment to the work at the highest level. Both companies have been carrying out strategic futures work for a considerable number of years and this ingrained company attitude seems a key factor in ensuring high level management 'buy-in' to the process, as well as positive contribution into the process from lower levels.

Overall, the experience and calibre of the personnel involved in the 52 organisations selected for the benchmarking analysis appears high. This was not always the case for the organisations that were scanned but not selected for benchmarking. There is no formal qualification required to set oneself up as a futures expert, thus the field attracts people who 'drift' into it, finding it an interesting diversion. As a result the experience and calibre of people involved in futures work varies widely.

3.3 Methods and Approaches

Historical Influences

Futures thinking has strong parallels with the social sciences, and as with the social sciences its models have changed as metaphors have changed.

In the immediate post-war environment, the experience of wartime planning and inter-disciplinary teams generated new approaches. Nonetheless these tended to be linear in their approach, using industrial, even Fordist, models, in which the combination of inputs produced a correct output. Operations research, one of the great intellectual creations of wartime, was influential.

Similar linear models were seen in the rise of economic planning, for example in the UK in the 1960s. The National Economic Development Organisation (NEDO) was created in 1962 by Harold Macmillan's government; in 1965 the Department of Economic Affairs, a product of Harold Wilson's government, produced an ill-fated five-year National Economic Plan. Emblematic of this approach was the large hydraulic model of the British economy held by the London School of Economics, in which financial flows within the British economy were represented by flows of water.

Since the late 1960s, approaches have changed fundamentally as intellectual models of the world have changed, away from the linear to the non-linear, from the absolute to the relative, from modernism to post-modernism.

Without attempting to construct an intellectual history of the past four decades, four themes are significant:

- The rise of narrative, and of notions of competing stories. Stories are at the heart of effective scenario processes, even in the most analytical of organisations. Steve Denning, responsible for a change programme in at the World Bank, argues that the reason for this is that people engage with stories in a different way from more data-driven or factual accounts, because narratives have space within them into which individuals can insert themselves.
- The impact of 'experiential' learning models, along with role-playing theory, which have developed from such environments as T-groups in the 1950s. This has evolved into models such as the 'adaptive organisation' or the 'learning organisation', which are softer and more porous than a traditional hierarchical organisation.
- Chaos theory, which suggests that while systems tend to be predictable over time, they are highly unpredictable in the short term (the British weather is notoriously difficult to forecast from day to day, but a January day in London is almost always warmer than a January day in New York); that causal analysis is almost impossible; self-organisation and the devolution of responsibility works better for organisations in coping with change than control.
- Complexity theory, the second cousin of chaos theory (pioneered to a large extent by the Santa Fe Institute), which concentrates on the importance of systems in creating 'emergent' properties of change, the need for ecological diversity, and also the phenomenon of 'path dependence' in which decisions taken

early in the development of a technology or new process can lock organisations into outcomes which are not optimal.

All of these have caused organisations to reappraise the way in which they understand themselves, and the models they use to manage. With these changes the metaphors used to understand organisations and their management have also changed. For example, computer-based metaphors are no longer drawn from the mainframe but from the internet, with its peer-to-peer, many-to-many, bottom-up structure. Under another metaphor managers are not so much machine-minders as gardeners.

In our view these changes explain why scenario thinking has become the dominant model of futures thinking in the past twenty years. However, as we will review in the Discussion section below, this is also because scenario processes are more likely than conventional planning processes to be inclusive and influence attitudes within the organisation.

It is noteworthy that these changes have occurred at the same time as contradictory concepts, which are internally focused and also more aligned with traditional models of the organisation, have also been influential. Examples of these include business process engineering, downsizing/delaying, outsourcing, and the growth of audit, which have typically commanded more attention from senior management teams and attracted significantly greater organisational resources.

Segmenting the Overall Approach

The methods and approaches employed in strategic futures analysis can be analysed and segmented on two key dimensions:

- The breadth of the analysis: from very broad to very specific.
- The level of complexity of the analysis: from uni to multi-dimensional.

Breadth of analysis

A majority of the strategic futures organisations assessed sought to draw from and be meaningful across a broad range of drivers and issues. The OECD Futures Unit is an example of an organisation carrying out broad-ranging analysis. It examines global drivers including economic factors, technological issues and demographic change, and covers a wide range of fields such as education, the environment, health and so on. The Club of Rome aims to address *'the complex set of the most crucial problems - political, social, economic, technological, environmental, psychological and cultural - facing humanity'*. The European Commission's Forward Studies Unit has also recently broadened its scope and commissioned the 'European Scenarios 2010' project.

Many of the government initiatives assessed also undertake wide-ranging analysis. The most striking example is Norway where the government funds a futures orientated project to inform the work of all government departments. The Norway 2030 project has the aim of developing five future scenarios about the public sector in Norway for the year 2030. Almost all of the project members are from government ministries and in total 15 ministries are participating in the project.

Even organisations with specific remits, such as the US organisation Resources for the Future who focus on the environment, emphasise that they examine economic and social issues in their broadest sense. Another organisation with an environmental focus, the Netherlands Environmental Policy Plan, also approaches their

topic area from various angles. They look at environmental themes, local policy dimensions as well as the spatial, financial, and economic consequences of environmental policy.

In the UK notable amongst government departments undertaking broad-ranging analysis is the Ministry of Defence (MoD). The MoD has stated that it is attempting to broaden its former practice of planning based around decisions affecting the procurement of hardware to a scenario process that examines defence in the context of a dynamic world. Thus there is a greater emphasis on horizon-scanning for factors which may affect defence. The UK Foreign and Commonwealth Office (FCO) is also notable for its broad approach, examining a wide range of issues impacting on international relations, for example climate change and European enlargement. The FCO also appears to contribute to a range of *ad hoc* cross departmental work.

Uni- or multi-dimensional approach

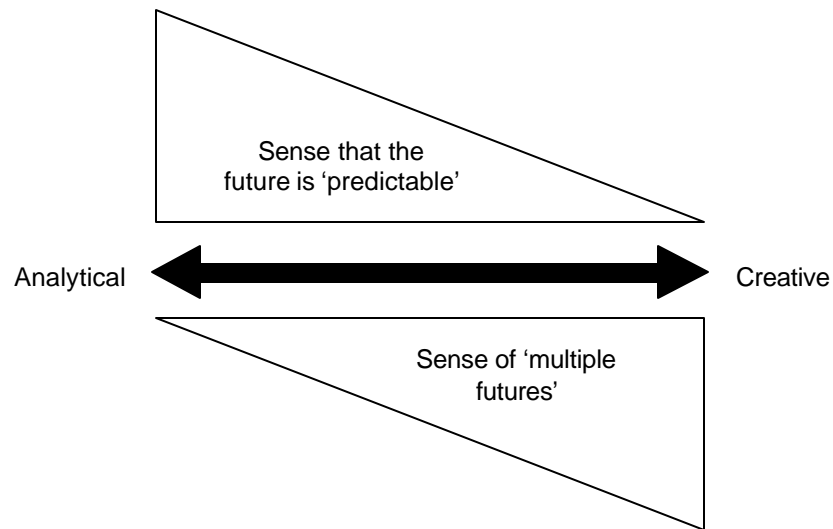
Uni-dimensional futures work examines drivers and trends in isolation without attempting to understand the complex interrelationships between them. This can happen when experts in different fields make individual contributions to strategic futures work. Their input is a useful start point, but the limitation is that the assessment of the future tends to be based on a rather straightforward trend analysis for each driver. In the technology field, an over simplified approach often results in a type of technological determinism which assumes that a technology will be adopted simply because it is available. The challenge is to integrate the analysis of a wide range of drivers, explore how they affect one another and draw out a series of implications for the future.

Almost all of the organisations benchmarked appear multi-dimensional in their approach in that they seek to understand the relationships between different drivers and identify a range of possible outcomes for their area of concern. This is usually the case even when the topic is a specific one. For example, when the International Institute for Strategic Studies examines an issue such as 'Scarcity and Conflict' they involve business people, journalists, academics and government officials, and do not limit the scope of the discussion to strategic issues alone. In this way, key drivers and the relationships between them can all be identified and used to inform the work, rather than extrapolating military trends from military drivers alone.

An Analytical/Creative Tension

A variety of methodologies are used by companies and organisations to develop strategic futures thinking. The benchmarking analysis suggests that the most frequently used process is scenario planning, which is the method adopted by, amongst others, Shell, the Global Business Network, Futuribles, and the Club of Rome. Other techniques are also used however, including trend analysis, statistical forecasting, the Delphi research technique, imagineering, and visioning.

Figure 4: Analytical versus Creative



Source: The Henley Centre

It is possible to characterise strategic futures methods as spanning a spectrum from the highly analytical to the highly creative and there is a notable divergence between those who favour each approach. Some practitioners believe in the ability of quantitative statistical and econometric models to predict the future. At the opposite end of the spectrum, others advocate the use of creative approaches to 'release' awareness of unsuspected drivers of change. In general, advocates of creative futures work are more comfortable with possibility of multiple futures (see Figure 4).

The UK is clearly open to creative techniques and government Departments have adopted such approaches, most notably the Department of Health's participative drama and role playing, and the DTI's Future and Innovation Unit's Immersive Virtual Reality Theatre, Creativity Lab and Interactive Society Area. Often a combination of techniques are employed. For example, at Faith Popcorn's Brain Reserve (an American consultancy) both trend analysis and forecasting are carried out, and at Sociovision scenario planning is used in conjunction with mental maps, a 'zooming in' process and workshops. It is likely that the optimal approach is to combine a mixture of analytical and creative techniques, a subject further explored in the best practice report.

3.4 Impact on Policy

Evaluating the Impact

This criterion aimed to assess whether strategic futures work has an appreciable impact on policy. We also sought to understand how the impact was affected.

When examining impact on policy it is important to return to an organisation's remit and understand whether this is indeed one of their aims. For example, the Brookings Institution states that it *"attempts to improve the performance of American Institutions."* It does this by indirectly influencing decision makers, by bringing issues to attention and seeking to enhance the general level of insight in the public policy arena. The Club of Rome states *"we believe that we are sometimes more effective when we work behind the scenes."* They may not be unique in using this approach, but they are the only benchmarked organisation to express it publicly.

Whilst some organisations seek to influence policy through tangible output (such as conferences, reports and publications), others rely upon individual members' secondment to committees and their prominent position within their specialist field. For example, Resources for the Future (RFF) members frequently testify before US Congressional Committees as a means of affecting legislation. The University of Tilburg's Development Research Institute's members work closely with local counterparts in particular countries and regions. This approach enables country- and region-specific issues of concern to be taken into account.

As stated earlier, around 1 in 4 of the organisations assessed aim to use strategic futures insight to formulate and implement policy. These include government departments and commercial companies. Evaluating whether and how these organisations are making successful use of strategic futures insight requires a detailed assessment of the strategic futures unit and the various ways in which it integrates with policy makers. This level of analysis is beyond the scope of the benchmarking exercise and is the focus of the best practice analysis explored in the second report in this series.

Monitoring the Impact

It appears that few organisations attempt to monitor the impact of their strategic futures work. Those that state they do include Shell and ICL. Because scenario planning is such an integral part of Shell's strategic planning process the feedback is incorporated automatically. Shell's country managers are required to write and sign off performance reviews and the results help to inform subsequent strategic futures work.

The Design Council also has a substantial monitoring process in place, operating 3-year plans which enable them to track progress and performance over both the short and longer term. The University of Tilburg's Development Research Institute also claim to carry out extensive monitoring following most of the projects they undertake.

As part of its methodology, Global Business Networks recommends the identification of 'signposts' or 'leading indicators' which enable an organisation to identify a trend towards one scenario rather than another. The process of defining suitable metrics to assess changes in what are often high-level stories is, however, complex.

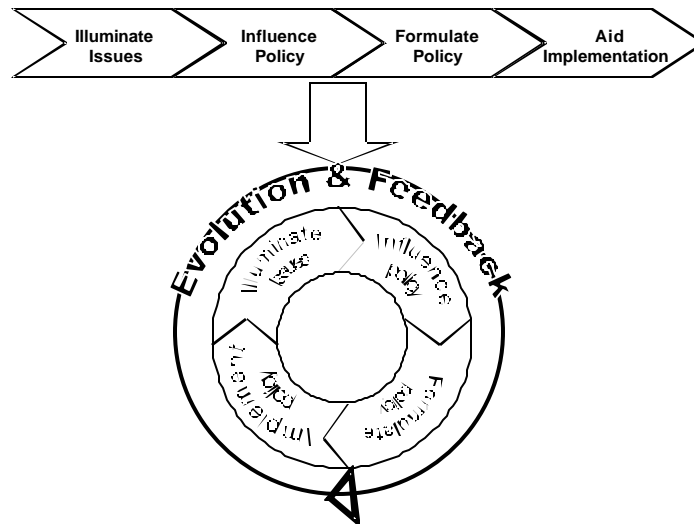
It is also important to try to predict where unintended, as well as intended, outcomes will emerge as the result of a particular initiative or approach. For example, the current focus on reducing NHS consultant waiting times may have, unintentionally, affected other areas of the Health Service, and may increase the wait a patient faces after seeing a consultant to receive treatment. Unintended outcomes such as this are important to identify, as it is possible that concentrating on one particular aspect of policy means fewer resources (both in terms of staff and budget) are given to other areas. Good futures work requires that the whole system is understood as part of the analysis.

4 Discussion: Learnings for Government

4.1 A Virtuous Circle

We were struck by how long many of the benchmarked organisations have been doing strategic futures work. It seems that it requires continuous effort – either from a long history of carrying out ad hoc work, or a structure where strategic futures work is ongoing and entrenched. We would suggest that the most powerful work is done where there is a continuous virtuous circle of futures insight and application, and a ‘loop’ of monitoring and accountability.

Figure 5: The Virtuous Futures Circle



Source: The Henley Centre

If work is ongoing then, paradoxically, the impact on policy making may be less clear, as there will not necessarily be an explicit connection between a decision and the futures process. This makes the requirement to monitor impacts and learn from this experience even more important.

The Strategic Futures Journey

Another dilemma or paradox for strategic futures work is the question of how broad to take the analysis. Overall, it is fair to say that the broader the hoped for sphere of influence, the more general must be the outputs, and therefore the more distant from specific policy making. The Hawaii Research Centre for Future Studies, for example, aims to influence futures thinking world wide, so the output must be sufficiently general to be meaningful for such a wide audience.

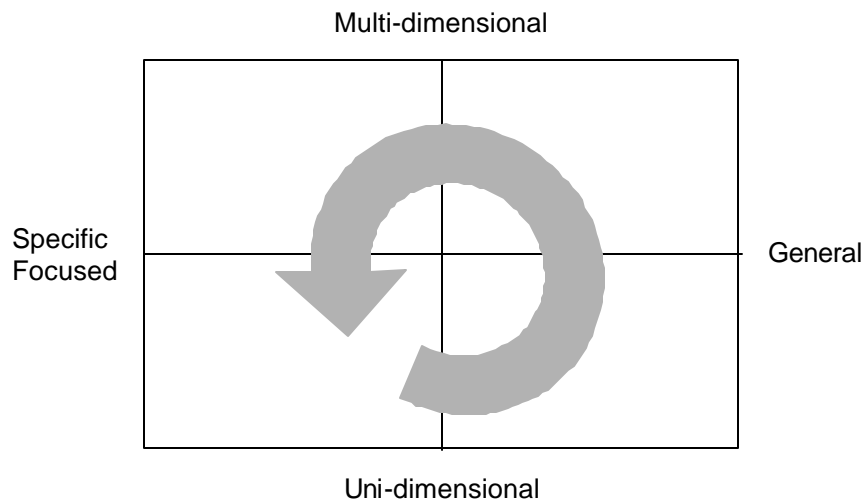
Furthermore, if strategic futures is broad, then it is less clear how to use the output and monitor the impact – it is far easier to monitor whether or not specific policy has been successfully implemented than whether a broad audience have had their outlook modified. For organisations with a requirement to deliver against specific

policy objectives, there would appear to be a clear advantage in sticking to a focused approach for strategic futures work.

This is not the whole story, however. The limitation of a narrow approach is the failure to see further than the most obvious horizon. Omitting key drivers or stakeholders from the analysis is a mistake. Strategic futures work must avoid the trap of reproducing an organisation's existing, limited sense of the world. Similarly, failure to involve or at least consult key stakeholders is likely to result in a key piece of the policy jigsaw being omitted. This is particularly the case in today's environment where policy areas are interdependent, the forces shaping them complex and the challenges to be overcome so significant.

It would appear that the optimal strategic futures process involves the journey illustrated by the diagram below. The initial momentum springs from a specific topic or policy concern. The issue is opened up and external inputs are garnered in order to consider a broad set of drivers of the future. At first the drivers are evaluated individually (or uni-dimensionally) in order to ascertain the scale and nature of change. Then the complexity of the analysis increases and an understanding of the complex set of interrelationships between the drivers and different outcomes explored. Finally the process re-focuses to extract meaning for the specific issue at hand and translate the new understanding into policy and action.

Figure 6: A Proposed Optimal Strategic Futures Journey



Completing the journey from specific to general and back to specific is challenging for any organisation and requires the optimal use of internal and external resources at different stages of the process.

Optimising the Use of External Resources

Strategic futures work is best opened up to a broad range of inputs to ensure that the topic is put into its widest possible context, ie, the sweep of the arrow in the diagram above should be broad. For a government department this process of 'opening up' the analysis is likely to require input from outside the department. As discussed in the previous section, almost all of the organisations benchmarked make use of external insights, processes and/or people during at least some stage of the strategic futures process. There are risks in relying too heavily on external inputs, however. Whilst they can facilitate the input of 'big picture' variables and new processes, if 'outsiders' do too much of the work they may dilute the relevance to the organisation and limit the 'buy-in' of insiders. Furthermore, the establishment of 'outside thinking' in opposition to 'inside thinking' may create a mental divide between them which then has to be bridged.

The appropriate blend and timing for making most effective use of external input is further explored in the best practice report. What we can say here is that all of the UK government organisations assessed take a collaborative approach to futures work, inviting participation from outsiders, and putting considerable effort into the ongoing regeneration of networks able to supply and validate useful insight into futures thinking.

In this regard, it is interesting to compare the multinational make-up of global companies with the more homogenous nature of the public sector. For example, Unilever has diverse inputs from a range of cultural perspectives, due to its utilisation of individuals from many different backgrounds. There is clear value to organisations such as Unilever in embracing a wide variety of cultural inputs. It is also likely that strategic futures work undertaken by government departments would benefit from the perspectives of overseas policy makers and international strategic futures organisations. Before embarking down this path, however, it is important to recognise the cultural embeddedness of strategic futures work and the additional complexity that this creates.

The Cultural Embeddedness of Strategic Futures Work

It was interesting to note how many of the strategic futures organisations assessed appeared to be working within a distinctive national tradition. In the US we can trace the influence on strategic futures work of key business books, a strongly individualistic, self-help culture and even of key science fiction. In contrast, French strategic futures tends to be more analytical, theoretical, and wide-ranging. The historically close relationships between church, business, and the state in the Netherlands appears to be reflected in collaboration in both the creative process and policy implementation. In contrast, much German futures work is constructed around econometric analysis and focuses on the specific. One interviewee pointed out this may reflect a reluctance to create and broadcast grand visions for the world beyond their own borders.

The cultural embeddedness of strategic futures work is an issue of importance as it affects the extent to which the approach and outputs are portable. For example, in the Netherlands there appears to be a consensual tradition under which different views are taken into account but consensus once achieved is then upheld by all parties. This makes it easier for the Dutch to accept 'specific' policy born of 'general' insight constructed by others, or at least that consensus makes the transition less painful. In countries where there is less of a consensual tradition, such as the UK, it is conceivable that 'outside' recommendations will not generate sufficient support or acceptance to ensure the policy gets implemented.

Framing the Ambition

Implicit behind the objectives and remit of the 52 strategic futures organisations assessed are differing views on how 'variable' the future is, whether the organisation desires a particular outcome and the extent to which they identify themselves as agents of change. Some organisations have a clear sense of purpose, of how they would *like* the world to be, and have some sense that they will be able to create the future they aspire to - a more aspirational approach to futures work. Other organisations tend to see the future as something that *will happen*, and their strategic futures work is focused on constructing the best responses to possible future outcomes (see Figure 7).

Figure 7: Framing the Ambition



Source: The Henley Centre

For futures work to be aspirational the organisation must have an underlying belief, common across the organisation, in its purpose and role, an ideological bridge to an aspirational future based on an accepted sense of mission. For example, the Design Council in the UK seeks *"to inspire the best use of design by the UK, in the world context, to improve prosperity and well-being."* Similarly, Resources for the Future in the US is aspirational in its view of the future. The organisation has a clear view of its role in the world as an agency of environmental improvement, as well as a relatively narrowly defined sphere of influence – the US government.

In contrast, the aims of the UK government departments appear less 'inspirational'. For example, the main aim of the former Department for Education and Employment (DfEE) was *'to improve the strategic capability of the department'* Similarly, the Ministry of Defence's (MoD) policy planning department seeks to *'be seen as a highly respected and influential team providing impartial, well researched, timely and clearly presented policy guidance on matters of strategic importance to defence.'* These more functional aims suggest that the UK government departments' ambitions are not explicit to an outsider. If this is indeed the case, it is likely that some on the inside of the organisation are also unaware of the overarching aspiration.

Some futurists argue that responsive organisations are tied down by the 'baggage' of their perceptions about their current state and are therefore less able to evolve. There would seem to be little point, however, in forcing aspirational thinking on an organisation that is culturally programmed to be responsive. Furthermore, we would stress that aspirational strategic futures work should not be seen as better or more worthwhile than work that is more responsive in nature. One could argue that in fact responsive strategic futures organisations are closer to the practical world and thus their work is couched in terms of current reality. As a result, the analysis and output may be easier to interpret and translate into actionable policy. From this perspective an aspirational stance may reflect a delusion about the organisation's genuine ability to change its future environment.

Challenging Underlying Assumptions

The final dimension which appears to be critical in the effective use of strategic futures work is the extent to which the thinking is able to engage with the underlying assumptions which drive the organisation. If strategic futures work is about looking outwards, the impact it has on the organisation is far more determined by the internal culture of the organisation.

It is for this reason that leading organisations in the strategic futures area increasingly emphasise the participatory component of the futures processes they use. Global Business Network uses the concept of the 'learning journey'; the French group Futuribles says that without the continuing involvement of the client in the process the impact of their work is far lower. In *The Fifth Discipline*, Peter Senge stresses the importance of methods for organisational learning which enable participants to identify their own unspoken assumptions about the organisation.

Two implications follow. The first is that the single most important element which determines whether strategic futures thinking becomes part of policy implementation is people, not the content or work. It is about who takes responsibility to be the bridge between general understanding of the future and specific implementation of

policy. Secondly, the benefit of strategic futures work is not that it predicts the future, which is unpredictable, or enables organisations to control it. Instead it is *'about devising methods and systems for handling the unexpected when it happens'* (Grint, 1997). It is about rehearsing possibilities so one is better able to respond if they happen.

It is possible to argue that the UK's unwillingness to engage in strategic futures thinking during the 1980s derived from a political standpoint within government which was certain in its world view and regarded diverse or dissenting opinions with suspicion. (The creation of the Foresight programme in the Office of Science and Technology required the support of the more inclusive political style of Michael Heseltine.) The cost of this has been that the British government is to some extent still catching up in its use of futures techniques and its understanding of them.

At the other extreme are some of the new regional governments which have emerged in the last fifteen years, which by their nature have to be flexible and outward looking and, because they are newer, are imbued with a more modern approach to government. Catalunya is perhaps a good example of this.

Within UK government, the increased willingness of government departments to engage in strategic futures thinking suggests that in the past few years the focus has changed. It is an essential step in the right direction. However, to be effective in influencing change at the level of policy and delivery, departments will have to take strides towards being able to question their own assumptions; to open them up to debate. In this there is some way to go.

5 Conclusions

There are a number of conclusions to be drawn from this study. Firstly, it is clear from the benchmarking analysis that the UK is comparatively forward-looking, investing resources of money, time and energy into strategic futures analysis. However, whilst the UK has some of the most experienced practitioners of strategic futures analysis, many UK government departments are relatively new to the field. These strategic futures units face a steep learning curve in the effective use of strategic futures work.

While the benchmarking analysis did uncover promising examples of strategic futures work around the world, it was notable that shining examples of best practice were few and far between. Furthermore, the scanning process found a number of futures organisations that would appear to have little to contribute to improving the planning and policy making process in government.

Critically, the commercial sector does not own the strategic futures field. Indeed, the standard of strategic futures work in the commercial sector appears no better (or worse) than the standard of work in the public sector. Although the commercial imperative is likely to ensure action and accountability, all too frequently it militates against a sustained commitment to strategic futures work and its priority over more immediate, tactical concerns. Thus, although two commercial organisations, Shell and ICL, were selected for later best practice analysis, it is not immediately evident that public sector organisations should seek to emulate strategic futures work carried out in the private sector.

Strategic futures is a diffuse discipline and the objectives and approaches of practitioners in this field differ widely. The influence of historical and cultural factors remains strong. Thus, the moments of change out of which different strategic futures organisations were born influence the approach taken today, as do national and cultural traditions within strategic futures work. With the exception of the scenario planning technique there is little consensus or consistency in the methods employed.

This complexity creates the potential for the unwitting practitioner to embark on a strategic futures exercise that yields little of value to policy making. On the positive side, the benchmarking analysis yielded a number of considerations that, if taken into account, should enhance the value of strategic futures work. These include:

- 1) The importance of precisely defining the objectives of strategic futures work.
- 2) The need to ensure a 'fit' between the culture of the organisation and the ultimate ambitions of the work.
- 3) The ideal strategic futures 'journey' starting with a specific objective, 'opening up' the analysis to consider a broad range of drivers, exploring the complex inter-relationships between them and then focusing down on a specific set of policy implications.
- 4) The requirement for those involved to have the will and ability to question internal assumptions and open them up to doubt.
- 5) The importance of senior management 'buy-in' and involvement throughout the process.
- 6) The optimal balance obtained by a core team dedicated to strategic futures analysis drawing on a wider network of external resources when required.
- 7) The advantage of ongoing commitment to strategic futures work and the benefits of a 'virtuous circle' of insight and application.

6 Recommendations

In order to further explore the issues raised in this study, the subsequent best practice stage analysed a subset of the benchmarked organisations in more depth. This subset was not only chosen as examples of best practice within the strategic futures field, but also on the basis that these organisations were most likely to hold constructive insights for UK government departments.

Strategic Futures Organisations Selected for Best Practice Analysis

Strategic Futures organisations	
Government	<ul style="list-style-type: none"> • Norway 2030 (Dept of Public Management Policy) • Singapore Government • Social and Cultural Planning Office of the Netherlands or the Netherlands Environmental Policy Plan
Institutions	<ul style="list-style-type: none"> • Brookings Institution (US) • Club of Rome (International) • Forward Studies Unit (EC) • Friedrich-Ebert-Stiftung (Germany) • Resources for the Future (US)
Consultancies	<ul style="list-style-type: none"> • Futuribles (France) • Global Business Network (US) • Sociovision (France)
Companies	<ul style="list-style-type: none"> • ICL • Shell
Academic organisations	<ul style="list-style-type: none"> • Hawaaii Research Centre for Future Studies (US) • University of Tilburg (Netherlands)

7 Selected Further Reading

Arie de Geus, *The Living Company*, 1999. Nicholas Brealey Books, London.

Steve Denning, *The Springboard*, 2000. Butterworth-Heinemann, Oxford.

James Gleick, *Chaos*, 1997. Vintage Books/Ebury, London.

Keith Grint, *Fuzzy Management*, 1997. Oxford University Press, Oxford.

Art Kleiner, *The Age of Heretics*, 1996. Nicholas Brealey Books, London.

Gareth Morgan, *Images of Organization*, 1997. Sage, Thousand Oaks, Ca./London.

Gill Ringland, *Scenario Planning: Managing for the Future*, 1998. John Wiley & Sons, Chichester.

Peter Schwarz, *The Art of the Long View*, 1998. John Wiley & Sons, Chichester.

Peter Senge, *The Fifth Discipline*, 1990. Century, London.

Mitchell Waldrop, *Complexity*, 1992. Penguin Books, London.