

# 12. Improving Resilience through Environmental Scanning in Western Australia

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The public sector's resilience to change is dependent at least in part on its capacity to anticipate change and its preparedness to respond. This is the case whether change occurs gradually and progressively or as major shocks. In the public sector, environmental scanning is a technique for identifying prospective policy challenges—and opportunities—that might arise from current and emerging issues and trends. It attempts to answer questions such as: how do we identify relevant issues and trends? How do we present these as snapshots? How can we translate that information into flexible strategies and priorities *and* prepare decision-makers for change?

The WA Department of Treasury introduced an environmental scanning process in the aftermath of the Global Financial Crisis that hit Australia in late 2008. A new strategic policy unit was created to 'make space' to provide advice on longer-term and crosscutting policy issues. Part of its remit was to start producing regular environmental scans. The unit developed its first environmental scan in 2009 on a fairly small scale. The approach was refined with two subsequent environmental scans conducted in 2010 and 2011, with a broadened consultation base within Treasury and across State public sector agencies.

This case study describes how environmental scanning has been realised in the WA Department of Treasury, and is designed to encourage public sector officials to consider current and emerging trends and how they might impact on their agency, or the public sector more broadly. Specifically, this case examines

- the definition of environmental scanning used by the WA Department of Treasury
- the approach to environmental scanning and the methodological considerations adopted by the Department of Treasury
- the scanning mechanisms to identify relevant issues and trends
- approaches to undertaking strategic analysis of those issues and trends
- how the results of environmental scans can be used to inform public policy.

## Defining Environmental Scanning

The WA Department of Treasury's approach to environmental scans was initially informed by reviews of definitions, approaches and formats for environmental scans undertaken in other Australian jurisdictions and internationally. This informal desktop study suggested that the key features of environmental scans were that they were outward looking, focused on change or possible change, considered the policy implications, explored the opportunities and challenges, and emphasised the issues that were most relevant to the organisation.

Over the past four years the WA Department of Treasury has developed its own, more prescriptive definition of environmental scanning that encompasses both the process and the use of such scans. First, environmental scanning is a formal and systematic exploration of the external environment to identify potential opportunities, challenges and likely relevant future developments that could or should inform government policy deliberations. Second, as a discipline, environmental scanning guides the development of flexible strategies and priorities that prepare the government and its decision-makers to respond quickly to change. This is an assertion of how the products of environmental scans might be used.

Environmental scans encompass both the potential for crises, which may include large-scale disasters, and softer, progressive processes of change. In this context, the essential nature of environmental scans is that they are

- formal and systematic investigations
- have an external focus
- investigate likely relevant future developments
- inform government policy deliberations
- provide for flexible responses to change.

The department's intentions in producing environmental scans were to use them to

- raise awareness of key strategic issues, particularly crosscutting issues that might impact on Western Australia's public sector, either in the short term or over the longer term
- inform the development of strategic plans and operational work plans, and policy development within Treasury
- prepare the Government to respond quickly to change.

Scans have also proved a useful means of introducing new staff to a 'big picture' view on key issues and trends that affect the public sector and more specifically

Treasury business. A further benefit is that they can pinpoint areas of risk, and at the same time develop scenarios to test the impacts of change in external parameters or policy conditions.

## Conducting an Environmental Scan

### Comprehensive Project Planning

An environmental scanning process can be as large or as small a task as the agency's resourcing will allow. Ideally, it is a task for a team of investigators, not for an individual in an ivory tower. Comprehensive scans need input from people with a broad range of views and experience. It is vital to draw on the diversity of talent, knowledge and experience within both the agency and the public sector more broadly to identify relevant issues and trends.

Given the potential breadth of scope, environmental scans need tight project management, covering their scope, approaches, time frames, consultation mechanisms, format, team resourcing and the communication strategy. In the WA Department of Treasury, initial planning and brainstorming began in April–May 2011 with dedicated staff taken offline while the State budget was being finalised. In-depth research and analysis were undertaken in the aftermath of the budget. Dedicated resources for the project consisted of three staff, with additional input and advice from other areas within the department and from other agencies.

Several internal and external workshops were held to invite internal senior officers to share their views, and for key government agencies to present and discuss their agencies' strategic issues. Approximately 25 to 30 State Government agencies participated in the 2011 process. The process was initially expected to take about four to six months, but the time frames were extended to monitor the immense volatility and uncertainty in global economic conditions at the time of drafting. When taking into account the time involved to communicate the environmental scan, the entire process took close to a year.

### Identifying Issues and Trends

Environmental scanners typically employ diagnostic techniques of the external environment. The WA Treasury chose to adopt 'STEER' as an instrument to identify issues and trends. STEER seeks to identify changes in *society*, changes in *technology*, changes in the *economy* (perhaps better phrased as the economic outlook), *environmental* change and *political* change—hence 'STEER'. From our

perspective, the particular choice of technique (for example, whether STEEP is chosen over other techniques such as 'PEST', 'PESTLIED', 'PESTEL', 'STEEPLE' or 'SLEPT') is largely arbitrary, as the success of the technique in identifying relevant issues and trends is contingent on access to and engagement with a diverse pool of people who are willing to share relevant ideas and expertise.

The key difference between these environmental scanning techniques and a 'SWOT' (strengths, weaknesses, opportunities and threats) analysis is that the environmental scan is focused on the external environment, including issues that can be largely outside the control of the public sector, and does not specifically examine the agency's capacity to respond to change. Examples of the types of public sector issues and trends that may be drawn out of facilitated group discussions using STEEP or a related technique are provided below.

## Societal Change

In public policy there are no hard and fast rules about what should be provided by government, to what standard or at what price. Expectations change over time, differ between generations and are influenced by the availability of services and awareness of new or alternative services that may not be available locally. Expectations can be highly political and emotive, and are difficult to manage.

For individuals, preferences to use public or private services can be influenced by the capacity to pay, the ease with which they can access services and differences between the two sectors in the range of services provided and their respective service delivery models.

Societal change is largely due to demographic developments, through population growth, population ageing, immigration and regional residential variability across the State or country. Other changes in society can occur through the comparative living standards and evolving relations between the indigenous populations and the broader community.

These demographic changes can result in changes in community expectations about the quality of services provided or receiving access to them, security of the services and rates of utilisation. It can also raise operational delivery issues, workforce issues and equity of services between metropolitan and regional and remote communities.

Changes in lifestyle trends and behaviours can have a significant influence on demand for and utilisation of services. Such trends may include prevalence of chronic health conditions, prevalence of smoking and alcohol use, health behaviours or the risks of outbreaks of disease.

## Technological Change

New technologies can decrease our reliance on labour to perform specific tasks, to address imbalances between the supply of and demand for limited natural resources, and to satisfy society's expectations of communication, entertainment and service delivery. Advances in technology can change the way people work by automating processes or reducing processing time (such as through using wireless devices), and the use of robotics in some services and industries. The adoption of new technology can also reduce labour and other costs through more effective service delivery. Other technological advances can offer the potential to respond to societal values (for example, renewable energy sources) or to challenge existing values (for example, attitudes to genetically modified crops).

Rapid growth in the use of social media and the availability of the web 2.0 technologies are challenging the traditional ways governments communicate with the public, opening up new possibilities of providing access to data and information, and mediums or platforms to consult over policy areas or legislation.

## Economic Outlook

Considerations of the economic outlook over the short to medium term may take account of common economic indicators such as inflation, interest rates, employment growth, unemployment rates, household debt and forecasts for economic growth. More strategic economic concerns may include considerations of which sectors of the economy are performing more strongly than others, levels of sovereign (government) debt, indications of structural change in the economy, trends in the terms of trade, and economic trends occurring in major trading partners.

Longer-term considerations may be challenges to managing government debt, increasing productivity and developing a more competitive economy. This may also include consideration of supply constraints such as levels of investment in research, science and innovation, regulation and support for business and agriculture, infrastructure adequacy, housing availability and affordability, and skills and employment.

Fiscal issues at present tend to focus on the provision of fiscal stimulus measures announced by various governments in response to the 2008 Global Financial Crisis, and fiscal consolidation measures to either wind back fiscal stimulus or manage sovereign debt.

## Environmental Change

Consideration of environmental issues and trends requires a balance between observed and projected changes to the environment (for instance, rainfall patterns, salinity measures, sea levels, drought) and the relative risks of major environmental events, including major weather events (such as cyclones or floods), seismic events or bushfires.

Strategic considerations include the risk of conflict between heritage and conservation interests, resource development interests and urban land-use interests. These issues may arise from population growth and housing demand, proposals or trends to develop resources in prime agricultural land, and trends in foreign ownership of or investment in domestic assets and land. In turn, these factors will have implications for planning in terms of transport networks, the rate of urban infill, water allocation and management, and economic infrastructure.

## Political Dynamics

The public sector has a close relationship with politics and government, and it can be difficult to isolate the political dynamics from the ordinary machinery of public administration. The challenge is to step back from the day-to-day issues and relationships between the public sector and government and to observe broader trends. Political factors that may be relevant include: government stability, which parties are in power across the country, government relationships with the media, opportunities and interests in government to introduce and progress reforms, the relative balance of independence versus the responsiveness of the public sector to government priorities, and broader geopolitical trends elsewhere.

In a federation such as Australia the stability and effectiveness of relationships between different levels of government, including the equity of distribution of financial resources between and across levels of government, can be significant influences on the effectiveness of service delivery. It may also be important to consider recent trends in reforms to accountability frameworks, the extent to which they centralise or decentralise decision-making, their influence on fiscal flexibility and financial accountability, and the longer-term implications for State sovereignty.

## Strategic Analysis

At the simplest level, an environmental scan can be limited to identifying a list of issues and trends of relevance to the agency. Some environmental scanners may also undertake a simple risk-assessment exercise to indicate the relative risk of

each issue. From a policy perspective, scans are of increased value when some additional form of strategic analysis is undertaken on the issues and trends, in terms of categorising information, gathering supporting evidence, identifying and considering the potential policy implications, and constructing a narrative of change.

Strategic analysis is the meaty part of the environmental scanning process. It is an iterative process that does not require a big team but does need people who are strategic thinkers, who can take responsibility for a cluster of issues, and who can sift them for relevance. It demands experience in isolating the intangibles from group discussions, transforming them into tangible facts, figures, charts and observations, and drawing out the policy implications.

## Categorising Information

Categorising information is a matter of reviewing and clustering issues and trends identified through workshops and consultation. Mind mapping can be a useful tool to help organise information and identify related themes. This might need to be done in several stages at different levels of complexity. It is the process of categorisation that contributes to the development of the structure and underlying messages of the environmental scan; however, attempts to mind map every issue raised through extensive consultation can be counterproductive. There will be many interdependencies and interrelationships between issues and trends, and it is likely that a complete mind map will resemble an inky blob of spaghetti. It is therefore often better to prepare very simple, high-level mind maps, or to produce detailed mind maps for narrowly focused selected issues and trends.

Categorising information is more a process of achieving consensus than of finding the 'perfect' themes, and should be undertaken with a view to identifying about five to nine themes that are clearly relevant to the agency. In the case of the WA Department of Treasury, there was a heavy bias towards economic and financial themes. The 2011 environmental scan consolidated the identified issues and trends to eight key drivers of change, which were the State's economic outlook, global economic uncertainty, fiscal consolidation trends, urban and environmental change, technological change, health and wellbeing, societal expectations, and demographic change.

## Gathering Evidence

Environmental scans are typically reliant on secondary quantitative and qualitative data sources. The scope of potential sources is necessarily broad, with a first priority to access professional expertise from within the agency, including people, corporate records and data sources. Other potentially relevant sources of data include

- published and unpublished data from line public sector agencies (reports, reviews, budget statements, annual reports, online statistics and unpublished data collections)
- government statistics and reviews from sources such as the Australian Bureau of Statistics, the Australian Institute of Health and Welfare, the Productivity Commission, the Reserve Bank of Australia and the Australian Bureau of Agriculture, Resource Economics and Sciences
- other sources of government information (media statements, Hansard debates, reports from inquiries and audits)
- testing local trends against other jurisdictions, using sources such as the OECD, IMF, World Bank and the Productivity Commission.

These sources need to be tested for relevance and credibility in terms of their authority, accuracy, reliability, validity, bias and timeliness. The Productivity Commission's suggested methodological considerations and principles for evidence-based policy should not be overlooked in determining whether isolated data and information constitute sufficiently robust evidence to be included in the environmental scan (see Banks 2009).

It can be useful to test 'public sector thinking' against the views of others, including industry bodies and/or community stakeholders and representative bodies, academia, employee representative groups and think tanks. The choice of consultation will vary with the scope of the environmental scanning exercise and the agency's relationship with potential stakeholders. Media coverage of issues, including press releases from other agencies or jurisdictions, can alert scanners to new developments, different perspectives and recently published new data.

## Drawing out the Implications, Opportunities and Challenges

The third stage of strategic analysis is to review the accumulated evidence and identify the key policy implications. Where and why might the public sector need to respond to the issues and trends? What are the risks and uncertainties? What are the potential positive impacts (opportunities) of the observed and predicted trends? What are the potential negative impacts (challenges)? Does the government have a role to intervene, or is the rationale for current interventions still valid? This review forms the basis of a discussion of the implications, opportunities and challenges presented by the issues and trends that are included in the environmental scan.

## Constructing a Narrative

The final task is to construct a narrative. The environmental scan should tell a story of change, using a mix of quantitative data and qualitative information. The role of the scan's narrative is to provide depth, focus and context, and a platform for policy debate. It needs to set out the opportunities, the downsides and the risks. It should use an accumulation of evidence to lead the audience to the policy implications, opportunities and challenges and directions for further policy development.

If an environmental scan is to be used to inform policy development, it needs to present issues, supporting evidence and the implications in the form of a narrative that persuades the audience that policy change may be needed. Its arguments must be supported with judiciously selected evidence. It must synthesise what might otherwise appear to be randomly selected data to give it meaning and coherence.

## Appealing to the Audience

Environmental scans can be lengthy documents intended to communicate vast quantities of information. The layout thus needs to be designed both to attract the reader's attention and to communicate information succinctly. In presenting information on issues and trends, it may be useful to focus first on presenting and explaining data and research findings. Discuss the policy implications separately. Stand-alone pages, with a message on each page, can be very effective. Message-based taglines are more effective as headings than single words, and can be threaded to integrate isolated data and observations into a broader narrative from page to page.

There needs to be a strong focus on making very complex issues relatively easy to digest. The text should be condensed to the key points, and visual impacts are important. At least one image, graph or chart on every page (provided they are clearly related to the text) helps to both engage the reader and communicate key points. Infographics are resource intensive to develop but effective to present information. A defined colour scheme can be an effective aid.

As environmental scans may be informed by a vast range of information, particularly secondary sources, which may be subject to change, it is essential to reference sources. It is useful to both hyperlink the text and include academic referencing to encourage readers to refer to the original source information to pursue more extensive policy research.

It is advisable to incorporate a disclaimer. Environmental scans are not predictive documents, use material from an extensive range of secondary sources, don't necessarily cover a particular period or horizon, and the data cited may be current only for a (sometimes brief) window of time.

## Using Environmental Scans

Environmental scans, as high-level, broad documents, are not an ideal vehicle for delivering formal conclusions and policy recommendations. They cannot provide government with immediate solutions to the complex, interdependent policy problems they describe. Rather, environmental scans should encourage thinking, discussion and further policy work. They should allow frank and balanced sharing of a broad range of issues within the public sector.

In view of this, and depending on the format and scope of the environmental scan, it is important to consider whether scans should be classed as confidential documents. Public debate is an important feature of policy development, but environmental scans may be too broad in scope, and the future too unclear, to engage the public and the media effectively. A more appropriate opportunity for public engagement may arise from tightly scoped green and white papers that focus on selected issues identified in environmental scans. If a scan is to remain confidential, the communication strategy for an environmental scan still needs to encompass the key audiences of agency staff, stakeholder agencies and government.

Copies of environmental scans should be circulated to agencies which participated in the consultation process. Stakeholder agencies may also be invited to receive briefings or presentations, with opportunities to present highlights and key issues to small groups of agency chief executives. This assists in providing agencies with the 'bigger picture' view and developing relationships for input into future scanning work and policy reform.

Ministers or cabinets may wish to be briefed on key messages in the environmental scan. For instance, some of the key findings from Treasury's 2011 environmental scan that had the potential to impact on the State's financial position over the budget and forward estimates period were brought to the attention of the Economic and Expenditure Review Committee as part of the broader scene setting for the development of the 2012–13 budget. At the agency level, environmental scans can be integrated with strategic and operational planning to help define the agency's forward work program and resource allocation. For individuals, they are also an opportunity to develop insight into the 'bigger' picture of the complexity of policy.

Environmental scans can, and should, be used

- to raise awareness of issues and trends, especially longer-term trends
- to identify crosscutting policy issues that impact on multiple portfolios and require a coordinated policy response
- as a mechanism to engage with stakeholders and other agencies

- to pinpoint and highlight areas of risk and opportunity for the sustainability of public sector finances
- to identify opportunities for scenario analysis with high-risk issues
- to inform policy development.

## Informing Policy Development and Reform

Environmental scanning is a part of the complex pathway of policy development and reform. As indicated above, while they are very useful to identify issues, and involve some limited policy analysis, they are too broad and high level in scope to present informed recommendations for change.

Based on the experience of the WA Department of Treasury, in terms of further work it is important to dig beneath some of the higher-risk issues and to monitor them closely. It is not realistic to expect an agency to have the capacity to conduct in-depth policy analysis on every issue raised in an environmental scan. Rather, the scan should be used to help pinpoint significant areas of risk that demand attention, to allow just a couple of key issues to be focused on at any point in time.

In taking these priority issues forward, it is worth giving consideration to some of the drivers of good policy reform processes, such as

- establishing a sound case
- bringing intellectually sound design to the policy reform
- being ready for and using windows of opportunity for reform as they are presented
- securing strong political commitment to reform
- building a broad base of support and consensus for reform.

It should be remembered that an environmental scan may raise many issues and trends that are relevant to the agency but are not the agency's primary policy responsibility. The forward view is to engage other agencies to isolate the issues and trends that are important to them, and within their remit (which could include crosscutting policy issues common to multiple agencies), and to work collaboratively in the next stage of the policy process.

## Conclusion

The WA Department of Treasury's approach to environmental scanning is formal and systematic, outwardly focused and examines change that is relevant to the WA public sector. Some of the lessons to be learned from this experience are that environmental scanners should be encouraged to gather information from a

wide range of sources, and to incorporate consultation and awareness raising as vital components of the process. They should think strategically. They should construct a narrative that leads their audience to see opportunities for further policy development, and that has the potential to manage policy challenges before they become crises. Their product—the environmental scan—should be used as a platform for debate rather than to communicate predetermined policy positions.

Environmental scans explore the potential to improve public sector resilience in a softer setting of change, and should give the audience an appreciation of the connections between public policy issues. Understanding these connections, and how change in these connections influences government policy, is integral to the public sector becoming more resilient to change.

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