# THE SOIF PRIMER
## ON STRATEGIC FORESIGHT

söif 2019

# ABOUT THE SOIF PRIMER

This primer is a brief introduction to strategic foresight designed for participants at SOIF2019. During the week it will serve you as a quick reference guide. It will give you insight into how to identify trends, emerging issues, disruptions and shocks. It will help you to recognise potential risks and opportunities, and to create future-ready organisations and teams. To deliver foresight with impact.

The primer is rooted in our core values of designing strategic foresight experiences for purpose, complexity and participation. It follows our four-stage process, which focuses on using insights about the future to make better decisions today.

It will be supplemented with the SOIF Toolkit on Friday, the last day of the retreat. Together they are a valuable resource for the first steps of your foresight journey during the retreat and beyond.

"Foresight [is] the capacity to think systematically about the future to inform decision making today"

Maree Conway (Thinking Futures, Australia)

## WHY FORESIGHT WITH IMPACT?

**Our environment is rapidly changing.** Existing business, governance and social systems face unprecedented challenges in an increasingly uncertain and networked world. These include: the globalised economy; increasing resource demands from an expanding global middle-class; inequality and environmental change; revolutionary effects of technology on work, skills, and the hard and soft infrastructure of the world around us; round-the-clock media; and a global multi-polarity that reflects the growing influence of emerging state and non-state actors.

These challenges increase volatility and uncertainty, disruption and discontinuities. At the same time, as a global community, we have a collective vision to deliver the promise of the Sustainable Development Goals that no-one will be left behind. For this to happen, we need to move away from linear views of the future and traditional planning approaches, and adopt strategic foresight and systems-based thinking instead.

## THE VALUE OF FORESIGHT

Strategic foresight is a critical tool for effective leaders and effective organisations. It is an organised and systematic process to engage with uncertainty. It is not about predicting the future, but about understanding the current and future contextual and operating environment. Insights gained from foresight equip organisations to recognise emerging threats and opportunities, and to respond to them by improving their competitiveness, resilience and agility.

**Foresight help us:**

- gain **vision** by making strategic choices to create the future we want
- manage **risk** by building preparedness for alternative, possible futures
- increase organisational **agility** by creating future-ready and alert organisations that can adapt as the future evolves

# FUNDAMENTALS OF FORESIGHT

## BUILDING BLOCKS

There are many ways to design a futures exercise, and many tools. However, we consider there to be three fundamental building blocks that are needed when depicting futures (Figure 1).
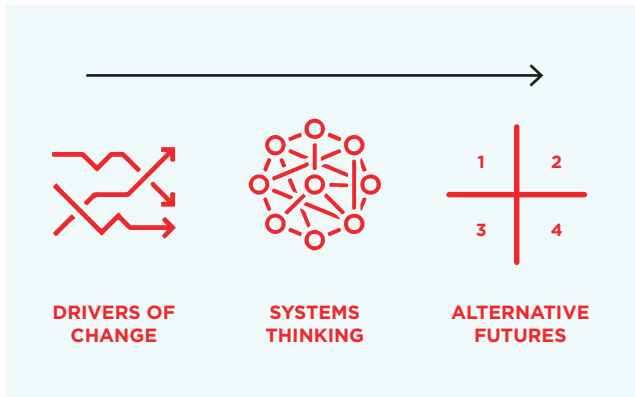


**DRIVERS OF CHANGE**   **SYSTEMS THINKING**   **ALTERNATIVE FUTURES**

**Figure 1. Fundamental building blocks of foresight**

## 1. USE DRIVERS, EMERGING ISSUES AND WILDCARDS AS THE BUILDING BLOCKS OF THE FUTURE

Drivers of change are global issues and trends that shape our future societies and markets. "In cause and effect, it's the cause" (Learning from Technology Foresight Connections).

Focusing on drivers of change highlights the history and context that have shaped the present, as well as the megatrends that will likely affect all areas of society in the future, for instance over the next 10-15 years.
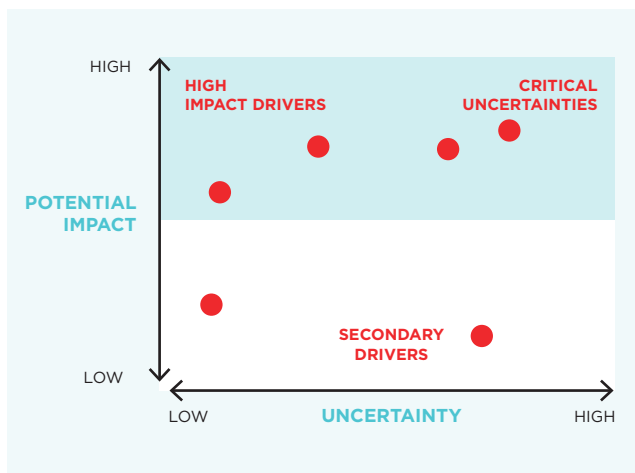


**Figure 2. Identify your drivers ( ● ) and prioritise based on impact and uncertainty**

This approach provides an important macro view and helps explore the full range of forces that may shape the future, especially those outside our control.

It looks beyond boundaries to identify potential wild cards and emerging issues (weak signals) that may have an impact, even looking to the fringe for new sources of inspiration.

Because the future cannot be predicted and is non-linear, the most significant drivers are those that will have high impact (on the future) and high uncertainty (demonstrating a degree of variability, or lack of predictability as to how they will manifest in the future).

## 2. TAKE A SYSTEMS APPROACH

Foresight is used to understand and to engage with complexity and uncertainty. It takes a systems approach to understand how drivers interact, and it analyses cause and effects to recognise points of leverage that can help to shape the future.
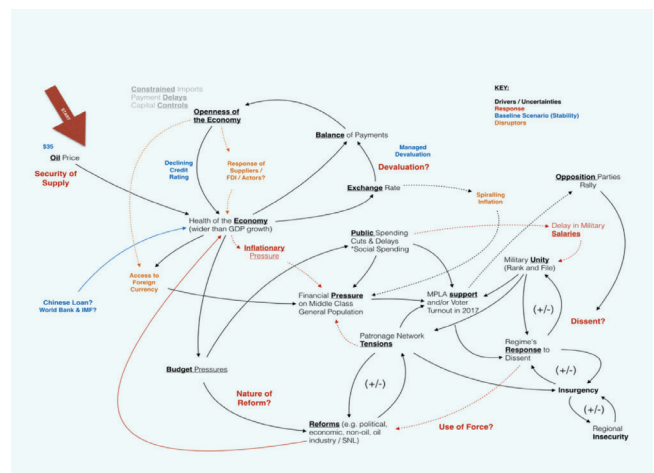


**Figure 3. Example systems map** Map the key drivers and understand dynamics of different scenarios

Systems thinking can be used to explore how alternative outcomes of drivers will affect the overall system, and to test for unexpected consequence and shocks as the system adapts. This process tests the way we understand the world. Systems mapping can be used to identify and to explore key relationships, to challenge assumptions, and to understand how a system might evolve over time. A systems map can be kept up to date, and is able to evolve as new information comes to light or the future unfolds.

## 3. EXPLORE ALTERNATIVE FUTURES

When a system is well-understood, it can be used to explore alternative futures. This is necessary as the future is non-linear, and therefore is unpredictable. There are many effective tools and methods for this, including scenario building. The key point, however, is to be able to move away from a fixed idea of the future to identify alternative, yet credible, futures.

*"A scenario is a story with plausible cause and effect links that connects a future condition with the present, while illustrating key decisions, events, and consequences throughout the narrative."* (Futures Research Methodology Version 3.0, Glenn 2009)

The purpose of exploring alternative futures is to shift our thinking beyond the constraints of today so we can prepare for a wider range of eventualities.

**Ultimately, this improves the decisions we make today because we are able to:**

• Challenge assumptions more effectively

• Identify new opportunities and innovate

• Improve risk management, by being able to respond to threats in a timely manner, to prepare effective mitigation plans

• for undesired future, and to keep an attentive eye on early warning indicators.

"Foresight allows decision makers to make a more informed and timely assessment of the likely impact of policies against a background of possible future environments"

Bob Johansen
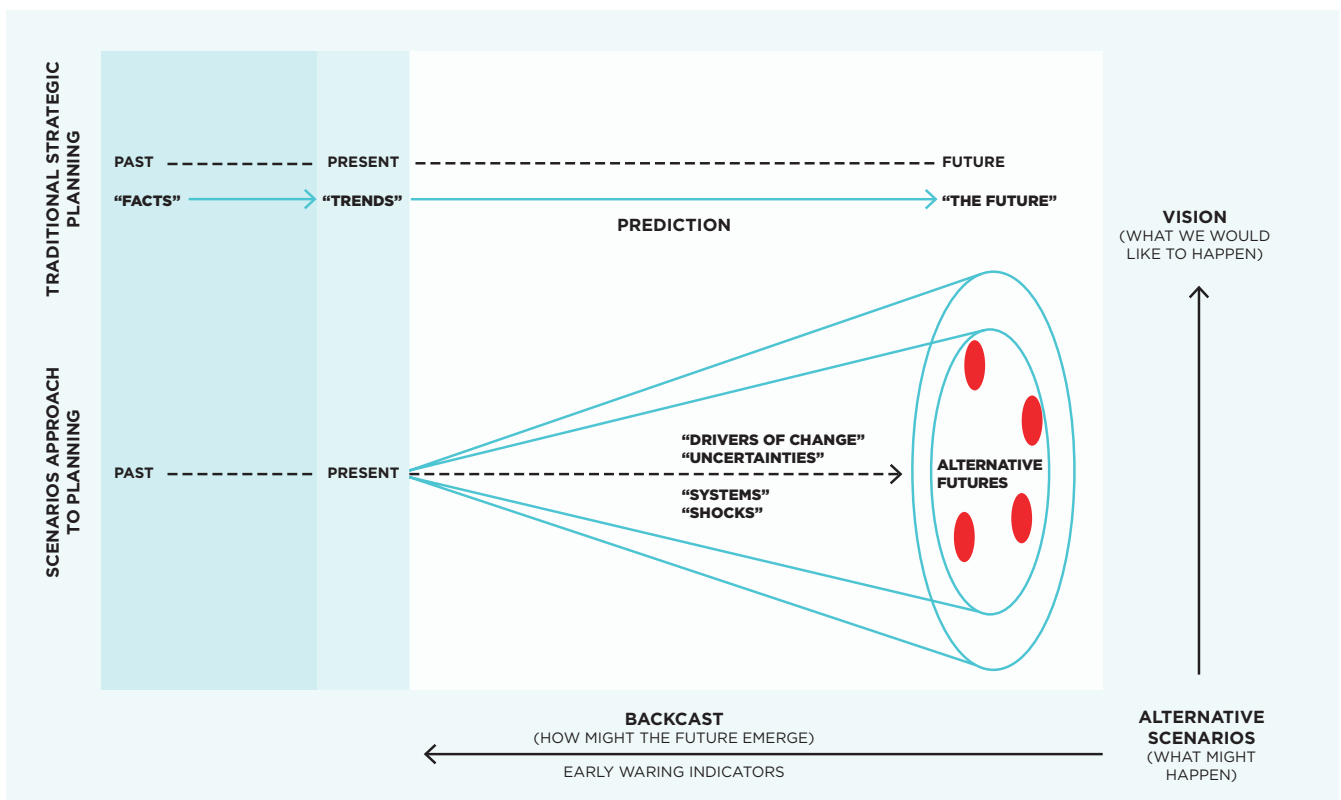(Distinguished fellow, Institute for the Future, Silicon Valley)



**Figure 4. Bringing the futures back to the present.** Foresight approaches differ from forecasting and other attempts to predict the future using linear trends. Foresight explores possible futures (●), to help you prepare for alternatives, and to understand your preferred future or vision.

# GETTING STARTED: THE SOIF FOUR–STAGES

For foresight to have impact, it needs to be conceived from the outset with the decision-maker, policy-maker or other client of the work in mind.

SOIF has developed a four-stage process to ensure that our clients as well as new users of foresight are aware of the essential components of successful foresight work. Our four stages – Scoping, Ordering, Implications and Integrating Futures – lead you through the steps that are necessary to achieve this goal.

We understand the process of engaging with the complexity and uncertainty of the future as a journey. Each organisation we work with, and each topic we explore is different. Context always matters in doing good foresight work. However, we use the same four stages in everything we do, because having a structured flow allows a greater focus on the specific differences of content, culture, and outcomes.

Our four stage process is a scaffolding to enable you to design a strategic foresight intervention to suit the particular needs and situation of the how much time and resources are available to you, the existing material and research, and the desired objectives of the work.

## 1. SCOPING

**Understand the context and people so you can set an appropriate question and design your intervention for maximum impact.**

**Why?** To design for cost-effectiveness and meaningful change, so that projects are manageable.

**What?** An iterative framing approach, ensuring thorough mapping of the 4-stage journey, the tools to be used, and wider stakeholders.

**How?** The Scoping note is one of the most important tools for project design.

**Keep in mind:**
- Before you start, understand the reason for engaging with the future and the project purpose
- Engage with the project commissioner and those you want to involve in the work
- Go back and forth on the question until you are confident you have the right one
- Adapt your approach, tools and level of stakeholder engagement to best utilise your resources and your points of influence
- Build external relationships and your 'sensing network'

## 2. ORDERING UNCERTAINTY

**Create contrasting, coherent futures using drivers of change, in order to engage with alternatives to the status quo.**

**Why?** To go beyond forecasting and trends to explore different elements in different combinations.

**What?** Identify the components and drivers of disruptive change and order them in different ways, especially to create divergent images of the future.

**How?** Scanning for drivers, systems mapping and scenarios are some of the tools for Ordering.

**Keep in mind:**
- Understand the purposes of, and differences between, futures thinking, prediction and forecasting
- Explore different shapes of change and understand how to engage with complexity
- Identify and use drivers of change to explore different futures
- Use appropriate methods to develop credible, coherent, and challenging alternative futures
- Build on others' analytical work – don't reinvent the wheel or get lost in detail
- Have fun, be creative, be bold and enjoy the unexpected!
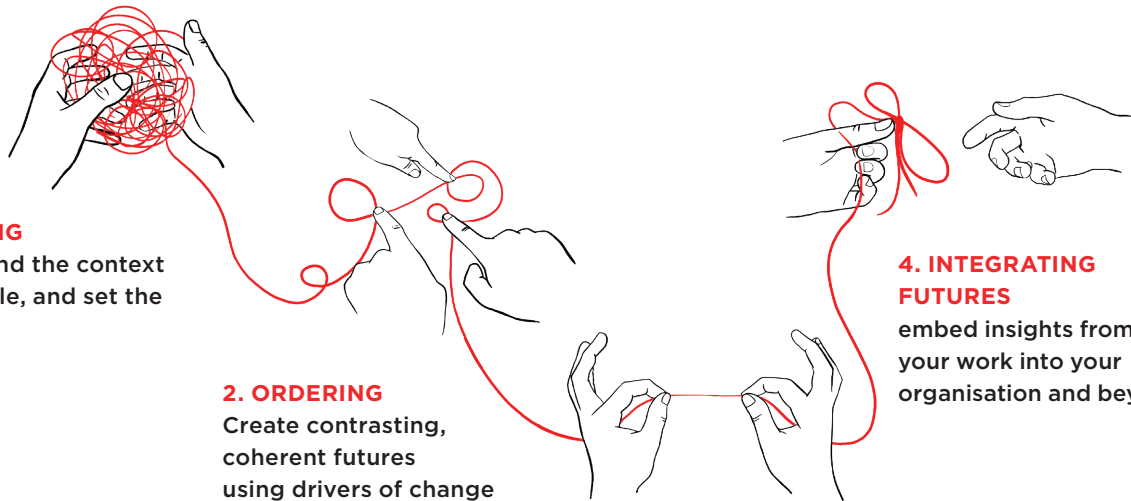
**1. SCOPING**
Understand the context and people, and set the question

**2. ORDERING**
Create contrasting, coherent futures using drivers of change

**3. IMPLICATIONS**
Work through consequences of the futures

**4. INTEGRATING FUTURES**
embed insights from your work into your organisation and beyond

## 3. IMPLICATIONS

Systematically work through consequences of the futures over time and across different perspectives.

**Why?** To avoid jumping to conclusions too easily, or considering only – the obvious consequences of scenarios.
Treating implications in a systematic way demonstrates the impact of possible future scenarios for decisions to be made today.

**What?** A systematic process of thinking through both general scenario implications and those for particular issues, questions or pending decisions.

**How?** Visioning, wind-tunnelling, portfolio and options analysis, and backcasting are some of the tools recommended for understanding implications.

**Keep in mind:**
- Choose and use tools, individually and – in combination, to gain different types of insight
- Make strategic choices to shape the future we want and build preparedness for alternative possible futures
- Consider implications from different points of view, through multiple lenses, to gain richer perspectives
- Capture the attention of decision-makers by identifying immediate implications as well as medium- to long-term implications

## 4. INTEGRATING FUTURES

Create impact and change, by embedding insights from your work into your organisation and beyond in the wider public space.

**Why?** Translating foresight into an organisation requires foresight skills to prevent it from being seen as interesting rather than important.

**What?** Synthesised foresight outputs and implications which link to clear organisational entry points and levers, through advocacy, building and nurturing relationships, sharing information, advising and communicating.

**How?** Rapid prototyping, strategic communications, visual design, the capability matrix and "more of/less of" are some of the tools we recommend.

**Keep in mind:**
- Formulate messages in an imaginative way using a range of media
- Create and roll out a foresight project implementation plan
- Embed foresight in organisational systems and planning processes
- Work with allies, make opportunities, use entry points, and overcome barriers to acting for the long-term in your organisation
- Inspire others to be advocates of your work
- Establish systems to monitor change, and measure the impact and quality of insights from foresight
- Take an ecosystem approach to create future-ready organisations that can adapt as the future evolves

# OUR PRINCIPLES

SOIF sits at the point where theory and practice meet. Our principles are informed by our experience of implementing and researching foresight practice in over fifty countries. We also draw on insights from our network and from conversations with ministers, policy-makers, civil servants, front-line staff, foresight experts and consultants.

These principles shape the design of our retreats and form the foundation of our training, advisory, project and advocacy work. They reflect our belief in foresight as a holistic approach to empower people to create a better world for this and future generations.

### 1. Collective reflection on the future enables resilience and empowerment

The act of reflecting on the future collectively - and the capability to do so - is valuable for all communities and countries at all times. It is not a luxury; it is a necessity. It helps build vision, resilience and empowerment in an uncertain world.

### 2. Focus on the decision and decision-maker, but unlock transformation with wide participation

Any effective foresight process must be designed to benefit the decision and decision-maker and use insights about the future to create change in the world today. But it is essential to confront different views, engage the periphery and ensure broad participation, particularly by those not usually listened to. This is the key to unlocking the transformative potential of tomorrow, empowering citizens, and holding today's decision-makers accountable to future generations.

### 3. Foresight as art, science and craft

Foresight is both art and science and together these make the craft of foresight. To achieve impact requires both a good understanding of tools and techniques and the judgement to use them effectively.

### 4. Design foresight as a four-stage journey

This journey acts as a scaffold for our work, moving from Scoping through Ordering and Implications to Integrating Futures.

### 5. Understand the context first, then choose the tools and methods for impact

Tools and method are important, but are influenced and guided by culture, time, topic resources, and purpose. The tools used within the four-stage journey maximise impact around the purpose, while staying within resource- and other constraints.

### 6. Mobilise left-brain and right-brain approaches in our personal, organisational and system-wide journey

Engaging with the future involves left-brain and right-brain approaches. We need to be mindful of our own personal practice when doing so, striving to make sense of things in an uncertain world and paying attention to our cognitive biases. What we learn inspires us to build future-alert organisations and communities.

### 7. We are part of a wider community of interest and advocacy

We learn from each other and support each other with examples of what we have achieved.

# GLOSSARY

## FORESIGHT, FUTURES AND FORECASTING

**Forecasting** To predict or estimate (a future event or trend). Forecast implies less certainty about the event's occurrence than a definitive prediction, but the terms are often used interchangeably. Forecast is usually applied to short-term futures – such as one year ahead.

**Foresight** The capacity to think systematically about the future.

**Futures** Academic discipline and research methods and tools used to develop foresight

**Resilience** The ability to recover from difficulties quickly.

**Risk** A situation involving exposure to danger or an adverse outcome.

**Risk Management** The forecasting and evaluation of risks together with the identification of procedures to avoid or minimise their impact

**Strategic Foresight** An organised and systematic process to engage with uncertainty regarding the future.

*"The ability to create and sustain a variety of high quality forward views and to apply the emerging insights in organisationally useful ways; for example, to detect adverse conditions, guide policy, shape strategy; to explore new markets, products and service"* (Developing and Applying Strategic Foresight, Slaughter, 1997)

**Uncertainty** A degree of variability, lack of predictability or state of doubt about the future or about what is the right thing to do.

## COMPLEXITY AND SYSTEMS-THINKING

**Complex or wicked problem** A problem with many interacting agents with multiple identities. If you alter an agent, the effect is unpredictable and cause and effect are intertwined.

**Complicated** All components are knowable and definable and can be catalogued. The relationships can be described and cause and effect understood. An interaction will have a replicable outcome.

**Sense-making** A motivated, continuous effort to understand connections (e.g. among people, places, and events) in order to anticipate their trajectories and act effectively.

**Systemic** Relating to or affecting the whole of a system, rather than just some parts of it.

**Systems thinking** A holistic approach to analysis that focuses on the way that a system's constituent parts interrelate and how systems evolve over time and within the context of larger systems. Systems thinking is a fundamental perspective of foresight; the lens through which futures thinkers view the world.

## BUILDING BLOCKS

**Driver of change** "What's a driver? In cause and effect, it's the cause." (Learning From Technology Foresight Connections, Smith & Mason, 2004)

Drivers are forces or factors of change that have the potential to "drive" a future in a particular direction. For example: Climate change is a driver of change in the context of urban development (and many other contexts).

Drivers may have an immediate effect on the system you are looking at, or may have a more diffuse impact on a number of direct drivers.

**Drivers of change analysis** A drivers of change analysis can be conducting in many ways, systematically through a horizon scanning process, quickly by clustering, using the futures triangle, or prioritisation based on a number of factors including the uncertainty and potential impact of the driver.

**Emerging Issue/Weak Signal** An early indication of a potentially important new event or emerging phenomenon that could become an emerging pattern, a major driver or the source of a new trend.

**Horizon or Environmental Scanning** The systematic examination of potential threats, opportunities and likely developments, including but not restricted to those at the margins of current thinking and planning. A good horizon scan will scan widely, involving a wide range of sources to map the underlying issues, and identify a range of weak signals, trends, wild cards of other developments, persistent problems, risks and threat.

**Trend** General tendency or direction of a movement/change over time. A megatrend is a major trend, at global or large scale.

A trend may be strong or weak, increasing, decreasing or stable. There is no guarantee that a trend observed in the past will continue in the future. Megatrends are the great forces in societal development that will very likely affect the future in all areas over the next 10-15 years.

*"A trend is a trend, until it bends."* (Ged Davis)

**Wild Card** There are multiple types of wild card. When people refer to wild cards they typically imagine so-called "black swan" (low-probability, high-impact) events (The Black Swan, Taleb 2007). However there are a range of wild cards – see for instance Oliver Markey's typology of Wildcards in the Compass Anthology. Or the three mascots of post-normal times: the Black Swan, Black Elephant and Black Jellyfish.

### THE FIVE TYPES OF FUTURE

**Business-as-usual** The world and the organisation will continue on the same lines. The extended present.

**Probable future** The future imagined based on an extrapolation of existing trends. Keep in mind Jim Dator's comment that there is no such thing as a probable future.

**Possible future** Judged to be less plausible, based on its logical connection to the perceived reality. A possible future will still contain embedded assumptions about the future.

**Preferred future/Normative future** Having a preferred scenario, or future.

**Plausible future** Judged to be reasonable, based on its underlying assumptions, internal consistency, and logical connection to reality.

### EMERGENT TECHNIQUES

**Co-creation** Working together with different groups of people to explore ideas and solutions.

**Feedback loops** Scenarios of alternative futures that produce circular causalities. Emergent strategic planning includes alternative policies and short, non-traditional feedback loops.

**Rapid prototyping** Creating models or sketches to test ideas and spot problems, as an effective way to navigate and test hypotheses and ideas in complex or rapidly changing environments.

### SCOPING TOOLS

**Scoping note** Sets out the principal project parameters – content and process – in a document that the client and project team can refer to at each stage.

### ORDERING TOOLS

**Archetypes** Often used in forecasting and exploratory scenarios work, archetypes reflect re-curring images of the future e.g. the Manoa method's Growth, Discipline, Collapse, Transformation. They are high level descriptors of potential ways that

a credible or coherent plausible future may evolve. They are a starting point to help you imagine a set of possible futures.

**Scenario** Scenarios are descriptions of alternative possible, coherent futures. They are not predictive, but help you to understand how possible alternatives may come about and to test the evolving dynamics of the future. They explore how the world would change if different drivers become dominant, or various events were to occur. They can be developed using several different methods.

*"An internally consistent view of the future might turn out to be - not a forecast but one possible future outcome"* (Competitive Strategy: Techniques for Analyzing Industries and Competitors, Michael Porter 1985)

*"A tool for ordering one's perceptions about alternative future environments in which one's decisions may play out"* (The Art of The Long View, Peter Schwarz 1991)

There are multiple types of scenario methods used for different purposes. For instance, the deductive 2x2 (or double uncertainty) method is the most widely used approach to developing scenarios based on analysis of drivers of change. Examples of other methods are incasting (Archetypes, Manoa Method), inductive (Causal Layered Analysis), and morphological (Field Anomaly Relaxation).

**Scenario planning** A futures approach used for medium to long-term strategic analysis and planning. It is associated with work done by Shell, GE, SRI, and the Global Business Network from the 1970s to the 1990s.

## IMPLICATIONS TOOLS

**Backcasting** Taking a future scenario as a given, backcasting asks you to explain the factors and events that led to that scenario developing. Starting in the future and working back, it helps to imagine alternative future paths and identify events and issues that will enable or prevent a scenario from taking place. Combined with a vision this can help you figure out what you need to do today to create that future.

**Porfolio analysis** An approach to generate a set of policy responses that can help you achieve both aspirational and resilient to different futures.

**Wind-tunnelling** To stress-test goals and objectives against different future scenarios, and to generate new policy and business ideas. It can also be used to assess the inherent risks of your desired policy response. Understanding what kind of organisation, policies and capabilities are effective in influencing future outcomes in a way that is beneficial, normatively, highlights "no regrets" outcomes and enables a future options approach to policy-making.

**Future options** An outcome from wind tunnelling. Possible policies or strategies are ranked according to whether they are "no regrets" (effective when tested against all scenarios); "opt out" options (effective against most but not all scenarios, which you may need to opt out of in future); "opt in" options (effective in a minority of scenarios, requiring investment in capabilities in case you need to opt in at a future date); and "abandon" options, ineffective against all scenarios.

**Visioning** Adds a normative frame of principles, desires and goals to scenario analysis without losing insights into change barriers, enablers and other alternative futures. A set of scenarios can be used to to help create a desired future. What are the positive and negative aspects of other scenarios – how do these come together to create a desired future?

## INTEGRATING TOOLS

**Capability matrix** A tool that identifies which aspects of an organisation can be used to enable the organisation to be successful in different futures.

**More of, less of** The use of scenarios and their implications to consider which parts of an organisation should benefit from more resources, which less.