

Practical Foresight Guide

Chapter 2 - Thinking

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2. Thinking

Aim

The ultimate aim of using strategic foresight to advantage is to provide challenging visions of alternative futures which can be acted upon today in order to shape the best possible tomorrow. This process starts by challenging thinking and questioning of a particular future topic.

Engagement

Strategic foresight programs and projects¹ might mean

- A single person working on a particular issue.
- A team constructing an organizational strategic plan.
- Systematized organizational trend spotting and action planning.
- Groups of organizations or people undertaking large-scale enquiries.

Needs range from addressing specific one-off challenges or focusing on delivering continuous intelligence and strategic thinking to provide agility and resilience in the face of increasing uncertainty.

^{1.} Project (a one-off exercise) | Program (a continuous process)

Common objectives

While the aims and goals of each individual program or project may differ, they all share certain common objectives.

- Challenging existing assumptions and paradigms.
- Developing new visions, values and strategies.
- Informing decision making.
- Expanding collaborative planning.
- Increasing organizational foresight capabilities.

They are delivered using systematic thinking frameworks.



Figure 5. Approaches. Courtesy of Shaping Tomorrow



Figure 6. Cross-impact analysis. Courtesy of Sheila Moorcroft 4RTT

Driving forces

They typically examine all the global, regional, and/or national driving forces associated with making organizational decisions including: political, economic, social, technological, legal and environmental factors.

A change in one or more trends affects many others both directly and indirectly (see *Figure 6*). The recent financial crisis created a 'Perfect Storm' that had impacts politically (e.g. the introduction of stimulus packages), economic (e.g. people's return to saving versus spending and socially (e.g. unemployment) and has led to waste reduction by consumers and organizations alike, lower standards of living and social concern.

Forward-thinking organizations endeavor to see how colliding driving forces like the ones shown in *Figure 7* can potentially combine to change their future landscape and then act early to ensure their strategy can cope with emerging and potentially disruptive change.



Figure 7. Trend analysis

Understanding how a sudden disruption to a complex system might fundamentally change the status quo is increasingly becoming a boardroom issue and one that senior executives of any size organization must ask in good time.

Understanding complexity

'Predicting the future is not possible because our world is a complex adaptive system. It is characterized by non-linear, complex, highly dynamic, set of interlocking issues that change in unexpected ways and at varying rates. The often stated "butterfly effect," a butterfly flapping its wings in

China is a small component of creating a hurricane in the

West Indies," is an example of this phenomenon. Rumors started by one person go global within hours, thanks to the Internet: setting hares running in positive and negative directions is another. Often, the biggest weakness in a system is the least known and observed part of that system and it's here that the biggest possibilities for unforeseen interaction occur.

The further we look out the harder it is to predict because the number of possibilities for unforeseen interaction rises dramatically.

Complex adaptive systems exhibit these properties:

- They manage themselves through being aware of their environment.
- Organizations and people tend to exhibit high levels of complexity to meet fresh, external challenges.
- New systems can emerge suddenly, without warning, using few and simple rules.
- Large complex systems can be transformed by a single person, or small sub-systems shifting the ballgame.
- Changes in one system affect all others.
- □ The range of possibilities is endless.'

Source: The Road Ahead for Research on Strategic Foresight Insights from the 1st European Conference on Strategic Foresight.'

No one has future data; just hypotheses and conjectures based on current observations, past experiences and ideas. So, if the future cannot be predicted, how are we best able to anticipate what is plausible and possible in the years ahead?

One answer lies in being more aware of what is changing and not changing by constantly conducting Horizon Scanning of the coming landscape and then using intuition and mental capacity to see patterns and possibilities in the information gathered. In military terms this can be compared to creating a battle strategy (Vision, Values, Goals) but simultaneously reconnoitering the war theatre for the maximum level of battlefield intelligence from land-based scouts, sea and air,

'By starting to see the events of the day as parts of trends, and those trends as symptoms of underlying system structure, one can consider new ways to manage and new ways to live in a world of complex systems. But, beware! Unless you take off the blinkers and see systems as complex and adaptive you are likely to mistreat, mis-design, or misread systems if you don't respect their properties of resilience, self-

organization and hierarchy. So, beware of false boundaries, bounded rationalities, limiting factors, nonlinearities and delays. You will still be surprised but you will probably be surprised less often, and that's the essence of foresight - being better prepared for the unexpected.'

Source: Thinking In Systems, Donella H. Meadows, Sustainability Institute, 2008

By continuously reading the news you will find many examples of systems in need of better management or re-design. And, by using a variety of environmental sensor mechanisms such as

- Collaborative foresight: Engaging the organization's people.
- Surveys: Using surveys of stakeholders to elicit their views.
- Search: Using searches to find material of relevance for answering the question(s).
- Exercises: Conducting internal and external strategic exercises.
- Scouting networks: Employing international networks of savvy people to report change.
- Social networks: Connecting with futures orientated people using Twitter, Facebook and special interest Internet groups.

you can make positive futures happen by engaging with more people and tools to help you get to your preferred future faster.

Action oriented

Excellent foresight programs and projects are:

- □ Action-oriented.
- Open to alternative futures.
- Collaborative.
- Interdisciplinary.
- Multi-dimensional, not mono-polar.
- Focused on positive outcomes and while handling threats.
- Increasingly systematized.

A foresight program or project must have all these elements to create the best assessment of "what's next?" and "how to respond?"

Further reference

- Are you fit for tomorrow?, Shaping Tomorrow [Registration required]
- Case studies, Shaping Tomorrow [registration required]
- Discover the future, Shaping Tomorrow
- □ <u>Thinking About The Future</u>: Strategic Anticipation and RAHS, RAHS
- Complex System Wiki definition

2.1 Starting futuring

How will the future be different?

At its basic level strategic foresight begins by asking "what if" questions about future issues:

- What if this happened in the world today?
- What does it mean for others?
- □ What does it mean for me/us?

Keep these "what if" questions in mind as you examine emerging issues. Select those for further investigation and deeper thinking that look as though they will generate significant change in your world. Significant change usually occurs when one driving force cross-impacts with others.

If your focus is on tactical foresight, i.e., those that can be absorbed or handled with ease, then answering just the questions below is probably sufficient for your purposes here.

What should we do about it?

Then ask more "what if" questions, determine the answers, and your response:

- □ What would have to happen first (for the results we want to occur)?
- What do we have to do to play a role?
- What do we do next?

If your focus is on strategic foresight, pick only those that represent significant change and are uncertain; not those that can be absorbed or handled with ease but the ones that may bring gut-wrenching change to your customers, collaborators, and communities. For these represent great upcoming opportunities and/or risks.

'As change is a complex adaptive system it is important to look at the context within which individual changes are occurring to see where additional impacts may occur. For example, the systemic diagram of the packaging industry in *Figure 9* clearly shows the complexity and interactions of the system and enables

us to consider some of the potential knock on effects. If you do not have a good understanding of the dynamics of the environment/business/issue you want to map, you will likely miss critical elements and make faulty or weak conclusions.'

Source: Joseph Coates



Figure 9. The Packaging System. Courtesy of Joseph Coates

Developing perspective

First, break down how an issue operates by mapping its system interactions like the above example from the Packaging Market and then research what's happening to each element. Patterns of change will begin appearing as you research your topic. Make a note of these.

Another fast way to create an instant similar map is through using social media web tools to aggregate, categorize, cluster, hyper-link, profile and personalize people's ideas about the future through designing collaborative delivery, retrieval, routing and alerting systems.

Below is an example of a collaborative web-enabled systems map created by shaping tomorrow members (represented as a 360° searchable tag cloud in *Figure 10* -available from the Shaping Tomorrow front page (Future Search).

360° View - Packaging 🛛 🖾 🚔
Keywords Adhesive Adolescent ADSB Aerospace Ageing Air safety Air scheduling Alarm
Antenna Anti-ageing Baby boomer Bag Barcode Beet Belonging Billiboard
Biodegradable Bioplastic Biogosphere Bottle Bottled water Bottling Boxes
Brand Can Candy Carbon footprint Carbon nanotubes Cardboard Celebrity
Celluloid Chemical Children Cigarette Clothing Coating Coffee Colour
commodily speculation Compostable Conductive plastic Confectionery Consumer Consumer
attitude Consumer goods Consumerism Container Cost reduction Cyberspace
Demographics Description Design Disposable Distribution Drink Economic growth
Efficiency Energy Energy efficiency Environment Environmental Impact
Environmentally conscious Ethanol Ethical consumerism Exotic Extrusion
Fair trade Fastener Feedstock Financial Investor Fish Fitness Foam Food
Food Industry Food labelling Food miles Fuel price Functional food Furniture
Garbage Giveaway Glacler Glass Glasses Grain Green Greenhouse gas
Grooming Haptics Health Implant Ingredient Injection molding Labelling
Landfill Liquor Location based services Luminosity Machinery Malze Manufacturing
Marketing Material Men Meteorology Military Milk bottle Mobile phone Money
Nanocomposite Nanofibres Nanoparticles Nanotechnology Natural product OII-free
Organic Organism Oxy-biodegradable Packaging waste Paper People Perception
Persona Photonic crystal Pill Plastic Plastics Pollution Polymer
Polypropylene Polystyrene Potato Produce Produce packaging ProductNity purchasing
decisions Raw material Recession Recommendation Recycle dollars Recycling
Recyling Refinery Refrigerator Regulation Retail RFID Rotomolding Scanning
Seafood Seat-belt Shipping Shopper Shopping Shopping bag Sillcon Simplicity Skin care Smart meter Snack Social attitude Sound Sov Sugar-free
Sugarcane Supermarket Supply chain Sustainability Sustainable Packaging
Sweepstakes Switchgrass Tag Tax Technology Time Touch-screen Transport
Trash Trollev Trust Virtual world Wallboard Waste Waste discosal Waste
reduction Water Wine Women Worm

Figure 10. Packaging keywords - Source: Shaping Tomorrow (www.shapingtomorrow.com)

The benefit of the keyword listing is that it's designed to make you think out of your box and help you discover outliers that you hadn't considered. Add more change observations to your notes as a result of this type of exercise.

From what you have learnt ask yourself how incumbents and upstarts:

Better anticipate the future?

Horizon Scanning Strategic Thinking

- Make change?
- □ Create new forms of competition?
- Alter their cultures?
- Innovate?
- Create new metrics?
- Change their processes?
- Assess and mitigate risk?

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- Increase their sales and marketing capabilities?
- Improve their strategies?
- Deal with their existing and future workforce and workplace?

For in your answers lie your opportunities and threats going forward!

As you explore, add new material to your evidence base and determine how policy and strategy might need to change as things evolve.

Design process change example

Here is a design change example that used tactical foresight to change the labeling of a shampoo bottle. In the first drawing all of the components of the bottle, its packaging, coating and materials used were mapped by the project team.



Figure 11. Shampoo bottle systems map before re-design. Courtesy of Shaping Tomorrow

Then the company looked beyond its market for new ways of labeling the bottle. After using their Horizon Scanning system to identify alternatives and evaluating all possibilities it settled on 'colored laser etching' to transform the bottle's look.



Figure 12. Shampoo bottle systems map after re-design. Courtesy of Shaping Tomorrow

The process was considerably simplified, the bottle made more aesthetically pleasing to the eye, costs cut and a better sustainable solution found.



Figure 13. How to do a Futures Study. Courtesy of Joseph Coates

How to do a future study

Finding a solution to labeling a bottle is relatively simple. But, people engaged in looking at the future are faced with many choices of what to include/exclude from their research when looking further out over far longer timeframes and at more complex issues. They therefore need high competency in design principles, sourcing, synthesis, and sense-making skills to be able to present conclusions in a rounded, reflective, and

unbiased manner. Since change in such a system is complex it is vital to establish the principles, framework, quality assurance policies and processes to maximize value and deliver the benefits.

Figure 13 gives a high-level process flow of how a strategic foresight project might be designed.

Further reference

Sharpening Your Business Acumen, Ram Charan

2.2 Future practices

Managing uncertainty

In a world where only uncertainty, complexity, and ambiguity seem to be the norm these days, organizations need wider global knowledge obtained from many more external sources and a new set of cognitive skills to determine their best future responses.

The following critical cognitive skills need to be mastered

- Trend assessment: The competencies to understand trend directions, assess likely impacts, and respond in a timely and appropriate manner.
- <u>Pattern recognition:</u> the ability to see patterns rather than individual factors.
- Systems perspective: the capability to envision the entire system rather than the isolated components.
- Anticipation: to anticipate short and long term consequences over time, novel situations, and geography.
- Analysis and logic: to rely on a combination of analysis and logic rather than repeating the past and/or employing gut feel.

Organizations that inspire, engage, and enable their people to use foresight in their daily work through developing their strategic competencies can acquire and maintain a sustainable futures-orientated edge in their global marketplace(s).

Next practice

Leading organizations use systematic, collaborative, and strategic foresight capabilities to discover what's coming next and respond ahead of the competitive curve.



Figure 14. Five future competencies. Courtesy of Shaping Tomorrow

They adopt a trans-disciplinary, systems-science based approach to analyzing patterns of change in the past, identifying trends of change in the present, and extrapolating alternative views of possible change in the future in order to help create the futures they desire.

Further reference

- Are You Fit for Tomorrow?, Shaping Tomorrow
- Discover the Future, Shaping Tomorrow
- Guide to Futures Thinking, The Tomorrow Project
- □ <u>Five Views of the Future</u>, Technology Futures Inc.
- <u>Futures Studies: An Overview of Basic Concepts</u>, Infinite Futures 2003

2.3 Future assumptions

Philosophy

Future thinking organizations acknowledge that:

- The future cannot be predicted and is not pre-determined.
- □ Tomorrow will be little like today.
- □ What people say could never happen, usually does!
- 'A Futures study is not prediction, but exploration and provocation!' (Source: Infinite Futures)
- Decisions are based on what is known; and in making those decisions, the future is pre-determined.

- Being better informed of potential, possible, and plausible futures helps to make better informed decisions.
- There is not one future but many possible futures. Of those possible futures, some are more plausible, probable, and preferable than others.
- □ The future is something we can create or shape, rather than be already decided.



Figure 15. What really happens? Courtesy of Lloyd Walker, PreCurve

Risk assessment

Foresight encompasses:

- □ Horizon Scanning for upcoming change.
- Strategic Thinking through consideration of the change issues raised.
- Action Planning from the learning gained.
- Networking, both to inform the program or project and to communicate decisions and results to the various stakeholders.
- Project management both to scope individual exercises and to evaluate the success or otherwise of the outcome.

This process ought to be continuous and its elements cycled around as the future unfolds. Missing components run the risk of sub-optimum outcomes or, worse, failure. Risk assessment and plans to manage threats are therefore essential upfront.

Need for integration

Scanning as a standalone activity is largely ineffective if it's not integrated with:

- Managerial sense-making activities.
- □ Managing risk and uncertainty.
- Periodic reviews of decision-making assumptions and mental models.
- On-going strategic thinking and planning.
- □ Inherent in scenario planning, wild card, or consequence exercises.
- Policy development.
- Organizational creative thinking processes.

Further reference

- Introducing the Future, Shaping Tomorrow
- Online Foresight Guide, For-Learn, JRC European Commission
- □ <u>Atlas of Future Links</u>, Futures Discovery

2.4 Futures outcomes

Outputs

Programs or projects typically deliver a combination of all or some of the following:

- Quick, initial assessment of the issue under study.
- Clear definition of the key question(s) to be answered derived from an initial, quick assessment.
- Horizon Scan for likely upcoming political, economic, social, technological, legal, and environmental changes.
- Exercises in conducting breakout thinking beyond todays accepted paradigms.
- Scenario plans of potential futures.
- Competitor and sectorial analysis.
- Stakeholder mind-sets (surveys of desires, attitudes, and behaviors).
- Organization critique of competitive position.
- Plausible responses.

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- Agreed visions, values, and strategies including policy recommendations.
- Action plans and road-maps.
- New higher order understanding and better questions.



Figure 16. Scoping considerations

Cautionary principles

However, programs and projects are not a panacea to solve all problems. Caution should be exercised when:

- □ No clear, precise, and agreed scope can be established.
- No possibility of acting on the results exists.
- Appropriate key stakeholders will not engage.
- No champions exist.
- Adequate human and budgetary resources are not available.
- Profound disagreements make consensus impossible.
- □ The work seemingly duplicates others' efforts.

• There is limited or no possible inter-disciplinary approach.

Overnight success with beginning a program or project is unlikely though not impossible. Depending on the program or project, many stakeholders may need to be engaged in understanding the concepts and benefits of using strategic foresight to advantage and the role they should best play in its creation.

Preparation essential

Good preparation through scoping and groundwork is therefore essential, particularly if the stakeholders are new to the concepts, uses, and benefits.

If, after considering all the above, a program or project is the best approach then the next step is to begin scoping in earnest.

Further Reference

Distribution Thinking About The Future: Guidelines for Strategic Foresight, Andy Hines & Peter Bishop Social

2.5 Scoping futures

Project/program origins

A program or project usually begins for one of two reasons:

- The organization wants to re-examine its strategic plan and determine the need for possible change.
- The executive want to encourage continuous futures thinking by all their key stakeholders, particularly their people.

Often the trigger comes in the form of questions which usually are expressed in simple form at the outset, e.g., "what's the future of tourism?"

But this tells us very little. For instance - in "which countries?", "in what tourist fields?", "over what time period?"

Quick assessment

Programs or projects usually begin with a "Quick assessment" (*Figure 17*). The assessment states "what is changing?" and "why this is important?" It sets the scene for determining more of the specifics of the key question(s) which must be answered and captures your early background thoughts.

Horizon Scan	ning Strategic Thinking	Action Planning	Networking
Add Project	lst 🗊 🚰 🎒		
Hover over the field	titles for more on how to get the b	est out of this form.	
Title			
Key question			<u>~</u>
			*
Audiences			<u>^</u>
			*
Resources			<u>^</u>
			T
Budget			<u>_</u>
			Ŧ
Scope			<u>_</u>
			~
Geographies			
Exclusions			<u>~</u>
			-
Special attention			<u> </u>
			-
Study period	Please select an option from	below 💌	
Methods	Causal layered analysis	•	
(use Ctrl) Definitions	Chaos theory Expert panel	_	
	Forecasting Futures wheel		
	Horizon scanning		
	Heuristics Modelling		
	Morphological analysis Participatory methods	•	
Output	Please select an option from	below 💌	
Desired length	Please select an option from	below 💌	
Tags			
_			
Team			A
			Þ

Figure 17. Add project - Courtesy of Shaping Tomorrow

Use a template like this to ask "what is the purpose of the project?" and "what are the objectives of the question(s)?"

- □ Is the intent clear and positive in its outlook?
- □ Is it too broad or narrowly defined?
- □ How will the stakeholders view the project or question?
- Are the boundaries and time horizon clear?
- What opportunities and risks may be won or lost by the thrust of the question?
- What answers would one expect from the question?
- □ Will these give expected and unexpected answers (both are important)?



Figure 18. Scoping. Courtesy of Shaping Tomorrow

Questioning the future

Crafting a challenging question is the single most important part of answering any concern about the future. What the question is will determine the nature of the answer more than any other variables. Typically you have to ask a different question to get a different answer. The same question addressed in the same ways gets you no further than where you started from.

A well-designed question helps break through the boundaries that cripple organizational ambitions by building new and deeper levels of understanding. The challenge is to get teams to consider a question that takes them into uncomfortable (and often more ambiguous) territory.

Political 'correctness', taboos, and group-think blindness combine to produce very shallow, shared understanding and painfully flawed common understanding of environments that need to be challenged.

When people determine that the answer is to use screwdriver and bound the problem they miss that employing a hammer would have been better. Their probability of success is at best limited! So go after fundamental assumptions, existing paradigms, longer timeframes than normal and blind spots first.

Specific and near-term questions certainly run the risk of capturing continuity but miss vital changes emerging on the horizon. On the other hand, a long-term horizon opens up the imagination to many, novel, and exciting possibilities. Therefore for real world, ambiguous, and complex problems it is beneficial to phrase the question in a manner that encourages exploring the topic as opposed to initially defining it.

Systems thinking

The initial question is not about the "decision" that is to be made, but instead acts to define the relevant "system under scrutiny" that will contain the eventual decision. The system needs to be drawn widely enough to include all the competing driving forces that impact on the initial question. Just what the extent of the system is often produces controversy among stakeholders at the start of the exercise but can be used as a source of new learning and understanding.

A question also needs to "chunk up" to its highest level of abstraction and breadth relative to the organization. For example: 'The future of the car' is too narrow for a car manufacturer. 'The future of mobility' is better. 'The future of access' may be better still, but may be too widely drawn, depending on the specific question that the client has.

In some cases, the question can be general because the purpose is informational or for better understanding. In other cases, you may have a need for better foresight in order to make a decision. The question has to address your underlying need. This is unusually hard to do, as many people and teams feel a need for something but cannot articulate it. They also find the crafting of a question very difficult to do. Too broad a question ("What is the future of the world?") produces no or very limited answers but too narrow a question, nothing new. But, as some philosopher observed, a question well-structured is half answered. Spend time on it, challenge it, look at it from every angle and ask how the outcome might be too restrictive or too encompassing before accepting as it your "right question".

Stakeholder engagement

Whether we are asking the "right question" depends entirely upon the purpose and goals of the exercise. The stakeholders, particularly the sponsor/champion, have to feel good about the question or they will worry about the exercise from beginning to end and may finally disown the results. You impose your own question on your stakeholders at your own risk. The question should be crafted by expert judgment and agreed upon by both the sponsor/champion and the team conducting the exercise.

Ask them: What are you worried about? What if you had the answer to a question about your worries, what would you do with it? Who else could use the answer? Don't answer questions that have no value no stakeholders.

A good question has many elements beyond the purpose of the project:

- 1. A key question; usually one short, memorable, engaging phrase.
- 2. A focused description. In the exercise, there may be two dozen descriptors, or so, but there has to be one primary, focused description. This description can be very specific, like GNP growth rates or consumer sales or profits, or it can be very general, such as the overall social-demographic and economic characteristics of a defined market. A description could be as broad as "global climate" or "world peace."
- 3. A definition or way to measure the focused description
- 4. A geographical scope (a territory, a country, the world ...)
- 5. A time horizon (2020, 2050, 2100, etc.)
- 6. Exclusions (geographies, products, organizations etc. not of interest)

7. Special attention (issues deserving an in-depth look)

In addition, there may be a follow-up question(s) which relates the question directly to the concerns of the stakeholders.

Metrics

Definition of metrics deserves extreme care for one tends to get what one measures (and rewards). Metrics are often the source of unintended consequences as the system exploits the metric while losing sight of the side impacts.

While limits facilitate and simplify process they are ultimately arbitrary and artificial (from a humankind perspective) and invite exclusion of important factors that will ultimately dominate the problem and potentially dictate the end outcome. Even for something with as seemingly clean a timeline as 'win the Olympic Games for 2024' the drawing of geographic bounds to the city/region/state/nation or time frame to 2014 (when they are awarded) or 2018 (when the plans must be finalized for construction) or 2024 or 2028 (after the facilities have been converted to end uses all involve a level of arbitrariness that invite blind spots.

For example, the question "What will be the GPD growth rate in the future" is very different from "What will likely be the average annual GDP growth rate in the U.S. from 2011 to 2018 and under what different sets of conditions?" A follow up question that is more normative and visionary could be: "And given these different conditions, where are our best opportunities for top line growth?"

Continuous checking

After identifying "the system" revisit whether the right question has been asked and keep reviewing it as the exercise proceeds and learning and understanding grow. In particular, evaluate how the stakeholders view the exercise at regular intervals during and after its completion. In this way, success will bring stakeholder learning, acceptance and action arising from the outcome.

Keep asking "what is the purpose of the project?" and "what are the objectives of the question(s)?" and check that the answers to these questions are always satisfied during the life of the exercise:

- Is the intent clear and positive in its outlook?
- Is it too broad or narrowly defined?
- How will the stakeholders view the project or question?
- Are the boundaries and time horizon clear?
- What opportunities and risks may be won or lost by the thrust of the question?
- What answers would one expect from the question?
- Will these give expected and unexpected answers (both are important)?

Test your project scope on a cold, sample audience and among the key sponsors to iron out any issues before embarking on a full roll-out.

Often a quick scan using the search methods described later in <u>Horizon Scanning</u> will further help to improve the quick assessment and your key question(s). The key is to get this right very early on and then be precise about the desired outcome.

Be clear for whom you are undertaking this work. This is important so that your reporting meets their needs. What kinds of report do they "like" - in-depth, bullet points, two pages maximum? What would a successful report look like (content, format, length)?

Desired outcome

The desired outcome(s) must be determined by resolving the key question(s), setting the context and boundaries for the program or project, and creating a project plan. Ensure too, that the project or program properly considers other efforts already on-going in the organization and design an outcome that avoids unnecessary duplication.

Defining the desired outcome should lead to consensus among the key decision makers that the groundwork should start in earnest and resources are committed.

Determining the key question(s) to be answered is as important as the outcome. A poorly defined question will lead to an equally poorly defined outcome and vice versa.

Ensuring value for money by solid upfront planning will further help to ensure program or project success.

Further reference

- Thinking About The Future: Guidelines for Strategic Foresight, Andy Hines & Peter Bishop Social Technologies 2007
- Scoping an Exercise, For-Learn, JRC European Commission,
- **Establishing the Question**, Local Government Association, UK
- □ <u>About Foresight</u>, Foresight

2.6 Stakeholder engagement

Stakeholder identification

The next step in laying the groundwork is to systematically identify the key audiences and current backdrop in which they operate.



Figure 19. Stakeholders. Courtesy of Shaping Tomorrow

Shaping Tomorrow's Practical Foresight Guide- Chapter 2 Copyright: Some rights reserved. This work is licensed under a <u>Creative Commons License</u>. A web-enabled stakeholder analysis can serve two purposes. First, to analyze the power, influence and objectives of stakeholders against each other and second, to provide semi-automatic scanning for their likely future direction and potential impact on the marketplace.

Add Stakeholder 📴 🔝 🖨

Add, scan and analyse your key stakeholders for real-time competitive intelligence. Contact us if you would like us to continuously scan and analyse for you or do it yourself.

Title (required)	name stakeholder
Description	briefly say who they are
Description is limited to 400 characters, remaining: 400	
Website	e.g. http://wired.com
RSS Feed URL	e.g. http://feeds.wired.com/wired/index
Twitter Username	e.g. wired
Paper.li URL	e.g. http://paper.li/wired
Facebook Profile URL	e.g. http://facebook.com/wired
LinkedIn Profile URL	e.g. http://linkedin.com/company/6958
Location Please choose ▼	main country
Type Please choose ▼	select their relationship to you
Strength Please choose	market power
Maturity Please choose _▼	development level
Influence Please choose ▼	organizational impact on you
Contact Frequency Please choose ▼	how often you interact
Review Period Please choose 💌	re-visit timeframe
Topic Please choose	note their prime interest
Tags	bookmark your favourites e.g. project name
Visible to ○ All Shaping Tomorrow members ● Me and my colleagues ○ Only me	
Add Stakeholder	

Figure 20: Add Stakeholders. Courtesy of Shaping Tomorrow

Don't just list your internal stakeholders and direct competition but look wider for key influencers. One method of doing this is to use Shaping Tomorrow's 360° view of stakeholders (*Figure 20*) which uses automatic text mining to create mind maps of key people, authors, organizations, sources and countries associated with a particular topic.

Key people	5			
Barack Obama	Paul Berkman	David Barber	John Haneslak	Ed Millband Gary
Roughead	Martin Sommerkorn	Steve Ferguson	David W. Titley	Peter Wadhams
Oran Young				
Authors				
Bruce Owen	Greg Roberts	Jennifer Grogan		
		U.S. Navy Unive Weekend Australiar		University
Sources	Ottawa Citizen F	PhysOrg The Day	Vancouver Su	n

Figure 21. 360° view. Courtesy of Shaping Tomorrow

Using this type of method is likely to help you identify renowned and highly influential people, unusual ideas and sources, outliers and dissatisfactions that you would most likely miss in an analysis of just your traditional stakeholders.

Having created your list now rank their power and influence against each issue and each other, then draw a stakeholder map similar to the system map above. Check that both are in sync with each other and are sufficiently explanatory of what is going on but avoid over-complication and too much detail.

Then list the key decision makers and describe their motivation and desires. Pay particular attention to those who are likely to be adventurers in helping you succeed and those abstainers with an interest in seeing you fail.

Key audiences will likely be examining and addressing all or some of the issues at stake. It is essential to determine the level of overlap with other cross-cutting initiatives and determine whether these should absorbed, integrated, co-ordinated or left as standalone efforts. Cross-cutting issues and efforts missed early may make results difficult to implement later.

You can define the desired outcome(s) and key audiences using the above template.

Now using the template set up the review period when you would like to re-visit the stakeholders' web presences. Using a web-enabled tool for stakeholder analysis means that the user can quickly be alerted to, and check for, new stakeholder Insights from web sources such as News sites, RSS feeds, Twitter, Facebook, LinkedIn, paper.li and Mention Map. In most cases these allow for the direct adding of Insights to the users database with one click. See figure 22.



Figure 22. Stakeholder Analysis. Courtesy of Shaping Tomorrow

Stakeholder engagement

Securing key audience support early on is essential for ensuring that the program or project is perceived as worth taking seriously. Eliciting the help of potential "sponsors" and "champions" is likely to give the program or project the initial burst of support to begin in earnest. Foresight programs and projects that rely on the efforts of, or support of, one champion can run into the buffers if this person changes or leaves unexpectedly. It is therefore advisable to seek widespread support and secure commitments upfront.

Early support is particularly needed from those who will be affected by any proposed change. Encouraging continued activity by developing inspirational, engaging, and enabling initiatives that bring quick wins as well as long-term improvement in foresight capabilities throughout the organization will keep the momentum going.

Cautionary principles

Roadblocks that might emerge during this phase include:

- Needed resources or the will to implement are not there.
- □ No champion(s) in key positions.
- No engagement or consensus among key stakeholders.
- Unrealistic expectations from participants and key audiences.
- Changing circumstances derail the program.
- Complexity and controversy makes agreement almost impossible.

- Previous failed attempts at co-ordinated strategic thinking and action planning.
- Low or hostile collaboration levels between the audiences.

For the sake of future success it may be better to abort the program or project than risk a failure. If these barriers appear insurmountable at this stage then it might be best to wait for more favorable circumstances. However, it may be that a Foresight exercise is just the sort of catalyst required to overcome these barriers if managed well.

Only when the scoping of an agreed project management plan is in place should work start on the Foresight program or project proper.

2.7 Futures presentations

Stakeholder interaction

Before you start your program or project, determine how the outcomes will be presented and what interactions may be required with stakeholders.

Engaging and enabling stakeholder working sessions, interim results reporting, and a final presentation may all be required.

Foresight Tools

A variety of tools exist and these are covered in the Methods section of this handbook. Foresight tools generally make for good stakeholder interaction and reported outputs from the project. You should state which methods you intend to use up-front though clearly as the project or program rolls-out you may find the need to employ other tools in your kitbag.

Outputs

Generally the output take the form of documents produced in a variety of forms from a major report(s) to short Trend Alerts to PowerPoint sides or collections of simple visual postcards. Here are some examples of typical reports:

- Visual post cards: Drivers of change Arup
- <u>Videos</u>: Penny For Your Thoughts Sohail Inayatullah
- PowerPoint presentation: Mobile Trends 2020 -In-trends.org
- <u>*Trend alert*</u>: Energy scavenging grows up Shaping Tomorrow
- *Full report*: Global Drivers of Change to 2060, Natural England Commissioned Report NECR030 26 November 2009

Remember that your scoping exercise should have determined which form likely best suits your organization and/or audience.

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Further reference

Participatory Workshops - Earthscan

2.8 Foresight management

Project management

Managing a Foresight project or program means applying the same rules of good project management like any other project. Given the participatory nature of the process, there are two specific challenges:

- Continuous adaptation of the process
- Preserving learning

As in any project, managing time and managing people to obtain value for money are key aspects. Although timeliness is critical, time can also be viewed as a cost, a constraint, or a resource. In terms of managing people, there are different types of relationships that need to be handled in the Foresight process. The Foresight project team is the main body responsible for driving the relationships both inside the team and outside it. Perhaps the most important are those with the client, steering committee, and participants.

Participation

Foresight is intrinsically participatory. Thus, a range of participants need to be involved, making enrolling participants a key task. There are four basic aspects to be considered:

- Role/functions of the various participants
- Identifying participants
- Engaging participants
- Training participants and key stakeholders

The need for:

- A steering group
- Champion(s)
- Project or program teams
- External contractors

and their relationship with each other and the organization needs to be documented, resources mustered, and roles, milestones, and budgets agreed. Describe these in your project scoping document.

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Figure 23. Program management. Courtesy of Shaping Tomorrow

Planning

An implementation plan and a training plan also need to be drawn up and followed. The project management practices should be put in place to continuously observe and ensure that the resources foreseen for each project step are used effectively (as defined in the implementation plan) that work schedules are kept, and outputs actually materialize.

Quality assurance

The project needs to be monitored rigorously and quality assured:

- □ To observe the activities during each project step and constantly compare them against the targets, milestones, and overall time-frame.
- To continuously adapt the implementation plan to its environment. The knowledge gained and the active participation of stakeholders may alter the view of the project.

An upfront, well written, and regularly maintained risk assessment coupled with associated mitigation plans can avoid pitfalls later on.

Similarly, a quality assurance plan stating how this will be achieved, by whom, and by when, will give confidence to the key stakeholders that deviations from expected outcomes will be corrected as they arise. Peer review of outcomes also helps to ensure proof of quality work done.

Budget monitoring processes will need to be set up and expenditures managed.

An escalation procedure should be put in place defining points when variances from the plan need to be communicated to champions and sponsors.

Lastly, a reporting timetable should be agreed with the key stakeholders to appraise progress and to agree on further funding and next steps.

2.9 Foresight development

Activities

With the completion of the initial project scope a number of early activities are required to ensure that recommendations are managed, all lessons are learned, and knowledge translated into practical applications.

These activities could include:

- Communicating the outcomes.
- Longer-term monitoring and value for money assessments.
- Widening Foresight methods and thinking to other projects and programs.

Longer-term monitoring

Organizations often find that making Collaborative Foresight an on-going strategic thinking process brings valuable benefits to adapting to new challenges ahead of potential competition. That's because:

- Reports will degrade in relevance over time.
- Personal associations wither as people move on.
- Skills acquired dissipate without regular use.
- New key questions arise that require similar approaches.
- Continuous scanning, strategic thinking, and action planning keep the organization on its toes.

Making Collaborative Foresight a key organizational activity can increasingly be done at ultra-low cost, with high value add and engagement of all stakeholders.

Widening Foresight methods and thinking to other programs

Evaluating on-going, or completed, Collaborative Foresight projects or programs is essential to ensure accountability, credibility, and potential to existing stakeholders and future sponsors.

Projects and program(s) must demonstrate to sponsors and potential clients that Collaborative Foresight is a worthwhile investment.

Learning

No project or program is complete without a post-implementation review and a final report. Evaluating ongoing or completed Foresight projects or programs is essential to ensure accountability, credibility, and potential to stakeholders. Just as important as the project or program outcomes is the ability to learn from successes and failures and pass these on to others conducting new studies. And, it's important to be able to check the outcomes against the original objectives ensuring each has been achieved or explanations given and further actions noted to correct any perceived shortfalls or seize new opportunities.

Process

At its basic a post-implementation review can be as simple as the leader and/or team writing their view of the outcome. But, a better method is to interview, or survey, key actors and stakeholders for their evaluation. The object is not to start a witch hunt for the guilty but to create dialogue about what went right or wrong in non-personal terms so that learning can be diffused into the organization.

These post-implementation reviews should be readily available to any authorized person at any time. They should consider all aspects of the project or program and give the opportunity for the sponsor(s) to formally sign off and add their own evaluation of the outcome(s). The outcomes should be expressed in both quantitative and qualitative comparisons of results versus expected targets.

Figure 24 shows typical key measures of success of a foresight project based on the initial project scope and post-project benefits. This web-based system allows for multi-stakeholder feedback both during and at completion of the project thus helping to avoid big surprises and closing perception gaps soon after they arise.

In effect, it becomes one of the team's key project management documents and helps keep everyone on message. Unexpected benefits' "success stories" can be documented as the work progresses and used as examples of positive outcomes.

Lastly, continuous review means less work in going back in time, and people's memory, to create the document as well as reducing a potentially significant workload for a team likely to be disbanded before the review is finished.

Future cor opportunit	nsumers and sustainability - impacts ies	and 🔝 🖬 😭
	elow to check progress with key stakeholders during and a elp consult our Practical Foresight guide for best practice r	
Pre-project ass	sumptions evaluation	
Key question	To what extent will climate change and resource shortages affect and change consumer behaviour; change the competitive landscape; create opportunities for ICT based solutions? Comment	Far exceeded Response: 2 users Far exceeded
Audiences	Senior strategic team responsible for long term change and strategic decision making.	Far exceeded Response: 2 users Far exceeded
Target date	06 October 2009 Comment	Exceeded Response: 2 users Exceeded
Resources	One researcher/ brief writer.	Far exceeded Response: 2 users Exceeded
Budget	£11,000 ♀ Comment	Met Response: 2 users Met
		Pre-project Average:
Post-project be	enefits evaluation	
Learning	Client: well placed to to respond to opportunities, but need to take significant strategic decisions. ST: Regular communication during project ensured successful outcomes.	Far exceeded Response: 2 users Exceeded
Methodologies	ST and client recognised that the inclusion of the expert interviews provided important additional insight.	Exceeded Response: 2 users Exceeded
Reputation	Confirmed a leading position on many fronts, but vulnerability to new entrants.	Far exceeded Response: 2 users Exceeded
Spin-offs	None © Comment (1)	Met Response: 2 users Met
Actions	Comment	Exceeded Response: 1 user Exceeded
	Project on time, and included additional material/	Far exceeded 💌
Results	coverage © Comment	Response: 1 user Far exceeded
Results Quality	coverage	Far exceeded Far exceeded Response: 2 users Far exceeded
	coverage © Comment Excellent.	Far exceeded Far exceeded Response: 2 users
	coverage © Comment Excellent.	Far exceeded Far exceeded Response: 2 users Far exceeded Post-project Average:

Figure 24. Project evaluation - Courtesy Shaping Tomorrow

Through the professional application of project scoping and evaluation, the successful delivery of outcomes for all concerned and helping people to see the benefits of using similar methods on their project or program, knowledge can be transferred and further successful outcomes achieved.

Documentation

Each aspect should provide a short summary of the:

- Results achieved
- Strategic variances versus expectations
- Lessons learned
- Recommended next steps

Further reference

- Thinking About The Future: Guidelines for Strategic Foresight, Andy Hines & Peter Bishop Social Technologies 2007
- **Follow-up of the Exercise**, For-Learn, JRC European Commission