



Practical Foresight Guide

Chapter 5 - Planning

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5. Planning

Having scanned the horizon and determined what's happening, the process moves on to think strategically about the implications and prioritize 'what's important around here?' and plan for the future.

What is Strategic Thinking¹?

"Strategic thinking is intent driven. It provides a point of view about the long-term market or competitive position that an organization hopes to achieve over a defined time period."

Source¹: [Competing for the Future, Prahalad and Hamel \(1994\)](#)

It can also be used to drive policy decisions, detect threats, discover new markets and in product and service design innovations. When you are thinking and planning strategically, you are in the realm of strategic foresight.

'Strategic Foresight

- ❑ Is the ability to systematically think about and develop alternative futures.
- ❑ Is the planning that results when future methods are applied to real-world situations.
- ❑ Is the theory and practice of envisioning alternative future scenarios in order to make better decisions today, turning insight into opportunity.
- ❑ Uses emerging signals from political, economic, social, and technological environments. It feeds the front end of innovation from a human needs and technology realization opportunity perspective.
- ❑ Contributes to coping with uncertainty and complexity. It deals with the identification, assessment, and usage of emerging signals to recognize and give warning about threats and opportunities at an early stage.

Successful strategies are rarely achieved by spontaneous flashes of genius, but rather result from the systematic collection, analysis, and evaluation of facts, circumstances, trends, and opinions.'

Source: [UK Government Cabinet Office - Survival Guide](#)

Elements of strategic thinking²

- ❑ Taking a systems perspective: mentally modeling a complete end-to-end system
- ❑ Intent focused: determining a sense of direction and outcome
- ❑ Intelligent opportunism: continuously adapting and innovating
- ❑ Thinking in time: connecting past, present, and future
- ❑ Hypothesis driven: asking "what if ...?" and then "if ... then ..."

Source²: Strategic Thinking: Can it be Taught?, Jeanne M. Liedtka (1998)

And using an appropriate balance of structured group processes that encourage buy-in through approaches that promote divergent (widen the scope), emergent (agree patterns and relationships) or convergent (promote agreement). This Chapter describes multi-methods that can be used to provide the appropriate balance and encourage buy-in.

Strategic Thinking starts from recognizing and understanding changes (key Insights) that are likely to take place over time by considering major outcomes (key Trends, Uncertainties and Wildcards) in nine dimensions:

- ❑ Business: competition, culture, innovation ...
- ❑ Economics: finance, regulations, trade ...
- ❑ Environment: agriculture, climate, raw materials ...
- ❑ Healthcare: disease, medical research, well-being,
- ❑ Industries: biotechnology, clean technology, nanotechnology
- ❑ Lifestyles: consumption, education, values ...
- ❑ Politics: government, rights, security ...
- ❑ Society: community, demographics, generations ...
- ❑ Technology: internet, micro devices, science ...

Approach

The Strategic Thinking approach identifies the major trends in each of these dimensions and analyses ways in which these are likely to develop and interact with each other over a pre-determined study period. Nothing is guaranteed about how the future will evolve but strategic trends research requires wide-ranging and deep investigation, not shallow and narrow looks at the top ten current global trends appearing in the newspapers. Smart companies had spotted these global trends long ago through their early warning radar systems and taken advantage of being early adopters. Most likely they will be early leavers, too, as the market peaks and declines.

Strategic thinking also seeks to explore the assumptions underpinning current ways of operating and how a trend might evolve over time. This ensures that the thinking that informs decision making about action to take today recognizes that just because a strategy is reasonable and works today doesn't mean it will be effective and useful into the future.

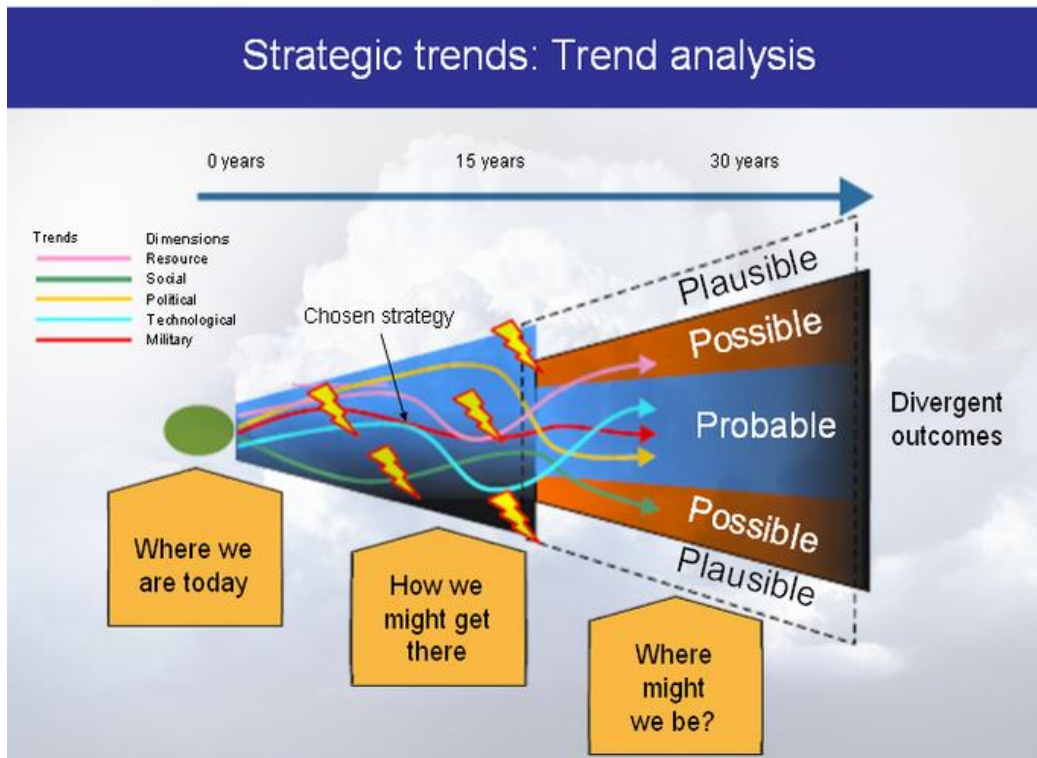


Figure 38. Strategic trends: Trends analysis Courtesy, Lloyd Walker - Precurve

Classification

Creating an inventory of identified Trends requires a highly effective classification system and methods to rank rate and qualify their impact.

Various models exist to classify trends and evaluate their impact. For example: The analytical framework described in John Petersen's book - '[Out of the Blue](#)' (Arlington Institute). Most work by considering a combination of urgency, impact and likelihood of occurrence factors like the Issue Assessment example below.

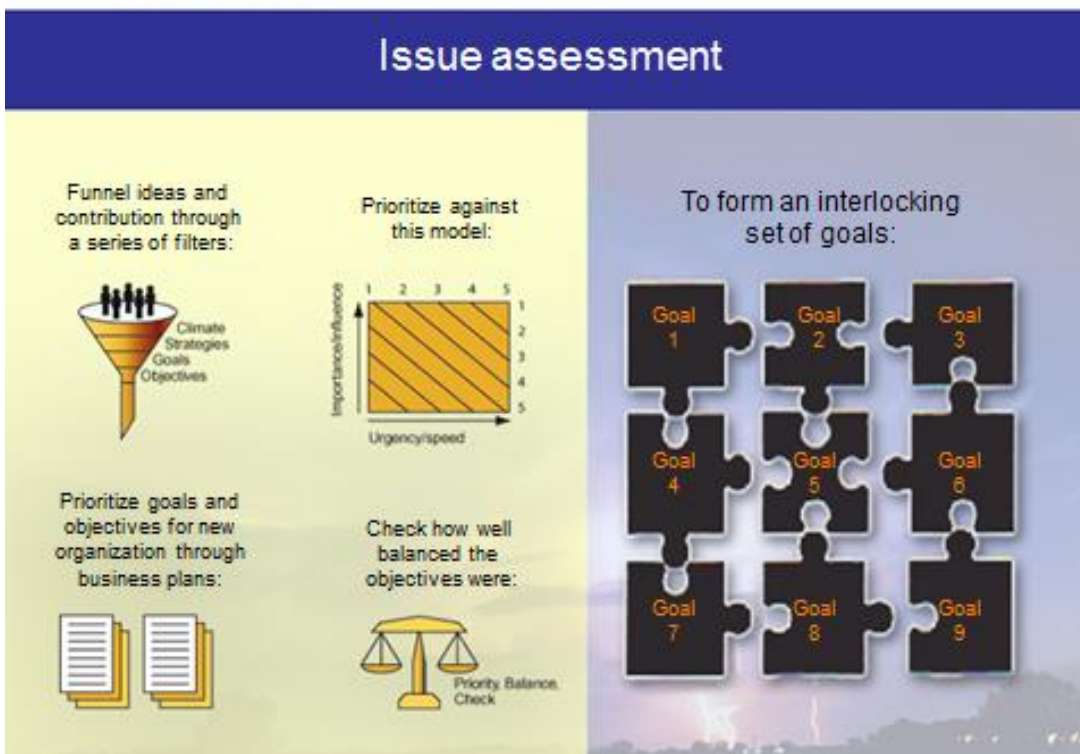


Figure 39. Issue assessment. Courtesy Shaping Tomorrow

Having established a trends database and evaluated individual trend outcomes based on probability one can determine which key drivers of change will likely have the most impact on a particular organization.

The future is not a single destination. The further out we look, an increasing number of different possible outcomes can be foreseen. Some will influence a particular organization more than another.

We find that none of our clients determines the same key drivers and rarely includes the top ten current trends appearing in newspapers in their current form. Through this approach organizations can map out their own destiny, unique selling points and solutions to solve real issues before others catch on to their strategy.

Further reference

- ❑ [Thinking About The Future: Guidelines for Strategic Foresight](#), Andy Hines & Peter Bishop, Social Technologies
- ❑ [Strategy Survival Guide](#), Prime Minister's Strategy Unit, UK
- ❑ [The DCDC Global Strategic Trends Program](#), DCDC, 2007
- ❑ [Out of the Blue](#), John Petersen, Arlington Institute, 1997
- ❑ [Using Futures Approaches: A Guide to Getting Started](#), Maree Conway 2007
- ❑ [What will Influence the Future?](#) Local Government Association, UK
- ❑ <http://www.3s4.org.uk/looking-out/what-is-strategic-analysis>, NCVO, UK

- [Why Strategy Is Like Sailboat Racing](#), Mike Linton, Forbes

5.1 Selecting trends

The process of interpreting your scanning hits for your organization and making an assessment of the likely impact of your identified trends over your chosen scanning timeframe is a pivotal step in strategic thinking. This is a step where you also add your judgment and perspective to the mix, and where you add meaning in the context of your organization's strategic focus and priorities.

Your aim here is to identify trends that might be critical in terms of your organization's sustainability, but which are uncertain in terms of the exact nature of how they will have an impact on your organization into the future. Identifying what these trends mean for your organization and how you might respond over time is part of the next phase of strategy development (what might happen?). Right now, you are looking for possibilities, not answers.

The objective is to select trends and issues for further research by first using the series of filters below to narrow down to the vital few. For the purposes of demonstration we will assume you have collected, or have access to, several thousand trends, uncertainties and wildcards from your scanning. However, you can apply the basis of this selection process to any number of trends using the following 'decision tunnel' technique.

Universe of trends

A simple sight (eyeball test) is applied to filter out extraneous, non-interesting trends and issues against predetermined topics or question. This reduces a database of potentially thousands of interesting trends to just the relevant 100-300 issues in a few days or less. They represent trends to 'Watch' going forward.

Selected trends

Strategists and policy makers then apply a combination of urgency, likelihood, and impact ratings to these remaining issues and determine which should be moved to be further considered.

Their assessment covers a number of categories:

- *Timeframe*: when will a mainstream impact begin to appear?
- *Scope*: how widely will the trend be accepted and/or adopted?
- *Impact*: how strong will the impact of this trend be?
- *Likelihood*: how quickly might this trend have an impact on the organization?
- *Urgency*: what is the required speed of response by the organization to the trend?

You do not have to use this type of quantitative approach, but most find it helps them think through, and rank trends in a logical manner. The critical element here is that you explore implications of the trends you have identified over a longer term period. This usually reduces the list down to between 40-60 issues of potential interest. They are effectively an inventory of items that must be 'Managed' into the future.

Key trends

Executives, strategists, and policy makers determine the Key Trends from the remaining 40-60 issues by in-depth discussion. These Key Trends are the ones the organization must ‘Act Now!’ on to survive and succeed in the future.

Usually the highest ranked 10-15 issues are determined to be Key Trends. This is as many issues that any size of organization can realistically manage to success at one time.

Assessing Trend Relevance

Rank the global impact					Rank the impact on your organization				
Timeframe		Reach		Impact		Likelihood		Urgency	
When will trend begin to have an impact?		What is likely future uptake of this trend?		What is likely future impact of this trend?		What is the likelihood of the trend having an impact on your organization?		How quickly does the organization need to respond to this trend?	
Assessment		Assessment		Assessment		Assessment		Assessment	
0-4 years	5	Global	5	Significant	5	Almost Certain	5	Now	5
5-9 years	4	Widespread	4	Major	4	Likely	4	Within 3-5 years	4
10-14 years	3	Niche sector/market	3	Moderate	3	Possible	3	6-9 years	3
15-20 years	2	Organizations	2	Minor	2	Unlikely	2	10-15 years	2
20+years	1	Individuals	1	Insignificant	1	Rare	1	16-20 years	1
Never *	0	None*	0	None	0	None		20+ years**	0

*Before you assign “Never” or “None” to a trend, make sure you have tested your assumptions, and identified your blind spots. Ask what would have to happen to make the trend a reality? Only then should you feel comfortable assigning these categories to a trend.

** Even though the urgency to address these trends is long-term, consider keeping them on your scanning “watch list.”

Decision funnel

Assessment Total	What might you do now?	Comment
Between 20-25	Act now	You need to make a decision now about whether or not your organization needs to respond to this trend. Consider how to respond and include in your current strategic plan if appropriate. If you decide not to include in your plan, then add to your manage list.
Between 15-19	Manage	You need to consider now how you might respond to these trends as they continue to emerge. It would be a good idea to include actions in your plans that allow you to act quickly if you need to.
14 and under	Watch	These trends are unlikely to have an impact on your planning in the medium term. To prevent future surprises, keep these trends on your scanning watch list.

Trends will occasionally need retiring or downgrading. This can occur because the issue is superseded or diminishes in its urgency, potential impact, or likelihood.

By moving issues up and down the decision funnel and only removing obsolete issues, the integrity of the issues database is maintained.

5.2 External assessment

This type of trend analysis can be carried out very quickly using software tools like the one below.

My Analysis [Icons]

Cultural lag of Nanotech

While the negatives of nanotech have been studied and discussed by scientific academia for several years, government and society have been lagging behind and allowing industry to pump out nanotech products faster than scientists can study their degrees of toxicity.

Tag Comment Report Share Reference Edit Delete

Members' Analysis: [Progress Bar] [Change Settings](#)

My Analysis: [Progress Bar] [Action Planning](#)

External assessment		
Change	improvement	
Reach	global	5
Impact	major	4
Likelihood	likely	4
Urgency	now	5
Time-frame	1-4 years	5
Complexity	chaotic	5

Decision: act now!

5. Very high
4. High
3. Medium
2. Low
1. Very low

Figure 40. My analysis: Cultural lag of Nanotech - Courtesy of Shaping Tomorrow

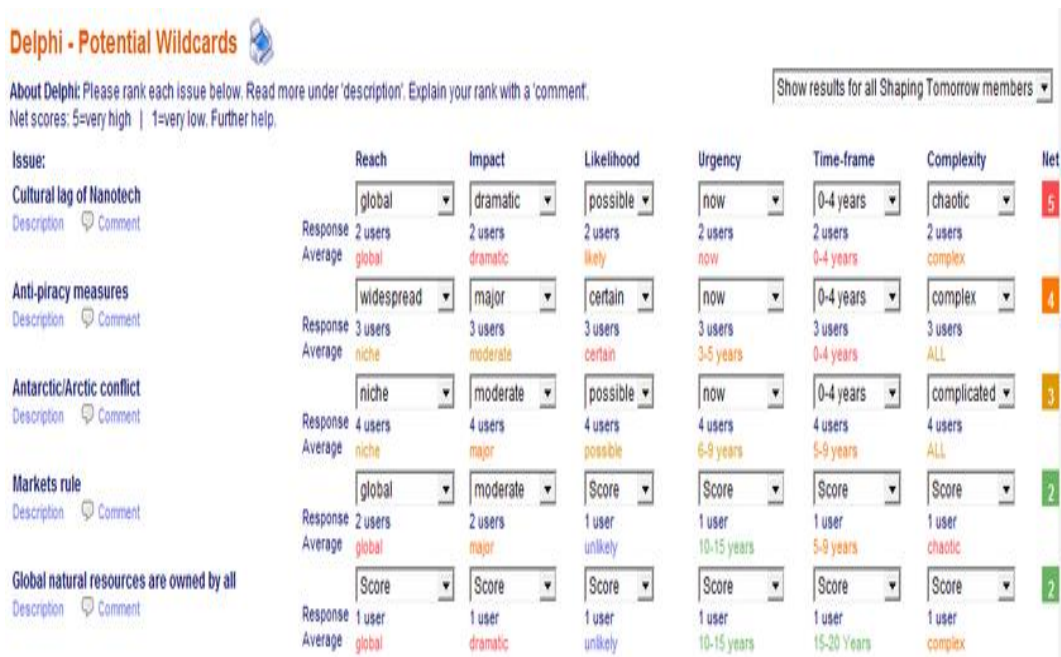
In the example above the external environment on the impact of Nanotech can be quickly assessed by setting the level in each field. The software calculates the signal strength in the form of traffic lights. The higher the scores the more the need to 'Act Now!' Organizations use this methodology to:

- ❑ Quickly get team agreement (most prefer to rank first then discuss differences of opinion to avoid time-wasting).
- ❑ Assess sensitivity to particular criteria.
- ❑ Revisit later as the trend changes and determine if their ranking still stands or not.

There are several other possible strategies for carrying out this selection process. For example:

- ❑ an expert, research-based approach, wherein scanners nominate candidate themes and issues for promotion to, "Selected trends." Nominated trends would either be submitted to the project team for review and confirmation, or would be part of a workshop discussion, as relevant opportunities arise.
- ❑ nominations of interesting themes and issues could be requested from executives and policy makers allowing individual evaluation and polling. This can occur on-line and asynchronously, or as an electronically mediated part of workshop activities.

- An online Delphi analysis is particularly useful here because it allows multiple people to contribute their views all at the same time and for the project team to get a fast handle on opinions of their



chosen stakeholders.

Figure 41. Delphi analysis - Courtesy of Shaping Tomorrow

A typical output from an exercise like this is a 'spider diagram'

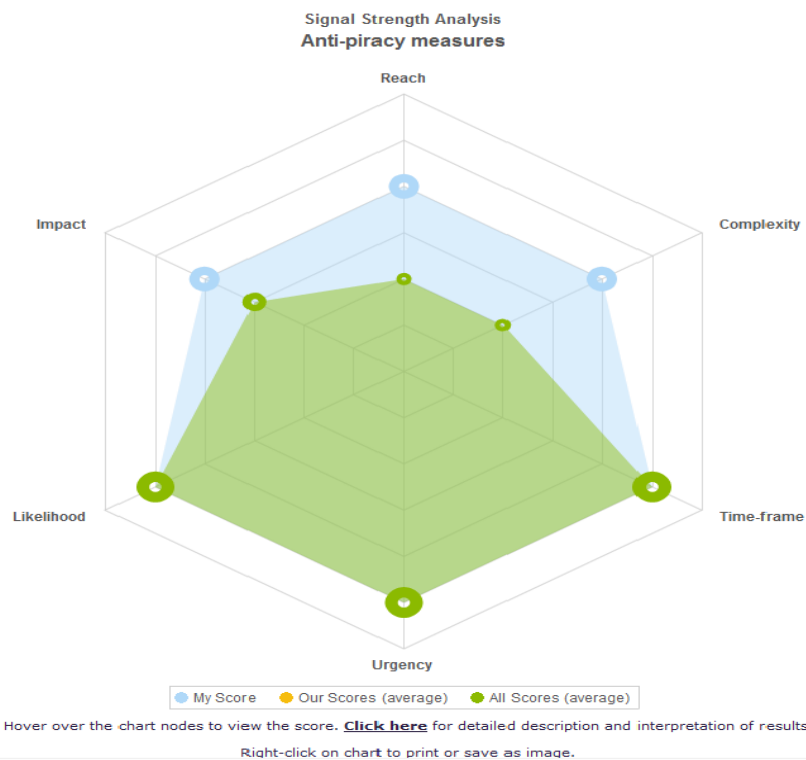


Figure 42. Spider diagram - Courtesy of Shaping Tomorrow

Using 'spiders' as graphical representations of individual and team views allows people to debate where they differ in opinion and why. After discussion the Delphi process can be repeated with changes to the trend and its description based on the feedback of the participants. In this way divergent views can be heard but a convergent position achieved as the outcome from the dialogue.

Forecasting the future

Though we can't predict the future all organizations need to make forecasts for planning purposes. The quality of those forecasts can be substantively improved through the use of robust and dynamic forecasting processes that offer alternative views of the future and look at multiple time horizons. Time-slicing a foresight project into five-year outlooks helps bring a sense of progression from today to tomorrow and out into the future. Single point forecasts that profess to know what the world will look like in 25 years should rightfully be challenged. But, multi-slicing shows how this single point could be reached and allows tracking and potentially course correction as the future unfolds.

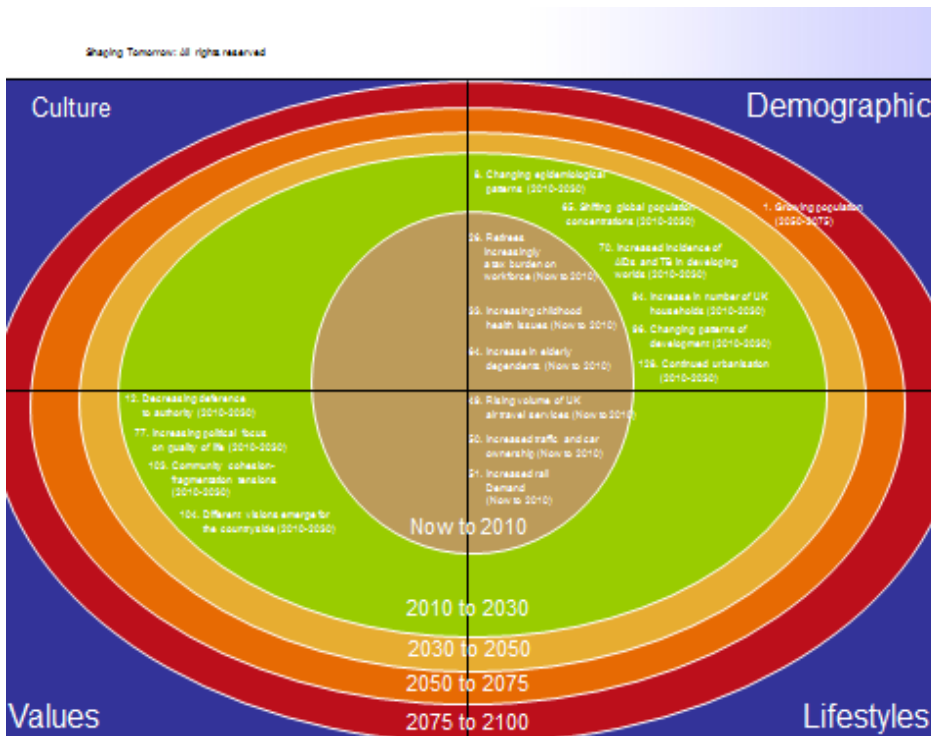


Figure 43. Potential societal futures time-lined in a Futures Wheel format. Courtesy of Wendy Schultz.

Forecasting the future helps organizations understand upcoming capabilities and challenges too, ensures investment decisions are linked to long-range goals and aligns stakeholders into successfully producing deliverables that maximize financial returns.

By scanning for change and engaging internal and external experts to make forecasts of when things are likely to happen a better mental map can be created. Most importantly, mentally laying out how the future might look will create executive challenge to existing thinking and paradigms and potentially create new ways of thinking. *Figure 44* shows an example of a technological timeline:

13

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Tracking change - an example

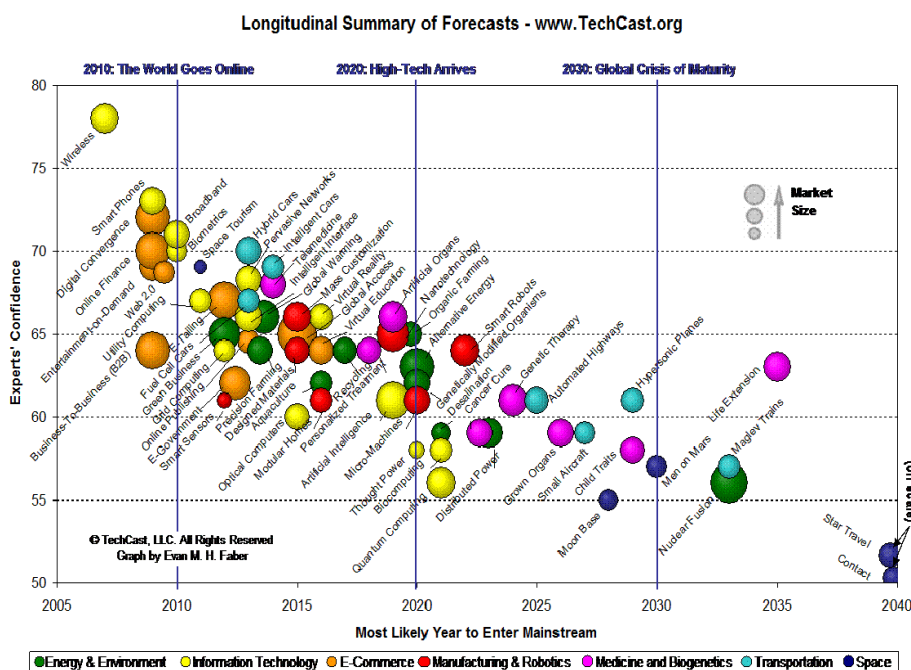


Figure 44. Technology timeline. Courtesy of TechCast

By estimating the most likely year that an issue or trend is likely to reach its tipping point into common public perception or use (35% population take up or attitude change) and estimating the confidence levels at regular intervals a mind map of upcoming change can be created.

- Most likely year: | 2010- | 2015- | 2020- | 2025- | 2030- | 2035- | 2040-
- Confidence level: | very high | high | medium | low | very low
- Potential: | paradigmatic | dramatic | big | medium | small

A future timeline exercise conducted by a facilitator with a diverse group of organizational leaders can prioritize trends and agree on the challenges presented to the organization in relatively short order.

Once agreement is reached teams can then work backwards from the expected tipping point of key drivers to determine their road-map to meet tomorrow’s challenges and investment planning linked to emerging change as in *Figure 42* below.

A series of meetings or an online timeline tool can be used to elicit multiple inputs thus inspiring, engaging and enabling stakeholders to create a systems perspective of the world they see emerging and a common view of the challenges ahead.

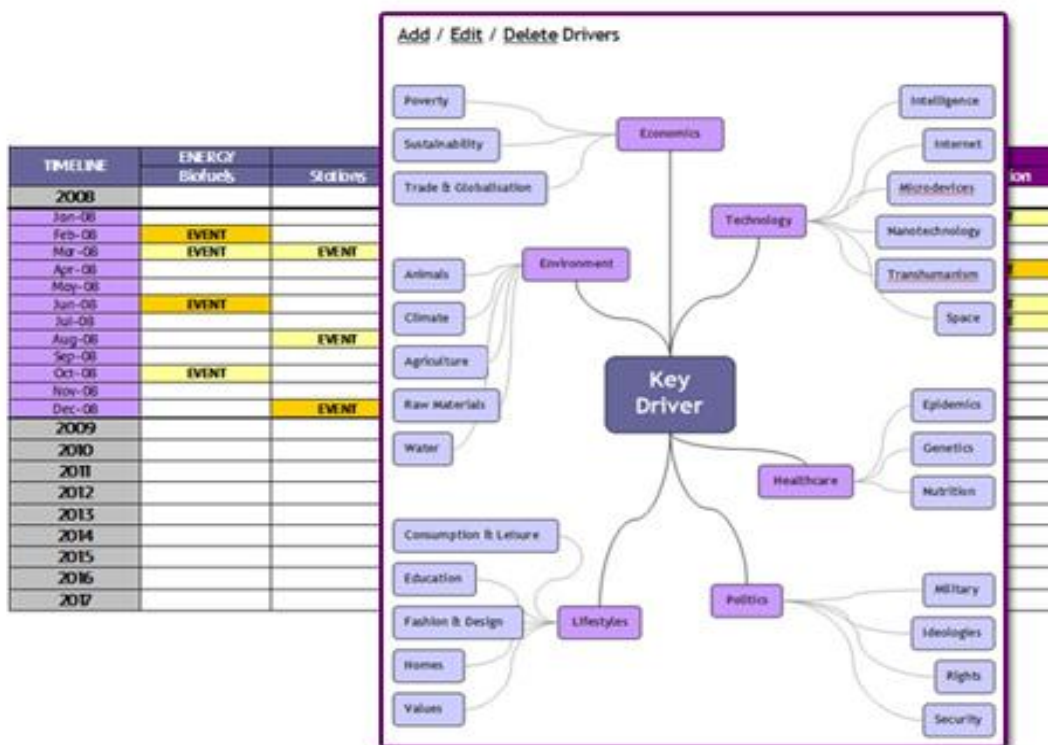


Figure 45: Road-mapping and investment planning. Courtesy of Shaping Tomorrow

Scenario planning

Scenario planning is one of the most well-known and most cited as a useful technique for forecasting the future.

Scenario planning questions assumptions we all make about the future. The method creates plausible views of the future that decision-makers can use to determine their best response and how to react to alternative plays.

Scenarios are qualitatively distinct visions, told as stories, of how the future looks. They make explicit the assumptions of how the world works. Building scenarios helps us to:

- ❑ Understand the realm of possible options.
- ❑ Makes us live the future in advance so as we can take better decisions today.
- ❑ Changes our vision of how the world works.

- Generates a common understanding of the real issues.
- Let's us test our decisions against a range of possible worlds.
- Helps us to deal with complex adaptive environments where the outcome is uncertain.

Scenarios are not an end in themselves, but a tool to

- Identify risks to and opportunities over a desired time period.
- Expose long term challenges for strategies and policies.
- Deal with a mix of wide ranging qualitative and quantitative inputs.
- Enable assumptions to be made clear and explicit.
- Make real the implications of these challenges.
- Encourage collaboration.
- Support and improve vision and policy making by starting grounded and challenging conversations about choices, trade-offs and conflicts.
- Build capacity among staff in futures work.

The key to creating scenarios of best, most likely and worst case options is in finding that strategy that represents the best middle ground on which to base action plans.

The middle ground is not often the center of the axes as Figure 46 shows but a considered position that puts an organization in a stretching position, but not one that over-reaches itself. The best strategy for action is therefore the one that leaves the distance to travel to another scenario at a practical level if circumstances change. Taking extreme strategic positions represents a huge bet given that the furthest poles of scenarios represent the greatest uncertainty. To find the middle ground we must therefore envision worlds where strategy can adapt and move as the future unfolds.

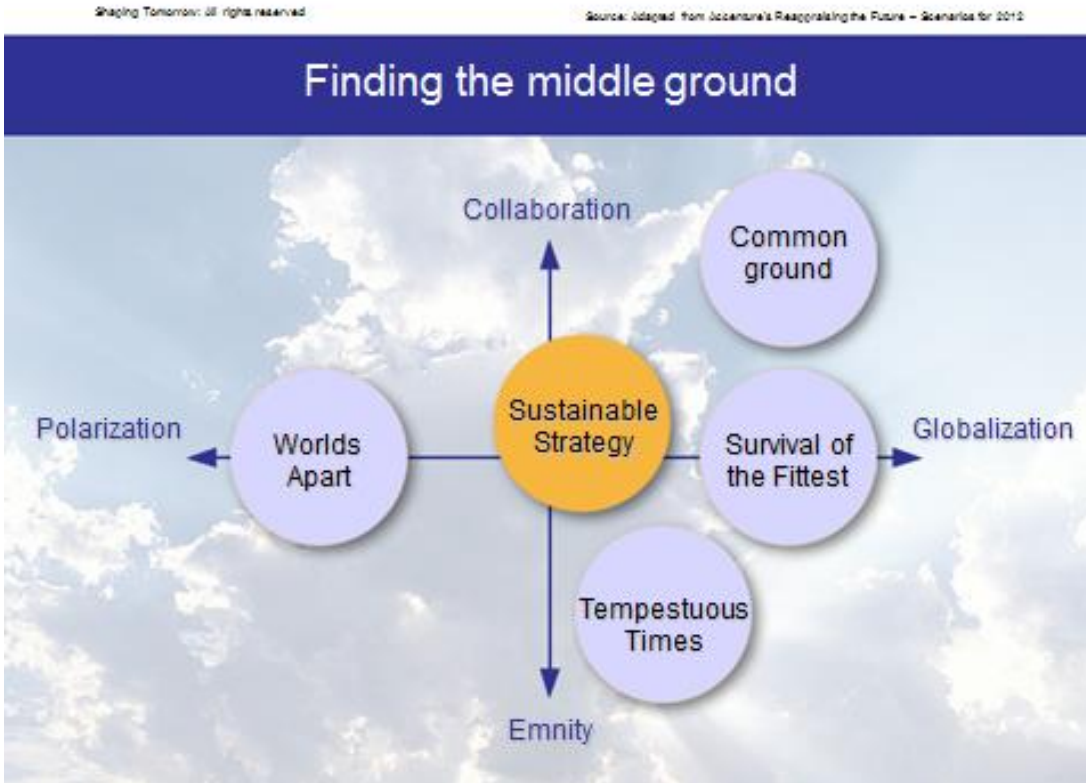


Figure 46. Finding the middle ground. Adapted from Reappraising the Future - Scenarios for 2012, Accenture 2005

In the example above, choosing a sustainable strategy is betting that co-operation, waste reduction, efficiency, corporate social responsibility, alliances, etc., will best cope with the four possible extremes of polarization versus globalization, and collaboration versus enmity, yet firmly fix its strategy in accepting globalization and collaborating for maximum advantage.

Simple scenarios like these can be created by individual or team-based efforts using the following construct:

Repackaging reading

A number of trends are coming together which may accelerate a move to e-books and a change in the perceptions of reading for the digital generation. However, it will be more a case of both: and, rather than either print or digital.



Sheila Moorcroft 7 January 2011 Hide Analysis

Date Added: 14 November 2006

Members' Analysis | My Analysis | Create Trend Alert

Delphi | Scenarios | Morphological Analysis | Modeling

Assumptions | Brainstorm | CLA | Counterpoint | Debate | Devil's advocate | Genus | Interviews | Megatrend | Panarchy | Red hat | Self-critique | Starburst | STEEP | SWOT | Surprise | Tipping point | Visioning

Latest Insights:

Kindle books to open on Web browsers
A News Corp. Newspaper, But Not In Print
Show more

Summary Tag Report Share Link Insight Comment (1)

Tags: repackaging reading

Add Scenario Learn More

Title
name this alternative future

Icon
add image icon (29x27px)

Time horizon
Month Year

Description
provide a short provocative overview

Prime purpose
Please choose

Scenario type
Please choose

Position
Please choose

Scenario outcome
Please choose

Story approach
Please choose

Judgement
Please choose

Plot
Please choose

Scope
research areas to be covered

Exclusions
research areas not required to be covered

Predetermined
slow-burns, constraints, pipeplined, inevitables

Uncertainties
unpredictable variables

Who is important?
key players and influencers

What is important?
key driving forces

Main character
describe who is doing the story-telling

Scene
tell the story looking back from then to today

Unique insight
what can be utilised?
what key question is suggested?
what hypotheses can be drawn?

Conclusions
excitement; challenges; achievement; fear; uncertainties; doubt; pitfalls; next steps; more research?

Future vision
add an image of how things could look then

Visible to

- All Shaping Tomorrow members
- Me and my colleagues
- Only me

Figure 47. Scenario planning template. Courtesy of Shaping Tomorrow

Now repeat the process by constructing further scenarios. At least four are recommended.

Creating multiple scenarios allows you to do further analysis e.g.

- *Influencing factors*: Which common factors have an impact in each scenario?
- *Projections*: How could the influencing factors develop?
- *Networking factors*: Which further cross-impact influencing factors exist with other key trends and issues?
- *Disruptive events*: Which events could lead towards radical trend deviations? Identify the most important uncertainties - view these uncertainties as ranges on dimensions and prioritize the most important.
- *Observations*: Describe what other observations can be made regarding these scenarios that are useful for future decision-making.

There are many books on scenario planning and many ways to conduct such an exercise including Alternative Futures Analysis (figure 48) and Multi-Scenarios Generation. They typically are used for far larger projects and involve many experts.

Alternative Futures Analysis typically only considers two driving forces arrayed in a two-by-two matrix with the extremes describe at the end of each axis. Multi-Scenarios Generation uses matrices to consider the impact of each scenario in combination with all others. Further reading on these various methods can be found in the Further Reference section.

Scenario planning too has been systematized, though these sophisticated systems usually require the use of a facilitator in a workshop environment. Especially in turbulent times the combination of horizon scanning, trend analysis, scenario planning and the identification of strategic option spaces is very powerful. This combination of system tools enables executives to identify consistent scenarios and to determine appropriate strategies which can be evaluated against corporate goals in real-time and as circumstances change.

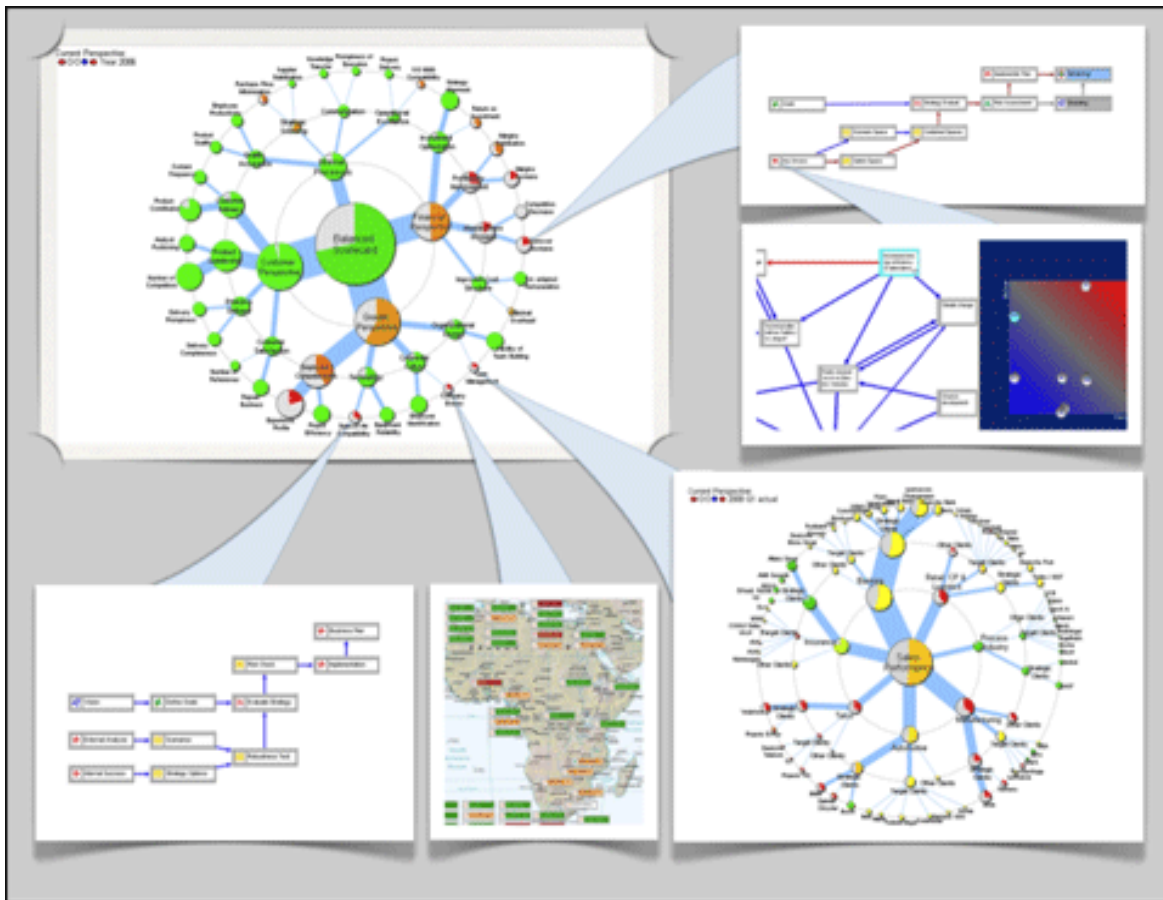


Figure 48. Scenario and Option space planning. Courtesy of Shaping Tomorrow's partners - Parmenides Eidos, all rights reserved

Modular architecture like that shown in Figure 48 allows the combination of:

- ❑ Trend/Driver Analysis
- ❑ Goal Assessment
- ❑ Vision Development
- ❑ Risk Assessment and Monitoring
- ❑ Conceptual Analysis
- ❑ Scenario Development
- ❑ Option Development & Evaluation

Further reference

- Heuer and Pherson, Structured Analytic Techniques, 2010

5.3 Market response

The external assessment is a good start in identifying which trends or issues deserve your utmost attention but is insufficient to ensure a robust and well thought through strategy. Great strategy comes from having an excellent handle on likely market responses, an internal assessment of your own capabilities, conducting competitor analysis, understanding your stakeholders mind-sets, and developing plausible responses as a result of what you learn. Along the way we may also find we need to employ 'breakout thinking' and 'scenario analysis' to make sense of our options.

Most organizations informally discuss all or some of the assessments here as part of their strategic thinking but the act of formally documenting assessments means that a systems map is built up that can be modified as circumstances change. Formal documentation doesn't imply that the organization has to prescriptively follow the framework that follows but explicitly writing down the strategy analysis means better understanding and acceptance from all concerned that the chosen strategy is as robust as it can be. Documenting the process in a consistent manner also means that stakeholders can understand and challenge the underpinnings of the strategy as circumstances change.

Here is one based an imaginary Nanotech company's view of their marketplace.

We will start with Market Response and deal with each in turn by looking at how leading organizations assess their opportunities and risks. You can mix and match among these assessments choosing the ones most relevant to the task at hand or add your own.

Sector opportunity- Rank on the chance to lead or follow: | very high | high | medium | low | very low | none

- ❑ Sector growth - Rank on the potential size of the market income in your chosen timeframe: | explode | grow | average | contract | decline | none
- ❑ Social group - Rank on the potential for social groups to change size in your chosen timeframe: | explode | grow | average | contract | decline | none
- ❑ Technology assessment - How much complexity is involved and time required to deliver the solution? | bleeding edge | leading edge | follow me leader | off-the shelf | code change | none
- ❑ Tipping point - When will 35% of the target market likely be on board? | 0-4 years | 5-9 years | 10-14 years | 15-20 years | 20+ years | never
- ❑ Driving force - Rank on whose pushing for change: | international | country | industry | financial institutions | consultancies | other

Market response		
Sector opportunity	very high	5
Sector growth	grow	4
Social group	explode	5
Technology assessment	leading edge	2
Tipping point	5-9 years	4
Driving force	industry	3

Figure 49. Market response - Courtesy of Shaping Tomorrow

All 'High fives' here suggest a great opportunity for the Nanotech organization to exploit assuming they have the organizational wherewithal, Very low scores would have suggested that this is a trend or an issue for them to avoid

5.3 Internal assessment

Now we can consider whether the organization has the appetite and means to exploit this trend or tackle the issue.

We can do this by assessing the following criteria:

- ❑ *Attainability* - Can the solution be implemented in the available time? | 100% | 80% | 60% | 40% | 20% | no chance
- ❑ *Motivation* - What must be done first? | legally must do | time constrained | high value | scarce resources | growth | reputation
- ❑ *Cost savings* - How much might be saved? | very high | high | medium | low | very low | none
- ❑ *Difficulty* - How complex is this to do? | very high | high | medium | low | very low | not at all
- ❑ *Risk* - How much risk would be run? | very high | high | medium | low | very low | none
- ❑ *Efficiency* - How simple and cost-effective is the solution? | very high | high | medium | low | very low | no effect'

Internal assessment		
Attainability	80%	4
Motivation	high value	3
Cost savings	high	4
Difficulty	medium	3
Risk	medium	3
Efficiency	low	4

Figure 50. Internal assessment - Courtesy of Shaping Tomorrow

Source: Rene Rohrbech, Deutsches Telecom, Germany

The same scoring interpretation is applied here as we did for External Assessment and Market Response. This looks a good prospect for the Nanotech organization.

5.4 Competitor analysis

Now we can spend a little time analyzing the capabilities, culture and performance of the Nanotech company's' competition. A surprisingly good assessment of their rivals can be made using these criteria with just a little effort in examining competitors' motivations, strategies and results.

- ❑ *Velocity ratio* - What is the rate of change within the industry? | very fast | fast | medium | slow | very slow
- ❑ *Rising tides* - How quickly are customer expectations changing? | very fast | fast | medium | slow | very slow | unchanging
- ❑ *Innovation index* - How widely innovative is the competition? | very high | high | medium | low | very low | none
- ❑ *Creativity capability* - How innovative is the industry? | very high | high | medium | low | very low | none
- ❑ *Retirement rate* - What's the turnover rate of the competitors' senior staff? | very high | high | medium | low | very low | none
- ❑ *Generational tolerance* - How much do competitors welcome young people? | youth- driven | very tolerant | tolerant | neutral | intolerant | very intolerant
- ❑ *Agents of change* - How much do competitors pay attention to emerging change? | adventurer | reactor | adopter resistor | abstainer | deaf, dumb, blind
- ❑ *Quality of service* - How good is your industries quality of service compared to others? | extraordinary | very high | high | medium | low | very low
- ❑ *Concentration* - Is the industry concentrated in the hands of a few or characterized by a long-tail? | very high | high | medium | low | very low | none

- *Environment* - What typifies the competitors' culture towards rivals? | uncaring | forgiving | stable | predictable | turbulent | chaotic
- *Capability* - How efficient are the competitors? | very high cost | high cost | average cost | low cost | lowest cost
- *Profitability* - How is the industry's ability to generate profits? | none | very low | low | medium | high | very high
- *Positioning* - What is the reputation of the industry? | industrial leader | excellent image | high image | me too | low image | poor image
- *New capabilities* - What new capabilities are coming from the industry? | very high | high | medium | low | very low | none
- *SWOT* - How strong are your rivals threats and opportunities? | opportunity | strength | neutral | weakness | threat
- *Barriers to entry* - How high are the protective fences erected by the industry? | very high | high | medium | low | very low
- *Barriers to leaving* - How easy is it for competitors to leave the industry? | very high | high | medium | low | very low
- *Potential entrants* - How easy would new players to create advantage? | very high | high | medium | low | very low
- *Supplier power* - How high is the ability of suppliers to control the market? | very high | high | medium | low | very low
- *Threat of substitutes* - How high is the threat of substitution to the industries channels, products and services? | very high | high | medium | low | very low
- *Bargaining power* - How high is the industry's ability to control the market? | very high | high | medium | low | very low
- *Industry rivalry* - How much competitor in-fighting is there? | very high | high | medium | low | very low
- *Lifecycle* - Where does the industry sit in terms of the development of its markets? | non existing | embryonic | growing | maturing | ageing | declining
- *Structural forces* - How does the structure of the market help, or hinder, the industry? | very strong | strong | good | average | poor | weak

Competitor analysis		
Velocity ratio	very fast	1
Rising tides	very fast	1
Innovation index	very high	1
Creativity capability	very high	1
Retirement rate	very healthy	1
Generational tolerance	very tolerant	1
Agents of change	adventurer	1
Quality of service	medium	3
Concentration	very low	1
Environment	chaotic	1
Capability	very high cost	5
Profitability	medium	3
Positioning	low image	4
New capabilities	very high	1
SWOT	opportunity	5
Barriers to entry	very low	5
Barriers to leaving	very low	5
Potential entrants	very high	1
Supplier power	very low	5
Threat of substitutes	very low	5
Bargaining power	very high	5
Industry rivalry	very low	5
Life cycle	embryonic	5
Structural forces	weak	5

Figure 51. Competitor analysis - Courtesy of Shaping Tomorrow

This time the high scores reflect opportunities to exploit competitor weaknesses while low scores suggest a highly vibrant industry that may be difficult to enter or lead.

In all these assessments don't be blind-sided by your own perceptions alone. Ask around and try to find strong but relatively easy to produce existing evidence for assessments.

5.5 Stakeholder mind-set

Earlier in the handbook we described why it's important to identify key stakeholders in the foresight process. Now you need to do this again focusing on their future needs and desires and current dissatisfactions.

- ❑ *Customer environment* - Has the industry fully articulated its offerings and does it serve all parts of its market completely? | articulated/served | articulated/unserved | unarticulated/served | unarticulated | unserved
- ❑ *Customer impact* - How do the industry's customers view the incumbents? | very positively | positively | neutral | negative | very negative
- ❑ *Perceived quality* - How do end customers view the quality of the industry's end-products or services? | very high | high | average | low | very low
- ❑ *Perceived price* - How do end customers view the price of the industry's end-products or services? | luxury | premium | me too | discounted | cheap | free
- ❑ *Social values* - What are the prevailing social values? | survival/satisfaction | safety/security | self/action | stability/meaning | strive/influence | social/harmony | systemic/independence | spiritual/community

Stakeholder mindset		
Customer environment	unarticulated/unserved	4
Customer impact	neutral	3
Perceived quality	high	2
Perceived price	me too	3
Global mood	depressed	5
Social values	safety/security	2

Figure 52. Stakeholder mind-set - Courtesy of Shaping Tomorrow

Much of the information to complete this analysis should be available from your marketing and sales teams. Remember that stakeholder mind-sets can change especially over extended timeframes but knowing their prevailing attitudes is a strong pointer to whether your solution is going to fly.

5.6 Organizational critique

All that glitters is not gold as many organizations have found out to their cost. Testing exploitation of the trend against your current market position is a useful way to determine whether you should embark on solving an issue at all. It also highlights potential roadblocks to overcome and strengths to maximise in your strategic response.

- ❑ *Approach* - What strategy do you intend to use on this issue? | lead | exploit | adopt | also ran | just in time | ignore
- ❑ *Prepared?* - What is the state of readiness on this issue? | very high | high | medium | low | very low | not at all
- ❑ *Market growth* - How much cash does it take to run the organization? | very high cash use | high cash use | average cash use | low cash use | very low cash use | no cash use

- *Relative market share* - How strong is relative market share versus rivals? | very high | high | medium | low | very low | minimal
- *Positioning* - How well positioned is the organization? | excellent | good | average | weak | unviable
- *Performance* - How well performing is the organization? | excellent | above average | average | below average | poor
- *Capability* - Rank your organizations ability to compete: | dominant | strong | favourable | tenable | weak
- *Product experience* - Rank your experience with developing and growing products related to this issue: | leader | current | past knowledge | related | somewhat new | entirely new
- *Market experience* - Rank your market experience: leader | current | past knowledge | related | somewhat new | entirely new
- *Return on Capital Employed (ROCE)*- How good is the organizations ROCE? | excellent | strong | above average | average | below average | weak
- *Value added* - How much value added do you provide to your customers? | exceptional | high | significant | moderate | low | none
- *Resource use* - What level of own resources is required to run the organization? | none | minimal | moderate | large | major | huge
- *Attractiveness* - How much organizational interest do you have in working on this issue? | huge | very large | large | medium | small | none
- *Competitive advantage* - How advantaged would you be versus your competition in addressing this issue? | highly advantaged | slightly disadvantaged | no advantage | slightly advantaged | highly advantaged | monopoly

Organizational critique		
Approach	exploit	4
Prepared?	high	4
Market growth	high cash use	1
Relative market share	very high	5
Positioning	excellent	5
Performance	above average	4
Capability	strong	4
Product experience	current	4
Market experience	current knowledge	4
ROCE	average	2
Value added	high	4
Resource use	moderate	3
Attractiveness	huge	5
Competitive advantage	highly disadvantaged	

Figure 53. Organizational critique - Courtesy of Shaping Tomorrow

High rankings suggest you are well placed while low scores suggest caution and the need to determine how you will overcome any issues if at all.

5.7 Plausible responses

Most plausible responses fit within one or more of the assessments below. This is a useful template to determine which plausible responses are available to exploit or avoid and/or to describe the best strategy going forward. One or a combination of these assessments should describe your strategic options going forward.

- ❑ *Lifestyles* - Rank this solution on the basis of how strong its appeal is to end consumers: | very high | high | medium | low | very low | no appeal
- ❑ *Distribution* - Rank this solution on the basis of how strong its appeal is to distributors: | very high | high | medium | low | very low | no appeal
- ❑ *Channels* - Rank this solution on the basis of how strong its appeal is to your channels: | very high | high | medium | low | very low | no appeal
- ❑ *Brand* - Rank this solution on the basis of how strong the brand enhancement is likely to be: | very high | high | medium | low | very low | no change
- ❑ *Skills base* - Rank on how the skill base of the organization can be enhanced: | very high | high | medium | low | very low | no impact
- ❑ *Spatial* - Rank this solution on how much the spatial footprint of the organization can be improved: | very high | high | medium | low | very low | none

- ❑ *Organization* - Rank this solution on how much the organization structure can be improved: | very high | high | medium | low | very low | no change
- ❑ *Co-opetition* - Rank how strong the appeal of collaborating with the competition and its implementation complexity: | very high | high | medium | low | very low | no chance

Determining where you are on the lifecycle of delivering a solution helps to set the timeframe by when your chosen strategy should be in place.

- ❑ *Pioneer* - Rank how fast you can become a pioneer: | today | one year | 2 years | 3 years | 5 years | 5+ years
- ❑ *Migrator* - Rank how fast you could migrate to deliver this solution: | today | one year | 2 years | 3 years | 5 years | 5+ years
- ❑ *Settler* - Rank how long you want to remain a settler in this space: | today | one year | 2 years | 3 years | 5 years | 5+ years
- ❑ *Leaver* - Rank how long before you want to leave this space: | today | one year | 2 years | 3 years | 5 years | 5+ years

Plausible responses		
Lifestyles	very high	5
Distribution	very high	5
Channels	very high	5
Brand	very high	5
Skills base	very high	5
Spatial	medium	3
Organization	very high	5
Co-opetition	very high	5
Pioneer	today	5
Migrator	today	5
Settler	5 years	1
Leaver	5 years	1

Figure 54. Plausible responses - - Courtesy of Shaping Tomorrow

Spend some time evaluating these options and defining your detailed strategies here upfront because inherent in them will be great opportunities and potential threats that need to be understood ahead of making investments.

5.8 Agreed strategy

Once a plausible response has been determined attention should focus on the stance to be taken in delivering the agreed strategy as follows:

- ❑ *Market leadership* - Which is the best way to lead the market? | best product | best total cost | best total solution | best time to market | best promotion
- ❑ *Imperatives* - Which imperative is most key?- a clear | deliberate| one, an | emergent| one after the event, a | submergent| strategy that arose from past problems, an | emergency| strategy due to current major problems, or a | detergent| strategy that cleans up after an emergent, submergent or emergency strategy phase.
- ❑ *Response* - What is your best strategic response? | opposition| to the change, | adaptation| to its impact, | offensive| action, | contingency| planning, | redeployment| of resources, | passive| acceptance
- ❑ *Engagement* - Which is your best marketplace stance? | champion | lead | comply | evade | ignore
- ❑ *Attention level* - Who should oversee the issue? | board | executive | group| team | individual

Agreed strategy		
Market leadership	best product	5
Imperatives	deliberate	5
Response	offensive	5
Engagement	champion	5
Attention level	board	5

Figure 55. Agreed strategy - Courtesy of Shaping Tomorrow

Overall scores here are less important than the debate and agreement that results about whether the agreed strategy is key to future survival and success, particularly at Board level.

5.9 Solution determination

Now determine what is needed to first design the solution and drive the process to a successful solution. Lastly, define the type of problem faced and the degree of difficulty in finding a good solution.

- ❑ *Difficulty* - How much do we know already? | known problem/known solution | new problem/known solution | known problem/new solution | new problem/new solution
- ❑ *Design* - Where can the knowledge to address this issue be found? | personal knowledge | company knowledge | industry knowledge | society knowledge | all knowable
- ❑ *Process* - What method is required to implement the solution? | routine | continuous improvement | innovation | transformation | discovery

Action plan		
Difficulty	not selected	1
Design	industry knowledge	3
Process	innovation	3

Figure 56. Action plan - - Courtesy of Shaping Tomorrow

This assessment will subsequently help to determine the required resource levels, organizational structure and people capabilities needed to ensure a successful outcome.

5.10 Reporting trends

Trend reports

Once you have done some work on initial interpretation of your scanning hits, you can prepare a regular trend report. This could be simply your trend assessment and summary implications as in Figure 57.

Stem cell treatments without controversy?

Author

Sheila Moorcroft, Research Director, Shaping Tomorrow

Stems cell treatments offer huge potential benefits; their use also raises significant ethical concerns. We may be seeing the beginning of new routes to 'stem cell treatment' which bypass some of the problems?

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- Skin Cells Turned into Brain Cells
- Stem Cell Market Analysis Factsheet
- Stem-cell Breakthrough
- UK Lays Out Regulatory Roadmap For Stem Cell Treatments
- Your Own Stem Cells Can Treat Heart Disease, Study Suggests

Our quick, high level, global assessment of this trend's Signal Strength

Signal Strength	
Decision	act now!
Change	policy
Reach	widespread
Impact	moderate
Likelihood	possible
Urgency	10-15 years
Time-frame	0-4 years

What is changing?

The number of diseases and medical conditions for which stem cells might be able to provide solutions is enormous including cancer, heart disease, immune system problems. Research and trial treatments are beginning to demonstrate some of that potential much more tangibly.

New research indicates progress in 'making stem cells', which was first announced in 2007. The new technique is seen as radically more efficient than, and twice as fast as, conventional methods for transforming adult human cells into stem cells, so-called induced pluripotent cells.

About one third of people in the USA who suffer from severe angina cannot be helped by existing treatments; about 300,000 people in toto. New research published last year indicates potentially significant success in using adult stem cells injected directly into patients' hearts.

Bone marrow cells have been used to treat a very rare but devastating illness, Cystinosis, in a mouse model. The experiment is seen as an important step forward to effective human treatment.

Why is this important?

The social, personal and economic benefits which will accrue from such treatments is enormous. The market is estimated to have been growing annually at several hundred percent in recent years; while that level of growth may not continue, in 2007 the US market was forecast to be worth \$7 billion in 2010, rising to \$8 billion by 2016. The forthcoming Stem Cell Summit 2010 may indicate even greater market potential.

In these early stages, hope and hype can win out over reality. As a result, the potential for exploitation of patients by unscrupulous treatment providers is huge. Alternatively the need to get genuine treatments to market as quickly as possible is equally important. A new 'roadmap' in the UK aims to create a better balance between protection and regulation on the one hand, and ensuring the potential benefits in new treatments on the other.

China meanwhile, often criticised for lax regulation, is looking to restrict 'stem cell tourism'. International collaboration has developed a framework to encourage Chinese organisations to follow more ethical approaches to new treatments, and the government is cracking down. (February 2010)

Figure 57. Example Trend Alert. Courtesy of Shaping Tomorrow

This report is more focused than your scanning hits report, and has a higher relevance rating than individual scanning hits. Note that many Insights are cited and give credence to the assessment and the implications drawn.

There are many uses for such a report - for example, general interest, targeted discussion at meetings, special planning workshops or forums to address specific trends.

Strategy Reports

Another type of report can be linked directly to the strategic planning cycle. It is best produced to coincide with the annual planning cycle provided as a resource to organizational units to inform their thinking about what options they might pursue. This ensures that everyone in the organization has the same information about the external environment and the trends likely to affect the way they do business into the future.

However, this more detailed report is also designed to be used as an input into more focused strategy development such as scenario planning. It provides the starting point for explorations about what might happen and what is possible and plausible. This is the prospection stage of any generic foresight process.

This type of report provides a summary of the implications of the trends you have identified earlier in your scanning process. It is not so much a listing of the trends but focuses instead on the implications of those trends for your organization - what might these trends mean for strategy now and into the future? What needs to be acted on now, and what can be monitored over time? What must not be ignored?

The exact format of the report will depend on your organizational culture and ways of operating. At the very least, you need an executive summary that identifies very clearly the critical trends your organization needs to consider. The report could cover the summary of the trend (what is changing?), the impact and significance for you organization, and implications and trigger questions.

In the early stages of your scanning, send the report to "friendly" managers and seek their feedback. Amend your report as needed to provide additional information or clarifications.

Custom reports

You may be able to undertake a custom scan based on this feedback (i.e., a scan around a particular issue) that can also bring value from scanning to your organization.

Further reference

- [Strategic Planning: Engaging Faculty and Other Stakeholders Early](#) - Academic Impressions 2010