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The role of scenarios in strategic foresight

Gill Ringland*

SAMI Consulting, 2b Northbrook Court, Park Street, Newbury, RG14 1EA, UK

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ABSTRACT

This article discusses the role of scenarios in strategic foresight. It starts by discussing the need for strategic foresight over the next decade, and a set of qualities, structures and processes that facilitate the use of strategic foresight for renewal. The author describes two roles of scenarios in supporting these processes — scenarios as mental models, and through providing a well-understood methodology that permits exploration of the future. Three key case studies from different fields, such as financial services and pharmaceuticals, enhance the description of the methods.

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1. Introduction

The pace of change in the next decade will challenge the "traditional" methods of organizational planning. Most organizations are ill-prepared to deal with this new world of turbulence. They often lack common values and shared narrative, the ability to undertake fundamental strategic thinking, and to take the results of strategic thinking into implementation.

This article starts by discussing why conventional planning will not be successful in the next decade. It sketches an approach and a set of qualities which allow for strategic foresight leading to renewal and hence survival. It discusses two roles that scenarios play in the processes supporting this approach thus providing a set of mental models and providing a well-understood methodology that permits exploration of futures.

2. The business environment in the next decade

Over the last few decades, business has profited from relatively smooth and significant growth in the world economy. This is unlikely to continue for Western economies over the next decade. There are a number of reasons for expecting the upcoming decade to be turbulent, and with relatively low growth in Western economies.

First, the overhang of debt that consumers and governments have acquired will take several years if not longer to pay off. In the meantime, consumer spending will be cut back, not least because of unemployment. Governments will be forced to review expenditures to cut debt repayment costs, thus further reducing spending in the economy. This debt burden of the wealthy nations means that their recovery from the crisis will be slower than the new competitor nations, previously known as developing nations.

At the same time, the world ahead of us will be fast-moving and innately challenging. Demographic change and education mean a shift in the patterns of labor skill and cost. The industrial nations, including China, are not well placed as their workforce ages and retires. Furthermore, skills that were once restricted to the industrialized nations are now widely available, further enhancing the shift in international competitiveness towards new entrants. Much the same can be said for technology, which continues its relentless expansion in depth and range.

^{*} Tel.: +44 78 998 473 87, +44 1635 36971 (office). *E-mail address*: gill.ringland@samiconsulting.co.uk.

Competition will be both intense and on new terms. Global system issues such as environmental change, but also international law and finance, access to raw materials and the management of intellectual property — all require the rich nations to sacrifice some of their power. This combination of power rebalancing and an institutional vacuum implies that the next decade will be a rough one for businesses in the West.

Within this environment, companies in the West will need to be concerned with renewal: of ensuring that their portfolio of assets is renewed in line with the changes in the external environment. Strategic foresight will need to be continuously updated as the external environment changes.

3. How organizations can adapt to the new environment

In the new uncertain environment, organizations clearly need to develop strategic foresight, namely:

"The ability to create and maintain a high-quality, coherent and functional forward view, and to use the insights arising in useful organizational ways. For example to detect adverse conditions, guide policy, shape strategy, and to explore new markets, products and services. It represents a fusion of futures methods with those of strategic management"[1].

Organizations seeking to achieve strategic foresight need to evolve a set of qualities which are rooted in common *insight*, *values* and *awareness* of the business fundamentals, what we call *options*. These are tied together with appropriate machinery and a deeprooted and over-arching *narrative* about the nature of the organization and what it does.

For instance, a manufacturing company might have values of 'engineering excellence in design' and a narrative of "we make and sell engines globally for trains, automobiles and air transport".

A toolkit for developing strategic foresight and going further to achieve purposeful renewal has been described in *Beyond Crisis*, [2]. The organization that is successful in using strategic foresight to renew in the next decade is called a PS-RO — a *Purposeful*, *Self-Renewing Organization*.

A PS-RO must combine the following: competing in the world of outsourcing, cost benchmarking and cost reduction, with the ability to adapt to the changing environment. We symbolize this with a double cone, as seen in Fig. 1. In the lower cone, insight is gained, from internal and external sources, in order to make sense of the environment. Where the cones meet, assets are allocated and projects are approved. In the upper cone, radiating from this, are the ongoing activities of the business.

Renewal needs to match both the organization's current situation and the changing environment, using insight. Insight includes the processes for exploring the external environment and anticipating change through horizon scanning; competitor and technology analysis and foresight; making sense of it through scenarios or other mental models; as well as understanding the internal capability.

A business also needs a clear sense of its values, the choices which it has made around often intangible issues such as brand positioning, staff relationships, and the like. Also, it needs to relate its current activity and asset base to practical ways forward, its options. These three — insight, values and options are joined by the organizational narrative. The narrative sets out the shared set of reflexes that knit the organization together.

The first four qualities of insight, values, narrative and option *generation* are held together though the operation of the fifth quality, that of *machinery* — used here in the sense of active and dynamic infrastructure, covering people and processes. All five qualities need to be in place if purposeful renewal is to be achieved.

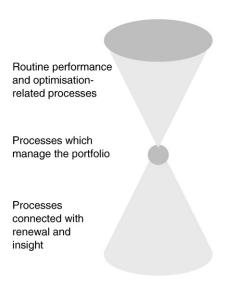


Fig. 1. The upper and lower cones of a PS-RO.

Scenarios are one tool to help these processes. As organizations progress toward strategic foresight (Fig. 2), scenarios provide analysis, communication, education of the organization and stakeholders in both possibilities and ways of thinking. They offer a worldview with implicit but painless critique. A set of scenarios affords a playpen, in which ideas can be explored without undue commitment. This part of the scenario process acts as a spur to innovation. An established set of corporate scenarios (as in the GSK example below) offers continuity across planning cycles. It fits perfectly into a biennial structure in which divergence and analysis is succeeded by convergence and decisiveness. It is the vector of new ideas and central qualms, a way of opening debate in a structured and practically-bounded manner.

4. Scenarios as mental models

Scenarios have been usefully defined by Michael Porter [3]:

"scenarios are an internally consistent view of what the future might turn out to be - not a forecast, but one possible future outcome."

The emphasis falls on possibility rather than forecasting, and on the internal consistency of the story. This means that scenarios as mental models can acquire a range of roles in strategic foresight processes, as described below. The examples briefly outlined in the roles marked below with * are described in more detail in *Beyond Crisis*.

4.1. Understanding complex systems

Scenarios provide a structure for tying together topical intelligence – from the front end of the organization – with structural and strategic work to understand new factors appearing. By sharing information from horizon scanning, forecasting and scenario exercises with the eyes and ears of the organization, intelligence is made accessible to the organization. The early use of scenarios in Shell was a response to the question: How can we understand OPEC?

4.2. Informing but not prescribing the internal discussions

They allow for debate right up to (but not beyond) the point of a decision, without fear of the 'finger of God' from the board or elsewhere; cutting through dissent by providing a framework for discussion.* An example was the use of scenarios to describe possible future scenarios for the City of London to a financial services firm, leading to each division recognising themselves in a different scenario, leading to the splitting of the organization.

4.3. Influencing, hearing and tapping into outsiders

Scenarios create images of the world external to the organization, its relationship to the world and possible futures. This allows an organization to influence its external environment through sharing images and models of the future, providing a context for a dialogue about desirable futures and for expanding its circle of influence. So with stakeholder relations, corporate social responsibility (CSR), and regulatory relations; scenarios can provide a context for a more informed and fruitful dialogue. One

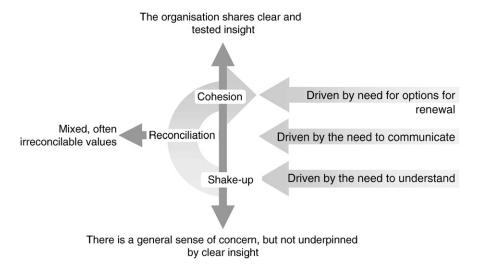


Fig. 2. Organization's progress to strategic foresight.

example is the use of the UNAids scenarios for Africa by a pharmaceutical company to recognise the different CSR needs in different African countries and develop appropriate policies.

4.4. Means of surfacing senior staff preoccupations

Scenarios may be needed as a prompt for senior management discussion. It has been observed that senior managers spend much of their time on current, internal issues. One study of the Fortune 500 global companies found that senior managers only spend on average 2–3% of their time collectively discussing strategic issues. Scenarios provide a non-threatening framework for this discussion. One example is a major oil company, where the Executive Management Team 'AwayDay' used scenarios to prompt thinking about their role, leading to the comment "that is exactly the sort of discussion we should have had years ago" [4].

4.5. Individual and group reflection

Scenarios may act to diffuse tension. By focusing on looking to the future, defensiveness in the management team is reduced (moving away from 'my patch' into a shared future). Group thinking is too far away to be personal; it exposes group assumptions so that these can be questioned, and provides a bridge between cultures that need to work together.* An example is the presentation of scenarios for the information technology (IT) industry to a management team, whose members immediately realized that their default set of assumptions described one industry scenario but that the business was living in a different scenario.

4.6. Providing a set of potential worlds in the future

In this way a scenario may be the example against which current plans can be benchmarked, innovation driven and new options explored. This is the typical use of scenarios as taught in business schools, but as the examples above suggest, it is in no way the only role.

These differing scenario roles are needed at different stages in the development of strategic foresight. A simplified flow is sketched in Fig. 3 below.

5. The role of scenario methodology

Scenario methodology is well understood by many senior managers now. After all, it has been taught in business schools since the 1980s. The methodology is well articulated, incorporating a number of stages leading to storylines, see for instance Paul Schoemaker's classic paper [5]. As the three brief case studies below illustrate, using the scenario methodology can set a context for futures thinking that does not necessarily nor only lead to scenarios.

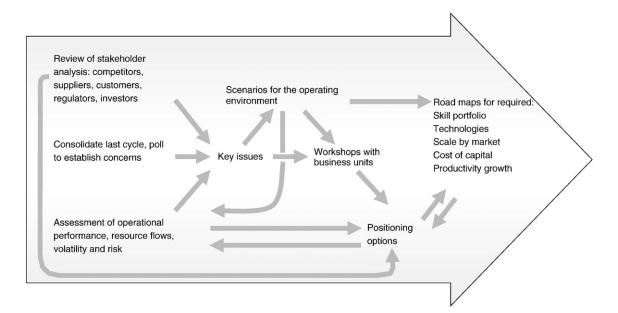


Fig. 3. Strategic foresight processes for renewal.

5.1. A case study — GSK

This description is based on the longer case in *Scenarios in Business* [6]. It illustrates the use of scenarios to expose the common, plausible, elements of the business landscape in order to develop strategic foresight. Scenarios became a useful intermediate stage of the analysis and strategy development towards a preferred future. They were also later briefed widely inside and outside the company and used to develop strategy in other areas.

GlaxoSmithKline (GSK) was considering the entry of the company into diagnostics, as distinct from its existing global businesses in therapeutics. Scenarios were used to do the following:

- look at the future of health care and the pharmaceutical industry;
- determine how therapeutics, genetics and diagnostics will integrate in the future;
- develop a vision, mission and long range goals for the company's activities in diagnostics.

A team developed four scenarios, following a pattern of 'Best Guess', 'Hard Times', and two paradigm-shift scenarios. These were compared to identify the relatively common elements and those which were scenario dependent. The relatively common drivers had to be taken into account by any strategy. The team then developed its preferred future for GSK diagnostics, including the potential effect that GSK could have on the rest of the industry. This led to the vision and mission for GSK diagnostics.

5.2. A case study - Legal & General

Legal & General (L&G) is one of the United Kingdom's leading financial services group. It has over 5.75 million customers and almost 10,000 employees. This case study illustrates the use of scenario methodology to develop one new mental model, and to pose the question: Will the pace of change be fast or faster?

A new chairman prompted a strategic review. The strategy process started with a scenario-planning project. Interviews with customers, staff, competitors and regulators identified two key factors in the changing environment — demographics and information as well as communications technology. The industry was perceived to have been "asleep for forty years" and the culture of many staff seemed to be summed up in comments like "customers frustrate me; they don't understand" or even more damning, "our best bet is to get in bed with a bank or building society".

There was universal agreement that continuation of the *status quo* was not a credible scenario, and two scenarios were created — Evolution and Revolution. While the drivers for both were the same, the main difference lay in the pace of change. By the end of the strategy development process, Revolution was looking more credible, as deregulation of financial markets, demographic change, and the use of IT as a sales, marketing and customer service channel developed more rapidly than expected.

The response was to focus on quality, cost-cutting and cultural change in the short term, and to develop a long-term strategy for success in the new environment. New opportunities were identified, and new sales channels. The results from getting ahead of the curve were that L&G enjoyed growth over the next 10 years in market share, profitable new business and share price.

5.3. A case study — ICL

This description is based on a longer discussion [7]. This case study illustrates the use of a scenario project as an envelope for thinking about the long-term drivers, as a part of strategic foresight.

Within a wider visioning exercise, ICL developed a set of three scenarios for the computer industry, using a team of people from headquarters. Each scenario was set within the context of a number of basic political, economic, social and technological (PEST) driving forces.

The scenarios were called 'Stagnation', 'Baseline' and 'Techno-growth'. The Techno-growth scenario showed a high or very high rate of change in consumer and business demands, but only medium economic growth in Europe. The Baseline scenario rated very

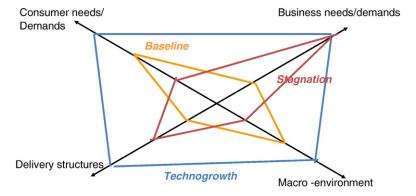


Fig. 4. Three scenarios for the IT industry.

low in terms of changing delivery structures; it had medium growth of consumer needs/demands, static or declining business needs/demands and a less healthy macro-environment in terms of growth. In the Stagnation scenario, business needs and demands would be very high, but the emphasis would be about reducing costs, with particular demand for outsourcing. Consumer demand would be very flat, while the macro-environment was low growth and delivery structures were relatively stable (Fig. 4).

Using these scenarios, the team members were able to make mental leaps and examine how different elements were connected and to predict that some areas would be more resilient than others. The graphic format highlighted the differences between the scenarios and helped us in discussing them with management teams. These discussions highlighted the importance of the changing structure of the industry, based on technology changes in the underlying components, which exceeded the impact of the variability included in our scenarios. So the trends analysis was integrated into the corporate plan.

6. Conclusions

Organizations need strategic foresight leading to renewal in order to survive the challenges of the next decade. We have illustrated two roles for scenarios in underpinning the strategic foresight processes — using scenarios as mental models, and deriving benefit from the scenario methodology itself.

References

- [1] R.A. Slaughter, Futures for the Third Millennium, Prospect Media, St. Leonards, NSW, Australia, 1995.
- [2] G. Ringland, O. Sparrow, P. Lustig, Beyond Crisis: Achieving Renewal in a Turbulent World, John Wiley, 2010.
- [3] M. Porter, Competitive Advantage, Free Press, 1985.
- [4] G. Ringland, Private communication.
- [5] P.J.H. Schoemaker, Scenario planning: a tool for strategic thinking, Sloan Manage. Rev. 36 (1995) 2.
- [6] G. Ringland, Scenarios in Business, John Wiley, 2002.
- [7] G. Ringland, Scenario Planning, 2nd editionJohn Wiley, 2006.

Short biography

After an early career in the IT industry, Gill Ringland has become well known globally as an author, consultant and speaker on scenario planning and strategy. Since 2002, she has been CEO and Fellow of SAMI Consulting, a firm which specializes in working with organizations to improve decision-making and implementation, based on views of the future, notably "robust decisions in uncertain times". Her books on scenario planning are amazon.com bestsellers, and the latest book, *Beyond Crisis* with Patricia Lustig and Oliver Sparrow will be published in March 2010.