Scenario Thinking:
Accelerating Strategic Learning

Peter M. Schütte
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The scenario approach is by no means new. It has been around since the seventies and has been actively pioneered and enhanced by companies as Shell. Although scenarios are growing in popularity these days, there remains a fair amount of misconception around them, especially about their use in strategy formation and implementation. This article explores what scenarios are (and what not), and why and how scenarios can be made effective in ‘strategising’ processes in organizations.

Future orientation

The quality of strategic decision making draws heavily on companies’ competencies to understand and act upon the future business environment. In most companies, however, ‘the future’ does not feature prominently on the corporate agenda. They tend to focus strongly on problems in the “here and now”. In fairly stable environments this may not lead to serious problems in the short run: the routines that have been developed in de past will often work sufficiently well in the organization’s dealings with the outside world. Problems will arise, however, when the environment changes; sometimes slowly, under the surface, but sometimes very quickly and dramatically. In such circumstances the logics and routines of the past no longer apply. Increasingly, companies need competencies, mechanisms and processes for linking the company to the outside world, helping them prepare for discontinuities and sudden change.

Value creation

A company’s strategic task is basically about ensuring the organization’s value creation, not only in the present but notably also in the future. If we continue to create value we earn the ‘right’ to survive. Therefore, clearly, “the future” should feature highly on the corporate agenda, much higher than we normally observe. Strategic management is about exploiting opportunities within the context of uncertainty about the future. Many companies, however, have trouble ‘reading’ the business environment and understanding its uncertainties, both in terms of potential challenges and business opportunities.

Most companies deal with the future by trying to reduce the uncertainty of it. They make guesses (predictions) about what the future will look like by addressing the question “what will happen…..”? They do so in elaborate corporate processes: in ‘planning’ and in board and management meetings. As a result they engage in a collective “uncertainty reduction” exercise, the result of which is a (comfortable but highly deceptive) sense of confidence and security as a basis for planning and subsequent action.

No doubt, most managers would agree that denying uncertainty is a foolish exercise. Yet that is what seems to happen in many organizations in a more or less institutionalized way, focusing primarily on a consistent and efficient execution of internal tasks, processes and procedures. Many organizations live with a more or less accepted version of the future, what we call ‘the official future’. Articulating this ‘official future’ provides a snapshot of management’s current perceptions.

Because the future is inherently uncertain, scenarios portray multiple futures which can (and must) be considered. “Unlike forecasts, scenarios aim to put (and keep) uncertainties on the agenda, not to get rid of
them”
. The purpose of scenarios is to open up, broaden the context, stretch ‘mental maps’, help remove the ‘blinders of dominant logic’
, and challenge the perceptions embedded in the ‘official future’.

‘What if’ thinking

“Thinking about strategy only makes sense in conditions of uncertainty”
. The task of the strategist, therefore, is to understand and even embrace uncertainty. Understanding uncertainty helps us to perceive the early signals on the horizon that may be harbingers of good or bad, helps us to prepare for what might happen and to detect opportunities ahead of competition.

Embracing uncertainty requires a different mode of thinking and strategy making. Firstly, we have to steer away from the habitual ‘predict and control’ approach to strategy. This forecasting approach may work in some areas, but fails in the world of strategy where longer time horizons prevail and uncertainties abound. In the words of Arie de Geus:
, “Nobody can predict, therefore we should not try. The only relevant discussions about the future are those where we succeed in shifting form the question whether something will happen to the question: what will we do if it happens”. This implies a fundamentally different way of thinking: what we need is clear insight in the fundamental uncertainties of the external environment that will allow us to assess firstly their implications for the actors that surround us (suppliers, customers, competitors, the public) and subsequently the implications for ourselves. And, as a next step, we must think systematically about the question: what would we do if...?” The outcome of this process is not ‘one best strategy’ in the form of a plan, but a state of preparedness facing the future, which allows a company to anticipate and adjust.

Strategising

Secondly, we must move away from the traditional concept of strategy as more or less episodic and adopt a view of strategy as a more or less continuous learning process. This process can be described as a “learning loop” wherein decisions are made and executed, outcomes are expected, reality is observed, variances are discussed and interpreted and behaviour is adjusted. Van der Heijden appropriately calls this continuous learning process ‘strategising’. Notably, in this concept strategy is a verb (to strategise), rather than a noun. In their strategising process, management teams systematically address the ‘fit’ between the company (and its unique, distinctive competencies that create success) on the one hand, and the uncertain business environment on the other.

The learning loop on the right portrays the strategic learning process: learning requires feedback. Learning organizations reflect on their experiences and adjust and improve their theories of ‘how things work’ on the basis thereof. No learning without action and conscious reflection.

Discussing the relatively short average lifetime of companies Arie de Geus concludes that the majority of large corporations suffer from learning disabilities
. They are somehow unable to adapt and evolve as the world around them changes. The essence of ‘strategy as learning’ is nicely expressed in his well known quote: “The ability to learn faster than your competitors might be the only sustainable competitive advantage”
. Therefore, if the business environment changes faster than the natural response time of the organization, accelerated learning can become a means for managers to enhance the ability to create the results they want.
Possible Futures

Scenarios are plausible, internally consistent stories of alternative futures. Because the future is inherently uncertain, there is not one story but there are several. Developing one story would come close to making a prediction, normally representing ‘more of the same’ (or ‘business as usual’) or some form of desirable or ‘official’ future that the company has in mind. Scenarios are stories about alternative ways in which situations may develop in the future. They do not predict what will happen, but identify what might happen.

An important starting point for the scenario planner is that the future is not ‘more of the same’. The art of scenario building is to discover alternative novel ways in which the external environment could unfold, based on the fundamental uncertainties of the situation. They are constructed in order to increase understanding of the often complex interactions between the underlying forces that determine the course of events. Good scenarios help decision makers to develop new insights and see new ‘logics’, to look over the horizon, to explore the “ unknowable”.

The figure below shows the organization in the context of its external environment. We distinguish between contextual and transactional environment. The contextual environment contains factors: variables such as speed of technological development, toughness of regulation, rate of development of new sources of energy etc., which can vary – and consequently producing different possible outcomes – over the period considered.

Scenario stories normally have their foundation in the most important driving forces in the contextual environment. However, elements of the transactional environment, depicting the related behaviour of certain actors (customers, competitors, suppliers etc.), within that particular context can be part of the scenario narratives as well.

Although the purpose of this article is not to discuss the process of scenario development, or the different purposes, processes, methodologies that are open to the scenario planner, a couple of points seem relevant, however, in the context of our discussion here. Some companies tend to develop scenarios ‘off line’ largely as an effort of a scenario team that offers the fruits of their work to the strategists / decision makers. Others endeavour to actively involve decision makers in the scenario development process, making them an active part of the learning process. We have learned that active participation by management is quite important. This increases the relevance of the scenarios to planning needs (linking them closely to the decision-making process and the issues that keep them awake at night) and enhances their “ownership” of the final product. The scenario stories must relevant (address the right issues), consistent and operate within a range of acceptability of their users. If we cross this latter ‘acceptability’ border, a scenario story or even a set of scenarios may be dismissed by management and, as a result, we fail to reach our aim of improving the quality of decision making.

Creating a ‘Memory of the Future’

By providing multiple pictures of the future, scenarios aim to stretch the corporate ‘mental models’. Our mental models determine how we see the world around us and what we can perceive. We can only see what fits our maps and a lot of disconfirming data is often discarded. Thus scenarios help broaden the range and the quality of our perceptions, and provide – if applied well – a framework for interpretation and corporate sense making. Our
mental models are built upon past experiences and learning processes. The future, however, is not ‘more of the same’. Therefore we need is an instrument for reading and ‘rehearsing’ the future.

The discipline of ‘thinking through’ a set of scenario helps decision makers to grasp an unknown world with new ‘logics’. During this process mental maps are affected, new possibilities become clear, and new ‘receptors’ are installed. The decision maker has, as it were, “lived there before”. He or she will be able to perceive and interpret things otherwise unseen, she will create what some call “a memory of the future”.

The primary value of scenario thinking, however, is the development of new faculties for improved ‘strategising’ in those who practice this regularly. Thus scenarios (and their systematic application) become a vital tool for increasing a company’s strategic (learning) capabilities.

**Scenarios versus Strategy**

In strategy processes – especially when management is closely involved in the scenario building process itself - scenarios and strategy often get conceptually mixed up and are interpreted as more or less ‘the same thing’. We feel that the two concepts must be carefully distinguished. Scenarios are about what might happen in the external environment, strategy is about what a company decides and how it acts. Therefore strategy is the outcome of a process in which scenarios are a *tool*. In this process, managers can test drive their current strategies, ‘business ideas’, investment plans, their vision for the future and options that they carry along.

**Applying Scenarios in the Strategy Process**

Scenarios can be built for different purposes. One important distinction is between scenarios for exploration – scanning the future, uncovering key uncertainties, raising important questions for the future, advancing our systemic understanding etc. – and scenarios for the purpose of improving strategic decision making. Most companies / organizations initially build and apply scenarios in specific problematic situations, when certain issues must be tackled and decisions with an important future impact must be taken. In such cases we speak of ‘focused’ or *decision* scenarios. Especially in such decision focused situations it is highly beneficial to develop and discuss a client organization’s ‘Business Idea’ early in such a ‘decision scenario’ process. A *Business Idea* (a concept initially developed in Shell) is a systemic representation of the current strategic success formula of an organization, articulating how value is created in the current context.

“If the Business Idea is a true representation of the organization’s success formula …… it is indicative of what is relevant. In practical terms scenario development requires understanding of the Business Idea to be tested, in order to decide what are suitable ‘test conditions. By using scenarios as a strategy testbed the managers are forced to articulate what they consider really important in the environment. They provide the relevant ‘test drive’ conditions: Is this the right Business Idea for the future? If not, what can / must we do? How can we adapt, prepare, build the required competencies to sustain success? In this way we make sure that the process addresses the vital strategic issue, namely the organization’s value creation in the future: the conceptualization of its ‘Business Idea of the Future’. A clear understanding of the ‘Business Idea of the Future’ provides solid guidance for strategic action and change.
Decision scenarios are tailored around certain strategic issues, investment options, planning requirements etc. Over time, however, scenario practitioners have learned not to start with too narrow a focus, because this may increase the chances of missing the deeper fundamental driving forces of future conditions. “You must first use a wide-angled lens to look at the big picture – afterward you can zoom in on the details”12. Such so-called ‘framework scenarios’ provide a useful backdrop for developing more specific focused of ‘decision’ scenarios as a next step.

Options for the future

As discussed, participating in a scenario development process constitutes a awarding learning process by itself. The proof of the pudding, however, is in the eating. How can we use scenarios one they are constructed? In so called ‘Scenarios to Strategy’ workshops, strategic issues, current options, Business Ideas and the scenarios themselves are brought to the table. Participants (managers, decision makers) discuss systematically (for each scenario):

a. the implications for the players in their business environment and their anticipated responses
b. implications for the organization itself and its Business Idea
c. the options available (‘what would be do if’, and why!).

This process is a vital part of the ‘strategic conversation’ as managers must open up to new possible situations, combine creativity and business sense, argue, listen, improve and learn.

In essence this is an outside-in process: we start in the outside world (‘contextual environment’) by ‘thinking through’ the scenario stories, addressing their implications, challenges and possible responses and subsequently, strategic options. During such ‘Scenario to Strategy’ workshops we go through this procedure systematically, addressing the scenarios one by one. In the end this generates a stock of well thought through options for the future, and insights into when and how they could be exercised.

Having options for the future, by itself, is quite valuable. But how do we move from a pile of options to strategic decisions and timely action? Scenario planners understand that scenarios do not reduce environmental uncertainty. Therefore we cannot choose one scenario over another that for whatever reason: we have no choice.

A particular scenario, therefore, can only be relevant in the context of the others. Scenarios must not be used one by one, but always as a set. This implies that we must evaluate all options (or combinations of options) against all our scenarios. The key question is: “what would be the consequences of pursuing option 1 in scenario A”? In some cases the answer is positive, in other case neutral or negative. Some options mat be robust: these options are a ‘good idea’ in each scenario. Other options may show a mixed picture: a particular option may look favourable in one scenario, but a waste of time and money or even harmful in others. This way we can develop an overview (often in the form of a so called ‘Scenario - Options Matrix’) which portrays the options against all the scenarios.
Creating this overview, in a strategic conversation, supports the development of strategic direction and alignment during the workshop, and subsequent decision making. Which options should be developed further? Which options should be discarded? Which options should we keep open? What are elements in the external environment that we must monitor closely?

Benefits of Scenario Thinking

Summarizing, based on our experience with scenario applications in various forms and for various clients we have observed the following benefits:

- understand shifts that are taking place around us now, prepare for discontinuities and sudden change
- see and interpret ‘weak signals’, remove ‘blind spots’
- break ‘dominant logics’, stretch mental maps
- understand opportunities and risks that may manifest themselves in certain situations
- help prepare, shorten response time
- understand potential pitfalls and threats of certain causes of action
- understand the value of certain (existing) options and when and how they should be exercised
- support the articulation of strategy, vision
- create a common language for strategy and enhance the quality of the ‘strategic conversation’

Scenarios to Strategy: investing in the quality of decision making

Many companies can considerably improve the quality of their strategic planning. In order to do so, they must take a different look at their strategy processes and ask the question whether they actually ‘prepare minds for the future’ by means of meaningful, well informed, strategic conversations.

The benefits of scenario thinking will become most visible when applied in a concrete decision situation: what to do or avoid when a decision situation is placed in a broader future context. Many companies start using scenarios in this way. When the value of a scenario based approach becomes clearer and more accepted over time, some companies make an effort to introduce the approach as a ‘normal procedure’ in addressing strategic issues. Gradually scenario thinking may become part of the culture. In ‘on-going’ strategic conversations, scenarios are naturally brought to the table. They gradually become embedded in the company’s strategising process, becoming part of the language, enhancing a company’s future orientation and thereby the quality of its strategic decision making.
Embedding ‘scenario thinking’ in an organization, however, does not come easy. It takes a lot in terms of time and (continuous) effort and success by no means guaranteed. A couple of success stories are very helpful. But first of all it is essential that organizations - or rather of key persons therein - really come to understand the importance of investing in the quality of their decision making processes (in terms of both time and money), in the organization’s ‘future ability’ and in the importance of accelerated learning. This is where sustained competitive advantage and longevity are created.

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1 Schütte, Peter, Van der Heijden, Kees and Hofman, Michel: Scenario Thinking, working paper OLC Nyenrode, November 1996
3 Van der Heijden, Kees: ‘Scenarios, the Art of Strategic Conversation’, 2nd edition, 2005, p. 91
4 Arie de Geus, recorded by the author of this article from one of De Geus’ speeches, 1990
7 De Geus, A.P.: Planning as Learning, HBR, Vol 66, no 2, p. 70 - 74
8 for an overview of factors to be considered and choices to be made in designing scenario processes see: Van der Heijden, Kees and Schütte, Peter: Look before you Leap, Key Questions for Designing Scenario Applications, Scenario Strategy & Planning, Ark Publishing, Vol. 1, issue 6, Feb/March 2000
10 for a comprehensive description of the Business Idea concept, see Kees van der Heijden, 2005, (reference above)