Decision Corridors as a Futuring Technique

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Abstract

This paper describes using a decision corridor approach to improve the exercise of strategic judgment under conditions of uncertainty. The method is a composite of concepts and tools principally borrowed from three analytical families - futures, transition management and strategic management. While the approach - as used - does not challenge current business concepts or radically contribute to their re-conception, it does prompt new strategic insight and introduce divergent, forward thinking into existing capability decision-making processes.

Keywords: decision corridors, applied futures studies, organizational culture, strategic decision-making

Introduction

One of the basic dangers in thinking about how a future will play out is that we may fail to consider the effect that the movement of time will have upon something happening the way we expect. When making strategic decisions, we often take ‘static snapshots’ of reality and assume that these snapshots will remain true. What is needed are moving pictures. This paper suggests one way of constructing this view.

We were recently given the opportunity to develop a new approach dealing with a client in this position. Our aim was to help senior decision-makers exercise their judgment in the face of uncertainty within the constraints of existing business constructs and political direction. We were clearly advised that there was, and is, no margin - at present - in dramatically re-conceiving existing concepts about how to manage the issue. As a ‘test case’, however, we felt that this was a good opportunity to introduce some elements of futures thinking and analytical methods to the organisational sceptics without attracting the question ‘Who engaged this idiot?’

The Problem

You work for one of the largest organisations in Australia. You are asked to solve an immediate problem that may go away in five years. Your political ‘radar’ tell you that long term capital investment solutions - with a shelf-life or horizon of 20+ years - will get the ‘nod’ but not so alternative approaches. You cannot buy in a solution; you cannot ‘wait’. How do you help senior decision makers face and then grapple with the paradox of their views that address a short-term policy issue with a long-term investment solution?

One Answer

We developed a specifically tailored ‘decision corridor’ approach. We focused on improving decisions because ‘management insight and determination can dramatically improve the productivity of capital spent on major projects’. This approach borrows and adapts its suite of concepts, tools and techniques from anticipatory management, futures analysis, integrated assessment, knowledge management, risk assessment, strategic man...
Decision corridors supplement current approaches that reflect the 'cumulative wisdom of disparate individuals making independent trade-offs'.

In discussing a transition management approach Professor Jan Rotmans uses the metaphor of a landing aircraft. "During a landing, an aircraft must approach the runway within a limited but well-defined passage, so that it does not touch the ground too early and crash, but also not too late so that there is not enough braking distance. The aircraft must have the correct speed and position: if you brake too quickly, you crash before your target, but if you fly too fast, you overshoot the target and crash." (See footnote 2)

Before decision corridors ...

We found that two intellectual challenges needed to be surmounted at the outset. The first revolves around the issue of uncertainty. It was necessary to convey a sense of uncertainty that was not binary. If uncertainty is binary, there or not, then, it is often the case that decisions are exercised either on the basis of 'gut feel' and instinct or on the basis of linear extrapolation. A large part of our written analysis conveyed the richness and texture of the uncertainties that surrounded the strategic decision. We used Courtney and Rowe's ideas about categorising uncertainty as a jumping off point in the analysis.

The second challenge was about understanding the organisational context. Michel Godet's approach to stakeholder analysis, Art Kleiner's core group theory, political mapping as used by the US Aid organisation, and some vigorous brainstorming permitted development of one of the key sets of constraints. We tried to identify 'who decides?' and 'What is really doable?'

- We were better able to conceive some of the 'limiting danger lines' - in addition to the business case approach of assessing cost, capability and schedule.
- We were also able to start identifying signals (or signposts) and emerging trends that impact on the viability of a decision in a given decision space.

Our cardinal rules? Make sure you chunk uncertainty in meaningful pieces. And, know the actors.

What is a decision corridor?

In a visual sense, a decision corridor is a me-lange of a futures cone, contingent map, political map, time-line and scanning data. In a substantive sense, the corridor describes the decision space within which the organisation is, and is going to be operating over the time horizon or life of the decision process. It attempts to identify the room for manoeuvre that a decision maker has within an uncertain, changing strategic context.

The heart of this is the development of critical corridors that identify or flag future decision and action points that should be actively monitored. The approach requires that the analysts define and describe the institutions, core processes and important relationships visually and analytically. Using this method, there are a few simple steps to building a decision corridor. These steps enable:

- Identification of important relationships and the strength of their connections (boundary spanners, gateways)
- Detection of important flows of ideas, people, information, financial resources, products/services, etc.
- Understanding important processes of change - evolution, adaptation, pioneering and transformation.
How to build one ...

Building a decision corridor is a messy, iterative process. It relies on good foundational research and strategic conversation. We followed a few principal steps:

- First, we developed a sense of the drivers and rhythms of change in terms of how the strategic context might change, what constraints and opportunities presented and how the organisation might adapt to them.
- We then developed hypotheses about what would derail the decision - discontinuity - or what would make the decision look bad in hindsight.
- The trickiest part of the process was in narrowing the decision corridor to the 'usable' decision space. Building an internal cone required not a few enlivening and difficult sessions in addition to development of the evidence base.
- Our fourth step involved mapping ideas and events, inflection and leverage points onto a timeline constructed within the inner corridor or usable futures cone.
- We developed a template for a scanning and monitoring system that would allow analysts to view and work with the decision space dynamically.
- Finally, we drew a visual representation of the decision corridor.

Remember, that the simplicity of the diagram belies the complexity of the underpinning written analysis and strategic thinking. We chose to convey the issues in a form that could be credibly communicated to the rest of the organisation - balancing simplicity with comprehensiveness. This 'appropriate simplicity' served to illustrate the proposed process with clarity and guaranteed accessibility to the wider community.

As Einstein once observed 'Make things as simple as possible - but no simpler'.

Different Migration Paths

Because a decision corridor offers a framework for strategic decision-making, there are immediate benefits and long-term benefits. It became apparent immediately that traditional capability analyses outlined different migration paths than the decision corridors analysis. The analytical process, properly executed, de-bunks linear - left and right of arc - progression to the future.

Insights ...about the organisation

Our analysis suggested that the greatest changes are almost certainly still ahead for our client.
We found the information revolution has caused management to be less well informed than they were before. They have more data, to be sure, but most of the information is about internal corporate matters. Surprisingly (for many), present information systems offer few clues about outside changes.

For example, we found competitors, depending on how each of them responds to the changes in their work force and technology will be less homogenous. A number of different models are likely to emerge, especially of organisation and structure.

Top management is seen now as an extension of operating management. It became clear that tomorrow's top management is likely to be a different.

The top management team (of tomorrow) will have to take charge of and balance the three dimensions of the organisation: as an economic organisation as a human organisation and as an increasingly important social organisation.

We found powerful insights suggesting different directions for the capital investment project:

- Because we had a better sense of evolutionary drivers for other actors, we identified new ways we could shape the viability of long-term capital investments for the future - regardless of how the future may unfold.
- This appreciation of how other actors might change (mind-sets and actions) influenced the number of realisable options available.
- We recognised that change would come likely in steps, some of which presaged significant discontinuities, rather than gradually and evenly over time.
- This insight not only confirmed earlier project thinking that the capital acquisition should not be a 'Lexus' solution (high-priced); it also suggested that the life expectancy of the capital equipment should be shorter rather than longer.

...And about the process

We discovered that building a decision corridor is an unworkable process without imagining what is possible.

- We had developed a presumptive case for building alternative futures.
  - Forming hypotheses about what could undermine the strategic decision requires one to tackle the 'unimagined'.
  - Hypotheses formation surfaces and challenges assumptions about the way things are, will be and also about 'what should we do about it?'

- Taking a decision space approach forced us to consider the horizontal nature of decisions not only in terms of their analytical approach but also in terms of the relationships across strategic decisions.
  - The intersection of, or connection between, capital investments can be developed as a signal to be monitored.

How to gain 'buy-in'...

Convincing senior officials and analysts alike that we could add value by dynamically exploring the range of uncertainty was a challenge. However, we gained entree into conversations because of the visual representation of the decision corridor. The visual attracted immediate attention. As Gary Hamel has noted 'A fresh way of seeing is often more valuable than sheer brain power.'

The approach reduced our reliance on conceptual language - and theoretical constructs. There is often little to be gained with busy executives in presenting futures insights in a conceptual voice. We added value by simplifying communication.

The decision corridor approach integrates the skills of scanners, intelligence analysts, risk assessment professionals, project managers, and, to a lesser degree, emergency management spe-
cialists. It enables an individual analyst to systematically:
- Develop and share information for early warning (scanning, intelligence)
- Inform judgments about the relative danger of action (or inaction) at a particular time (risk).
- Map whole projects (cost, schedule and performance requirements) while taking into account implementation factors (project management) that your political 'radar' has identified.
- Identify inflection and leverage points.
- Identify possible contingencies (emergency management).

A Few Cautions

1. A limit on the 'futures discourse'
   In this large organisation, there are a handful of people that set the agenda and influence the direction and priorities that are taken. This dominance influences the way that a 'futures discourse' can be approached. This raised a fundamental concern for the project team: Is it better to challenge 'hereditary' pre-suppositions by placing them in the car's headlights or not?2
   - It was eventually resolved that using a suite of futuring tools such as a decision corridor would at least open a gateway to a wider discourse. We could, at least, make explicit some assumptions that would open them to later challenge.

2. Blind-sightedness
   Because the decision corridor was employed to open a gateway, the approach offered but one way of seeing. Accordingly, there was some danger that it will also provide a way of 'not seeing'.
   - The diagnosis of the uncertainties and the development of the decision space may not succeed in sufficiently reframing the issue for decision-makers. If there is 'nothing new', no challenge to assumptions, no 'speaking the unspeakable' in building the corridor, there is the danger that decision makers will revert to a binary view of the future. This will drive them back to relying on 'gut feel' or a linear, predictive decision-style depending on their current view of relevant uncertainties.

3. The 'herding instinct'
   In conservative organisations the 'need' (perceived) to conform to the opinions of others is strong. Only one thing is worse than making a strategic leap: being the only person to do so.
   - Even though our 'trial' resulted in some important insights, general application of the approach will ultimately rest with individual employees and depends, in some ways, on an individual willingness to single themselves out.

Some Important Learning

The need for futures discourse is evident, however, there is a wide discrepancy between that need, and the capacity of some corporate systems to fulfil it.

The complexity of informed decision-making, the virtual impossibility to be consistent in all matters at all times, means that what matters most is not simply whether contrasted strategies are being pursued, but whether they are being pursued knowingly, or unwittingly. If contradictory decisions must be made, the concern is that they be made deliberately, and on the basis of information and analysis that enable the decision takers to mitigate the costs of, as well as to explain their course of action in the context of the difficult choices they are confronted with.

In this context:
- The approach brings greater discipline to the identification and use of signposts in capital acquisition processes.
- The inter-relationship (and cross-impact) of individual acquisition projects is brought out when developing the timeline and hypotheses.
- Decision corridors call for more flexible strategic approaches. It requires the consideration of strategies with breadth and depth (focus).
- This method also allows us to explore the decision from the point of view of the different
internal (and external) cultures. It may also surface unnoticed differences (with potentially serious consequences) inside an organisation.

A final thought about eating an elephant ...

Many [DoD1]forces shaping change are slow to affect conservative institutions until they pass some threshold of tolerance or conviction. We can take advantage of these slow waves and thresholds and create an improved understanding of the dynamic 'decision space' wherein senior executives exercise their judgment. A better picture, earlier signals of change and better advice about the parameters of the 'plausible boundaries' of the decision space over time should improve the exercise of strategic judgment.

Using futures tools pragmatically does not mean that we have adopted a naive approach to corporate futures; it means that we have purposefully chosen to eat the 'elephant' one bite at a time. This is not ideal. But the alternative 'doing nothing' is not really a choice if one believes that we must responsibly pursue corporate transformation that affects societal innovation.

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Notes
1 Because of client sensitivity I cannot provide detail about the decision and the decision space analysed. I worked through the analysis with an insider - Simon Andrews. His able assistance and internal networks made the approach work. His intellectual contribution was invaluable.
2 We spent some time determining the goals of 'futures adoption' and considered the relative emphasis that would be placed on diffusion (how widespread the use of futures thinking will become) versus infusion (how deeply embedded). We considered whether an emphasis on diffusion may achieve broad acceptance and knowledge of futures thinking within the organization, but may not achieve the differences in behavior that actually contribute more heavily to improved business results. Our thinking related to the culture of the capability development staff and was informed by Edgar Schein's work on the cult of three cultures. See Schein, Edgar H. Three cultures of management: the key to organizational learning. Sloan Management Review 38, no.1 (Fall 1996): Reprint 3811
6 The strength of the decision corridor is that it is particularly suited to the idea of leadership under uncertainty or 'yellow light' leadership. This is leadership that requires executives to exercise their judgment. That is, senior leaders have to read a wide range of flashing signals at an intersection and make choices. In conditions of uncertainty, as opposed to crisis, executives face a wider array of strategic options and the key capabilities needed to make choices are analytical. Bruce Pastermack and James O'Toole explain the findings of a study in their article 'Yellow-Light Leadership: How the World's Best Companies Manage Uncertainty' in Strategy+Business, Issue 27.
8 Michel Godet, Creating the Future
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9 John Ratcliffe wrote an excellent publication on the dimensions of strategic conversation. It was 'Strategic Conversation' in Foresight 4,1 200 2, pp. 19-30

10 The idea of a time-line is not new, although combining its construction with a futures cone and ‘limiting danger lines’ is. There are a few companies that have used similar processes trying to identify events, inflection and leverage points. Pierre Kacha of decision/analysis partners (Vienna, Virginia) describes a decision-mapping process that has been employed by the US Coast Guard for its air fleet. See http://www.decisionanalysis.net/resources/decision_mapping/decision_mapping.html. Nerve Wire a Boston based consulting firm has developed a proprietary ‘future-mapping’ process. An overview is on http://www.radio.gov.uk/topics/convergence/document/mappingfuture/may2000/append2.pdf. The Foundation for Accountability uses decision-making maps http://www.facct.org/facct/doclib Files/documentFile_112.pdf. Many companies use contingent maps to fulfil the same purposes. The difference in approaches relates to what Professor Jan Rotmans et al identify as blueprint thinking (flow-oriented and gradual and short-term action) and back-casting (and then moving forward).


12 Rick Slaughter discusses the unthinking generational transfer of unsustainable commitments and assumptions that are embedded. Richard A. Slaughter ‘Futures Studies: From Individual to Social Capacity (c) Richard A. Slaughter 1996, 2002 All rights reserved.

13 Over time, I have adapted the layers of civilisation ideas that Stewart Brand articulated in his book ‘The Clock of the Long Now’ (p. 34-39), Phoenix, 1999 by considering the rates of change differentials for different forces shaping change, institutions etc. Layers with slow waves of change tend to stabilise the system; those layers with high rates of change invigorate it. The nature of their interplay is equally important (how differential rates of change affect each other). Gary Hamel talks in a similar way about changing rates of change and different rates of change in his book ‘Leading the Revolution’, p. 126-129, Plume, 2002.

14 Richard Slaughter rightly points out the dangers in accepting a particular corporate or cultural ideology as ‘given’. This, he notes, ‘likely means missing altogether the many options for critical analysis and re-conceptualisation upon which lasting social innovations may depend’. I agree. However, it is a matter of whether one believes that futures can be approached as if consuming an elephant. Can it be done one mouthful at a time? My experience with long-term clients is that this is indeed possible - re-conceptualisation and lasting social innovations become more conceivable as understanding and new ways of knowing grow over time. (see footnote 12)