

Startegy during Uncertainty–Environmental Analysis

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1. Introduction

A strategy is defined as a method or plan chosen to bring about a desired future, such as achievement of a goal or solution to a problem. It is the art and science of planning and marshallng resources for their most efficient and effective use. It is a high level plan to achieve one or more goals under conditions of uncertainty. Strategy is important because the resources available to achieve these goals are usually limited.

2. What is Strategic Uncertainty?

Strategic Uncertainty is defined as the Situation where the current state of knowledge is such that (1) the order or nature of things is unknown, (2) the consequences, extent, or magnitude of circumstances, conditions, or events is unpredictable, and (3) credible probabilities to possible outcomes cannot be assigned. Although too much uncertainty is undesirable, manageable uncertainty provides the freedom to make creative decisions.

3. Strategy Under Uncertainty–A Brief Scenario

3.1 What makes for a good strategy in highly uncertain business environments?

Some executives seek to shape the future with high-stakes bets. Eastman Kodak Company, for example, is spending \$500 million per year to develop an array of digital photography products that it hopes will fundamentally change the way people create, store, and view pictures. Meanwhile, Hewlett-Packard Company is investing \$50 million per year to pursue a rival vision centered on home-based photo printers. The business press loves to hype such industry-shaping strategies because of their potential to create enormous wealth, but the sober reality is that most companies lack the industry position, assets, or appetite for risk necessary to make such strategies work.

More risk-averse executives hedge their bets by making a number of smaller investments. In pursuit of growth opportunities in emerging markets, for example, many consumer-product companies are forging limited operational or distribution alliances. But it's often difficult to determine if such limited investments truly reserve the right to play in these countries or just reserve the right to lose.

Alternatively, some executives favor investments in flexibility that allows their companies to adapt quickly as markets evolve. But the costs of establishing such flexibility can be high. Moreover, taking a wait-and-see strategy—postponing large investments until the future becomes clear—can create a window of opportunity for competitors.

4. How Should Executives Facing Great Uncertainty Decide Whether to Bet Big, Hedge, or Wait and See?

Chances are traditional strategic-planning processes won't help much. The standard practice is to lay out a vision of future events precise enough to be captured in a discounted-cash-flow analysis. Of course, managers can discuss alternative scenarios and test how sensitive their forecasts are to changes in key variables, but the goal of such analysis is often to find the most likely outcome and create a strategy based on it. That approach serves companies well in relatively stable business environments. But when there is greater uncertainty about the future, it is at best marginally helpful and at worst downright dangerous.

One danger is that this traditional approach leads executives to view uncertainty in a binary way—to assume that the world is either certain, and therefore open to precise predictions about the future, or uncertain, and therefore completely unpredictable. Planning or capital-budgeting processes that require point forecasts force managers to bury underlying uncertainties in their cash flows. Such systems clearly push managers to underestimate uncertainty in order to make a compelling case for their strategy.

Underestimating uncertainty can lead to strategies that neither defend against the threats nor take advantage of the opportunities that higher levels of uncertainty may provide. In one of the most colossal underestimations in business history, Kenneth H. Olsen, then president of Digital Equipment Corporation, announced in 1977 that “there is no reason for any individual to have a computer in their home.” The explosion in the personal computer market was not inevitable in 1977, but it was certainly within the range of possibilities that industry experts were discussing at the time.

At the other extreme, assuming that the world is entirely unpredictable can lead managers to abandon the analytical rigor of their traditional planning processes altogether and base their strategic decisions primarily on gut instinct. This “just do it” approach to strategy can cause executives to place misinformed bets on emerging products or markets that result in record write-offs. Those who took the plunge and invested in home banking in the early 1980s immediately come to mind.

5. Strategies for Dealing with Uncertainty in Environmental Business

Randomness and uncertainty play increasingly greater roles in determining business success, largely because of rapidly evolving social networks. But knowing that technological progress, networks, and complex systems are making the business world

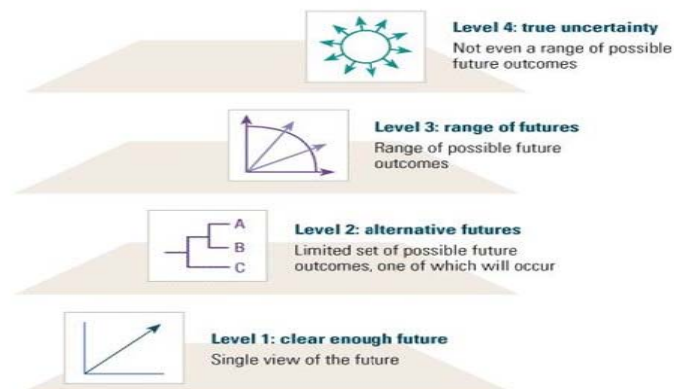
less and less predictable is a prediction itself, right? You can actually plan on it. Here are six strategies that can help your business remain stable as the tides shift.

1. Use Analytic Techniques that don't require high accuracy.
2. Prepare for multiple outcomes.
3. Find and rely on the predictable elements of the situation.
4. Focus your evaluation of initiatives on the inputs, not just the outputs.
5. Remain agile, and strive to respond quickly.
6. Cultivate your reputation for extreme trust.

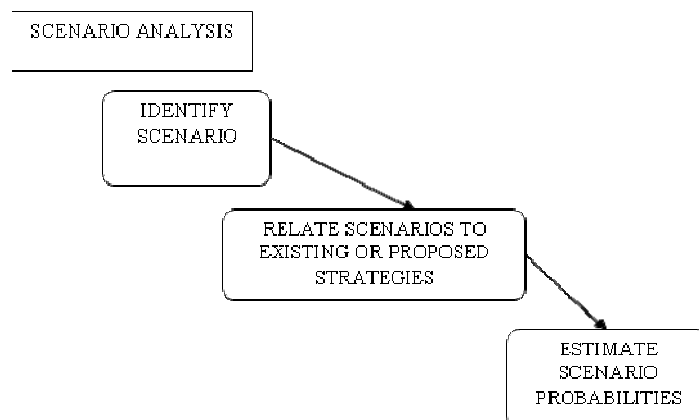
6. Dimensions of Strategic Environmental Analysis

1. Technology
2. Government
3. Economics
4. Culture
5. Demographics

7. Levels of managing Strategy during Uncertainty



8. Dealing with the Strategic Uncertainty



9. Scenario Analysis

It is a vehicle to explore different assumptions about the future, involves the creation of two to three possible scenarios, the development of strategies appropriate to each individuals, the assessment of scenario probabilities, and the evaluation of the resulting strategies across the scenarios.

10.Types of Scenario Analysis

- 1) **Strategy-Developing Scenarios:** This scenario is to provide insights into future competitive context then use these insights to evaluate existing business strategies and stimulated the creation of new ones.
- 2) **Decision-Driving Scenarios:** This scenario is proposed and tested against several scenarios that are developed. The goal is to challenge the strategies, thereby helping to make the go/no-go decision and suggesting ways to make the strategy more robust in withstanding competitive forces.

11. Identifying Scenarios

The impact analysis will identify the strategic uncertainty with the highest priority for a firm. A competitor scenario analysis can be driven by the uncertainty surrounding a competitor's strategy. An inflation stimulated recession scenario would be expected to generate a host of conditions for the appliance industry, such as price increases and retail failures.

12.Relate Scenarios to Existing or Proposed Strategies

The next step is to relate them to strategy and to know what new options or strategies will be applicable to the scenarios. Even if the scenario analysis is not motivated by a desire to generate new strategy options, it is always useful to consider what strategies would be optimal for each scenario.

13.Estimate Scenario Probabilities

To evaluate alternative strategies it is useful to determine the scenario probabilities. The task is actually one of environmental forecasting, except that the total scenario may be a rich combination of several variables.

14. What Makes for a Good Strategy in Highly Uncertain Business Environments?

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15. Scenario Planning

It is best to start by looking at what business scenarios are not and how they differ from conventional business planning approaches. Business scenarios are not:

- a) A Forecast
- b) About Certainty
- c) Quantitative

But scenarios are descriptions of a range of futures that managers, leaders and staff in organization feel that they may face.

16. Conventional Business Planning & Scenario Planning Contrasted

Characteristic:	Conventional Business Planning:	Scenario Planning:	Comments/Observations:
Timeframe:	1-3 years.	5-25 years	Select a period of between 7-10 years for business scenarios. This is a long enough period for "shaping forces" to have an impact, but not too long as to be regarded as an abstraction.
Qualitative vs. Quantitative:	Significant quantitative component. "Single point" quantitative objectives.	Can be both. Quantitative outcomes usually expressed in ranges.	Suggest use of qualitative scenarios or stories. Especially if you are new to the process.
Views of the future:	1	Multiple. Typically 2-5.	If using 3 scenarios beware of being overly influenced by the "middle" scenario. For this reason some use just two scenarios.
Primary Purpose:	Business direction, control.	Challenging perceptions. Developing a portfolio of opportunities.	Single goal control vs. developing a range of potential actions and opportunities. Business plans answer the question "What are we going to focus on?" scenarios answer the question: "What do we do if?"

17. Building Scenarios

The real reason why scenario planning is not used more often is that there is a great deal of confusion over the methods that can be used to create scenarios. There is also the worry that scenario building will soak up time and resources. I will try to show here that scenarios can both be produced quickly and can rapidly stimulate debate about the futures that you think your organization may face. The process that I will describe is based largely on my own personal experience of scenario building.

STEP 1: Global Conditioning

STEP 2: Define the Driving Forces

- a) Economic Pressures
- b) Concern about Environmentalism
- c) Legislation and Regulation
- d) Political moves
- e) The influence of Technology
- f) Socio-Demographic trends

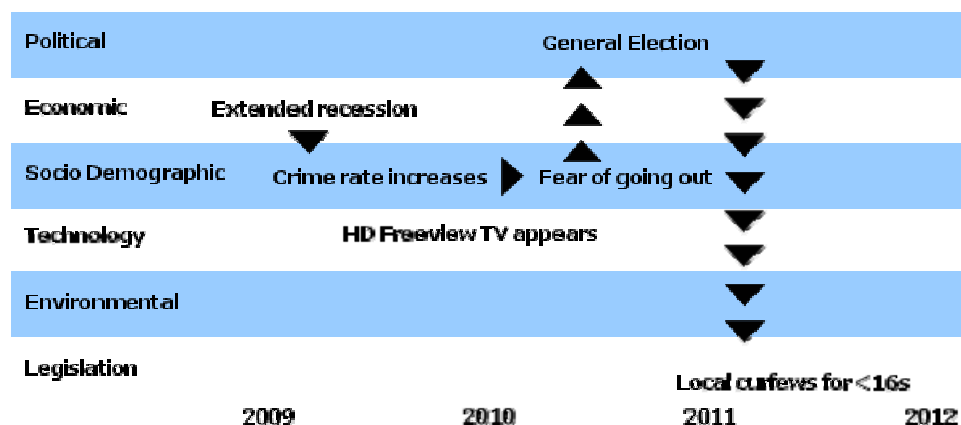
STEP 3: Issue Identification

- a) A prolonged Recession–over 3 years
- b) The failure of a traditional core distribution channel
- c) New regulations restricting the sale of your product
- d) Restriction in energy supplies

STEP 4: Isolating the major themes

STEP 5: Writing the Scenarios

18. Scenario Timeline Extract–future of Home Centric Entertainment: (Simplified)



STEP 6: Impact and Responses

- a) What is the impact on our sources of competitive advantage?
- b) How will our competitors act? Will we face new competitors? What will their sources of advantage be?
- c) How should we change our strategy? What is our response plan?
- d) What are the implications for our people, competences, culture, structure and processes?

Answering these questions will help to ensure that we are better prepared for future uncertainties.

STEP 7: Setting the early warning Indicators**19. Challenges**

We have spent so much time over the last decade constructing measurement systems (e.g. the Balanced Scorecard) to help us monitor primarily the internal status of our businesses that we have forgotten to monitor the outside world. To reinforce this point, a recent research survey noted that over 90% of organizations do not have a system to scan the external environment. The same research also told us that even in those companies that did have a system to scan the external world, the vast majority of managers were with dissatisfied with their capabilities to predict the next "jolt".

But it is the forces and influences emanating from outside the organization that will, ultimately, lead to either its success or its downfall.

Future success in an inter-connected world therefore will depend on the ability to create resilience and prepare for the unexpected.

One of the principal tools that we can use is scenario planning, tools that can help us see our world, our business environment, from a different perspective. Instead of focusing our plans around just one view of the future, we can, through the use of scenario planning, consider a range of possible futures.

19.1 Broadening the Corporate Mindset:

But arguably the first challenge is to broaden the corporate mindset.

We have all been trained to focus on one path, one picture of the future and, of course, one broad goal. Now we need to take a different course and develop:

- (I) A wider awareness of the range of possible futures that we could face and
- (II) A range or portfolio of strategic opportunities matched to the range of futures and uncertainties that we face.

Thinking not just about one future marketplace but a range of possible future marketplaces is the first step in both changing the corporate mindset and managing uncertainty. The process of generating pictures of a range of possible futures is known as scenario planning and is an established, but under-utilized tool to help organizations manage and prepare for uncertainty.

20. The Importance of Execution in Creating Impact

To maximize the chances of the strategic initiative's success, a number of steps need to be taken before and during execution to prepare the ground:

20.1 Before Execution

- Select strategic initiatives that have high business impact and avoid those that are low priority.
- Ensure you have the right team and that performance criteria are aligned.
- Make sure that there are short stages to deliver value.
- Prioritize steps for learning and frame tangible deliverables.

20.2 During Execution

As execution uncertainty increases, focus on social proof pilots for initiatives that need to be done to protect and extend the existing business, while keeping growth options under the radar.

- Build a change plan to help get organizational commitment.
- Monitor progress regularly to help keep initiatives on track and to provide important feedback and reenergize continuing implementation.
 - 1) Credibility
 - 2) Replicability
 - 3) Feasibility

21. Conclusion

At this point we will have a greater understanding of the potential futures that our businesses could face. Considering a range of potential futures, not just one, can help to build more resilient strategies and above all help your business to identify and react to major shifts in the outside world before your competitors do. Situation where the current state of knowledge is such that

- 1) The order or nature of things is unknown,
- 2) The consequences, extent, or magnitude of circumstances, conditions, or events is unpredictable, and
- 3) Credible probabilities to possible outcomes cannot be assigned. Although too much uncertainty is undesirable, manageable uncertainty provides the freedom to make creative decisions.

References

- [1] <http://www.fastcompany.com/1824457/6-strategies-dealing-uncertainty-business>
- [2] <http://www.sciencedirect.com/science/article/pii/S1053811900906670>
- [3] <http://en.wikipedia.org/wiki/Strategy>
- [4] <http://www.strategy-business.com/>

- [5] <http://www.businessdictionary.com/definition/strategy.html#ixzz2spVXR414>
- [6] <http://www.businessdictionary.com/definition/strategy.html#ixzz2spW12zrn>
- [7] <http://www.businessdictionary.com/definition/strategy.html#ixzz2spW7zWV2>
- [8] <http://www.businessdictionary.com/definition/strategy.html#ixzz2spW9d5Vq>
- [9] <http://hbr.org/1997/11/strategy-under-uncertainty/ar/1>
- [10] <https://www.macroeconomics.tu-berlin.de/fileadmin/fg124/heinemann/publications/HNO-2.pdf>
- [11] http://www.mckinsey.com/insights/managing_in_uncertainty/a_fresh_look_at_strategy_under_uncertainty_an_interview
- [12] http://www.slideshare.net/klnarayan1986/savedfiles?s_title=environmental-analysis-and-strategic-uncertainty&user_login=VladimirMedina
- [13] <http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.5.2261>
- [14] <http://www.drrobertdavies.com/scenarioplanningforbusinesshowto.php>
- [15] <http://www.businessdictionary.com/definition/uncertainty.html#ixzz2sq3DvP95>
- [16] Courtney, H J Kirkland and P Viguerie. "Strategy under Uncertainty" Harvard Business Review, 75(6), 1997:67-69
- [17] Courtney, H. 20/20 Foresight. Watertown: Harvard Business School Press, 2001.