

maker has a choice between scenarios, rather than regarding them as outcomes which are largely or wholly beyond one's control.

Summary

Scenario planning offers an alternative to conventional decision analysis methods for handling uncertainty. However, as usually practiced it does not contain any formal methods for evaluating alternative strategies. This can be potentially troublesome where an organization has several, possibly conflicting, objectives and it may result in some key objectives being neglected in the evaluation process. The procedure described in this chapter is designed to overcome these problems. As with all the decision-analysis methods in this book, the intention is to provide support to decision makers faced with difficult problems rather than to impose an 'optimal' solution. Implementing the method should bring a structure to strategic discussions, allowing managers to address the full range of issues that may be relevant to their planning while also providing them with a documented rationale for any decisions that they make.

Exercises

- (1) The following table shows the aggregate scores of three strategies in four scenarios. Which strategy is the most attractive?

Strategy	Scenarios			
	Steady state	Austerity	Big bang	Gentle growth
Status quo	20	35	35	50
Expand overseas	64	45	78	62
Reduce business to core activities	51	40	65	38

- (2) A car manufacturer has two objectives: (1) to maximize profits and (2) to maximize market share. It develops two scenarios for the next 10 years using the extreme-world method: (a) carbon fuels prevail and (b) green governments rule. Three strategies are to be evaluated under the two scenarios: (1) status quo, (2) move to produce hybrid cars and (3) produce a mixed range of cars. The

scores for the strategies on each objective under each scenario are shown below.

Objective: Maximize profits

Strategy	Scenarios	
	Carbon fuels prevail	Green governments rule
Status quo	100	0
Move to hybrid cars	15	75
Produce mixed types of cars	40	60

Objective: Maximize market share

Strategy	Scenarios	
	Carbon fuels prevail	Green governments rule
Status quo	70	0
Move to hybrid cars	50	100
Produce mixed types of cars	85	30

The company's managers consider that the improvement from the worst market share to the best is only 35% as desirable as the improvement from the worst to the best profit.

- (a) Determine aggregate scores to reflect the performance of the three strategies in each of the two scenarios.
- (b) Interpret your results. Which strategy appears to be the most risky and which appears to be the most robust?
- (3) What are the strengths and limitations of applying SMART in scenario planning?

References

1. Von Winterfeldt, D. and Edwards, W. (1986) *Decision Analysis and Behavioral Research*, Cambridge University Press, Cambridge.
2. Keeney, R.L. (1982) Decision Analysis: An Overview, *Operations Research*, **30**, 803-838.
3. Phillips, L.D. (1984) A Theory of Requisite Decision Models, *Acta Psychologica*, **56**, 29-48.
4. Keeney, R.L. (1992) *Value Focused Thinking*, Harvard University Press, Cambridge, MA.