

Scenario techniques are used to grapple with uncertainty. Instead of attempting to predict what is going to happen, scenario analysis starts from the “what if” question and explores a range of plausible and distinct stories of the future. Scenarios can be used for a variety of purposes. There are many methods for developing scenarios. At their core, most share in common the early analytical phases. Scenario techniques have implications for monitoring and evaluation.

Scenario techniques are used to grapple with uncertainty. Instead of attempting to predict what is going to happen, scenario analysis starts from the “what if” question and explores a range of plausible and distinct stories of the future. It is therefore very different from forecasting techniques.

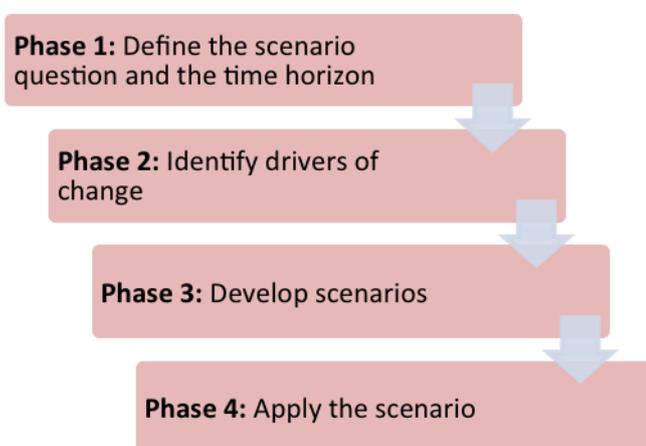
Scenarios can be used for a variety of purposes. Most commonly, they are used to assist planning and strategy development, but they may also be used for other purposes such as to provide early warning indicators of the direction of change, or to support public debate about desired courses of action.

Scenario techniques were first developed in war-gaming for the Pentagon in the 1960s by Herman Kahn. In their modern form, they were pioneered by the planning department of the oil multinational, Shell. Shell claims the company was able to anticipate the possibility of a decline oil price in the 1980s, and to diversify accordingly.

The techniques were introduced into the public sector towards the end of the twentieth century, and into the development sector only in the twenty first century. Scenario techniques are now, for example, a mandatory requirement in DFID for country programme planning.

Developing and using scenarios

There are many methods for developing scenarios. At their core, most share in common the early analytical phases (see diagram below):



Phase 1: Define the scenario question and the time horizon

The purpose of undertaking scenario analysis is defined. For example, what socio-economic changes will we be confronting in a country over the next five years, and how well-adapted are we to respond to these changes? Typically, scenarios are then developed to describe a period twice as long as the planning period. If the plan is intended for a five-year period, as in the example above, scenarios would be developed to describe a ten-year period.

Phase 2: Identify drivers of change.

The futures under consideration will be driven by a variety of factors. A PESTE analysis (politics, economics, social, technological and environmental) or similar analysis, can be used to identify these factors. These drivers of change are then sorted into those which are certain and those which are uncertain. At least in the short-term, factors such as demographic change, for example, can be considered certain, and data from trend projections can be built into the scenarios. Other factors, such as policy change, for example, are usually uncertain. The uncertain drivers are used to shape the scenarios.

Phase 3: Develop scenarios

This is where methods differ widely. Here we will use the example of the most widely used method, the two-by-two grid. This should not be taken to mean the method is necessarily the best, or the most appropriate for every use, but it is simple to understand. In the two-by-two grid method, championed by the Global Business Network, the uncertain drivers are filtered down to the two most important and impactful drivers. These might be, for example, conflict and governance. Combining the two drivers as two distinct axes creates a grid of four boxes (see diagram)

High Conflict Responsive Governance	High Conflict Unresponsive Governance
Low Conflict Responsive Governance	Low Conflict Unresponsive Governance

Using all the drivers of change, stories are then developed to show plausible trajectories of

development for each of these futures. Whatever method you use, it is important to have a workable number of futures to compare. Normally, the number varies between two and four.

Phase 4: Apply the scenarios

How you do this phase, depends on your purpose. If, for example, you were using it for country strategic planning, you would examine how well your purpose played out in each of the futures. You might discover that there would be real problems for you in some of the futures. This might lead you either to change your purpose, so that it was robust across all of the futures, or build new capacities to allow you to continue to operate in the problematic futures.

Scenario methods

There are too many scenario methods to describe in this paper. Below, however, are some of the most common.

- *The judgement method (Shell).* The Shell Planning Department, which produces global scenarios about the future of energy every few years, makes a judgement about key dilemma facing the sector to produce two or three alternative futures.
- *The two-by-two matrix (Global Business Network).* This method was described in the section above. Perhaps the most famous example of this method was the Mont Fleur scenarios that analysed the future course of a majority government in South Africa, and was said to be influential on the outcome of negotiations between the apartheid government and the Africa National Congress (ANC) liberation movement. This is still the most widely used method, though critics argue that it is too mechanical.
- *Trend extrapolation.* There are many variants of this type of method. All such methods describe different evolutions of major trends, often a “high road”, a “low road” and a “middle road” or “best case”, “worst case” and “middle case”. This is the approach taken in the climate modelling scenarios developed by the UN Intergovernmental Panel on Climate Change. Some critics caution against this approach as likely to lead to people opting for the middle way in their planning and ignoring surprises.
- *Event sequences.* This technique identifies key branch points in a decision landscape, and develops scenarios of the outcome of alternative choices. This method was used, for example in the Chatham House exercise to develop early-warning indicators of the direction in which the situation in Yemen was evolving.
- *Incasting.* In this technique, participants in the exercise are provided with broad brushstroke descriptions of alternative futures (developed

using any of the methods described above), and then elaborate these futures and the trajectory of events that lead to them.

Strengths and weaknesses of scenario techniques

Some of the main strengths of scenario techniques are as follows:

- By rehearsing responses to possible futures, organisations become more agile in responding to change.
- Considering multiple futures can help to expose taken-for-granted assumptions and to reveal unacknowledged possibilities.
- In volatile environments, scenario techniques reduce the risk of betting on just one outcome.
- Scenario techniques focus on factors which act as drivers of change, and permit the identification of early-warning indicators of the direction in which a situation is evolving.

However, there are also acknowledged weaknesses, some of which are as follows:

- The technique is only as powerful as the stories of alternative futures generated. Poorly used, it will not generate surprises and will reinforce the taken-for-granted assumptions about the future.
- Scenario techniques do not lend themselves as easily to the development of indicators of progress as do more conventional techniques
- In the 30-year history of modern scenario analysis, there is only limited evidence that it has successfully anticipated major discontinuities, such as the fall of the Soviet Union.

Success and failure factors in scenario techniques

There are a number of factors that may result in the success or failure of scenario techniques. For example, scenario analyses are usually collective activities, undertaken by groups of people with expertise in the field of relevance. Sub-groups often work on different futures. A key success criterion is to select a group to include a wide range of perspectives (such as practitioners, academics, journalists, and social activists). Ideally, some of the group will be working in areas that could be considered “islands of the future” (for example, people doing urban work in scenario exercises dealing with humanitarian relief). This will allow the surfacing of uncertainties and identification of surprises. Correspondingly, too narrow a group is likely to produce stories that are not very challenging and which simply reinforce taken-for-granted assumptions.

Another key issue is that the mechanics of most of the techniques are simple. This simplicity can be seductive. There is very little science in scenarios, but a considerable amount of art. Using an experienced scenario facilitator is advisable to avoid some of the common pitfalls. Among these are: stories that are not challenging, fruitless debates about the probability of particular futures, and emotional preferences for some futures over others.

It is important to note that when using scenario techniques, planning and learning become the same process. It is essential to keep scenarios, once developed, under review and updated.

Links to monitoring and evaluation

Scenario planning has certain implications for how planning, monitoring and evaluation are conducted within an organisation, programme or project. Firstly, since a scenario plan contains elements of planning for multiple futures, conventional M&E is normally accompanied by monitoring of early-warning indicators of the direction in which a situation is moving. This is a distinct property of M&E derived from scenario analysis. In order to respond to changing situations in a timely manner, organisations also need feedback loops that allow external changes to be quickly identified. This requires decision-making processes that can rapidly translate findings into action.

Secondly, if plans are to be redesigned and redeveloped in changing scenarios they need to be kept light and flexible, especially if many different stakeholders are involved. This means planning formats and procedures need to be designed from the start to recognise that plans are likely to be adjusted,

sometimes rapidly, in the face of changing circumstances.

There are two factors that could potentially affect this. One is the requirements of external stakeholders such as donors or host governments. There is little point in having a planning methodology that enables plans to be rapidly adjusted if a donor does not allow this flexibility, or makes demands that can mean lengthy delays between the identification of necessary change and action being taken.

The second factor is the systems and processes used by an organisation itself to handle adjustments to plans. Again, for scenario planning to be effective it is important that an organisation has the capacity and desire to react swiftly to changing scenarios. However, as Green (2014) points out:

“Working in complex systems where change is intrinsically unpredictable and non-linear means above all, having fast feedback loops so that you notice when the system is changing, and respond to it. This is really hard for large organisations that try to maintain coherence and direction through a hierarchy of plans (organisational, departmental, team and individual). If, after spending months agreeing these plans, something changes in the context that suggests a new direction, it is far easier to ignore it than rip up the plan and start all over again.”

In summary, scenario planning is a technique that relies on effective monitoring and review mechanisms in order to be effective. Organisations need the will and the power to make changes rapidly in the face of changing scenarios, and appropriate monitoring and review processes to identify those changes.

References

- Green, D (2014). *Why scenario planning is a waste of time – focus on better understanding the past and present instead*. Oxfam blog, <http://oxfamblogs.org/fp2p/why-scenario-planning-is-a-waste-of-time-focus-on-better-understanding-the-past-and-present-instead/>

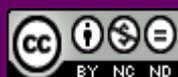
Further reading and resources

- Peter Bishop, Andy Hines, and Terry Collins (2007) *The current state of scenario development: an overview of techniques* (2007) *Foresight* 9 (1) pp. 5-25
- Peter Schwartz (1991), *The Art of the Long View* (Doubleday)
- Neil MacDonald (2004) *Success is Extinction: Scenario planning in INGOs*, *Development* 47 (4), pp 115-120

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INTRAC is a specialist capacity building institution for organisations involved in international relief and development. Since 1992, INTRAC has contributed significantly to the body of knowledge on monitoring and evaluation. Our approach to M&E is practical and founded on core principles. We encourage appropriate M&E, based on understanding what works in different contexts, and we work with people to develop their own M&E approaches and tools, based on their needs.

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