Critical Uncertainties

Idea In Short

When a strategy depends on assumptions no one can confidently predict, explore several plausible futures before committing to one fixed plan. Critical Uncertainties helps a group identify the outside factors that matter most, imagine alternative combinations, and develop strategies that can work across them. Invite people who will execute the strategy as well as those who set it. Separate uncertainties from trends you can forecast, then ask which uncertainties could most change your ability to succeed. End with a few actions that are robust across scenarios and signals that would tell you when to adapt. The goal is prepared flexibility, not a prediction of which future will occur.

A five-year plan can look precise while resting on assumptions about regulation, technology, customer behavior, or supply that nobody can verify. When one of those assumptions changes, the plan may lose its relevance just as the organization begins to execute it. Critical Uncertainties asks strategy teams to explore multiple plausible futures and test what they intend to do against each one. The exercise does not predict what will happen. It helps a group notice which factors could alter its choices and prepare to respond. The practice connects with the Liberating Structures principle “Emphasize Possibilities: Believe Before You See” by asking people to imagine futures that do not yet exist and act with flexibility.

Distinguish uncertainty from forecast

Participants first list factors in their operating environment that they cannot predict or control with confidence. Examples might include the pace of a technological shift, the structure of a future market, or the timing of a policy change. A trend with a known direction may matter, but it is different from an uncertainty. The group should avoid simply relabeling its current risks as future scenarios. It needs to ask what could vary and why that variation would affect its ability to operate successfully.

The next step is to identify which uncertainties matter most. A useful factor is both uncertain

and consequential. The structure encourages participants to consider a horizon, often five to ten years, while adapting that horizon to the organization's decision cycle. Pairs or small groups can compare factors and select two uncertainties that create meaningfully different conditions. If the chosen factors are not independent, the group can still use them, but should be explicit about the relationship.

Build four plausible futures

Two uncertainties can be represented as axes, with each end of an axis describing a possible condition. The resulting four quadrants provide a simple scenario map. Participants then describe what each future might look like for the organization: what customers need, what constraints apply, what capabilities matter, and which assumptions no longer hold. A scenario should be coherent enough to support reasoning, not a dramatic story assembled for entertainment.

The official design uses small groups to work on different quadrants and then bring their views together. A larger group can assign more than one team to a quadrant, while a smaller group can divide the work among fewer participants. Participants need to see each scenario before testing strategies so they can challenge hidden assumptions. The facilitator should make sure one scenario is not treated as the "realistic" future while the others become throwaway exercises. All four are plausible for purposes of the analysis.

Test strategic choices

Once the scenarios are described, ask what the organization would do in each. Which current strategies would still work? Which would fail? What capabilities would become more valuable? What action could the organization take now that preserves options across several futures? This comparison can reveal robust moves: investments or operating changes that provide value under a range of conditions. It can also show where a strategy depends on a particular assumption and needs a contingency.

A robust strategy need not be identical in every scenario. The group can identify signposts that would indicate which conditions are emerging, then define what it would change when those signals appear. For example, a company might maintain a flexible supplier arrangement and monitor lead-time changes. The specific action depends on its operating context; the method is to connect a possible future to an observable signal and a response.

Without this link, scenario planning can remain an interesting discussion with no effect on current decisions.

Keep the exercise grounded

Critical Uncertainties is most useful when participants can influence the strategy or provide knowledge about execution. Invite people who understand the market and people who will implement the response. A group of senior leaders alone may miss operational constraints; a group of specialists alone may lack authority to change the plan. The facilitator should clarify which decisions can be made in the session and which require follow-up.

The practice takes roughly 90 minutes in its standard form. It needs a visible template, materials for group work, and enough participants to explore the scenarios in parallel. Remote groups can use a shared visual workspace and breakout rooms. Give the scenarios enough time to develop, but avoid false precision: do not attach invented probabilities or numerical forecasts unless the organization has credible data to support them. The output is a set of plausible conditions and strategic responses, not a statistical prediction.

Scenario planning research emphasizes that scenarios help decision makers question assumptions rather than forecast a single outcome. Royal Dutch Shell's published account describes scenario planning as a way to prepare for alternative futures, and the UK Government Office for Science offers guidance on futures tools. 1, 2, 3

Make scenarios part of ongoing work

Close by asking what the team will do now, what signals it will monitor, and when it will revisit the scenarios. Assign responsibility for tracking a small number of signposts and decide how findings will reach decision makers. If a signal changes, the team can revisit the strategy rather than wait for an annual planning cycle. A scenario may become less plausible as evidence accumulates; the organization should update its thinking rather than defend a picture it drew in a workshop.

Critical Uncertainties is valuable when a decision has long-lived consequences and the external context can shift. It can help leaders identify options they would otherwise overlook and reduce dependence on a single forecast. Its discipline lies in moving from uncertainty to scenario, from scenario to strategy, and from strategy to signposts. The group cannot

control which future arrives, but it can prepare to recognize change and adapt its choices.

- 1Scenarios: An explorer’s guide
- 2The art of the long view
- 3Futures thinking and foresight

Summary

Critical Uncertainties gives a strategy team a disciplined way to work with unpredictability. Participants identify the external factors that could change their operating context, combine the most consequential uncertainties into plausible scenarios, and test strategies against each. The exercise becomes useful when it produces decisions: actions to take now, assumptions to monitor, and signals that will trigger a change. Facilitators should keep scenarios plausible and distinct, while avoiding a false impression that the group has forecasted the future. Review the assumptions as conditions change. A strategy that can adapt is more useful than a detailed plan built on one fragile expectation.