

How Do Leaders Work With Uncertainty?

Current findings on uncertainty, sensemaking, adaptive leadership, and decision design

Recent research does not support a heroic model in which good leaders simply know more or predict better. Strong decision-making under uncertainty depends on naming what is and is not known, communicating uncertainty precisely, making sense of changing conditions, preserving options, and creating pathways that allow learning to influence what happens next.

1 How uncertainty is communicated matters.

Research on leader uncertainty suggests that people distinguish between a leader being personally unsure and a situation being inherently uncertain. Precise external uncertainty can preserve credibility while remaining transparent.

Source: Lohre & Teigen (2024)

2 Sensemaking is a core response to unfamiliar conditions.

A 35-year review shows how sensemaking helps people interpret unfamiliar, dynamic environments by noticing cues, constructing plausible accounts, acting, and revising understanding as new information appears.

Source: Eckstein et al. (2025)

3 Deep uncertainty calls for robust and adaptive pathways.

Decision-making under deep uncertainty emphasizes options that perform reasonably across plausible futures, preserve flexibility, and include monitoring and adaptation rather than optimizing for one forecast.

Source: Lempert et al. (2024)

4 Leadership mode should shift with the situation.

Adaptive leadership research distinguishes familiar situations needing efficient coordination from genuinely novel conditions that require broader collective sensemaking and shifts in team and leader behaviour.

Source: Thommes et al. (2024)

5 Systems and future thinking strengthen adaptive leadership.

Recent adaptive-leadership research connects systems thinking, future thinking, mental models, and adaptive change management as important capabilities in volatile and uncertain environments.

Source: Abukalusa & Oosthuizen (2025)

WHAT THIS MEANS FOR LEADERS

Separate evidence from assumption.

Confidence should follow the quality of the evidence, not the pressure to look certain.

Name the uncertainty.

Make clear what is unknown, why it is unknown, and whether it can be reduced.

Preserve options.

When uncertainty is high, reversibility and staged commitment become valuable.

Build feedback into the decision.

Decide in advance what signals will trigger review, adaptation, or a different path.

Open the room when the problem is novel.

If the answer is not known, narrowing who is allowed to think may make the organization less intelligent.

Leadership happens before the answer is clear.

Decision Quality Is Not the Same as Outcome Quality.

A thoughtful decision can encounter a poor outcome. A poor decision can get lucky.

LOOK FOR DECISION QUALITY

- What evidence was available at the time?
- What alternatives were considered?
- Which assumptions mattered most?
- What uncertainties and risks were recognized?
- Was the level of commitment appropriate to the uncertainty?
- What feedback and review points were built in?

WATCH FOR THE HAZARDS

- Certainty theatre - sounding more sure than the evidence justifies.
- Analysis paralysis - assuming another report will eventually remove every unknown.
- Irreversible commitment too early.
- Treating adaptation as failure rather than learning.
- Using one predicted future as though it were the only plausible one.
- Becoming more controlling when the situation actually requires more intelligence.

A PRACTICAL PROJECT PRINCIPLE

Skornyakov argues that project leaders can reduce unpredictability by working in smaller meaningful slices. Each slice creates information that can improve what happens next - a useful principle whenever a large commitment can be broken into responsible learning moves.

SELECTED REFERENCES

- Abukalusa, K., & Oosthuizen, R. (2025). An adaptive organisational leadership framework through systems thinking. *International Journal of Organizational Analysis*, 33(8), 2673-2703. <https://doi.org/10.1108/IJOA-07-2024-4635>
- Eckstein, G., Shrestha, A., & Russo, F. (2025). Thirty-five years of sensemaking in the business & management research: A bibliometric analysis, review and discussion. *Management Review Quarterly*, 75, 3191-3217. <https://doi.org/10.1007/s11301-024-00458-5>
- Lempert, R. J., Lawrence, J., Kopp, R. E., Haasnoot, M., Reisinger, A., Grubb, M., & Pasqualino, R. (2024). The use of decision making under deep uncertainty in the IPCC. *Frontiers in Climate*, 6, 1380054. <https://doi.org/10.3389/fclim.2024.1380054>
- Lohre, E., & Teigen, K. H. (2024). When leaders disclose uncertainty: Effects of expressing internal and external uncertainty about a decision. *Quarterly Journal of Experimental Psychology*, 77(6), 1221-1237. <https://doi.org/10.1177/17470218231204350>
- Skornyakov, A. (2025). How project leaders can tame unpredictability. *Harvard Business Review*, 103(1), 124-127.
- Thommes, M. S., Uildewilligen, S., Rico, R., & Waller, M. J. (2024). Switching gears: How teams co-construct adaptive leadership style transitions in dynamic contexts. *Organizational Psychology Review*, 14(4), 542-570. <https://doi.org/10.1177/20413866231214238>

Know enough to act. Learn enough to adapt.