

Gathering Information Well

A guide to Step 2 (Explore the Evidence) of the Decision Cycle

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The goal of Step 2 is not to gather everything. It is to know which gaps in your knowledge matter and which can be accepted without resolving them. More information does not always mean better decisions - it can delay commitment, produce overload, and introduce noise alongside signal. This guide explains how to gather information purposefully, how to assess what you find, and how to recognise when you have enough.

PART 1 What you are trying to find out

Task 1 - Map what you know and do not know. Before looking for new information, take stock of what you already have. The Step 2 questions ask you to classify each piece as fact, assumption, or opinion. This is not pedantic - much of what feels like known information is assumption, and assumptions carry much less weight than facts when it comes to choosing between options. Keeping fact, inference and assumption separate is a discipline worth practising (Omand, 2020).

Task 2 - Identify which gaps are critical. Not every knowledge gap needs to be filled. Some gaps cannot be known before deciding; others are not worth the cost of resolving them. The question to ask of each gap is: would filling this change which option I choose? If yes, it is worth pursuing. If not, note it and move on.

Task 3 - Test your current view against evidence that challenges it. The mind naturally seeks information that confirms what it already believes. Actively looking for disconfirming evidence is not pessimism - it is calibration. If your view survives a serious challenge, it is more reliable. If it does not, you have learned something important before committing.

PART 2 Five types of information source

1 Your own knowledge and experience

What you already know from past experience, training, or direct involvement. This is the fastest source and often underused - people go looking for external information before fully taking stock of what they already have.

Strength: Immediately available; contextually rich; includes tacit knowledge that is hard to find elsewhere.

Caution: Experience can encode biases and outdated patterns. Ask: when did I last encounter a situation similar to this, and have conditions changed since then?

2 People - experts, advisers, and those with direct experience

Others who have relevant knowledge, skill, or experience. This includes formal experts (professionals, specialists) and informal ones (people who have made this kind of decision before). Both are valuable; the second category is often overlooked.

Strength: Can bring out knowledge that is not in any document; an experienced person can often identify what matters quickly.

Caution: Experts can be wrong, especially outside their core domain. People with direct experience may generalise too readily from their own case. Check whether the advice is independent - does the adviser have a stake in your decision?

3 Research, data, and published evidence

Studies, reports, statistics, and documented analysis. The most formally verifiable type of source, but also the most prone to misuse - data can be selectively presented, studies can be poorly designed, and statistics can mislead without lying.

Strength: Traceable, checkable, and often independent of the specific situation.

Caution: Check recency, sample size, and whether the findings apply to your situation. A study conducted in a different context, population, or time period may not transfer. "The research says" is a claim worth examining before accepting.

4 Direct observation and first-hand evidence

What you can see, test, or verify yourself. Going to look at a property before buying, speaking to the people who will be affected, testing an assumption against reality rather than accepting a report about it.

Strength: Eliminates second-hand distortion; produces evidence specific to your actual situation.

Caution: Time-consuming and not always possible. A single observation can also mislead if it is not representative - what you see on one visit may not reflect the typical picture.

5 Base rates and the outside view

What typically happens to people making this kind of decision in similar circumstances. This is the most underused source in personal and organisational decision-making. The inside view focuses on the specifics of your situation; the outside view asks what the reference class suggests.

Strength: Corrects for optimism bias and uniqueness bias - the tendency to treat your situation as more exceptional than it is.

Caution: The outside view requires identifying the right reference class, which is itself a judgment. If the class is too broad or too narrow, the base rate misleads. Also: your situation may differ from the typical case in ways that matter - note how and why.

PART 3 Assessing the quality of what you find

Every piece of information should be held at arm's length before being accepted. These five questions apply to any source.

Judging how far to trust a particular source has a guide of its own: see Evaluating Trust.

Question to ask	Higher confidence if...	Lower confidence if...
Is this direct or second-hand?	Direct - observed or experienced first-hand	Second-hand - reported by someone who was told by someone else
Is this independent?	The source has no stake in how you decide	The source would benefit from one outcome over another
How recent is it?	Current and updated for your context	Old, or from a different period or setting
Is this fact, opinion, or estimate?	Clearly labelled and treated accordingly	Presented as fact but based on inference or assumption
Has it been tested?	Reviewed, replicated, or verified independently	A single claim with no external check

PART 4 Confirmation bias in the search itself

Confirmation bias is usually described as a problem of interpretation - we give more weight to evidence that supports our existing view. But it operates earlier than that, in the search itself. We tend to look in places that are likely to confirm what we already think, and not look in places that might challenge it.

Three signs that your search may be confirming rather than informing:

1. All the sources you have consulted reached the same conclusion as your current instinct.
2. You have not sought the view of anyone who might disagree with you.
3. The information you have gathered answers the question "how do I make this work?" rather than "should I do this at all?"

The corrective is not to distrust your instinct - it may be right. It is to actively seek one source that is likely to challenge it, and engage with that challenge honestly before moving on.

PART 5 Knowing when you have enough

The decision to stop gathering information is itself a decision, and it should be made deliberately rather than by running out of time. The cost of more information is delay and effort. The cost of too little is deciding on shaky ground. The question is whether the next piece of information you might find would change your choice.

Keep gathering if...	You are ready to move on if...
A critical gap remains that could change your decision	You know which gaps are critical and have a plan to fill them - or have consciously accepted them
You have not yet sought any disconfirming evidence	You have actively looked for evidence against your current view
You have not considered the outside view at all	You have asked what typically happens in situations like this
Your knowledge inventory is still mostly assumptions	You have distinguished facts from assumptions and tested the most important ones
More information would materially change the options worth considering	Additional information is unlikely to change which options are worth considering

Sources and references

CONFIRMATION BIAS AND INFORMATION SEARCH

Wason, P. C. (1960). On the failure to eliminate hypotheses in a conceptual task. *Quarterly Journal of Experimental Psychology*, 12(3), 129-140.

The original experimental demonstration of confirmation bias - the tendency to seek information that confirms an existing hypothesis rather than information that could disconfirm it. This guide extends the concept to the search phase, not just interpretation.

Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175-220.

A comprehensive review of confirmation bias across domains. Demonstrates that the bias operates in information gathering as well as in the interpretation of evidence already held.

THE OUTSIDE VIEW AND REFERENCE CLASS FORECASTING

Kahneman, D., & Tversky, A. (1979). Judgment under uncertainty: Heuristics and biases. *Management Science*, 25(2), 112-131.

Introduced the distinction between the inside view (focusing on the specific situation) and the outside view (asking what typically happens in comparable cases). The outside view is described as Source 5 in this guide.

Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.

Covers the inside/outside view distinction and reference class forecasting. Relevant to the guidance on base rates and the outside view in this guide.

SEPARATING FACT FROM ASSUMPTION

Omand, D. (2020). *How spies think: Ten lessons in intelligence*. Viking.

Sets out the reasoning method used in British intelligence assessment, which treats separating fact, inference and assumption as a discipline to practise. Relevant to Task 1.