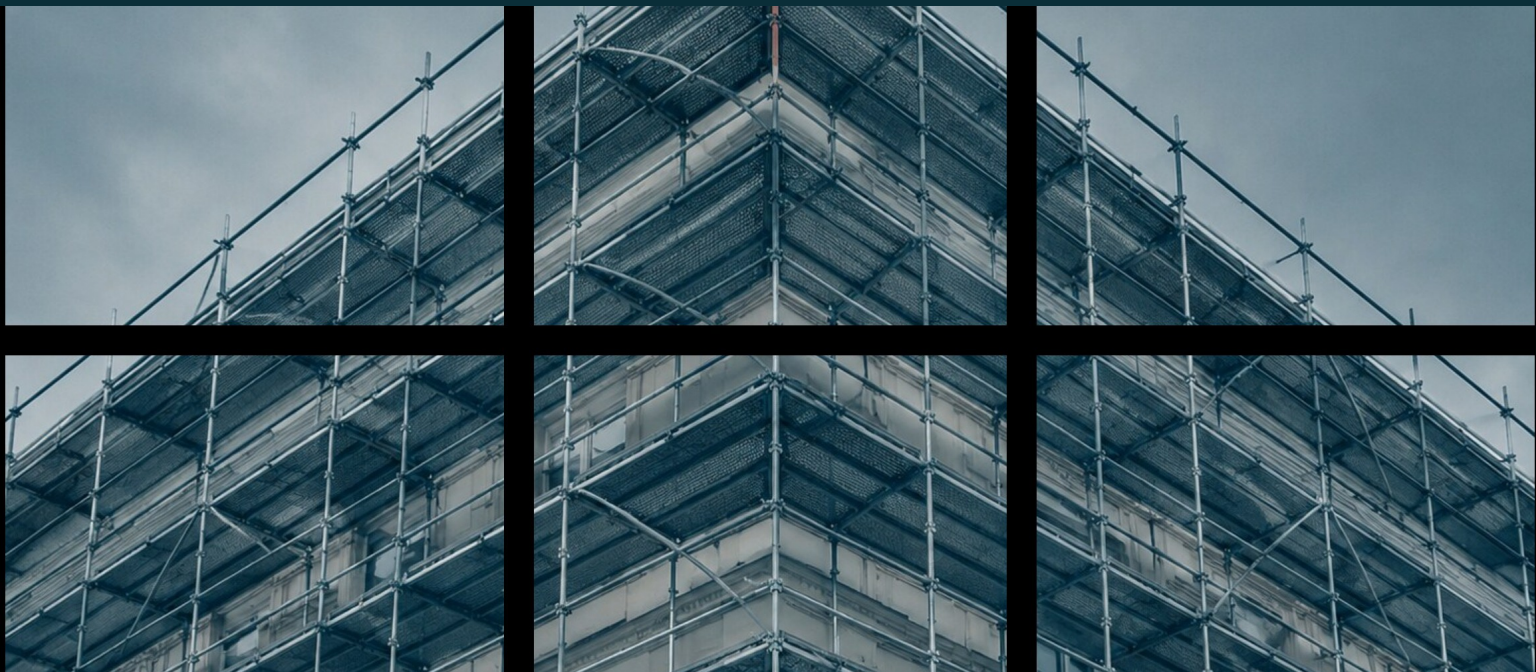


BEYOND THE EVIDENCE BASE

The Data You Don't Have — Making Decisions Under Genuine Uncertainty

A Practitioner's Perspective on Judgement, Absence, and the Limits of Evidence in
Organisational Transformation



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“The most consequential decisions in any transformation are made not where the data is richest, but where it is thinnest – and the organisation’s capacity to act well in that gap is the truest measure of its leadership maturity.”

1. Executive Summary

Organisations embarking on large-scale transformation consistently overestimate how much relevant data they will have at the points where decisions matter most. The critical choices – whether to proceed, where to invest, which capabilities to build, when to change course – are almost always made in conditions of genuine uncertainty, where the information needed to decide with confidence does not exist and cannot be manufactured in the time available. This essay examines why this gap persists, what structural and cultural forces prevent organisations from acknowledging it, and what distinguishes those that navigate uncertainty well from those that are paralysed or deceived by its presence. The central argument is that the quality of transformation decision-making depends less on the quality of available data than on the organisation’s capacity for disciplined judgement – a capacity that most governance frameworks neither develop nor reward.

2. The Assumption That Breaks First

Every transformation business case rests on an implicit promise: that the organisation knows enough to commit resources at this scale. The financial model has been built, the risk register populated, the benefits mapped to strategic objectives. The documentation creates an impression of comprehensiveness – of a decision grounded in evidence.

The impression is, in most cases, misleading. Not because the analysis is dishonest, but because the nature of transformation makes comprehensive evidence impossible at the point of commitment. A transformation programme is, by definition, an intervention into a system whose future state cannot be fully predicted from its current one. The organisation is committing to change something fundamental about how it operates – its technology, its processes, its culture, its capabilities – and the consequences of that change will emerge over months and years, shaped by variables that no business case can enumerate.

This is not a failure of analysis. It is a structural feature of the problem. And yet the governance frameworks that surround transformation decisions are almost universally designed as though comprehensive evidence were both possible and present. The question posed at the investment gate is: does the data support this decision? The question that should be posed is: given what we cannot know, is this a decision we are prepared to make, and how will we know if we are wrong?

3. Three Kinds of Absence

Not all missing data is the same, and the failure to distinguish between different kinds of absence is itself a significant problem. In my experience, the data gaps that matter in transformation fall into three categories, each requiring a different response.

The first is data that exists but is inaccessible. The information is somewhere in the organisation — buried in operational systems, held in someone's experience, scattered across departments that do not routinely communicate. This is a logistics problem, not an epistemological one. It can be solved, given time and effort, and the appropriate response is to invest in finding it. Many organisations treat all data absence as though it were this kind, because it is the most comfortable: it implies that the answer exists and merely needs to be retrieved.

The second is data that could exist but does not yet. The information could be generated — through a pilot, an experiment, a proof of concept, a market test — but the organisation has not done the work. This is a sequencing problem. The appropriate response is to ask whether the decision can be deferred until the evidence has been generated, or whether the cost of delay exceeds the value of the information. This is where the discipline of value of information analysis is most relevant, though it is remarkably rare in practice.

The third, and most important, is data that cannot exist. The information is unknowable at the time of the decision, because it depends on the behaviour of complex systems — markets, technologies, human organisations — that are inherently unpredictable at the relevant time horizon. No amount of analysis, no extension of the timeline, no additional investment in research will produce it. This is the domain of genuine uncertainty, as distinct from risk, and it is where the most consequential transformation decisions are actually made.

The critical distinction is between risk — where the range of outcomes can be estimated and probabilities assigned — and genuine uncertainty, where the range of outcomes is itself unknown. Most transformation governance is designed for risk. Most transformation reality is characterised by uncertainty.

4. Why Organisations Pretend

The rational response to genuine uncertainty is to acknowledge it explicitly, make decisions on the basis of judgement rather than false precision, and build the capacity to adapt as the unknown becomes known. This is, in principle, well understood. In practice, it almost never happens. The question is why.

The answer lies in the intersection of organisational culture, governance design, and individual incentive. Consider the position of a programme director presenting a business case to an investment board. The board expects evidence. The governance framework requires quantified benefits, costed risks, and a confidence assessment. The programme director knows — often with considerable clarity — that many of the numbers are fabricated in the specific sense that they are precise estimates of inherently imprecise quantities. The contingency figure is a guess. The benefit realisation timeline is aspirational. The risk quantification is an exercise in false precision.

But the alternative — standing before the board and saying we believe this is the right thing to do, but we cannot quantify the outcome with the precision this template demands — is career-limiting in most organisational cultures. The governance framework does not have a mechanism for processing acknowledged uncertainty. There is no box for we don't know and we can't know. And so the programme director does what the system demands: produces numbers that look like evidence, presents them with appropriate caveats that everyone understands will be forgotten by the next meeting, and secures the approval.

The organisation has not made a decision under uncertainty. It has made a decision under the pretence of certainty, which is considerably more dangerous, because it has also forfeited the adaptive capacity that an honest acknowledgement of uncertainty would have demanded.

5. The Cost of False Precision

The damage is not confined to the moment of decision. Once a transformation is approved on the basis of a precise business case, that precision becomes the baseline against which everything is measured. Variance reports compare actual spend to a budget that was, at its origin, a structured guess. Benefits tracking measures realisation against targets that were, at their origin, aspirational projections. The entire performance management apparatus of the programme is calibrated to a fiction.

This creates two pathologies. The first is defensive reporting: programme teams spend increasing effort explaining variance from a baseline that was never robust, rather than focusing on whether the programme is achieving something valuable. The question shifts from are we creating the right outcomes? to why are we off plan? — and the plan was wrong from the start.

The second is false escalation: variance from an unreliable baseline triggers governance interventions — additional reviews, enhanced reporting, stage-gate challenges — that consume leadership attention and programme capacity without improving outcomes. The programme is being governed against a standard that has no relationship to reality, and the governance burden is itself a drag on delivery.

- Defensive reporting consumes programme capacity explaining variance from baselines that were never robust
- False escalation triggers governance interventions calibrated to fictional standards
- Opportunity cost is invisible: the adaptive decisions that were never made because the framework demanded adherence to a discredited plan

6. The Organisations That Navigate This Well

Amidst this pattern, there are organisations — and leaders within organisations — that handle uncertainty materially better. They share a set of characteristics that are worth identifying, not because they constitute a formula, but because they illuminate what good looks like in this domain.

The first characteristic is explicit acknowledgement of uncertainty at the point of decision. This does not mean vague disclaimers buried in appendices. It means that the investment decision is framed, from the outset, as a commitment made under uncertainty, with the implications of that framing built into the governance approach. The board says:

we are proceeding because we believe this is strategically necessary, and we accept that we will need to adapt as we learn. This is a fundamentally different commitment from we are proceeding because the business case demonstrates a positive return, and it leads to fundamentally different behaviour downstream.

The second is governance designed for learning, not compliance. Instead of stage gates that ask are you on plan?, the review points ask what have you learned, and what does it mean for what we do next? This shifts the entire dynamic of programme oversight from backward-looking accountability to forward-looking adaptation. It also changes what gets reported: instead of variance from baseline, the programme reports emerging insights, changed assumptions, and recommended adjustments.

The third is investment in judgement as a capability. Organisations that navigate uncertainty well tend to invest in developing the judgement of their decision-makers — not through training courses, but through deliberate practices: structured decision reviews, pre-mortem exercises, scenario planning that is genuinely exploratory rather than confirmatory, and the cultivation of environments where dissent is expected and rewarded rather than merely tolerated.

The distinguishing feature is not better data or better analysis. It is the willingness to build governance frameworks that treat uncertainty as a permanent condition to be managed, rather than a temporary deficiency to be resolved.

7. The Role of Narrative

One practical mechanism deserves particular attention: the role of narrative in decision-making under uncertainty. Where quantitative evidence is thin or unreliable, the quality of the story — the causal logic that connects the proposed intervention to the desired outcome — becomes the primary basis for judgement.

This is not a retreat from rigour. A well-constructed narrative is a demanding discipline: it requires the decision-maker to articulate every link in the causal chain, to identify where the chain is strongest and where it is weakest, and to specify what would have to be true for the overall logic to hold. It makes assumptions visible in a way that spreadsheet models often do not, because a narrative is harder to construct from arbitrary numbers than a financial model is.

The organisations I have seen handle uncertainty best are those that demand narrative as a complement to quantitative analysis, not as a substitute for it. The numbers provide what precision they can. The narrative provides the causal logic that connects the numbers to the decision. And the combination gives decision-makers something that neither alone can offer: a basis for judgement that is honest about what it knows and what it does not.

8. Judgement Is Not Guessing

There is a resistance, in many organisational cultures, to the idea that major investment decisions should rest partly on judgement. The word itself carries connotations of subjectivity, of gut feeling, of the kind of unaccountable intuition that governance

frameworks were designed to constrain. This resistance is understandable but misplaced.

Judgement, in the sense I am using the term, is not the absence of analysis. It is what remains after analysis has done everything it can. It is the synthesis of experience, pattern recognition, contextual awareness, and disciplined reasoning that allows a decision-maker to act well when the evidence is incomplete. It is, in fact, the core competence that senior leaders are employed for — and the one that most governance frameworks are least equipped to support.

The alternative is not objectivity. The alternative is the pretence of objectivity: decisions made on the basis of fabricated precision, defended by governance frameworks that mistake process for rigour, and evaluated against baselines that have no relationship to reality. This is the status quo in most large organisations, and its costs — in failed programmes, wasted investment, and forfeited opportunities — are substantial.

9. What This Means for How We Govern Transformation

The implications are practical and, I believe, urgent. If the argument of this essay is correct — that the most important transformation decisions are made under genuine uncertainty, and that the pretence of certainty makes outcomes worse, not better — then the way most organisations govern transformation is not just suboptimal but actively counterproductive.

The changes required are not dramatic in concept, though they are significant in culture:

1. Redesign investment gates to distinguish explicitly between decisions made under risk (where quantified analysis is appropriate and expected) and decisions made under uncertainty (where narrative, judgement, and adaptive governance are the primary tools)
2. Replace variance-based reporting with learning-based reporting: what has the programme discovered, what assumptions have changed, and what adaptive decisions are recommended
3. Invest in the judgement capacity of senior decision-makers, through structured decision reviews and deliberate practice, not as a remedial intervention but as a core leadership development priority
4. Normalise the language of uncertainty in programme governance — create frameworks in which we don't know is a legitimate and expected input to the decision process, not an admission of failure

None of this is easy. It runs against deeply embedded organisational instincts: the desire for control, the comfort of precision, the fear of being seen to decide without sufficient evidence. But the evidence — and here the irony is deliberate — is clear. The organisations that make the best transformation decisions are those that have learned to decide well in the absence of certainty. The rest are governing against a fiction, and the fiction is costing them more than they know.