



Preserving Strategic Decision-Making Under Uncertainty

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ABSTRACT

This essay argues that crisis preparedness should not be limited to plans, procedures and operational response. In uncertain and evolving situations, organisations must also preserve the conditions under which strategic decisions can be constructed, mediated and assessed. The article distinguishes tactical adaptation from strategic steering and proposes that strategic capability depends on dynamic situational analysis, explicit decision frameworks, systemic assessment, pedagogically engineered simulation, and recursive learning.

Because prevention and safety are of an asymptotic nature, organisations are compelled to prepare for crises to occur. Crisis preparedness is usually designed around action: plans, procedures, trained teams, prepared resources. Yet a crisis does not necessarily challenge first the ability to act. It may challenge something more fundamental: the conditions under which strategic decisions can still be constructed [1].

This matters because operational response and strategic steering do not share the same purpose or relationship to time. Operational teams must often act quickly, containing immediate consequences and adapting to rapidly changing circumstances: damage control belongs primarily to this tactical response. Strategic steering has another purpose: it sets the objectives, success criteria, acceptable margins of deviation, timeframe, and allocation of available and deployable resources. Its ultimate purpose is mitigation – restoring normal operational conditions when possible, maintaining operations under adverse conditions when necessary, or adapting the organisation to a new, durably different environment [2].

The deeper challenge arises when the urge to act takes over the need to mediate: intuition replaces reflection, and an immediate interpretation of the situation becomes an imperative to act before it has been sufficiently analysed. The organisation then develops a false sense of acceleration while actually becoming less capable of strategic decision-making [3].

WHEN UNCERTAINTY BECOMES A PROBLEM OF DECISION-MAKING

Uncertainty is intrinsic to complex crises; strategic steering cannot eliminate it, only preserve a process for handling it without destroying the conditions for judgement. This requires precision about information itself.

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Data are not information. Processed data become information. Data may be inaccurate, fragmented, incomplete or out of date; they must be cross-referenced and confronted with other data before they can support an understanding of the situation – never final, since the situation keeps generating new data through the crisis's evolution, prior decisions, and the organisation's interaction with its environment. The situational analysis must therefore remain dynamic [4].

The decision process is consequently not a linear sequence – collect data, analyse, choose a strategy, implement – but a continuing loop: data become information, information feeds situational analysis, analysis informs action, action modifies the situation, and the resulting changes generate new data. This dynamism is essential to strategic steering, but it does not mean the strategy itself should be continuously changed.

STRATEGY SETS THE FRAMEWORK; TACTICS ADAPT TO THE SITUATION

Strategy establishes the objectives to be achieved, the success criteria, the acceptable margins of deviation and the timeframe within which they are expected to be reached. Once established, it provides the reference framework for action.

In this context, a success criterion should be understood as a determined characteristic of a sought-after organisational state, enabling decision-makers to assess, in a given situation and throughout its evolution, whether a strategic objective has been reached or whether the organisation remains on a trajectory toward reaching it, within accepted limits of uncertainty, deviation, time, resources and constraints. It is therefore not only an indicator for verifying the achievement of an objective, but also an instrument for steering the organisation's trajectory during the crisis.

Tactics, by contrast, are inherently adaptive, continuously adjusting to the changing situation in pursuit of those objectives – which is why situational analysis must stay dynamic.

Continuous situational analysis does not, in itself, provide grounds for changing the strategy. Until the defined success criteria can be assessed within the agreed timeframe and accepted margins, the organisation cannot legitimately conclude that the strategy has succeeded or failed, nor that the trajectory toward the sought-after organisational state remains appropriate. The dynamic belongs to the conduct of the strategy, not to its permanent rewriting.

This is crucial under pressure: when the urge to act overtakes the need to mediate, the organisation risks mistaking tactical adaptation for strategic reconsideration, and the situation's continuous movement for a reason to keep rewriting the strategy itself [5].

FROM DAMAGE CONTROL TO MITIGATION

The distinction also rests on a further one: the crisis must not be confused with the triggering event. The triggering event is the initial fact; the crisis emerges from the cascading and domino effects – across structural, organisational, functional and communicational dimensions – that this event sets in motion.

Damage control – the tactical response – limits materialising consequences, adapting action continuously as the situation evolves. Mitigation – the strategic response – addresses the same trajectory at another level: according to the objectives, success criteria, accepted margins of deviation, uncertainty, resources and constraints, and the timeframe that have been established, it seeks to restore normal operational conditions, sustain operations when they cannot yet be restored, or prepare the organisation for a durably different environment [2].

The strategic question is therefore not simply how do we respond? but also what operational condition do we need to reach, and what choices will keep us on a trajectory toward it within the defined success criteria, accepted margins and timeframe? Strategic steering cannot be reduced to crisis response.

PRESERVING THE PROCESS THROUGH WHICH DECISIONS ARE CONSTRUCTED

A strategic decision is not produced directly by an event. Data must be collected and qualified; information produced through processing; the situation analysed; objectives and criteria considered; available and deployable resources allocated; decisions transmitted; and the resulting situation observed again – a recursive process in which the strategic level sets the framework and evaluates the trajectory, while the tactical level adapts implementation.

The quality of strategic steering therefore depends not only on available information, but on the architecture through which information becomes a representation of the situation and then action.

This architecture is systemic: it considers global, individual, inter-individual and organisational levels and their interactions across structural, organisational, functional and communicational dimensions. A difficulty at one level or within one dimension may become strategically significant through its interaction with another. The purpose is not to accumulate diagnoses, but to understand the conditions affecting the organisation's capacity to build and sustain coherent strategic decisions [6].

In other words, strategic steering must confront complexity. Complexity should be understood here not as a solution, but as the problem of what is "woven together": interacting levels of organisation, feedback loops, uncertainties, antagonistic constraints and emergent properties that cannot be reduced to a single principle or linear causality [7]. In this sense, Morin's complexus, Laborit's levels of organisation,

and Planchette's systemic approach to risk all point to the same requirement: preserving strategic decision-making means linking what crisis tends to fragment, without dissolving the tensions through which the situation evolves [8-10].

FROM PREPAREDNESS TO STRATEGIC CAPABILITY

What should an organisation prepare when it cannot know precisely what the crisis will become? The conventional answer – more plans, procedures, scenarios and training – remains necessary but cannot substitute for the capacity to sustain the decision-making process once its assumptions are challenged.

A plan prepares an organisation for a situation. Strategic capability prepares it to continue deciding when the situation no longer corresponds to the one anticipated.

This requires maintaining the strategic framework while tactical conduct adapts continuously, processing changing information without confusing it with raw data, and resisting the substitution of immediate reaction for mediated judgement.

It also requires examining the organisation beforehand: a systemic assessment identifying deficits, dissonances and cross-level interactions is not an inventory of weaknesses, but a shared understanding of the conditions in which strategic capability is built.

AN ARCHITECTURE FOR BUILDING STRATEGIC CAPABILITY

If strategic capability resides in an organisation's capacity to construct, test and maintain its own decision process, the complexity of preserving strategic decision-making under uncertainty may require the intervention of a third-party facilitator. Such support is relevant when it brings analytical tools capable of identifying structural, organisational, functional and communicational vulnerabilities, and when it helps the organisation make visible the conditions under which its decision-making capability may be weakened or preserved.

In this sense, the third party does not act as a substitute for the organisation's strategic authority. It helps structure the conditions through which that authority can be exercised, tested, assessed and renewed.

Strategic capability becomes observable and developable through recurring operations that must be articulated before, during and after crisis situations: assessing the organisation, identifying vulnerabilities and dissonances, supporting decision-makers in their posture, formalising tested practices, exercising procedures, evaluating preparedness, transmitting doctrine, and transforming experience into knowledge. Taken together, these operations provide a practical reading grid for examining whether an organisation can make its strategic decision-making capability observable, transmissible, exercisable, assessable and renewable.

These operations can be grouped into functional pairs: audit and expertise, coaching and mentoring, procedures and certification, lectures and workshops, and research and publication. Audit and expertise make vulnerabilities, deficits, dissonances and decision conditions observable. Coaching and mentoring develop the strategic posture required under pressure. Procedures and certification translate tested practices into explicit and auditable frameworks. Lectures, workshops and drills build a shared strategic culture and allow the tools used to steer a crisis cell to be practised before they are needed. Research and publication transform experience into knowledge that feeds back into doctrine, training and future assessment.

Available customized training programmes and crisis drills, provided they rely on appropriate pedagogical engineering, can create the experiential conditions required to develop strategic decision-making capability under uncertainty. After prior preparation in the methodological tools used to steer a crisis cell, participants can be placed in immersive situations where they must handle incomplete information, changing constraints, collective pressure and delayed effects while preserving strategic judgement. Among existing simulation-based training formats, iCrisis® illustrates this type of immersive simulation environment.

Developed initially within a European research programme dedicated to improving decision-making under uncertainty, this simulation model was subsequently co-developed through a public-private partnership between the University of Lorraine and StratAdviser Ltd. It is available in academic contexts for initial and continuing education, including university programmes, and in private training contexts for senior executives and organisational leaders.

CONFRONT, REGULATE, OVERCOME

This dynamic can be expressed through three complementary movements.

To confront is to establish and continuously update the representation of the situation, its vulnerabilities, consequences and possible trajectories.

To regulate is to steer the organisation through the evolving situation while maintaining the strategic framework – objectives, doctrine, criteria, margins and timeframe – and continuously adapting tactical conduct and resource deployment accordingly.

To overcome is not simply to declare the crisis finished, but to achieve the organisation's strategic purpose: restoring, sustaining or adapting operational conditions as required.

These are not successive steps, but a dynamic strategic process continuously informed by situational analysis, the strategic framework remaining the reference until the success criteria and the trajectory toward them can legitimately be assessed [6].

RETHINKING CRISIS PREPAREDNESS

An organisation should not ask only whether it has a crisis plan, whether personnel know it, or whether procedures have been exercised. It should also ask whether it can preserve the process through which a changing situation is continuously analysed, mediated and translated into coherent action, while maintaining the distinction between strategic steering and tactical adaptation.

These are questions of strategic capability, not merely of preparedness documentation. The objective is not to make everyone faster, but to prevent the organisation from confusing activity with acceleration, reaction with decision, damage control with mitigation, and tactical adaptation with strategic change.

Operational teams must act quickly; strategic leaders must retain the capacity to decide deliberately; and the organisation must preserve the architecture that allows both to coexist.

A resilient organisation is not merely one that can control damage. It is one that can maintain strategic steering while the situation evolves and ultimately restore, sustain or transform its operational conditions according to what the new environment requires.

The strategic challenge of preparedness is therefore not simply to prepare organisations to act when a crisis occurs – it is to preserve their capacity to confront, regulate and overcome an ever-changing situation without allowing the urgency to act to destroy the reflection required to decide. Strategic steering then consists in maintaining a trajectory toward the defined objectives, while continuously assessing it against the success criteria, accepted margins, available resources, constraints and timeframe that make judgement possible.

DECLARATION OF INTERESTS

Jan-Cédric Hansen is Chief Medical Officer within the French public hospital service and serves as Associate Editor – Disaster Medicine for Panorama of Emergency Medicine. He holds scientific and professional responsibilities in disaster medicine and crisis management, including leadership roles within the International Commission on Disaster Medicine, the Global Health Security Alliance, and the European Council of Disaster Medicine. He is affiliated with StratAdviser Ltd, which co-developed iCrisis® with the University of Lorraine through a public-private partnership and contributes to training, audit and certification activities related to strategic crisis steering.

KEYWORDS

CRISIS MANAGEMENT; STRATEGIC DECISION-MAKING; UNCERTAINTY; STRATEGIC STEERING; SIMULATION-BASED TRAINING; COMPLEXITY; PREPAREDNESS

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The Authors declare that there is no conflict of interest.

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DATA AVAILABILITY STATEMENT

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ETHICAL APPROVAL

Ethical approval for this study was not required.

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