

# Decision Sovereignty

*A theory of execution  
in prediction-rich economies*

PETER FRITZ AO, CATHERINE FRITZ-KALISH AM  
AND OLGA BODROVA

$$Y = d(P) \cdot S$$

**DECISION SOVEREIGNTY**

*The capacity to execute decisions  
and make them real*



$$Y = d(P) \cdot S$$

*The binding constraint in modern economies is no longer information, but the capacity to execute decisions under complexity.*

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This book is dedicated to our family, friends and colleagues.



# Preface

This monograph combines a body of work developed over several years to address the persistent problem of why established firms and organisations often fail to execute projects and adapt to new technology despite ample information and resources. Decisions are not carried through, reforms stall, pilots fail and strategic shifts do not translate into sustained outcomes, allowing problems to escalate rather than resolve. This work argues that the puzzle may be better understood by reference to institutional decision sovereignty.

The term “decision sovereignty” describes the capacity of individuals, commercial companies and public agencies to execute, revise and sustain decisions to completion under conditions of uncertainty, contestation and stress. While leadership talent is not in short supply, deployable decision sovereignty remains a scarce and precious commodity, constrained by human cognitive limits and institutional design.

This manuscript synthesises diverse concepts of convex governance costs, organisational responses to neurological constraints, the “uncontested territory” of innovation-driven organisational spaces separated from legacy structures, the Second Track process and decision sovereignty into the Decision Sovereignty Framework – a coherent analytical framework for examining institutional execution. The paper presents formal expressions for authority, control, execution-relevant information and veto exposure, together with a framework for assessing whether projects appear feasible or constrained, and whether alternative architectures or pathways may be required.

It is presented as a monograph rather than a collection of articles to highlight common themes and allow the argument to unfold in full.

**Peter Fritz**

Sydney, February 2026

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# Convex governance costs

## Abstract

Recent technological innovations, most notably artificial intelligence (AI) powered by large language models, were expected to reduce administrative friction and the cost of accurate prediction in public agencies and established firms. However, despite the increasing adoption of AI models and processes, productivity and institutional performance so far have shown limited or uneven improvement<sup>1</sup> in Australia and across much of the developed world. Technology-enabled growth remains concentrated in startups, large technology firms and, to a lesser extent, “greenfield” units created or acquired by incumbent organisations.

While most established firms recognise the potential of AI and pursue its integration, the governance costs of adoption tend to increase at an increasing rate beyond the pilot stage. This “convex scaling” means the costs of organisation-wide adoption can outweigh the additional output it generates. The accelerating pace of technological change is straining human capacity to manage rising decision intensity and exceeding the capacity of inherited institutional architectures. However genuine attempts to reshape technology around existing governance processes, convex governance costs and human cognitive limits create an internally generated (endogenous) ceiling on the scalable adoption of transformative technology in long-established entities.

## KEY TERMS

### **Convex**

A non-linear relationship in which marginal costs increase at an increasing rate as scale expands.

### **Convex scaling**

A condition in which each additional unit of activity or integration imposes disproportionately higher coordination and governance costs.

### **Decision intensity**

The volume, frequency and complexity of decisions required within a system over time.

### **Decision rights**

The formal and informal allocation of authority to initiate, approve, modify or block decisions within an organisation.

### **Endogenous ceiling**

An internally generated limit where rising decision complexity and governance costs constrain execution capacity.

### **Execution capacity**

The ability of an organisation to translate decisions into sustained, coordinated action at scale.

## 1.1 – Growth through technology

Technological innovation, rather than culture or resources, has spurred economic growth throughout human history. Inventions from the wheel and plough to steam power and the micro-processor drove the invention and mechanisation of agriculture, the industrial revolution and the current information age. Earlier tools multiplied mankind's physical strength and made everyone more productive, increasing humanity's aggregate wealth and ending the zero-sum scramble for scarce resources in the hunter-gathering tribes of homo sapiens' first 120,000 years. While each new technological paradigm caused disruption as people changed occupations and lifestyles, the economy expanded at an ever-increasing rate.

This trend seemed certain to accelerate with the computing and internet revolutions of the late 20th and early 21st centuries, while the rapid expansion of artificial intelligence promises to augment and even replace human brain power as well. Such is the startling pace of development that AI advocates argue it will soon eclipse the abilities of not just the best individual people, but the whole of mankind. If one is optimistic, this “singularity” will see AI iteratively improve itself to generate exponential economic and scientific growth, spawning whole new spheres of endeavour and radically expanded analytical capability.<sup>2</sup>

Previous technological revolutions – such as the Bronze or Iron Age<sup>i</sup> – lasted for millennia, centuries or, in recent times, decades,<sup>ii</sup> but the unprecedented acceleration of change today gives organisations and human psychology no time to understand, adapt and integrate it. Progress moves faster than our archaic systems and ancient minds can process or understand, let alone accommodate its social, economic and existential implications.

## 1.2 – Why many AI deployments fail to boost productivity

Despite the heavy promotion and undoubted potential of AI, and the popularity of large language models with casual users, its formal deployment in government agencies and established companies to date has produced no significant improvements in productivity. A much-cited report from MIT analysts based on 150 interviews with executives, a survey of 350 employees and an analysis of 300 public AI deployments in 2025 found that only 5% had improved results, with the other 95% mired in “adoption without transformation”.<sup>3</sup>

---

i. The Bronze Age (approx. 3300–1200 BC), Iron Age (approx. 1200–550 BC)

ii. The Palaeolithic (Old Stone) Age spanned roughly 3.3 million years ago to around 10,000 BC, marking humanity’s earliest use of stone tools. In Europe, the Bronze Age lasted from about 3300 BC to 1200 BC, culminating in the widespread disruptions of the Late Bronze Age collapse. The Iron Age began around 800 BC in Central Europe and persisted in Northern Europe until the Viking Age circa 800 AD. The Industrial Revolution began in Great Britain after 1760, transforming industry and society. In modern technological history, the first networked e-mail was sent in 1971, Apple introduced the iPhone in 2007, and ChatGPT launched as a research preview on 30 November 2022, reaching 100 million users within months. Across these eras, the pace of technological change has been accelerating at an unprecedented rate.

The MIT report saw the problem as a “learning gap”, as many organisations had bespoke AI models and sufficient infrastructure, but their AI-informed enterprise systems were not then shaped by feedback or integrated into existing workflows so became static “science projects”. The report therefore urged firms to partner with AI specialists, rather than building their own solutions, and to select tools that integrate with vertical workflows, rather than assume that chatbots will boost horizontal efficiency.

An alternative interpretation is that current difficulties in integrating AI into established organisations reflect longer-standing constraints in their ability to carry major decisions through to completion. Conventional explanations for this systematic underperformance range from organisational inertia and regulatory friction to generational timidity or the absence of complementary assets, yet one crucial factor often goes unrecognised.

Outmoded systems of governance are simply overwhelmed when new capabilities expand the scope and volume of actionable choices, as the flood of information increases decision frequency, reduces the size of individual bets and compresses decision cycles in real time.

This problem will not resolve as familiarity with AI increases up the management chain, as AI capabilities are advancing at an accelerating rate, producing exponentially more information than previous generations of management theorists and decision makers could have anticipated. More decisions will be taken by AI itself lower down the management chain as it replaces employees, given that wages are typically the largest cost in any firm. However, the constraint on growth will continue to shift from the historic scarcity of reliable, relevant real-time information to a crisis of authorisation and control.

### **1.3 – Decisions don’t automatically translate into action**

Despite a well-documented track record of underperformance in large-scale technology implementation and organisational change programmes, public policy makers and company executives often assume that decisions will translate into action. Studies of digital transformation, including those by McKinsey & Company,<sup>4</sup> suggest that around 70 per cent of such initiatives fail to achieve their stated outcomes.

Efforts to improve results following initial AI integration may focus on additional analysis, consultation and optimisation applied to largely unchanged governance structures, with limited effect. As decision intensity increases without a corresponding expansion in execution capacity, contestation can scale faster than authority, and projects, however well intentioned, may stall.

Reform fails not because institutions resist change or make the wrong decisions, but because the demands of innovative technological implementation exceed their legacy execution capacity. The resulting “institutional freeze” is often misinterpreted as conservatism or incompetence but is, in fact, a rational response to conserve formal legitimacy amid an internal collapse of decision sovereignty.

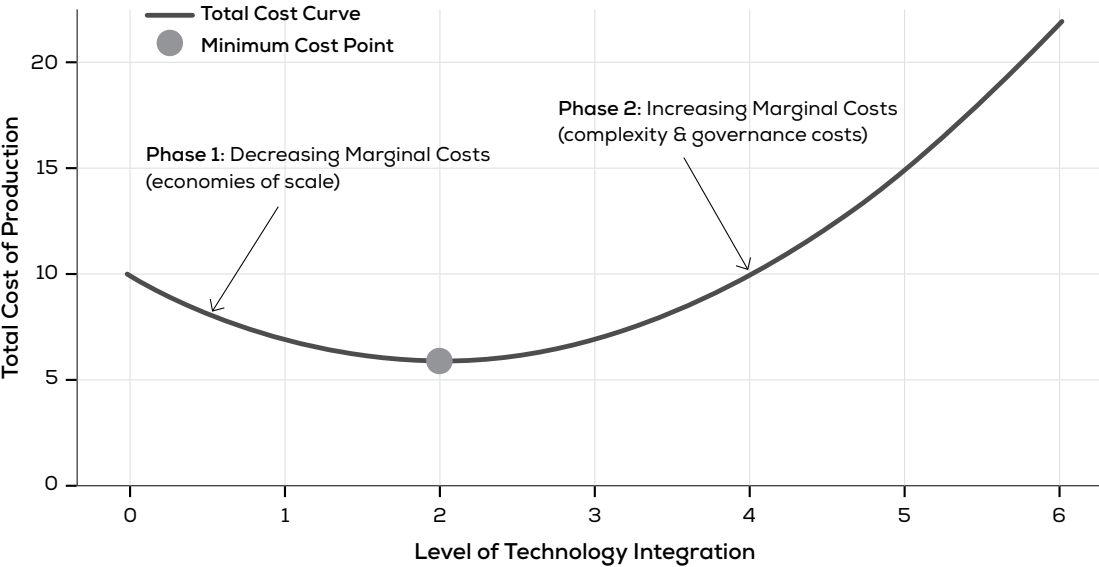
## **1.4 – Convex decision-governance costs**

When AI promises to reduce operational costs, legacy organisations are often willing to invest in optimising long-standing processes, but less willing to alter those processes or their underlying functions. The rules governing who makes decisions (authority) and who is held responsible (accountability) for outcomes tend to remain unchanged, as do established operating practices.

In practice, AI is frequently deployed as an incremental enhancement — supporting research, enabling chat interfaces or improving document retrieval — rather than as a catalyst for enterprise-wide redesign. Organisations therefore tend to integrate new technologies into existing structures, rather than undertake the more complex and higher-risk task of reshaping those structures around the technology.

While new technologies are introduced to reduce costs and complexity, they often increase the number of decisions required across successive management layers, raising organisational complexity and, ultimately, marginal costs rather than reducing them. Furthermore, as enterprising employees try to do more with the technology, the difficulty and cost of securing permission for more fundamental changes to existing processes can escalate rapidly until they run into institutional roadblocks set to protect the organisation from instability.

**Figure 1. Convex cost curve for scaling new technology**



**Figure 1** plots the experience of a legacy firm integrating a new technological paradigm into its existing governance structures. The technology’s pilot scheme lowers marginal costs as early efficiency gains are realised by specialist teams, prompting the C-Suite to order its staged rollout across the whole firm. While the first stage of this rollout is a partial success, the rate of decline in marginal costs slows and complexity increases. Minimum marginal cost is achieved just as stage 2 is launched, with the marginal cost of implementation matching the output gained, although executives expect the new stage to generate a further wave of improvement.

Subsequent expansion schemes, however, increase marginal costs to and beyond their original level, and committed executives continue to pursue the strategy in an effort to recover the initial gains, given their prior commitments and significant financial investment. Rising costs are often attributed to temporary factors, which further technological deployment is expected to resolve rather than exacerbate. Eventually, a crisis point may be reached when the C-Suite abandons the scheme before the launch of stage 6 or is replaced by a new regime brought in by concerned shareholders to do so. Alternatively, the firm may be driven out of business by a technology-first competitor whose marginal costs decline with scale, rather than increase.

The convex scaling costs experienced by legacy organisations mean that adoption becomes harder, rather than easier, at scale, so it either stalls or remains siloed in pilots. Bureaucratic structures can accommodate new technology when it does not alter their fundamental design or significantly increase the number of decisions required, but as organisations attempt to scale it and replace existing systems, complexity compounds and reaches the firm’s “endogenous ceiling”. Institutional decision-making capacity can no longer process the volume of data the technology generates or the flow of decisions it requires. Twice as much technology can mean four times as many meetings and eight times as many legal reviews and risk assessments to manage it. Even if legacy approval chains, compliance thresholds and professional liability requirements can be negotiated or removed, the rapid increase in decision intensity can overwhelm systems designed for much lower rates of information flow.

Just as marginal costs will, at some point, equal increased output and then begin to rise, so an endogenous administrative decision ceiling is reached when the cost of approving and implementing new decisions overtakes the value of the decisions themselves. This constraint cannot be resolved through improved training or greater individual effort any more than a propeller aircraft can be made to fly faster than the speed of sound.<sup>iii</sup>

While instances of this syndrome across the public and private sectors are often analysed in isolation, the consistent and observable patterns it produces – from pilot proliferation instead of scaling, and delayed or perpetual review and symbolic compliance, to diffusion of responsibility and the migration of execution to parallel units – suggest the problem is systemic.

Governance reforms that focus on bigger incentives, better transparency or greater participation, rather than addressing the central problem of cost curvature, are therefore unlikely to succeed. Removing or redesigning protective layers of administration to reduce impediments to adoption can also increase the perceived risk exposure for individuals, triggering personal and departmental resistance even when the aggregate performance of the firm would improve. As a result, incumbent entities tend to reform only at the margin while core execution constraints persist.

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iii. The propellers of a supersonic aircraft would have to rotate faster than the speed of sound in level flight, generating extreme shock waves and destabilising drag. By contrast, the shroud around modern turbofans slows incoming air, allowing supersonic speeds to be achieved with manageable vibration.

Convex governance costs hit the organisation's endogenous ceiling most quickly when four conditions hold: the technology increases decision intensity; its governance thresholds are deeply embedded; decision rights are sticky and costly to renegotiate; and the transfer of the technology to uncontested territory is feasible and more economic. The phenomenon weakens when modernised governance costs scale linearly, decision rights are modular, or parallel domains cannot emerge, reducing the urgency created by more agile competition in "uncontested territory".

# Uncontested territory

## Abstract

“Uncontested territory” in the Decision Sovereignty Framework is not necessarily a new or untapped market without entrenched incumbents, ripe for startups to dominate. It is an organisational space in which decision authority, accountability and contestability can be configured at relatively low cost. It does not imply the absence of rules or oversight, but does require settings in which bespoke governance allows for the increased decision intensity of new technology.

Governance architectures in such settings are designed around the new technology and scale to handle the heightened decision environment it generates. Decision rights, accountability and review processes scale linearly with decision intensity, or may even improve due to network effects and economies of scale, rather than becoming convex. Adoption and productivity therefore improve with the use of technology, rather than stalling because of it.

## KEY TERMS

### **Uncontested territory**

An organisational space where governance can be configured at low cost to support high decision intensity.

### **X-first**

An organisational model built around a specific technology or capability rather than adapting legacy structures.

### **First Track**

Formal, hierarchical decision-making systems optimised for stability, control and accountability.

### **Second Track**

Parallel, informal or semi-formal structures that enable flexible, cross-boundary decision-making and experimentation.

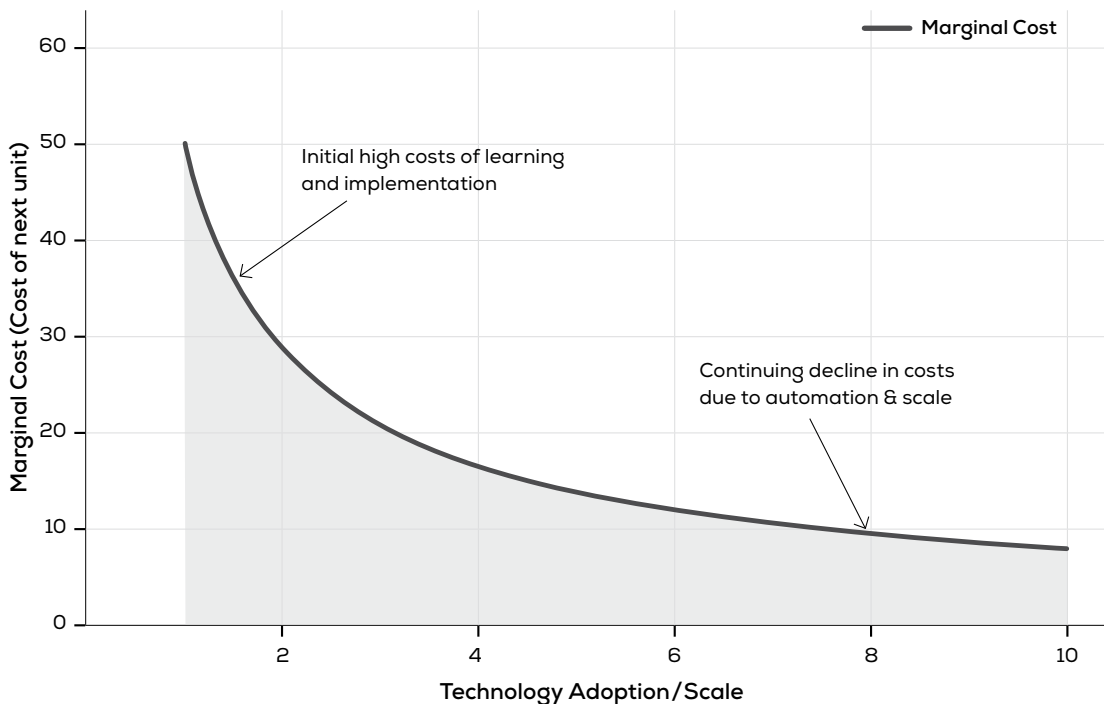
## 2.1 – Startups

The difficulty older firms and traditional institutions face in adapting business models and administrative policies developed before the arrival of transformative technologies such as AI means that startups have ample “uncontested territory” in which to emerge, experiment and grow.

Just as life will quickly colonise new territory<sup>5</sup> and evolve to match its novel environment,<sup>6</sup> so firms such as Amazon in retail, Uber in taxi services and Airbnb in accommodation grew rapidly to fill the new space created by mobile technology, big data and casualised labour. They satisfied consumers’ basic needs for products, transportation and travel accommodation in new, more convenient ways that reduced logistics costs or utilised under-used resources. These firms then used their position in uncontested territory to expand into other markets and take increasing market share from their more cumbersome predecessors. Amazon, for example, began as a mail-order book retailer before expanding to dominate a much broader market and developing an even more profitable cloud computing business as a sideline.

The lack of competition from large, established firms in uncontested territory allows a small subset of high growth firms to become dominant and develop platform models that expel, eliminate or absorb competitors, leaving them free to maximise both the value they extract from suppliers and the margins they charge customers,<sup>7</sup> particularly where regulation is limited or slow to adapt.

**Figure 2.** The 'technology-first' efficiency curve



**Figure 2** illustrates the relationship between technology adoption and marginal costs for a startup, greenfield operation or similar technology-first firm in uncontested territory. It plots the continuous gains in efficiency enjoyed as technology is adopted, illustrating the impact of increasing network effects and economies of scale.

The startup's marginal costs begin high due to initial learning curves, integration hurdles and large R&D expenses, but as the technology matures, its deep integration in the firm's rationalised and automated processes allows marginal cost to continue declining. Scaling therefore benefits, rather than penalises, a new firm, as the cost of each additional unit produced and sold is lower than the previous one. This, in turn, allows it to undercut established competitors, expand market share and increase profit margins.

This dynamic has enabled firms such as Amazon to grow rapidly and outcompete high street retailers that were slower to pivot online and whose costs increased with scale.

New firms initially sacrifice profit to build market share, while existing firms tend to concentrate on higher-spending customers at the expense of lower-margin customers to maximise returns. This creates gaps in the market for new entrants to fill with lower-cost, technology-first services. Their market offerings, labour processes and governance are shaped around the technology, rather than the other way around, allowing costs to scale in a linear fashion or enabling economies of scale and network effects to reduce marginal costs over time.

Just as it is easier to install an electrical system while building a house than to rewire an old one, so it is easier for technology to grow and take root in uncontested territory where there are no entrenched rules or decision rights to constrain it. Digital currencies and mobile-first interfaces have fuelled the growth of fintech firms such as Revolut and Stripe, while legacy banks have often adopted a digital veneer without being able to “rewire” a century of embedded compliance structures.

## 2.2 – Greenfield sites

In an effort to compete with the dynamism, agility and lack of bureaucratic constraint enjoyed by startups, “greenfield” departments may be established by large incumbents to embrace modern technology without the administrative baggage of the past.

Alternatively, well-resourced firms often reduce the time, risk and expense required to trial new ideas by using their cash reserves to acquire promising new entities and rebrand them as their own “X-first” initiatives, just as they acquire emerging brands to avoid the need for internal innovation and absorb potential competition.<sup>i</sup> This approach offers at least two advantages: it denies these startups to competitors and provides access to cutting-edge engineering capability and intellectual property without requiring management to fully understand or develop the underlying technology.

Such acquisitions reassure the stock market that action is being taken to embrace the prevailing technological paradigm, but do not disrupt the parent firm’s current operations or unsettle long-standing customers with no wish to change. The X-first entity can adopt less stringent, greenfield governance as a new ‘industry standard’

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i. Android, YouTube, Nest and Fitbit were acquired by Google in 2005, 2006, 2014 and 2021 respectively. Instagram and WhatsApp were acquired by Facebook (now Meta) in 2012 and 2014. Skype, Minecraft, LinkedIn and GitHub were acquired by Microsoft in 2011, 2014, 2016 and 2018. Siri and Beats were acquired by Apple in 2010 and 2014. Slack was acquired by Salesforce in 2021 and Twitch by Amazon in 2014.

without incurring opposition from legacy staff, and can either be written off as a tax deduction if the technology fails, without dooming the whole company, or scale rapidly to replace the legacy core if it succeeds.

## **2.3 – Special Governance Zones**

Convex governance costs can also lead national governments of varying ideologies to create geographical zones or industrial categories in which their own rules are relaxed or do not apply, where uniform reform would be too difficult or risky. China created four Special Economic Zones – Shenzhen, Shantou, Zhuhai and Xiamen – in 1980–81, for example, to experiment with market reforms, as the “legacy core” of bans on private enterprise was too difficult to change and wholesale abandonment of established doctrine would have undermined the party’s egalitarian rationale for political and social control.<sup>8</sup> Their success in attracting foreign investment and boosting growth helped pave the way for China’s subsequent economic expansion.

## **2.4 – Evolution of uncontested territory**

Uncontested territory is not a product of rule evasion, although it may offer that opportunity.<sup>9,10,11</sup> It may even be highly regulated, but its defining feature is that it allows governance costs to scale coherently with the decision environment they are designed to govern.

Startups in uncontested territory also configure decision rights and other capabilities to handle increasing decision intensity, so successful execution migrates to these firms, restoring manageable execution costs through flatter hierarchies and a higher tolerance of risk. They have no long-established customers to cater for, and if a startup fails – as 90% do<sup>12</sup> – it simply proves the entrepreneur’s willingness to experiment with new ideas.

In time, the 10% of new firms that survive their first five years tend to accrete their own layers of bureaucracy as they mature and focus on maximising returns for owners or shareholders, rather than innovation to attract and retain engineers. MBAs and finance specialists replace the original entrepreneurs, engineers and innovators, processes ossify in the absence of new ideas, and new forms of uncontested territory emerge to accommodate the next wave of technological change.

These dynamics are ultimately governed by underlying decision architectures, to which we now turn.

## 2.5 – First Track decision architecture

Traditional, hierarchical First Track decision architecture is not a hallmark of uncontested territory but remains the dominant governance paradigm in older public and private institutions. While reliable in stable conditions, its limited capacity to manage fluid environments is a function of the rigid, outmoded decision architecture itself, rather than misaligned incentives, deficient leadership or inadequate information.

Its clear hierarchy minimises transaction costs in stable circumstances, but in uncertain conditions, where alternative ideas are required, they are often suppressed because they threaten institutional coherence. Negative reports from front-line workers are also filtered, diluted or ignored as they percolate up through the bureaucracy, biasing the signals received by upper management towards defensible but obsolete narratives. Changes of course are rejected or delayed because they imply a loss of competence or authority, so cognitive closure increases just as new ideas are required, and escalation of commitment is favoured instead. Policy failures and organisational collapses can then unfold through sequences of decisions that appear reasonable in isolation but are catastrophic in aggregate.

Unfortunately, political, economic and social turbulence, combined with the erosion of social norms and the weakening of international norms, leaves the deeply embedded First Track hierarchies of Western democracies increasingly unfit for purpose. A host of seemingly intractable issues, from overburdened social systems to energy transitions, resist optimisation through stable rules or linear planning. Even if “First Track” governance is informed by AI, its effectiveness remains constrained by its inbuilt predilection towards centralised authority, vertical information flows and status-limited channels of dissent.

Conventional explanations for institutional malaise emphasise informational asymmetry, principal–agent problems or leadership error, but the deeper determinant lies in this outmoded decision architecture.

Decision efficiency in today’s uncertain times may be evaluated with bespoke, updated metrics, including the rate of option discovery; the breadth and depth of institutional learning; reversal costs; the persistence of error, and the management of rare or extreme outcomes beyond the bounds of traditional risk models (tail risk). First Track architectures, which evolved to minimise short-term coordination costs, can increase the risk of much larger long-run errors.

## 2.6 – Second Track architecture

The fourth and final form of entity in uncontested territory – alongside startups, greenfield units and acquired entities – is parallel governance and decision structures such as “Second Track” taskforces and other special-purpose vehicles. Such entities are appointed or may emerge spontaneously as alternatives to moribund First Track processes, and discuss, decide and pilot practical solutions without inbuilt First Track restrictions.

While Second Track groups can operate alongside First Track authorities, they should be insulated from attribution and political exposure to ensure their members speak frankly and draw on the full range of their experience, rather than default to role-prescribed platitudes. Second Track mechanisms do not replace hierarchy or, indeed, subvert transparent democracy, but complement it, providing a parallel capability for rapid, flexible problem-solving.

Hierarchy tends to suppress learning in conditions of uncertainty, and AI augmentation produces a “prediction rich” environment, so Second Track systems that expand the scope for human judgement are increasingly required. To extend a biological analogy in preparation for the following chapter, Second Track systems can function as an improved prefrontal cortex for a First Track organisation, sharing experience, opening options and inviting counterfactual reasoning.

Such groups not only tolerate but require independent, cross-sector and cross-role participation to allow theorists, technologists and system owners to engage with frontline staff in a state of “structured informality” that traditional hierarchies would never allow.

## 2.7 – Comparative efficiency

The relative efficiency of First and Second Track mechanisms varies with conditions and circumstance. As noted above, First Track approaches minimise coordination costs in stable conditions but risk costly error in unstable ones, while Second Track groups increase coordination complexity but excel when faced with “wicked problems” that cross jurisdictional divides.

During the Vietnam War, for example, a series of tightly controlled hierarchical decision processes, in which dissent was costly and ambiguity intolerable, led to a catastrophic outcome for the United States and the people of South Vietnam.<sup>13</sup> In contrast, recent Second Track investigations across the varied domains of Australian

health reform, climate policy and digital governance have consistently expanded option sets, accelerated learning cycles, secured broader consensus and led to more durable commitments to change.

Second Track architectures are not a panacea and will fail when captured by traditional hierarchical interests. Their independent, non-partisan credibility cannot survive overt politicisation or commercial capture, and their recommendations must inform a credible decision-making system capable of binding commitment. As noted above, improving decision discovery – the identification and exploration of viable options – does not guarantee execution without building decision sovereignty that accounts for both administrative sclerosis and the indispensable but often overlooked “human factor” in decision execution.

## Chapter 3

# The human factor

### Abstract

Execution failure arising from convex governance costs cannot be fully understood without considering human biology and humanity's accumulated cultural tropes. For all their modern digital technology and highly automated processes, companies and public agencies are ultimately run by people whose cognitive systems evolved to optimise small-group survival in a wilderness environment. Execution failure is therefore systematic rather than accidental or the result of individual incompetence, because its roots extend deep into what makes us human.

## KEY TERMS

### **Cognitive bandwidth**

The limited capacity of individuals to process information and sustain attention under increasing decision load.

### **Attribution risk**

The perceived personal risk of being associated with failure, which drives defensive behaviour and decision avoidance.

### **Protective architectures**

Informal or formal mechanisms (e.g. committees, approvals, documentation) created to reduce individual exposure but which increase collective execution costs.

### **Yerkes–Dodson Law**

The relationship between arousal and performance, where moderate stress improves performance but excessive stress degrades it.

### **Fight, flight or freeze**

The neurobiological reaction to perceived threat that shifts cognition from deliberation to rapid, defensive action.

## 3.1 – Evolutionary origins

Ostracism or banishment from the small, close-knit hunter-gatherer groups in which humans lived for all but the last few thousand years was effectively a death sentence. As a result, most people instinctively align with the group rather than strike out alone – even when they believe the group is wrong – because collective solidarity, reinforced over millions of years of biological and cultural evolution, made survival more likely. However, the innate aversion to loss, sensitivity to status and reluctance to accept individual blame that sustain our position in group hierarchies can make these once-adaptive traits a liability in the modern institutional environment.

Similarly, the hard-wired neurobiology underlying our instinctive “freeze, flight or fight” response to sudden threats, or to prolonged stress, can overwhelm our more recently developed capacities for learning, reflection and revision. When we perceive danger, attention narrows and risks appear pervasive, whether the threat is a sabre-toothed predator or an adverse earnings report. While institutions mitigate individual risk through formal processes such as reviews, approvals and compliance layers, this psychological protection carries a hidden cost in the form of higher collective execution costs.

When institutions repeatedly expose decision makers to uncertainty, visibility and blame, those individuals respond by constructing informal protective architectures to reduce their psychological load, but which collectively increase the intangible costs of execution. In short, the more stressed managers become, the less rational and more self-protective their decisions are likely to be.

Organisational measures to reduce these barriers to change cannot overcome underlying biological constraints. Alongside self-protective thresholds for exposure and complexity, organisations default to pilots, delay and symbolic compliance partly because these responses ease the neurological load on managers and executives.

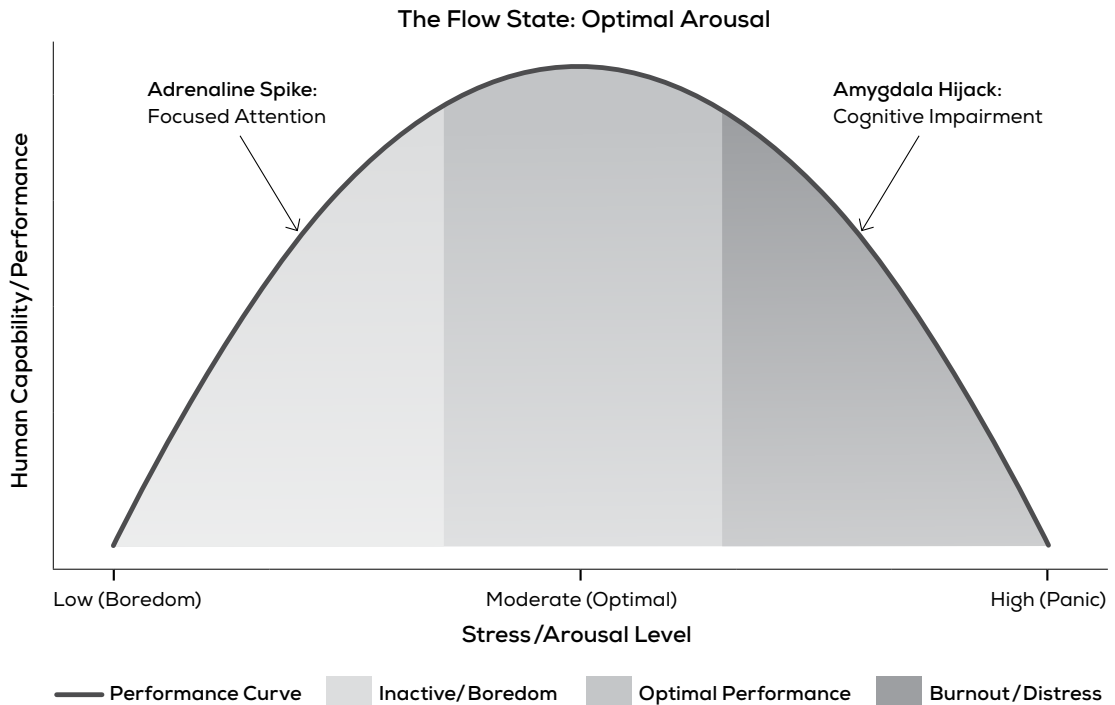
Human cognitive bandwidth is limited, and when the volume and intensity of decisions accelerate over a sustained period, people at all levels become mentally overwhelmed. Attention to detail inevitably wanes, patience fragments and the temptation to prevaricate over problems allows them to fester. Humanity's tolerance for sustained stress is often remarkable, but it is not infinite.

Attribution risk is another institutional manifestation of these culturally evolved traits, as individuals are reluctant to be personally associated with irreversible failure, which may carry consequences for their position (the modern equivalent of banishment from the group). This preference for social conformity also means that even well-meaning, evidence-based dissent carries reputational and career risk, especially in hierarchical or politicised settings.

### **3.2 – The Yerkes–Dodson Law**

Again, this is not a new concept. As far back as 1908, the so-called Yerkes–Dodson law described an empirical relationship between arousal and performance in a paper by psychologists Robert M. Yerkes and John Dillingham Dodson, published in the *Journal of Comparative Neurology and Psychology*.<sup>14</sup> They observed that human performance initially increases with physiological or mental arousal, but as stress rises beyond a certain point, performance declines. While the original study examined the Japanese house mouse (a “dancing mouse”), the principle corresponds to the human capacity to mobilise greater cognitive resources to manage higher information loads and decision intensity – up to the point where sustained stress leads to fatigue and diminished performance.

**Figure 3. Human capability vs stress (The Yerkes-Dodson Law)**



**Figure 3** illustrates the Yerkes-Dodson Law by plotting the relationship between arousal (stress) and human performance. The ascending phase shows performance improving with moderate increases in stress, driven by heightened alertness and concentration. As stress rises from a low baseline, the body releases epinephrine (adrenaline) and norepinephrine to activate the sympathetic nervous system, increasing heart rate and sharpening sensory focus. This moderate level of arousal enhances the efficiency of the brain's prefrontal cortex, supporting executive function, alertness and motivation.

Optimal arousal occurs at the top of the curve when the brain reaches a maximising "flow state" with sufficient arousal to maintain peak engagement without being overwhelmed. However, if stress persists and intensifies, performance begins to decline as the adrenal glands secrete elevated levels of cortisol to sustain blood pressure, immune *function* and anti-inflammatory processes. As stress increases further, activity in the amygdala – the brain's fear centre – rises, and the combination of elevated cortisol and amygdala activation inhibits the prefrontal cortex, leading to cognitive decline.

These largely subconscious responses to stress produce mental “tunnel vision”, impair decision making, disrupt memory and increase the risk of long-term burnout. Even over shorter periods, higher-order cognitive functions deteriorate as the brain shifts from reflective “thinking and planning” towards more primitive “survival” modes of fight, flight or freeze. While a degree of stress can be a powerful catalyst for better performance, its long-term effects on human physical and mental capability mean that every individual has their limits.

### 3.3 – Organisational responses

So, just as Ronald Coase<sup>15</sup> saw firms as adaptive responses in the market to reduce transaction costs, many administrative procedures in firms and other institutions can be interpreted as adaptive responses to human biological and cultural constraints, and tend to increase the costs of governance. Our bounded attention leads to more decisions by committee. Our limited stress tolerance demands escalation protocols. Multiple sign-offs safeguard individuals from isolation. Attribution risk means we rely on documentation and compliance checks to second-guess our own judgement, and our urge towards social conformity raises consensus thresholds.

Each new layer reduces individual exposure, but they accumulate rather than substitute for one another. As decision intensity rises, institutions do not remove these safeguards to increase decision speed and capacity, but add new ones to guard against a heightened perception of risk.

Institutions facing crisis tend to centralise authority, suppress dissent and narrow options as a result, all of which sacrifice agility and resilience for the impression of solidity. The apparent irrationality of these managerial decisions becomes more explicable if institutions are viewed as nervous systems that shift from a deliberative to a reactive mode under stress.

Doubling down on a poor decision is often the least risky option for an individual who feels their position is under threat from underwhelming outcomes. Reversing the policy would signal a loss of managerial control and invite blame and potential replacement, so postponing change often appears the safer course. Under sustained stress, decision sovereignty and execution capacity therefore erode, regardless of any

formal strengthening of authority. As results continue to deteriorate, attention shifts from collective problem solving to self-protection, with responsibility displaced and individual blame avoided.

New forms of governance must therefore align with human neurobiology as well as artificial intelligence if decision sovereignty is to improve, assuming humans remain in control.

# Defining decision sovereignty

## Abstract

Contemporary political,<sup>16</sup> social<sup>17</sup> and economic<sup>18</sup> commentary often laments the gulf between decision and delivery in its respective sphere of interest, without recognising a common underlying link or offering practical solutions. Governments announce ambitious policies and projects that balloon over budget and underperform;<sup>19</sup> institutions commission analysis, recommend action, then watch the situation deteriorate;<sup>19</sup> and firms declare pivots and grand strategies<sup>21</sup> that they struggle to translate into profits or operational change.

As outlined in previous chapters, the pattern repeats across well-resourced firms and well-informed sectors that should be capable of much better. Far from being confined to weak states or poorly governed organisations, the spectre of failure haunts advanced, technically capable institutions operating in complex, contested environments.

Despite this persistent track record, decision makers still assume that effective action will automatically follow their good ideas, and so continue to emphasise policy over implementation. Increasing the decision sovereignty required to drive change, reform governance structures and manage decision intensity is therefore the key task facing companies and governments in a world of accelerating technology and economic turmoil.

## KEY TERMS

### **Decision discovery capacity (D)**

The ability of an organisation to identify, evaluate and select viable courses of action under conditions of uncertainty.

### **Decision sovereignty (S)**

The capacity of an organisation to translate authorised decisions into sustained execution despite internal constraints and external pressures.

### **Governance curvature**

The non-linear relationship between decision intensity (L) and decision sovereignty (S), whereby increases in decision load generate disproportionately higher coordination and approval costs, reducing execution capacity.

### **Predictive capacity (P)**

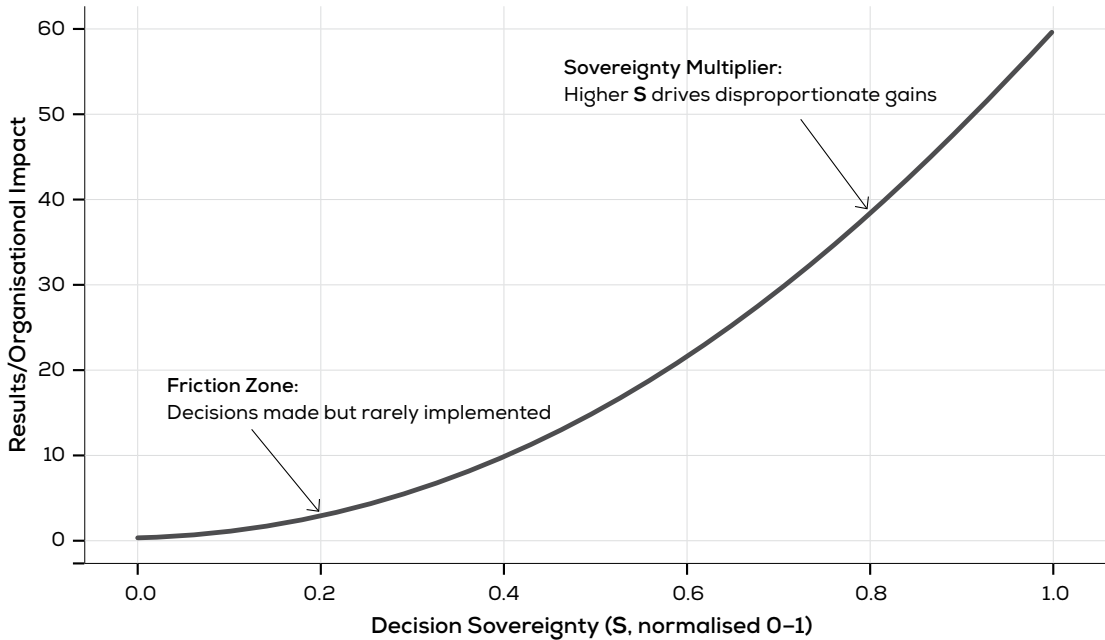
The ability of an organisation to generate reliable insights and forecasts to inform decision making, which does not guarantee implementation.

### **Veto exposure (V)**

The extent to which decisions are subject to delay, blockage or reversal by competing authorities or processes.

## 4.1 – Mapping decision sovereignty to results

Figure 4. Decision sovereignty vs results (normalised)



**Figure 4** describes the relationship between decision sovereignty and organisational results on a convex curve, reflecting the gently compounding effects of effective execution.

In the “friction zone” of low sovereignty, executive decisions are made but remain poorly implemented due to bureaucratic delay, lack of alignment and other manifestations of insufficient authority. The results are negligible or incremental and do not pave the way for fundamental change.

As decision sovereignty increases, the gap between policy and performance narrows at a gradually increasing rate, such that each additional “unit” of implementation power yields disproportionately higher results due to network and efficiency effects.

High decision sovereignty allows for rapid pivots and better organisational alignment, allowing a firm to capitalise on market opportunities faster than its competitors. All else being equal, such as access to modern technology and the quality of decision making, the ability to execute creates a powerful upward curve in organisational outcomes.

## 4.2 – Contribution and significance

This is not a novel observation in itself. Indeed, there is a substantial and well-established literature, spanning decades of work across public administration studies, political economy, organisational theory and sociology, which argues that implementation failure stems from a systematic institutional incapacity to execute. However, while building on that accumulated research, this monograph goes further to formalise decision sovereignty as the structural constraint on transmission and offers an original conceptual framework for its measurement and management.

The term “decision sovereignty” has also appeared in sundry legal, governance and technological contexts, but this monograph argues for the phrase to formally describe an organisation’s capacity to authorise, execute and sustain decisions to maximise output. If decision making is ineffective because no individual or process has the authority, coordination or continuity to properly implement policy, then the problem merits reserving this specific term to capture that gap.

Highlighting its importance explicitly helps to break the deeply ingrained but incorrect intuition that failures in institutional execution result from insufficient information, analysis or intelligence and can therefore be remedied by improving them.

## 4.3 – Theoretical forebears

Diverse theories of the firm over the last hundred years have tried to explain the role of company structures in economic results. In the 1930s, Ronald Coase pondered why companies exist at all if markets are so efficient at producing goods and services, for example. He concluded in *The Nature of the Firm*<sup>22</sup> that firms exist to reduce the transaction costs and frictions of the open market. The advent of agentic AI<sup>23</sup> may substantially reduce these costs, potentially challenging the traditional rationale of the firm – to manage those excessive costs – and raising questions about the future role of organisational structures and human labour.

The American economist Douglass North was co-awarded the Nobel Prize in Economic Sciences in 1993 for combining economic theory and historical data to explore economic and institutional change. An architect of New Institutional Economics,<sup>i</sup> he also stressed

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i. New Institutional Economics (NIE) agrees with classical economists that individuals are rational and try to maximise their preferences, but also recognises the cognitive limitations, information gaps and contractual complexities of real-world settings. NIE also views the state as an active economic actor capable of hindering or favouring particular institutions, acknowledges that transaction costs are unavoidable and accepts that actors’ preferences can change.

the impact of institutions on economic behaviours, incentives and outcomes, and their collective influence on national growth, stagnation, or decline. In *Institutions, Institutional Change and Economic Performance*,<sup>24</sup> he accepted that internal dynamics determine what institutions can implement, agreed that decisions without enforcement capacity are economically ineffective, and noted the lag caused by informal social customs within firms when technology changes.

In his 1997 bestseller *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, Clayton Christensen<sup>25</sup> argued that large incumbent companies falter in changing times by maximising margins from high-value customers rather than embracing innovation to replace themselves from the bottom up. This leaves them vulnerable to startups, which develop and rapidly iterate new technological paradigms to attract increasing numbers of low-value customers and, once their market share is established, leverage that to displace established firms by capturing higher-value customers as well.

While not using the term “uncontested territory”, Christensen also encouraged dominant players to launch small, nimble divisions to compete with startups; however, he believed the problem was older firms’ unwillingness to cannibalise their own profits by offering the lower-cost options enabled by new technology, rather than endogenous administrative constraints hampering its adoption.

In her 2003 work on *Technological Revolutions and Financial Capital*,<sup>26</sup> Carlota Perez notes that technological revolutions arrive with remarkable regularity and economies react in predictable ways. She draws on Schumpeter’s theories of innovation clustering and creative destruction<sup>27</sup> to explain why each technological revolution produced a paradigm shift, as every major technological “surge”, from the steam engine to the Internet, has required a “re-institutionalisation”, with society, laws and institutions inevitably lagging its introduction.

Herbert A. Simon famously detailed the bounded rationality of individuals, but also noted the limitations of authority within organisations. In *Administrative Behavior*,<sup>28</sup> for example, he observes that firms routinely “know what to do” but lack the structural capacity to act coherently upon it.

In *Rediscovering Institutions*,<sup>29</sup> James March and Johan Olsen also assert that decision outcomes are shaped by institutional routines and authority structures as much as by choice optimisation or information quality. George Tsebelis’s veto-player theory<sup>30</sup>

agrees that political systems and public policy outcomes are constrained by the number and nature of actors who can block change, regardless of how well-informed a decision may be. This isn't always a negative. The more independent actors with veto powers in a democracy, for example, the more stable the system is – hence the value of checks and balances like an upper house, a free press and an independent judiciary in democratic countries. However, these independent vetoes make it harder for governments to pursue radical reform, hence the assaults periodically launched by autocratically inclined regimes on these structures and traditions.<sup>31</sup>

Pressman and Wildavsky's seminal study on *Implementation*<sup>32</sup> described policy failure as the product of fragmented authority, sequential veto points and coordination breakdowns. They noted the likelihood of failure increases with every additional implementation step, consistent with the veto exposure (V) term included in the following chapter's Decision Sovereignty Index.

Ongoing work by Michael Hill and Peter Hupe on implementing public policy<sup>33</sup> reinforces the distinction between decision authorisation and delivery, while Christopher A. Bartlett, an Australian organisational theorist and Emeritus Professor of Business Administration at the Harvard Business School, has argued that the “middle management layer” can dilute or misinterpret strategic intent before it reaches the frontline.<sup>34</sup> A 2011 taskforce on complex project management,<sup>35</sup> convened by the International Centre on Complex Project Management (ICCPM) and Global Access Partners (GAP), identified persistent barriers to upward communication, with lower-level staff often unable to convey implementation challenges to decision makers.

In addition to peer-reviewed academic work, there is no shortage of popular business books on this topic. *Execution: The Discipline of Getting Things Done* by Larry Bossidy and Ram Charan,<sup>36</sup> for example, argues that execution must be a discipline systematically embedded into a company's strategy, goals and culture and identifies inadequate links between people, strategy and operations as the primary impediment.

Alternatively, *The 4 Disciplines of Execution (4DX)* by Chris McChesney, Sean Covey and Jim Huling<sup>37</sup> blames the “whirlwind” of pressing day-to-day tasks as the enemy of long-term execution and calls on CEOs to focus on lead rather than lag measures to ensure strategic goals are not obscured by daily operations.

*Thinking, Fast and Slow* by Daniel Kahneman<sup>38</sup> is primarily a psychology text but also explains why cognitive biases like the “planning fallacy” and “overconfidence bias” lead organisations to set unrealistic implementation timelines and budgets.

1999’s *The Knowing-Doing Gap* by Jeffrey Pfeffer and Robert I. Sutton<sup>39</sup> was promoted as the first book to “confront the challenge of turning knowledge about how to improve performance into actions that produce measurable results”. It blames people’s fondness for “smart talk as a substitute for action” and our deep-seated fear of failure as the psychological impediments that freeze organisations in their decision phase.

*Adhocracy: The Power to Change* by Robert H. Waterman Jr blames rigid hierarchies and bureaucracy for being friction points and calls for “adhocracy” – flexible, project-based teams – to bypass organisational drag.

John P. Kotter outlines an eight-step process for implementation in *Leading Change*<sup>40</sup> to overcome a lack of organisational “urgency” and anchor changes in corporate culture, while *Strategy Safari* by Henry Mintzberg, Bruce Ahlstrand, and Joseph Lampel<sup>41</sup> critiques the “Design School” view of strategy as a detached, top-down process. As the ICCPM-GAP taskforce on project management discovered, when thinkers (executives) are separated from doers (implementers), any project or strategy is primed for failure because it ignores the emergent realities of the workplace.

Finally, in the latest of these publications, *The Strategy Trap: Why Companies Fail at Execution and How to Get It Right*<sup>42</sup> released in February 2026, former Nike executive Kevin Ertell writes that strategies that work on paper fail in practice when priorities shift, teams misfire and execution breaks down. He offers “Six Cs of Execution” – Co-creation, Clarity, Capacity, Communication, Coordination and Coaching – as the cure, but their effectiveness depends on whether organisations create the conditions for consistent, aligned decision making across teams and over time

There is something to be learned from all these books and articles, but the common theme that unites each failure is their underlying lack of decision sovereignty. While these works acknowledge the role of veto points, compliance drag and coordination collapse, this monograph develops a conceptual framework to measure, evaluate and manage this execution constraint.

## 4.4 – Core equations

$$Y = D \cdot S$$

If decision sovereignty, rather than formal authority, determines whether policy produces durable action or symbolic compliance, delay or reversal, then a formula is required to quantify it.

The formal calculation offered here assumes that realised outcomes (Y) depend on both decision discovery capacity (D) and decision sovereignty (S), which functions as the transmission capacity of the system, giving the relationship  $Y = D \cdot S$ .

If decision sovereignty (S) is weak, then additional analysis or better prediction to improve decision quality produces negligible effect.

Organisations and firms may treat decision sovereignty as the scaling factor that determines the ultimate value of their strategic choices.

Where predictive capacity (P) is introduced, given the increasing importance of artificial intelligence in augmenting this factor, decision discovery capacity (D) may be expressed as a function of P, such that:

$$Y = d(P) \cdot S$$

where  $d(P)$  denotes the quality of decisions enabled by predictive capacity. If the quality of decision making is equal, then institutions with higher sovereignty will implement them more reliably, in contrast to standard theory in which P is assumed to translate smoothly into outcome Y.

This formulation separates predictive capacity, decision quality and decision sovereignty as the transmission constraint, and underlines their multiplicative, rather than additive, relationship. If decision sovereignty weakens, outcomes fall regardless of the quality of the original decision. An additive form would incorrectly imply substitution between prediction and authority.

This formula and those that follow offer a theoretical scaffold to render execution failure visible and isolate decision sovereignty as the previously under-specified constraint in growth theory, rather than a background institutional condition.

The relationship  $Y = d(P) \cdot S$  recognises that while predictive capacity can expand rapidly, the ability to translate decisions into action remains constrained.

$$Y = \min\{F(P), G(D), H(S)\}$$

If P denotes predictive capacity, D decision discovery capacity and S decision sovereignty, then realised outcome Y is bounded by the weakest of these capacities so  $Y = \min\{F(P), G(D), H(S)\}$ .<sup>ii</sup>

Artificial intelligence is driving rapid growth in P but without parallel growth in D and S, adding analytical capabilities into legacy institutions will not revitalise productivity, and realised outcomes will continue to stagnate. Increased knowledge becomes a substitute for closure, rather than an engine for change, as more information creates complexity, exceeds human cognitive limits and increases governance costs.

## 4.5 – Decision sovereignty as institutional capital

The concept of governance curvature can now be viewed as an accelerated depreciation of decision sovereignty. Convex decision governance costs increase the cumulative wear on both human and administrative capacity as decision intensity rises. Organisations that react with ever-thickening protective layers deplete decision sovereignty faster than they can regenerate it.

Decision sovereignty accumulates when organisations repeatedly make and carry through decisions without damaging consequences, but depreciates when responsibility is fragmented, decisions are avoided or delayed, or accountability is shifted rather than owned. Decision sovereignty can therefore be strengthened by creating protected decision environments, stress-regulating structures and reversible commitment mechanisms, combined with clearer allocation of authority and liability. These investments are often politically as well as financially costly and can be slow to mature, requiring sustained commitment across the organisation.

Authority without decision sovereignty is fragile and ineffective, while decision sovereignty without legitimacy risks instability. Execution is more likely to stabilise where authority to make decisions is clearly defined, revision is survivable without

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ii. The functions F(P), G(D) and H(S) represent the maximum achievable outcomes (ceilings) imposed by each capacity (predictive capacity P, decision discovery capacity D and decision sovereignty S), with the lowest acting as the effective bottleneck on realised outcome (Y).

disproportionate penalty, and delays incur visible costs. However, whatever its theoretical importance, decision sovereignty will only be valued and invested in when it is reframed as institutional capital rather than a residual or intangible asset. If accountants and markets see decision sovereignty as a durable stock that accumulates, depreciates and multiplies the returns to other inputs, they will accord it the value and priority it deserves.

Treating decision sovereignty as institutional capital to justify the time and resources required for these reforms therefore demands its systematic estimation through a Decision Sovereignty Index (DSI), developed in Chapter 6 as a conceptual framework and foundation for further research.

# Execution reversal

## Abstract

Previous chapters have argued that decision sovereignty is the binding constraint on institutional performance, and that improving decision quality alone cannot guarantee better outcomes. This chapter extends that argument. It shows that, under certain conditions, better decisions can systematically produce worse results. This is not an anomaly or a matter of poor judgement. It is a structural feature of how decisions are transmitted through institutions.

Existing economic and organisational theories explain how decisions are formed, how incentives are aligned and how costs accumulate. None explicitly specifies the conditions under which a decision's intended effect may be altered, nullified or reversed as it is implemented. This chapter identifies that gap and defines decision sovereignty as the missing variable. Without it, the relationship between decision and outcome remains incomplete.

## KEY TERMS

### Sign reversal

A condition in which improvements in decision quality produce worse outcomes due to inversion in transmission.

### Transmission fidelity

The extent to which a decision's intended effect is preserved or altered as it is translated into action within an institutional environment.

### Convergent impossibility

The shared limitation across multiple frameworks in accounting for the transmission of decisions into outcomes.

## 5.1 – When better decisions produce worse outcomes

Modern economics and management theory devote considerable attention to how decisions are made. From rational choice and game theory to behavioural economics and mechanism design, the emphasis has been on improving the quality of decisions through better information, stronger incentives and more refined analytical tools.

The implicit assumption is straightforward: better decisions should, in general, lead to better outcomes. In many cases, they do. But not in all.

Across a range of institutions, a different pattern is observed. Decisions that are analytically sound, well-informed and aligned with stated objectives can produce results that are not merely disappointing, but systematically worse than those produced by weaker alternatives. In such cases, improvement in decision quality does not improve outcomes, it amplifies failure.

This is not random variation or the product of isolated error, but a persistent pattern that cannot be explained by chance, poor execution in the ordinary sense, or deficiencies in analysis alone. It reflects a structural property of the environment through which decisions are carried into effect.

A recent Australian example illustrates the point. The Robodebt scheme (formally known as Income Compliance Program), run by the Australian Government between July 2015 and November 2019,<sup>43</sup> sought to recover welfare overpayments through automated data matching between Centrelink and Australian Taxation Office records.

The underlying logic was analytically coherent within its design assumptions and the policy objective was legitimate; however, the method of implementation applied annual income averages to fortnightly payment periods, systematically generating false debts for individuals with variable incomes. The more consistently the system applied this logic, the more incorrect debts it produced.<sup>44</sup> A mechanism designed to improve accuracy instead amplified error. This was not an incidental side effect, but a structural inversion of the policy's intended outcome.

This example highlights the need to distinguish between the quality of a decision and the conditions under which it is implemented. A decision may be well reasoned within the information available at the time yet still produce adverse outcomes if the institutional context through which it passes distorts its effect. If this distinction is not maintained, any negative outcome can be attributed retrospectively to a “bad decision”, and the underlying mechanism remains concealed.

The relationship introduced in Chapter 4 captures this distinction directly:

$$Y = d(P) \cdot S$$

Decision capability,  $d(P)$ , reflects the quality of decisions enabled by predictive capacity. Decision sovereignty,  $S$ , reflects the capacity of the institutional environment to transmit those decisions into outcomes.

When  $S$  is positive, decisions translate into outcomes as expected. Where  $S$  approaches zero, decisions have little or no effect. When  $S$  is negative, the relationship is inverted: better decisions produce worse outcomes.

Standard theory assumes, implicitly, that  $S$  is constant and positive, that decisions transmit faithfully into outcomes. Chapter 5 demonstrates that this assumption does not hold.

## 5.2 – Limits of existing frameworks

The claim that decision sovereignty is required as a distinct analytical variable would carry limited weight if it arose from the limitations of a single theoretical framework. Individual models are built on specific assumptions and are not expected to account for all observed phenomena. A gap in one tradition may therefore reflect the scope of that model rather than a broader structural omission.

The position is different when multiple independent traditions, developed over time, addressing different questions and grounded in distinct methodologies, encounter the same limitation at their analytical frontier. In such cases, the limitation is less likely to be incidental – instead, it points to a common element not captured within the existing structure of analysis.

The test applied here is straightforward: can a given framework account for conditions in which a well-informed, analytically sound and properly authorised decision produces outcomes that are systematically opposite to those intended? Where this cannot be explained, the framework does not specify the conditions governing the transmission of decisions into outcomes.

This limitation appears across the principal traditions considered below.

### **Mechanism design and implementation theory**

Mechanism design, developed from the work of Hurwicz<sup>45</sup> (1973) and formalised through implementation theory by Maskin<sup>46</sup> (1999) and subsequent work with Tirole<sup>47</sup> (1999), examines whether a set of rules can be constructed to produce a desired outcome. It identifies which outcomes are implementable under given informational and incentive conditions.

Within this framework, implementation is treated in binary terms. A mechanism either yields the intended outcome, or it does not. The possibility that a mechanism may operate consistently yet produce outcomes opposite to those intended is not addressed. The framework specifies the conditions under which outcomes can be achieved, but not the fidelity with which those outcomes are preserved in execution.

### **Transaction cost economics**

Transaction cost economics, associated with Coase<sup>48</sup> (1937) and Williamson<sup>49</sup> (1985), explains how coordination and exchange impose costs that shape organisational structure and economic performance. These costs may reduce realised outcomes relative to their expected value.

A reduction in outcomes, however, is not the same as inversion. While high transaction costs may diminish the effect of a decision, the framework does not treat the possibility that the outcome may systematically move in the opposite direction as

a distinct analytical condition. Where costs exceed expected benefits, outcomes may become negative, but this is treated as an extreme case rather than a regime requiring separate treatment.

### **Principal–agent theory**

Principal–agent theory, including Holmström's<sup>50</sup> (1979) moral hazard framework, addresses divergence between the objectives of principals and agents. Through incentive design, it seeks to align actions with intended outcomes by ensuring that agents act in accordance with the principal's objectives.

Where alignment is achieved, the framework has fulfilled its purpose. It ensures that the intended decision is made and executed.

This leaves a further question. Even where incentives are aligned and decisions are implemented as intended, outcomes may still diverge from those sought. In such cases, the issue does not lie in misalignment or non-compliance, but in the conditions through which the decision is carried into effect.

Principal–agent theory operates on the alignment of decisions rather than on the transmission of their effects. It does not specify the conditions under which an authorised and faithfully executed decision may produce outcomes that diverge from, or even invert, its intended direction.

### **Institutional economics**

Institutional economics, developed by North<sup>51</sup> (1990) and extended by Acemoglu and Robinson<sup>52</sup> (2012), emphasises the role of formal and informal rules in shaping economic behaviour and outcomes. It explains how institutional arrangements influence incentives, feasibility and long-term performance.

They model the environment in which decisions are made, but not the fidelity with which those decisions are transmitted into outcomes. An authorised and legally valid decision, made within an inclusive institutional framework, may still be inverted by the organisational and structural conditions through which it passes.

Institutional economics identifies which decisions are feasible and desirable. It does not determine whether such decisions will produce their intended effect or its opposite.

## **Dynamic capabilities theory**

Dynamic capabilities, introduced by Teece, Pisano and Shuen<sup>53</sup> (1997), refer to the capacity of firms to integrate, build and reconfigure competences in response to changing conditions. They explain how organisations adapt and respond to technological and market shifts.

Possessing a capability, however, is not the same as producing the intended result. A firm may have the capacity to restructure and may exercise that capacity with full commitment yet find that outcomes diverge from those intended because the organisational context distorts transmission.

Dynamic capabilities theory establishes that a firm can act. It does not specify whether the effect of that action will align with its intended direction.

## **Evolutionary and organisational theory**

Evolutionary and organisational theories, including the work of Nelson and Winter<sup>54</sup> (1982) and the concept of absorptive capacity developed by Cohen and Levinthal<sup>55</sup> (1990), describe how routines evolve and how organisations process and apply knowledge over time.

These approaches capture variation, selection and learning within organisations. They do not distinguish between routines that preserve the intended effect of a decision and those that systematically alter or invert it. The direction of transmission remains unspecified.

## **On combining frameworks**

It may be argued that while no single framework accounts for inversion, a combination of several frameworks could do so. Models incorporating elements such as incentive alignment, coordination costs and uncertainty can generate outcomes that diverge from those intended.

When such models appear to explain these effects without a transmission variable, they are not eliminating it but embedding it within the interaction of underlying factors (incentives, costs, uncertainty).

This suggests that existing frameworks, while addressing different aspects of economic and organisational behaviour, do not explicitly specify the conditions under which the effect of a decision is preserved, diminished or reversed as it is implemented (Table 1).

**Table 1. The convergent impossibility**

Theory	What it explains	What it cannot explain	The gap
<b>Mechanism design and implementation theory</b>	Whether a mechanism can implement a social choice	A mechanism that inverts its intended effect	No variable for transmission fidelity
<b>Transaction cost economics</b>	Costs that reduce returns to decisions	Costs that reverse the sign of returns	Reparameterises transmission implicitly; does not specify it explicitly
<b>Principal-agent theory</b>	Agent's action diverging from principal's intent	Outcome reversal when incentives are perfectly aligned	Operates on decisions, not on transmission
<b>Institutional economics</b>	How institutions constrain and shape decisions	Authorised, feasible decisions producing inverted outcomes	Models feasibility of decisions, not their transmission
<b>Dynamic capabilities theory</b>	A firm's capacity to adapt and reconfigure	A capability exercised correctly that produces the opposite result	Does not specify how capabilities are transmitted into outcomes
<b>Evolutionary and organisational theory</b>	How organisational routines evolve	Routines that systematically invert intended effects	Describes variation in routines, not transmission of effects

### 5.3 – The missing variable

The common limitation across these frameworks is the absence of a variable governing the transmission of decisions into outcomes. This limits their capacity to account for systematic divergence between intention and outcome. Decision sovereignty provides a means of specifying this relationship explicitly.

As the preceding analysis shows, even where models generate divergence through combinations of costs, incentives or uncertainty, they do so by implicitly incorporating a transmission mechanism rather than specifying it directly.

The implication is not only that a transmission variable is required, but that its sign must be specified.

In economic and organisational theory, the prevailing assumption has been that decisions, once taken, translate into outcomes in a broadly predictable manner. Variations in results are typically attributed to costs, incentives or information constraints, rather than to the transmission process itself.

Decision sovereignty specifies this process directly. It describes the capacity of an institutional environment to carry decisions through to their intended effect, reflecting the combined influence of authority, control, information and institutional structure.

Its critical feature is that it is signed. Where decision sovereignty is positive, the effects of a decision are preserved and reinforced. Where it approaches zero, those effects are weakened or lost. Where it is negative, the system transforms the decision in a way that produces the opposite result.

This is not a marginal refinement – it completes the relationship between decision and outcome. Without it, the model remains structurally incomplete.

The following section shows that this variable is not optional, but structurally necessary.

## **5.4 – Execution reversal as a structural condition**

The most consequential implication of this framework is the possibility of execution reversal.

Execution reversal occurs when the institutional conditions through which a decision is implemented invert its intended effect. In such cases, improving decision quality does not mitigate failure but intensifies it.

This phenomenon can arise through a range of mechanisms. Temporal mismatches between data and decision rules may systematically misclassify outcomes. Fragmented authority may distort accountability and suppress corrective feedback. Incentive structures designed to promote efficiency may encourage behaviour that undermines system objectives. Hierarchical filtering may remove critical information as it moves through an organisation, leaving decision-makers unaware of emerging problems.

These mechanisms do not operate in isolation; they interact and reinforce one another. The result is not simply degraded performance, but a change in the direction of outcomes.

Importantly, execution reversal is not an extreme or pathological edge case. It is a predictable feature of systems in which decision intensity increases without a corresponding capacity to manage it. As analytical capability expands, the volume

and frequency of decisions rise. If the structures responsible for implementing those decisions do not adapt, the risk of inversion increases.

In such environments, efforts to improve outcomes by refining analysis, increasing data inputs or strengthening incentives may be counterproductive. They increase the throughput of a system that is already unable to process decisions effectively, accelerating the divergence between intention and result.

The framework is empirically tractable. Decision sovereignty is identifiable through variation in transmission conditions and the relationship between decision quality and realised outcomes. Its predictions are falsifiable: where  $S > 0$ , improvements in decision quality improve outcomes; where  $S = 0$ , decisions have no effect; where  $S < 0$ , improvements in decision quality worsen outcomes. Any system exhibiting persistent inversion must therefore contain a signed transmission variable.

These regimes are not purely theoretical and can be observed across different institutional contexts (Table 2).

**Table 2. Three cases of sign reversal**

<b>Robodebt (Australia, 2015–2019)</b>	<b>Reversal (<math>S &lt; 0</math>)</b>	An automated welfare compliance system used income averaging to detect overpayments, but this method generated large numbers of incorrect debts for people with variable incomes, with errors increasing as the system was applied at scale, leading to approximately 470,000 debt notices, many without legal basis, and subsequently found by the Royal Commission to be unlawful from its inception.
<b>Soviet central planning (1928–1991)<sup>i</sup></b>	<b>Collapse (<math>S \approx 0</math>)</b>	In the Soviet Union’s system of central planning, government planners set detailed production targets, but factories often met them in ways that did not reflect real demand, leading to shortages of essential goods alongside unusable or low-quality output.
<b>Boeing 737 MAX (2018, 2019)</b>	<b>Degradation (<math>S \downarrow</math>)</b>	A flight control system designed to improve aircraft handling instead repeatedly pushed the aircraft nose downward based on faulty sensor data, contributing to two crashes (Lion Air Flight 610, 29 October 2018, and Ethiopian Airlines Flight 302, 10 March 2019) when pilots were not adequately informed or able to override the system.

i. 1928 marks the start of the First Five-Year Plan under Joseph Stalin, while 1991 marks the dissolution of the Soviet Union.

## 5.5 – Implications for theory and practice

Recognising execution reversal has several implications.

First, it challenges the assumption that improving decision quality is sufficient to improve outcomes. While necessary, it is not enough. Without adequate decision sovereignty, better decisions cannot be relied upon to produce better results.

Second, it reframes persistent implementation failure. What appears as resistance, inertia or incompetence may reflect structural limits on execution capacity. In such cases, further analysis or stronger direction will not resolve the problem. The constraint lies in the system itself.

Third, it establishes the need for measurement. If decision sovereignty governs the transmission of decisions into outcomes, it must be possible to assess it in practical terms. This requires a framework that captures the key components of execution capacity and allows comparisons across projects, organisations and contexts.

The following chapter introduces such a framework. The Decision Sovereignty Index provides a structured method for assessing the conditions under which decisions are likely to be carried through, delayed or distorted. It does not capture every aspect of the transmission process, nor does it encompass the full range of conditions under which execution reversal may occur. Rather, it is designed to operate within the domain of standard institutional performance, where the objective is to distinguish between feasible and constrained execution.

Taken together, Chapters 5 and 6 establish both the necessity of decision sovereignty as a theoretical construct and the basis for its practical assessment. Chapter 5 demonstrates that organisations that invest in decision quality without first assessing the capacity of their transmission environment risk making outcomes worse, not better.

# The Decision Sovereignty Index (DSI)

## Abstract

Organisations tend to focus on the tangible costs and revenues they can readily account for – wages, costs and sales – rather than the less visible capacity to execute decisions. When execution was assumed to follow automatically from authority or incentives, its measurement attracted limited attention, but once decision sovereignty is recognised as a potential constraint, this assumption warrants reconsideration. Capabilities and forms of capital that are not systematically assessed are less likely to be valued, suggesting that a framework for systematic estimation may help improve outcomes.

The execution capacity of organisations in prediction-rich environments may be assessed through the Decision Sovereignty Index (DSI), proposed below as a composite measure of decision sovereignty under conditions of complexity and contestation, intended to make this capacity more observable, comparable and governable. The DSI measures the institutional capacity for positive transmission: the conditions under which decisions are likely to translate into outcomes as intended.<sup>i</sup>

The DSI conceptually deconstructs decision sovereignty into authority, control, execution-relevant information and veto exposure. While decision sovereignty may not be directly observable, it may be inferred from organisational behaviour rather than formal rules or mandates. The DSI is proposed as a systematic estimator of decision sovereignty, constructed from observable components. Its purpose is not to rank institutions but to enable comparison of relative performance, identify where and why decision sovereignty – and therefore execution capacity – may weaken, and inform efforts to address those constraints.

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i. The DSI provides an operational approximation of decision sovereignty within a bounded range and does not capture negative transmission directly.

## KEY TERMS

### **Decision Sovereignty Index (DSI)**

A composite measure of institutional execution capacity under conditions of complexity and contestation.

### **Authority (A)**

The ability to formally commit an organisation or system to a course of action.

### **Control (C)**

The degree of control over resources, processes and delivery pathways required for execution.

### **Execution-relevant information (I<sub>e</sub>)**

Information available at the point of action that is timely, accurate and sufficient for implementation.

### **Closure capacity (S<sub>1</sub>)**

The ability to move from deliberation to a binding decision.

### **Execution fidelity (S<sub>2</sub>)**

The degree to which authorised decisions are translated into realised outcomes.

### **Revision agility (S<sub>3</sub>)**

The capacity to revise decisions without loss of institutional legitimacy.

### **Stress resilience (S<sub>4</sub>)**

The ability to maintain learning, adaptability and performance under pressure.

### **Accountability clarity (S<sub>5</sub>)**

The coherence of authority, responsibility and liability in execution.

## 6.1 – Calculating DSI

$$(A \cdot C \cdot I_e) - V$$

The DSI for a firm or organisation may be calculated as  $(A \cdot C \cdot I_e) - V$  where  $A$  represents Authority (the ability to formally commit the system to act),  $C$  is Control (the system's control over resources and supply chains);  $I_e$  is Execution-relevant Information (available at the point of action); and  $V$  is exposure to Veto (by internal or external actors able to block, delay or dilute action).

$$S = f(S_1, S_2, \dots, S_K)$$

Decision sovereignty can be further broken down into a number ( $K$ ) of distinct but complementary components, so  $S = f(S_1, S_2, \dots, S_K)$ , with each element capturing a necessary dimension of decision sovereignty. No single component is sufficient on its own, and sovereignty may weaken or fail if any critical component collapses.

An equivalent decomposition may express decision sovereignty as a weighted aggregation of these components:

$$DSI = \sum_{k=1}^K w_k \cdot S_k$$

where  $w_k \geq 0$  and  $\sum w_k = 1$

$w_k$  denotes the weight assigned to component  $k$ , reflecting its relative importance in the overall structure of decision sovereignty, and where  $w_k \geq 0$  and  $\sum w_k = 1$ .

In the basic DSI discussed below,  $K = 5$  with the five core components comprising:

**Closure Capacity ( $S_1$ )** – The organisation's ability to move from deliberation to a binding decision. This may be calculated by decision latency, the duration of option-set expansion and the frequency of non-closure.

**Execution Fidelity ( $S_2$ )** – The degree to which authorised decisions are translated into realised outcomes. It may be assessed through implementation rates, time-to-delivery and deviation between authorised and realised outcomes.

**Revision Agility ( $S_3$ )** – The capacity to revise decisions without undermining internal legitimacy. It may be assessed through the frequency of structured reversals and policy updates that occur without changes in leadership.

**Stress Resilience (S<sub>4</sub>)** – The preservation of learning and adaptability under pressure, reflected in the persistence of communication pathways for frontline feedback and middle-management dissent.

**Accountability Clarity (S<sub>5</sub>)** – The coherence of authority, responsibility and liability within an organisation, assessed through the concentration of execution responsibility and patterns of blame diffusion.

No single proxy is decisive, and robust estimation of these factors will rely on human experience and expertise, as well as internal data analysis and external triangulation.

The DSI aggregates these components into a single index, with each component corresponding directly to a failure mode identified in earlier chapters, so

$$DSI = \sum_{k=1}^5 w_k \cdot S_k$$

where  $w_k \geq 0$  and  $\sum w_k = 1$

These weights may be uniform for diagnostic use or calibrated for specific sectors. The key requirement is transparency rather than precision, as the Index is comparative rather than absolute. Its value lies in relative diagnosis across institutions or over time, and its potential to target effective action and assess its impact.

$$Y \approx d(P) \cdot DSI$$

The DSI connects measurement to performance as realised outcomes are given by  $Y = d(P) \cdot S$ , so replacing  $S$  with its estimator yields  $Y \approx d(P) \cdot DSI$ . Improvements in the decision quality function  $d(P)$  raise outcomes only to the extent that the DSI is sufficiently high, and yield diminishing returns when the DSI is low.

$$Y_{\text{predicted}} = d(P)$$

If predicted outcomes are those implied by decision quality prior to execution, then  $Y_{\text{predicted}} = d(P)$ . This formulation is consistent with conventional economic approaches in which improved information and predictive capacity are assumed to translate into higher-quality decisions and expected outcomes, with execution effects typically treated as implicit or secondary rather than modelled explicitly.

$$Y_{\text{realised}} = d(P) \cdot S$$

If realised outcomes incorporate decision sovereignty, then  $Y_{\text{realised}} = d(P) \cdot S$ , reflecting the effect of decision sovereignty – including the impact of execution constraints – on the translation of decisions into action. In this formulation, execution capacity is treated as an explicit, central and potentially measurable determinant of outcomes.

$$\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$$

Execution efficiency  $\eta$  is defined as the ratio of realised to predicted outcomes. Under this formulation,  $\eta = S$ , so execution efficiency may be interpreted as an observable proxy for decision sovereignty, under the assumptions of the model.

$$\eta \approx \phi(\text{DSI})$$

The DSI provides a structural estimator of decision sovereignty  $S$ , such that  $S \approx \phi(\text{DSI})$ , and therefore  $\eta \approx \phi(\text{DSI})$ . Here,  $\phi(\cdot)$  denotes the relationship through which the Index is translated into an estimate of decision sovereignty, recognising that the DSI is an approximation based on observable components rather than a direct measure.

$\phi$  (phi) represents the functional relationship between the DSI and effective decision sovereignty. It ensures that the Index is interpreted as a bounded and behaviourally realistic measure of decision sovereignty.

This transformation is required because the DSI is constructed from structural components ( $\text{DSI} = (A \cdot C \cdot I_e) - V$ ), which do not scale linearly. As a result, changes in the Index may produce non-linear effects in realised execution.

In practice,  $\phi$  constrains decision sovereignty to a feasible range (typically between 0 and 1), captures threshold effects in governance systems and reflects the non-linear nature of execution failure and recovery.

Different functional forms may be applied depending on context. A simple bounded identity, e.g.,  $\Phi(\text{DSI}) = \min\{1, \max\{0, \text{DSI}\}\}$ , supports transparency and interpretability in policy and administrative settings. More complex forms may be used in analytical contexts to model threshold effects and compare institutional performance, including logistic mappings such as:

$$\Phi(\text{DSI}) = \frac{1}{1 + e^{-\alpha(\text{DSI}-\beta)}}$$

which capture non-linear transitions in execution as institutional capacity crosses critical thresholds.

In some systems, execution only begins once minimum conditions are met; a threshold-based form of  $\Phi$  captures this threshold behaviour and may be useful for governance design.

Conceptually,  $\Phi$  explains how structural capacity translates into real-world execution. Below a minimum threshold of authority, control and information, decisions tend to stall; beyond that point, execution becomes feasible and then increasingly reliable. This step-change behaviour underpins the non-linear relationship between decision sovereignty and realised outcomes.

As execution efficiency is defined as  $\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$ , and  $S \approx \Phi(\text{DSI})$ , it follows that  $\eta \approx \Phi(\text{DSI})$ . This means the DSI indicates the proportion of intended outcomes that are likely to be realised in practice.

$\Phi$  is not intended as an accounting adjustment or discretionary parameter, but as a formal representation of the non-linear behaviour of execution capacity in practice. It captures how structural capacity to execute translates into the likelihood that a decision is carried through, reflecting the threshold and non-linear nature of real-world execution.

## 6.2 – DSI scoring guide for A, C, I<sub>e</sub> and V

Institutions that address their own constraints will outperform those that invest only in prediction. Decision sovereignty is often low in long-established organisations, with corresponding execution efficiency frequently observed in the range of -0.2 to 0.4, but it can often be improved to -0.6–0.8 by strengthening deficient components of decision sovereignty.

The following tables provide a practical guide for assigning numerical values to the DSI variables of Authority (A), Control (C), Execution-relevant Information (I<sub>e</sub>) and Veto exposure (V).

The following tables provide a proposed scoring guide for assigning numerical values to the DSI variables of Authority (A), Control (C), Execution-relevant Information (I<sub>e</sub>) and Veto exposure (V). The components are directional: higher values of A, C and I<sub>e</sub> indicate greater capacity to execute decisions, while higher values of V indicate greater constraint and therefore reduce decision sovereignty.

### A – Authority

Who can formally commit the system to act?

Score Range	Structural Test	Interpretation
0.8–1.0	Binding authority with mandatory compliance	Decision is enforceable
0.4–0.7	Delegated authority within defined limits	Conditional commitment
0.1–0.3	Advisory or coordinating role only	Influence without power
0.0	No formal decision rights	Spectator

## C – Control

Who controls resources and implementation?

Score Range	Structural Test	Interpretation
0.8–1.0	Controls budget, staff, systems and timelines	Direct delivery power
0.4–0.7	Shared or negotiated control across entities	Partial execution
0.1–0.3	Delivery depends on others' assets	Fragmented execution
0.0	No control over resources or delivery mechanisms	No execution capacity

## I<sub>e</sub> – Execution Relevant Information

Who sees what is happening as decisions are enacted?

Score Range	Structural Test	Interpretation
0.8–1.0	Real-time, verified operational visibility	Early intervention possible
0.4–0.7	Regular but indirect or aggregated reporting	Delayed correction
0.1–0.3	Lagged, partial or self-reported data	Reactive only
0.0	No reliable visibility into implementation	Blind execution

## V – Veto exposure

Who can delay, block or reverse the decision after agreement:<sup>ii</sup>

Score Range	Structural Test	Interpretation
0.0–0.1	Few or no veto points	Low blockage risk
0.2–0.4	Limited escalation points or opt-out mechanisms	Moderate blockage risk
0.5–0.7	Multiple veto points across actors or processes	High blockage risk
0.8–1.0	Strong, independent veto pathways with reversal capacity	Execution highly fragile

ii. Unlike other components, veto exposure is scored as a constraint: higher values indicate greater risk of delay, blockage or reversal, and therefore reduce decision sovereignty.

### 6.3 – DSI formula

The DSI provides an estimate of decision sovereignty (S), which, in turn, shapes execution efficiency ( $\eta$ ), so higher DSI values imply a higher likelihood that decisions will be executed as intended. The values assigned in  $DSI = (A \cdot C \cdot I_e) - V$  should be conservative and specific to the decision pathway to avoid overestimating the likelihood of successful execution.

Holding predictive capacity constant, given the increasingly widespread use of AI models of comparable capability, institutions with higher DSI scores should exhibit higher rates of execution, shorter implementation lags, greater durability of outcomes and fewer instances of crisis escalation. Conversely, reforms that improve analysis without improving the DSI are likely to yield limited or transient gains. The results of a DSI assessment may therefore be interpreted as follows.

### 6.4 – DSI thresholds

DSI Range	Regime	Execution Reality
$\leq 0.00$	Symbolic	Plans exist, but delivery is structurally blocked
0.01–0.15	Fragile	Execution depends on individuals or short-term pressure
0.15–0.25	Weak	Low-intensity actions proceed; contested ones fail
0.25–0.40	Executable	Decisions are typically closed and translated into action
0.40–0.60	Robust	Sustained delivery despite contestation
$\geq 0.60$	High Sovereignty	Execution is highly reliable and resilient to shocks

These thresholds are indicative and intended to support comparative diagnosis rather than precise classification.

## 6.5 – Four-quadrant sovereignty map

The matrix below uses the values outlined above to illustrate how different combinations of decision sovereignty and decision intensity shape the likely outcomes of public sector reforms.

DSI Score	Low Decision Intensity	High Decision Intensity
Low DSI ( $\leq 0.25$ )	<b>Symbolic/Pilot Space</b> <ul style="list-style-type: none"> <li>• Voluntary standards</li> <li>• Advisory reforms</li> <li>• Early AI guidance</li> </ul>	<b>Failure Zone</b> <ul style="list-style-type: none"> <li>• Whole-of-government mandates without gates</li> <li>• High-risk AI without authority</li> </ul>
High DSI ( $\geq 0.25$ )	<b>Operational Delivery</b> <ul style="list-style-type: none"> <li>• Funded pilots</li> <li>• Central shared services</li> </ul>	<b>Durable Execution</b> <ul style="list-style-type: none"> <li>• Cabinet-gated programs</li> <li>• Statutory authorities</li> <li>• Prime Minister/Premier-anchored reforms</li> </ul>

In terms of the DSI formulation, the 0.25 threshold represents an indicative transition point at which the multiplicative effect of  $A \cdot C \cdot I_e$  begins to offset the constraining effect of  $V$ , enabling decisions to move from episodic or symbolic execution to more consistent implementation.

In practical terms, a DSI of around 0.25 marks the point at which execution shifts from being dependent on individuals or short-term pressure to being supported by the system itself.

This threshold is indicative and context-dependent, and is intended as a diagnostic guide rather than a precise or universal cut-off.

The DSI method is most informative in complex, contested settings, but may also help shift executive attention from intent to outcomes in less demanding environments.

# DSI template

## Abstract

The DSI provides an estimate of the degree of effective control (scaled between 0 and 1) available to executing actors. An increase in the DSI following improvements to decision architecture indicates the extent to which execution authority has shifted closer to the point of action. A positive  $\Delta\text{DSI}$ <sup>i</sup> may result from improvements in authority, control or execution-relevant information, reductions in veto exposure, or a combination of these factors.

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i.  $\Delta$  (delta) simply denotes change.  $\Delta\text{DSI}$  refers to the difference in DSI before and after an intervention.

## 7.1 – Conducting a DSI assessment

The following template outlines a proposed approach to conducting a DSI assessment to identify the extent to which an organisation's capacity to execute decisions is constrained by its level of decision sovereignty, and to highlight areas for improvement. Reports produced using this approach may vary in format depending on context and purpose.

### Step 1 – Define the outcome (Y)

The assessment begins by identifying the measurable outcome the organisation or project is expected to deliver. It must be observable and time-bound, rather than an abstract goal – for example, an increase in output rather than a shift in attitudes.

This outcome should then be lodged with an independent and trusted party before the process begins, but not otherwise disclosed. Publicising the outcome may create incentives to adjust reported results to align with it, as any metric used for evaluation can be subject to gaming. However, independent and confidential pre-registration is required to prevent analysts from revising the defined outcome to a more favourable metric if the process demonstrates stronger results elsewhere.

Known as HARKing (Hypothesizing After the Results are Known),<sup>56</sup> an acronym coined by social psychologist Norbert Kerr, the practice of presenting a *post hoc* hypothesis as if it were formulated a priori tends to reduce the statistical significance and replicability of any study. While it may be tempting to boost a report's potential impact by reframing it around more favourable or unexpected results, decisions based on such findings are more likely to fail, as the results may reflect statistical noise rather than underlying effects, thereby undermining the credibility of the DSI approach as a whole.

### Step 2 – Confirm predictive capacity (P)

The next step is to assess the extent to which the project is already understood within the organisation. Useful indicators may include confidential, individual interviews with the executive team to assess the degree of diagnostic consensus; consistency of problem framing across written documentation over time; and the availability of validated, evidence-based analysis.

If predictive capacity (P) appears low, the DSI assessment should be deferred until sufficient analytical clarity has been established.

### Step 3 – Identify execution-critical decisions

The next step is to identify the minimal set of decisions required for execution to occur. These are often fewer than anticipated and typically located closer to the point of delivery than senior leadership levels. This step should therefore exclude symbolic or high-level policy decisions unless they are directly required for implementation.

A sound understanding of both informal networks and formal lines of authority is required, typically informed by interviews with senior officials, middle managers, frontline staff and service providers.

### Step 4 – Score baseline DSI

Once sufficient qualitative information and quantitative data have been compiled, the next step is to apply the guidelines in the previous chapter, supported by professional judgement, to rate the organisation's Authority (A), Control (C), Execution-relevant Information ( $I_e$ ) and Veto Exposure (V) on a scale of 0 to 1.

These assessments should be conservative, given the likelihood of unobserved human behaviour, additional administrative friction and residual uncertainty within any system.

The questions used to assess each factor are as follows:

**A – Authority:** Whether the designated actor can legally and organisationally set a course of action.

**C – Control:** Whether the actor can allocate and direct the time, effort, and resources required to complete it.

**$I_e$  – Execution-relevant Information:** Whether the actor has direct and timely access to primary information from frontline staff as well as management on progress.

**V – Veto Exposure:** The extent to which internal or external actors can postpone or prevent execution.

When these component values are estimated, the Decision Sovereignty Index may be calculated as  $DSI = (A \cdot C \cdot I_e) - V$ .

As each component is scored from 0 to 1, the maximum possible DSI score is 1, as  $(1 \cdot 1 \cdot 1) - 0 = 1$ . However, while the raw DSI formulation may produce negative values where V exceeds  $(A \cdot C \cdot I_e)$ , decision sovereignty is bounded in practice, so the effective value of S is given by  $\phi(DSI)$ , which constrains the result to a feasible range (typically 0 to 1).

In applied settings, this implies that strongly negative DSI values should be interpreted as conditions of near-zero decision sovereignty, rather than taken literally, reflecting structural blockage of execution.

Context-specific considerations, such as the quality and commitment of an implementing group, may also be incorporated as judgement-based adjustments to the final score. The DSI is intended as a structured aid to professional judgement, rather than a substitute for it.

### **Step 5 – Assess decision intensity (L)**

The next step is to evaluate the intensity of the decision-making environment to provide context for the calculation and interpretation of results. Higher decision intensity generally constrains feasible decision sovereignty and increases the risk of execution breakdown.

While organisational decision making is sometimes compared to high-pressure or crisis conditions, there are material differences in intensity across contexts. For example, operational or crisis environments involve significantly higher decision intensity than routine organisational choices, such as selecting software systems or branding changes.

### **Step 6 – Report probability of project success**

Referring to the tables in Chapter 6, the assessment may then report on the project's likelihood of success, indicating whether conditions for execution are sufficient or identifying deficiencies requiring remediation.

### **Step 7 – Design alternative architectures**

If the DSI result is insufficient to support action with a reasonable likelihood of success, the next step is to outline options to reconfigure the organisation's internal architecture to increase decision sovereignty. This may include identifying alternative execution architectures that reduce veto exposure and shift decision rights closer to the point of action. If a First Track process produced the original plan, alternative approaches may be developed through a Second Track process to broaden the range of perspectives and improve the quality of decision discovery.

## **Step 8 – Score target DSI**

Once the Second Track process is complete, the revised values of A, C, I<sub>c</sub> and V for the proposed architecture may be estimated based on the best available evidence. This enables calculation of the corresponding DSI and the change ( $\Delta$ DSI) relative to the baseline.

Execution efficiency may also be estimated as  $\eta = Y_{\text{realised}} / Y_{\text{predicted}}$ , using a historical or structural counterfactual, to connect changes in decision sovereignty to observed or expected outcomes.

The assessment may then consider whether the change is sufficient to support implementation. A  $\Delta$ DSI  $\geq 0.25$  may indicate a material shift in execution capability, although this threshold is indicative and context-dependent. Where the change is insufficient, further adjustments to organisational architecture or alternative execution pathways may be required, followed by reassessment.

## **Step 9 – Validate and document assumptions**

All scoring assumptions should be documented and supported by verifiable evidence and data throughout the process. This should include qualitative feedback from employees and other stakeholders obtained through confidential interviews, surveys and questionnaires, as well as relevant output or throughput data.

As noted in Chapter 3, the “human factor” remains a material and often under-recognised influence on institutional outcomes. Outcome-based justifications should be avoided, and provision should be made for independent or third-party evaluation, as transparency is essential for replication, audit and implementation credibility.

## **Step 10 – Implementation**

The DSI process is intended as an applied analytical framework, while remaining a proposed and evolving approach to assessing decision sovereignty. Its value should be evaluated through its application in practice, with results used to test, refine and improve the framework over time. Where appropriate, its insights may inform efforts to strengthen decision sovereignty within organisations, while recognising that its effectiveness will vary by context and requires ongoing validation.

## Chapter 8

# The Decision Sovereignty Framework

### Abstract

This monograph draws together theories of the firm, governance cost curvature, human neurological limits and institutional design to examine the factors contributing to stagnant productivity, organisational inertia and technological underperformance. As decision sovereignty is proposed as a central determinant of whether decisions translate into sustained execution, strengthening execution capacity emerges as a critical institutional challenge.

## 8.1 – Framework overview and implications

The Decision Sovereignty Framework brings together the observation of convex governance costs, the concept of decision sovereignty and the development of an index to better understand, estimate and improve execution capacity. It may help translate the current expansion of AI-driven analysis and data processing capacity into more consistent and tangible outcomes.

Strengthening decision sovereignty may support companies and agencies in delivering more effective services, and may also contribute to maintaining institutional legitimacy in democratic systems by improving public confidence in their ability to deliver results.

It may further inform exploration of new institutional forms, adapted to an environment shaped by digital technologies, including the internet, mobile devices, social media and AI. Such approaches could include modular governance structures that align legitimacy more closely with execution and incorporate revision mechanisms within implementation processes.

## 8.2 – Energy grid thought experiment

The Decision Sovereignty Framework may also offer a lens through which to examine complex “wicked” problems affecting developed economies, such as, for example, the energy transition associated with accelerating climate change.

The persistent difficulty faced by many Western democracies in developing energy systems that are environmentally sustainable, affordable and reliable within existing institutional and market structures may reflect underlying constraints in decision sovereignty. Addressing these constraints could involve Second Track processes to design modernised system architectures, alongside institutional reforms to strengthen the capacity to implement them.

The growth of distributed energy generation, particularly through rooftop solar, combined with the differing scale, topography and geographic requirements of renewable technologies relative to fossil fuels, means that Australia’s legacy energy distribution framework may itself contribute to current system constraints, rather than fully supporting the transition to new energy models.

A transition from a linear “poles and wires” model to a decentralised, AI-augmented smart grid could allow Australia to better utilise its world-leading domestic adoption

of rooftop solar. Such a system could operate as a highly interconnected network, with AI coordinating distributed energy resources across multiple nodes to enhance system resilience and flexibility.

AI could coordinate thousands of individual home batteries and rooftop solar arrays to operate as an aggregated resource, augmenting supply as required. For example, when reduced solar output affects generation, AI could enable discharge from distributed storage systems to support grid stability, including during periods of peak demand such as extreme heat events.

Vehicle-to-grid integration could further utilise Australia's growing fleet of private electric vehicles, which function as distributed storage assets. AI could manage intelligent charging and discharging patterns, prioritising charging during periods of high solar generation and lower prices. It could then enable controlled discharge during evening peak periods to support grid demand, while ensuring sufficient charge is retained for typical household mobility needs.

AI could also anticipate wholesale price fluctuations and optimise the use of stored household energy, including export to the grid where appropriate, potentially reducing energy costs for households.

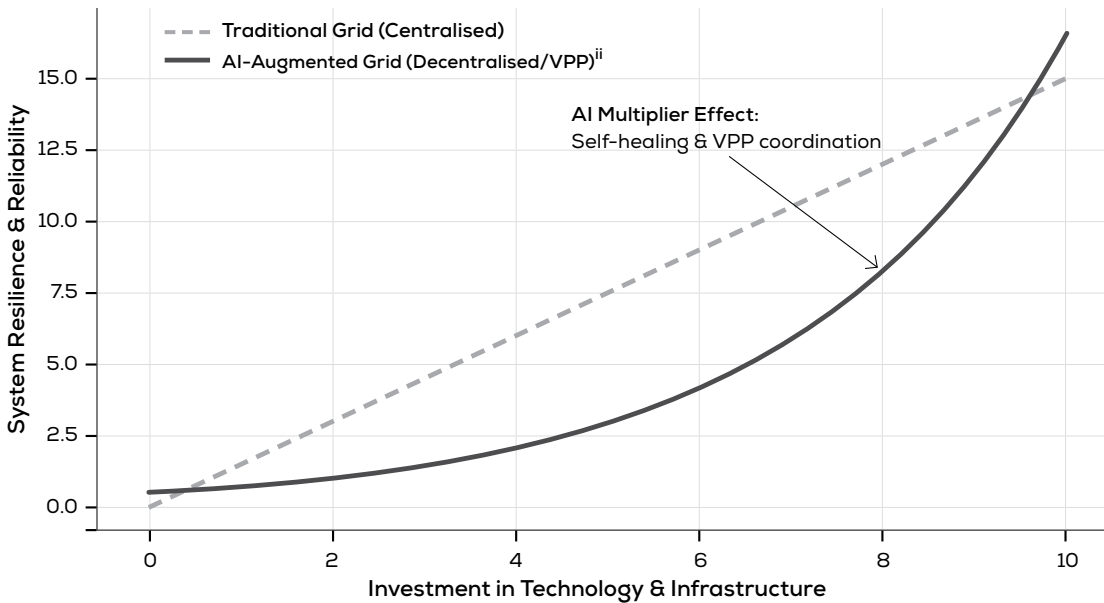
While such solutions may improve the management of power flows and costs in urban areas, resilience in regional and remote Australia could be enhanced through edge computing and self-healing network capabilities to manage the impacts of fires, floods and storms. For example, if a regional town's single transmission connection were disrupted by fire or storm damage, AI could coordinate local distributed energy resources, including rooftop solar, electric vehicles and community batteries, to maintain essential power supply despite disconnection from the wider grid.

In terms of demand-side participation, AI could support a shift from a system in which supply follows demand to one in which demand is more responsive to supply conditions. The increasing uptake of smart appliances across households provides an opportunity for AI to coordinate devices such as pool pumps, hot water systems and HVAC<sup>i</sup> units, shifting their operation to periods of high renewable generation. This effectively leverages existing thermal storage capacity within these systems to help balance the grid, without materially affecting consumer utility or comfort.

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i. Heating, ventilation and air conditioning

**Figure 5. Grid resilience vs infrastructure investment**



In terms of demand-side participation, AI could support a shift from a system in which supply follows demand to one in which demand is more responsive to supply conditions. The increasing uptake of smart appliances across households provides an opportunity for AI to coordinate devices such as pool pumps, hot water systems and HVAC units, shifting their operation to periods of high renewable generation. This effectively leverages existing thermal storage capacity within these systems to help balance the grid, without materially affecting consumer utility or comfort.

**Figure 5** illustrates how AI-augmented infrastructure in the energy sector could produce a multiplier effect in system performance. Unlike traditional “poles and wires” distribution networks, where resilience tends to scale more linearly with infrastructure investment, an AI-enabled grid could improve reliability as system flexibility increases and coordination across distributed nodes becomes more effective.

As additional nodes, such as rooftop solar systems and electric vehicle batteries, are integrated, the system may benefit from greater data availability and improved pattern recognition, enhancing the efficiency of coordination and response.

ii. Virtual Power Plant (VPP) is a network of decentralised, consumer-owned energy devices, such as rooftop solar panels, home batteries and electric vehicles, linked together by smart software.

A Second Track process that brings together relevant stakeholders to design such a system and build shared commitment to its implementation could help reduce costs and enhance system resilience. However, the central argument of this monograph is that even well-designed solutions are unlikely to succeed without sufficient institutional decision sovereignty to deliver concrete outcomes.

# Appendices

## Terminology

### Accountability clarity ( $S_5$ )

The coherence of authority, responsibility and liability in execution.

### Attribution risk

The perceived personal risk of being associated with failure, which drives defensive behaviour and decision avoidance.

### Authority (A)

The ability to formally commit an organisation or system to a course of action.

### Closure capacity ( $S_1$ )

The ability to move from deliberation to a binding decision.

### Cognitive bandwidth

The limited capacity of individuals to process information and sustain attention under increasing decision load.

### Control (C)

The degree of control over resources, processes and delivery pathways required for execution.

### Convergent impossibility

The shared limitation across multiple frameworks in accounting for the transmission of decisions into outcomes.

### Convex

A non-linear relationship in which marginal costs increase at an increasing rate as scale expands.

### Convex scaling

A condition in which each additional unit of activity or integration imposes disproportionately higher coordination and governance costs.

### Decision discovery capacity (D)

The ability of an organisation to identify, evaluate and select viable courses of action under conditions of uncertainty.

**Decision intensity (L)**

The volume, frequency and complexity of decisions faced by an institution.

**Decision rights**

The formal and informal allocation of authority to initiate, approve, modify or block decisions within an organisation.

**Decision sovereignty (S)**

The capacity of an organisation to translate authorised decisions into sustained execution despite internal constraints and external pressures.

**Decision Sovereignty Index (DSI)**

A composite measure of institutional execution capacity under conditions of complexity and contestation.

**Endogenous ceiling**

An internally generated limit where rising decision complexity and governance costs constrain execution capacity.

**Execution capacity**

The ability of an organisation to translate decisions into sustained, coordinated action at scale.

**Execution-relevant information ( $I_e$ )**

Information available at the point of action that is timely, accurate and sufficient for implementation.

**Execution fidelity ( $S_2$ )**

The degree to which authorised decisions are translated into realised outcomes.

**First Track**

Formal, hierarchical decision-making systems optimised for stability, control and accountability.

**Fight, flight or freeze**

The neurobiological reaction to perceived threat that shifts cognition from deliberation to rapid, defensive action.

**Governance curvature**

The non-linear relationship between decision intensity (L) and decision sovereignty (S), whereby increases in decision load generate disproportionately higher coordination and approval costs, reducing execution capacity.

**Predictive capacity (P)**

The ability of an organisation to generate reliable insights and forecasts to inform decision making, which does not guarantee implementation.

**Protective architectures**

Informal or formal mechanisms (e.g. committees, approvals, documentation) created to reduce individual exposure but which increase collective execution costs.

**Revision agility (S<sub>3</sub>)**

The capacity to revise decisions without loss of institutional legitimacy.

**Second Track**

Parallel, informal or semi-formal structures that enable flexible, cross-boundary decision-making and experimentation.

**Sign reversal**

A condition in which improvements in decision quality produce worse outcomes due to inversion in transmission.

**Stress resilience (S<sub>4</sub>)**

The ability to maintain learning, adaptability and performance under pressure.

**Transmission fidelity**

The extent to which a decision's intended effect is preserved or altered as it is translated into action within an institutional environment.

**Veto exposure (V)**

The extent to which decisions are subject to delay, blockage or reversal by competing authorities or processes.

**Uncontested territory**

An organisational space where governance can be configured at low cost to support high decision intensity.

**X-first**

An organisational model built around a specific technology or capability rather than adapting legacy structures.

**Yerkes–Dodson Law**

The relationship between arousal and performance, where moderate stress improves performance but excessive stress degrades it.

## Notations

### **A – Authority**

The ability to formally commit an organisation or system to a course of action.

### **C – Control**

The degree of control over resources, processes and delivery pathways required for execution.

### **d(P) – Decision quality function**

A mapping from predictive capacity (P) to the quality of decisions, representing how effectively available information is translated into actionable choices.

### **D – Decision discovery capacity**

The ability of an organisation to identify, evaluate and select viable courses of action under conditions of uncertainty.

### **DSI – Decision Sovereignty Index**

A composite measure of institutional execution capacity under conditions of complexity and contestation. A structural decomposition of execution capacity is

$$DSI = (A \cdot C \cdot I_e) - V$$

It represents an estimate of decision sovereignty based on authority, control, execution-relevant information and veto exposure.

### **$\eta$ – Execution efficiency**

The ratio of realised to predicted outcomes:

$$\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$$

Under the model,  $\eta = S$ , making execution efficiency an observable proxy for decision sovereignty.

### **F(P), G(D), H(S) — Outcome ceiling functions**

Mappings that translate predictive capacity (P), decision discovery capacity (D) and decision sovereignty (S) into their respective contributions to realised outcomes.

In  $Y = \min\{F(P), G(D), H(S)\}$ , each function defines a binding constraint.

### **$I_e$ – Execution-relevant Information**

Information available at the point of action that is timely, accurate and sufficient for implementation.

### **$\kappa$ – Governance curvature parameter**

A scalar capturing the sensitivity of decision sovereignty ( $S$ ) to increases in decision intensity ( $L$ ):

$$S(L) = e^{-\kappa L^2}, \kappa > 0$$

where  $\kappa$  determines the rate at which sovereignty declines as decision intensity increases, and  $e$  denotes the base of the natural logarithm.

### **L – Decision intensity**

The volume, frequency and complexity of decisions faced by an institution.

Defined as a function of predictive capacity:

$$L = L(P), \quad L'(P) > 0$$

Decision intensity captures the expansion of option sets, counterfactual visibility, contestability and coordination demands generated by predictive capacity.

### **P – Predictive capacity**

The ability of an organisation to generate reliable insights and forecasts to inform decision making, which does not guarantee implementation.

### **S – Decision sovereignty**

The capacity of an organisation to translate authorised decisions into sustained execution despite internal constraints and external pressures.

Defined on the real line  $S \in \mathbb{R}$ ,<sup>i</sup> where  $S > 0$  indicates faithful transmission,  $S \approx 0$  collapse, and  $S < 0$  reversal. Applied measures, such as the DSI, may restrict  $S$  to a bounded interval  $[0, 1]$  for practical assessment.

### **$S_1$ – Closure capacity**

The ability to move from deliberation to a binding decision.

### **$S_2$ – Execution fidelity**

The degree to which authorised decisions are translated into realised outcomes.

### **$S_3$ – Revision agility**

The capacity to revise decisions without loss of institutional legitimacy.

### **$S_4$ – Stress resilience**

The ability to maintain learning, adaptability and performance under pressure.

### **$S_5$ – Accountability clarity**

The coherence of authority, responsibility and liability in execution.

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i. Here  $\mathbb{R}$  denotes the set of real numbers.

### **S(L) – Decision sovereignty as a function of decision intensity**

The level of decision sovereignty (S) as a function of decision intensity (L), describing how an institution's capacity to translate decisions into sustained execution varies with increasing decision load. Typically non-linear and decreasing in L. A common specification is:

$$S(L) = e^{-\kappa L^2}, \kappa > 0,$$

where  $\kappa$  governs the sensitivity of sovereignty to decision intensity.

### **V – Veto exposure**

The extent to which decisions are subject to delay, blockage or reversal by competing authorities or processes.

### **Y – Realised outcomes**

The observable outcomes generated after accounting for both decision quality and execution capacity.

### **Y\_predicted – Predicted outcomes**

The outcomes implied by decision quality alone:

$$Y_{\text{predicted}} = d(P)$$

### **Y\_realised – Realised outcomes (expanded form)**

Outcomes incorporating decision sovereignty:

$$Y_{\text{realised}} = d(P) \cdot S$$

### **$\phi$ (DSI) – Mapping function**

A transformation that converts the structural index (DSI) into an estimate of decision sovereignty:

$$S \approx \phi(\text{DSI})$$

This reflects the non-linear and threshold-based nature of execution.

## Formulas

### Traditional assumption

**Formula:**  $Y = d(P)$

In traditional economic and policy analysis, realised outcomes are implicitly modelled as a function of decision quality derived from prediction and execution is assumed to be frictionless.

### Execution constraint

**Formula:**  $Y = \min\{F(P), G(D), H(S)\}$

The functions  $F(P)$ ,  $G(D)$  and  $H(S)$  represent the maximum achievable outcomes (ceilings) imposed by each capacity (predictive capacity  $P$ , decision discovery capacity  $D$  and decision sovereignty  $S$ ), with the lowest acting as the effective bottleneck on realised outcome ( $Y$ ).

Actual results are constrained by the weakest institutional capacity, as outcomes bind at bottlenecks rather than averaging strengths. Improving non-binding capacities yields little return once any factor reaches its limit.

### Decision sovereignty

**Formula:**  $Y = d(P) \cdot S$

**S:** Decision sovereignty, defined on the real line  $S \in \mathbb{R}$ ,<sup>ii</sup> where  $S > 0$  indicates faithful transmission,  $S \approx 0$  collapse, and  $S < 0$  reversal.

Outcomes are the product of decision quality and transmission capacity, meaning that more accurate or informed decisions do not guarantee better outcomes in the absence of sufficient decision sovereignty. Applied measures, such as the DSI, may restrict  $S$  to a bounded interval for practical assessment.

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ii. Here  $\mathbb{R}$  denotes the set of real numbers.

## Decomposition of decision sovereignty

**Formulation:**  $S = f(S_1, S_2, \dots, S_K)$

Decision sovereignty may be decomposed into  $K$  distinct but complementary components, each capturing a necessary dimension of transmission capacity. No single component is sufficient, and failure in any critical component may reduce overall sovereignty.

This functional form implies that decision sovereignty is non-substitutable across its components, and may exhibit bottleneck behaviour where failure in any critical dimension constrains overall  $S$ .

A corresponding operational form, for measurement purposes, is given by:

$$DSI = \sum_{k=1}^K w_k \cdot S_k$$

where  $w_k \geq 0$  and  $\sum w_k = 1$

with  $w_k$  denoting the relative weight assigned to component  $k$ .

## Execution efficiency

**Formula:**  $\eta = Y_{\text{realised}} / Y_{\text{predicted}} \Rightarrow \eta = S$

Execution efficiency ( $\eta$ ) is the observable expression of decision sovereignty ( $S$ ).

## Prediction and decision intensity

**Formula:**  $L = L(P), \quad L'(P) > 0$

**L:** Decision intensity

**P:** Predictive capacity

As predictive capacity increases, institutions face higher decision intensity. Expanding option sets, counterfactual visibility and contestability increase coordination demands, such that greater predictive capacity can strain governance rather than simplify it.

## Governance curvature

**Formula:**  $S(L) = e^{-\kappa L^2}$ ,  $\kappa > 0$

where governance curvature parameter ( $\kappa$ ) determines the rate at which decision sovereignty ( $S$ ) declines as decision intensity ( $L$ ) increases, and  $e$  denotes the base of the natural logarithm.

Decision sovereignty declines at an increasing rate as decision intensity rises. Beyond a given threshold, additional increases in decision intensity are associated with sharp reductions in execution capacity.

## Decision Sovereignty Index (DSI)

**Formula:**  $DSI = (A \cdot C \cdot I_e) - V$

A: Authority, C: Control,  $I_e$ : Execution-relevant Information, V: Veto exposure

A composite measure of decision sovereignty, capturing the institutional conditions under which decisions are translated into outcomes. Higher values indicate greater capacity for effective transmission. Changes in the DSI correspond to changes in execution capacity under given institutional conditions.

## Formal alignment

Predicted outcomes:  $Y_{\text{predicted}} = d(P)$

Realised outcomes:  $Y_{\text{realised}} = d(P) \cdot S$

Execution efficiency:  $\eta = \frac{Y_{\text{realised}}}{Y_{\text{predicted}}} = S$

The Decision Sovereignty Index (DSI) provides a structural estimator of  $S$ , such that  $S \approx \phi(DSI)$ , and therefore  $\eta \approx \phi(DSI)$ .

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# Foundational perspectives

## 1. Execution: The discipline of getting things done (2002, reprint 2011)

*by Larry Bossidy and Ram Charan, with Charles Burck*

**Key insight:** A foundational work on execution as a managerial discipline. It argues that execution is not a discrete phase but must be embedded in strategy, operations and people processes. Failures of execution arise from weak linkages between these domains, combined with insufficient accountability and leadership engagement.

## 2. The 4 disciplines of execution (2012)

*by Chris McChesney, Sean Covey and Jim Huling*

**Key insight:** The book identifies the “Whirlwind” (the urgent, day-to-day operational demands) as the primary barrier to executing strategic priorities. It proposes a framework centred on a small number of “wildly important goals” and emphasises the use of lead measures, rather than lag measures, to ensure that strategic objectives are not overtaken by daily operations.

## 3. Thinking, fast and slow (2011)

*by Daniel Kahneman*

**Key insight:** While a work of psychology, the book is central to understanding systematic biases in decision making. Kahneman identifies cognitive biases such as the planning fallacy and overconfidence, which lead organisations to underestimate costs, timelines and risks. These biases contribute to unrealistic expectations that can undermine implementation.

#### 4. The knowing-doing gap (1999)

*by Jeffrey Pfeffer and Robert I. Sutton*

**Key insight:** The book examines why organisations often know what to do but fail to act. It identifies barriers such as treating talk as a substitute for action, fear of failure, and organisational practices that prioritise analysis over execution, leading to a persistent gap between knowledge and implementation.

#### 5. Adhocracy: The power to change (2010)

*by Robert H. Waterman Jr.*

**Key insight:** Waterman contrasts rigid hierarchical structures with more flexible, project-based forms of organisation. He argues that “adhocracy” – temporary, adaptive teams operating alongside formal structures – enables organisations to respond more effectively to change by reducing the friction associated with bureaucratic processes.

#### 6. Leading change (1996)

*by John P. Kotter*

**Key insight:** Kotter outlines an eight-step process for leading organisational change. He identifies common sources of failure, including a lack of urgency at the outset and the failure to anchor changes in organisational culture, which can prevent decisions from being sustained in practice.

#### 7. Strategy safari (1998)

*by Henry Mintzberg, Bruce Ahlstrand and Joseph Lampel*

**Key insight:** The book surveys multiple schools of strategy and critiques the “Design School” view of strategy as a detached, top-down process. It argues that separating strategy formulation from implementation limits effectiveness, as it overlooks the emergent, adaptive nature of strategy shaped by real-world conditions.

# Endnotes

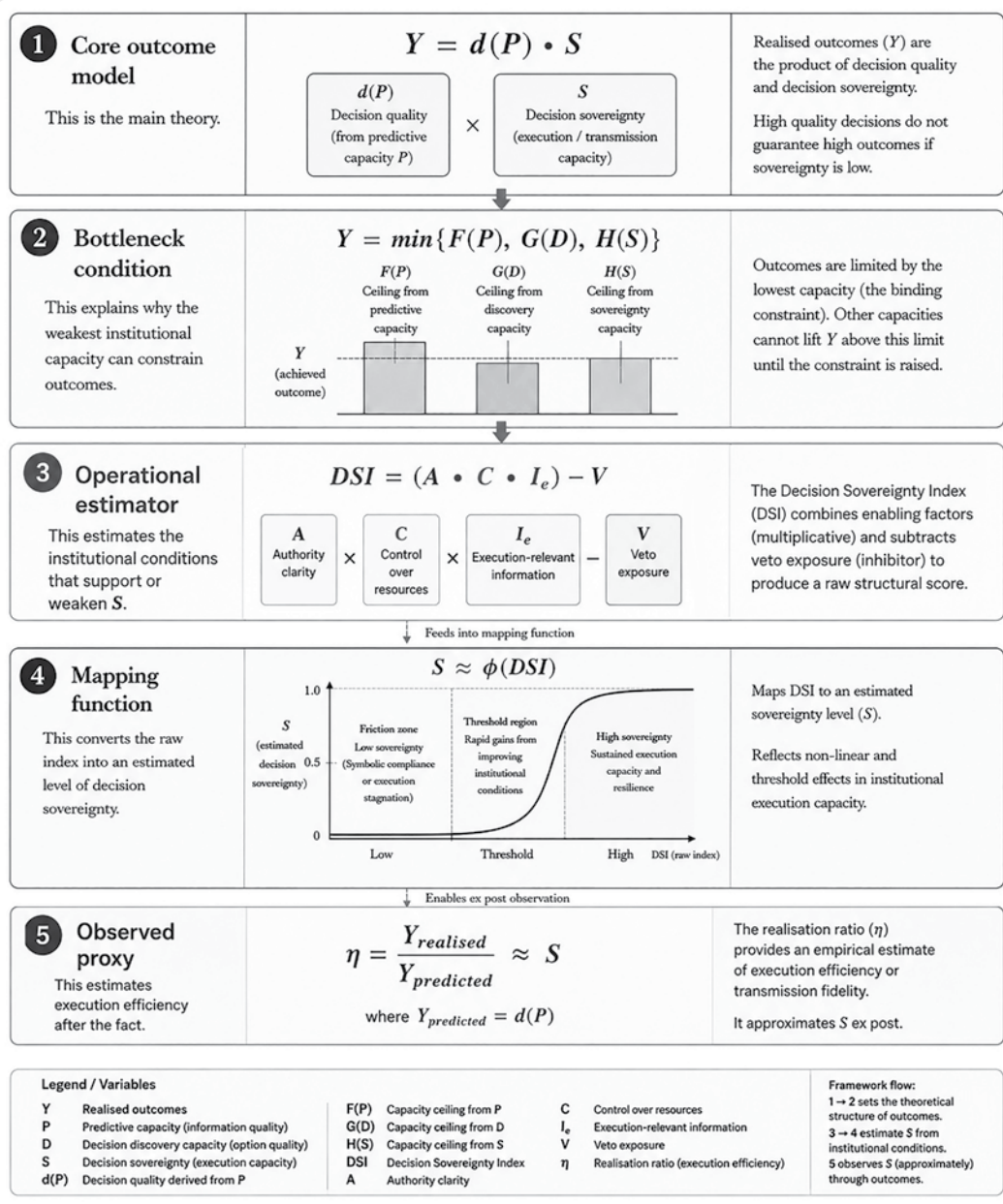
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# Decision Sovereignty Framework Architecture











$\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$  &  
 $\phi(\text{DSI}) = \min\{1, \max\{0, \text{DSI}\}\}$   
 $e^{-\kappa L^2}, \kappa > 0$   
 $(S_1, S_2, \dots, S_k)$   
 $(A \cdot C \cdot I_e) - V$   
 $Y \approx d(P) \cdot S$   
 $\phi(\text{DSI}) = \min\{1, \max\{0, \text{DSI}\}\}$   
As execution efficiency is defined as  
 $\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$ , and  
 $S = \phi(\text{DSI})$ , it follows that  $\eta = \phi(\text{DSI})$   
 $\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$   
 $S = \phi(\text{DSI})$   
 $\phi(\text{DSI}) = 1 / \sum_{k=1}^{\infty} w_k \cdot S_k$   
 $S(L) = e^{-\kappa L^2}, \kappa > 0$   
 $S = f(S_1, S_2, \dots, S_k)$   
 $(A \cdot C \cdot I_e) - V$   
where  $w_k \geq 0$  and  $\sum w_k = 1$   
formula:  $\eta = Y_{\text{realised}} / Y_{\text{predicted}} \Rightarrow \eta = S$   
formula:  $L = L(P), L'(P) > 0$   
 $\sum w_k = 1$   
 $S \approx \phi(\text{DSI})$   
 $\phi(\text{DSI}) = 1 / (1 + e^{(-\alpha(\text{DSI} - \beta))})$   
 $(A \cdot C \cdot I_e) - V$   
 $\phi(\text{DSI}) = \min\{1, \max\{0, \text{DSI}\}\}$   
where  $\kappa$  determines the rate at which soft-  
intensity increases, and  $e$  denotes the  
 $Y = d(P) \cdot S$   
 $Y = d(P) \cdot S$   
 $(A \cdot C \cdot I_e) - V$   
 $L'(P) > 0$   
 $\phi(\text{DSI}) = 1 / (1 + e^{(-\alpha(\text{DSI} - \beta))})$   
 $S(L) = e^{-\kappa L^2}, \kappa > 0$   
As execution efficiency is defined as  $\eta = Y_{\text{realised}} / Y_{\text{predicted}} = S$ , and  $S = \phi(\text{DSI})$ , it follows that  $\eta = \phi(\text{DSI})$   
 $Y = d(P) \cdot S$   
 $w_k \geq 0$   
 $(A \cdot C \cdot I_e) - V$   
 $Y_{\text{predicted}} = d(P) \cdot S$

