

The Architecture of Institutional Intelligence

AI, authority and the systems through which organisations
perceive, decide and act.

Publication record

A foundational enquiry into AI, authority and the systems through which organisations perceive, decide and act.

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ABSTRACT

Artificial intelligence enters an institution through tasks, but its consequences accumulate at the level of authority. This transaction offers a framework for examining how AI changes what an organisation can perceive, remember, interpret, decide, execute and correct - and the conditions required to preserve responsibility when those capacities are distributed across people, models, vendors and workflows.

Automation asks whether a task can be performed by a machine. Institutional intelligence asks what becomes of judgement, responsibility and legitimacy when the machine enters the organisation.

Seven chambers of the argument

The edition moves from premise to institutional control: from what changes when AI enters an organisation, to the obligations required when capability begins to exercise authority.

01	Premise	The institution-model system
02	Six capacities	Perceive, remember, interpret, decide, act, contest
03	Modes of authority	Instrument to constitutive system
04	Failure atlas	How institutions fail around technically functioning systems
05	Institutional controls	Eight obligations joining capability to responsibility
06	Applied readings	Three hypothetical institutional settings
07	Method & sources	Evidence, limits and reference register

The consequential unit is not the model.

It is the institution model system: people, evidence, incentives, rules, vendors, workflows and machines bound together around authority.

AI arrives as software. It remains as institutional architecture.

01	Task	Retrieval, classification, synthesis, prediction, communication or execution may each appear bounded when examined alone.
02	System	As outputs enter workflows, they reshape attention, memory, meetings, permissions, incentives and the sequence in which evidence becomes action.
03	Authority	The decisive change is often a transfer of practical authority: who can see, frame, recommend, approve, act, challenge and remember.

The governance error

Organisations frequently begin with a technology inventory: models, licences, pilots and use cases. Yet two identical models can create radically different consequences. A language model used to draft a meeting note is an instrument. The same model connected to records, permissions and communication channels may become infrastructure. If its classifications determine who is seen, investigated, promoted, served or excluded, it may become constitutive of the institution's practical reality.



PLATE I

THE ANATOMY OF A DECISION

Six capacities through which an institution becomes intelligent.

An AI system changes the organisation when it changes any one of these capacities – and changes it profoundly when several become coupled.

I

Perceive

What becomes visible?

AI changes the institutional aperture. It can reveal weak signals at scale, but it can also make the measurable appear complete.

Test: Identify what the system cannot see, whose knowledge is absent and which signals it privileges.

II

Remember

What can be recalled and traced?

Retrieval can make memory operational only when provenance, version, retention and access survive updates and staff turnover.

Test: Reconstruct a consequential answer from source record to current output without relying on the vendor or original operator.

III

Interpret

How does evidence acquire meaning?

Models can enlarge classification, comparison and explanation while importing categories and thresholds that were never authorised.

Test: Make ontology, thresholds, uncertainty and alternative interpretations inspectable to responsible domain experts.

IV

Decide

Where does judgement reside?

The critical question is not whether a human clicked approve, but whether that person had time, evidence, authority and capacity to disagree.

Test: Name the accountable decision owner and demonstrate that refusal or reversal remains materially possible.

V

Act

What can the system cause?

Agents convert analysis into communication, transactions, permissions and operational change; each action surface enlarges both capability and blast radius.

Test: Enumerate action channels, permission boundaries, escalation paths and irreversible consequences before deployment.

VI

Contest & correct

How does the institution learn that it is wrong?

Appeal, audit, incident response and correction are how an institution remains governable when intelligence is distributed.

Test: An affected person must be able to reach a competent human, challenge the evidence and obtain a recorded correction.

ANALYTICAL NOTE

Intelligence is relational.

No capacity is sovereign. Perception without correction becomes certainty. Memory without provenance becomes mythology. Action without contestability becomes force.

R/01

Perceive +
remember

Creates institutional situational awareness - or entrenches the biases of the record.

R/02

Interpret + decide

Creates speed and consistency - or hides normative choices inside technical thresholds.

R/03

Decide + act

Creates operational agency - or allows errors to propagate before human comprehension catches up.

R/04

Contest + correct

Creates institutional learning - if the route is reachable, competent and capable of changing the system.

The aim is not to maximise every capacity. It is to compose them so that greater capability does not outrun responsibility.

From instrument to constitution.

The same model can occupy radically different institutional roles. Governance must follow the authority actually exercised, not the product label.

01	Instrument	None transferred A bounded tool produces analysis, retrieval or generation. A person remains responsible for interpretation and use. Governance: Quality, provenance and appropriate-use limits.
02	Advisor	Judgement influenced Recommendations shape attention, framing and the alternatives that appear reasonable. Governance: Calibration, counter-evidence and meaningful dissent.
03	Delegate	Bounded action granted A system sends, schedules, approves, purchases, routes or triggers within explicit permissions. Governance: Action scopes, reversibility, logs, escalation and kill authority.
04	Infrastructure	Organisation shaped The system structures memory, ontology, workflow and coordination across functions. Governance: Architecture ownership, interoperability, continuity and capability retention.
05	Constitutive system	Institutional reality altered AI changes who can know, decide and act - and therefore changes the practical constitution of the institution. Governance: Legitimacy, rights, public reason and independent examination.

A gradient, not a taxonomy

A system may occupy several modes at once. It can remain an instrument for one team, act as a delegate in another workflow and become infrastructure at the enterprise level. The relevant classification is therefore domain specific and consequence specific. Governance should attach to each decision domain, not only to the software product as a whole.



PLATE II

THE UNOWNED DECISION

Systems fail before they become technically incorrect.

Institutional failure can emerge through framing, dependence and authority even when model accuracy remains within specification.

F/01	Epistemic compression	What can be measured, retrieved or modelled is mistaken for the whole field of reality. Diagnostic: Which important facts become harder to express inside the system?
F/02	Responsibility diffusion	The vendor, model, operator, manager and policy each explain one fragment; no actor owns the whole decision. Diagnostic: Who can explain, reverse and answer for the outcome without referring responsibility elsewhere?
F/03	Capability atrophy	Human skill erodes while oversight survives only as a ceremonial click at the end of an automated chain. Diagnostic: Can the institution still operate, inspect and challenge the process during system failure?
F/04	Vendor sovereignty	A third party controls the ontology, logs, memory, update path or exit conditions through which the institution understands itself. Diagnostic: What remains intelligible and operable if the provider changes terms, fails or disappears?
F/05	Feedback capture	Model outputs alter future inputs and human beliefs until the system confirms its own earlier classifications. Diagnostic: Which independent observations can still falsify the system's account of reality?
F/06	Invisible precedent	Repeated recommendations harden into policy without explicit deliberation, authorization or a record of change. Diagnostic: When did a recurring output become the institution's effective rule?

FAILURE RECONSTRUCTION

The unowned decision

Responsibility diffusion is not a philosophical abstraction. It is a repeatable operating pattern.

01	Source	The data team can explain collection, but not why the field became decisive.
02	Model	The provider can explain performance, but not the institution's legal or operational duty.
03	Workflow	The product owner can explain routing, but not the judgement encoded in thresholds.
04	Operator	The user can explain the final click, but lacks practical ability to challenge the recommendation.
05	Management	Leadership can explain the policy objective, but not a particular adverse result.
06	Affected person	The person experiences the institution as one authority, yet encounters only fragments when seeking an answer.

Accountability must be designed across the chain before deployment; it cannot be reconstructed after harm by adding more signatures to the end.



PLATE III

CONTESTATION AS INTELLIGENCE

Govern the chain of consequence.

The purpose of control is not to stop intelligence. It is to keep capability, responsibility and legitimacy joined as systems become more powerful.

C/01	Decision rights before deployment	Define what may never be delegated, what requires dual authorization and what can proceed within bounded thresholds.
C/02	Evidence and model lineage	Preserve the chain from source and transformation to model version, output, decision and downstream action.
C/03	Calibrated human authority	Design human involvement around consequence and reversibility - not the appearance of supervision.
C/04	Appeal and redress	Create a competent route through which affected people can understand, contest and correct an outcome.
C/05	Continuous examination	Monitor performance, drift, unequal effects, security, incidents and changes in the operating environment.
C/06	Continuity and portability	Retain records, skills, interfaces and exit rights sufficient to survive vendor, model or personnel change.
C/07	Independent challenge	Use red teams, audit, specialist criticism and dissenting evidence appropriate to the system's consequence.
C/08	Proportionate public reason	Where public authority or fundamental interests are implicated, disclose enough for legitimacy and democratic control.

CONTROL DESIGN

Human oversight is a capability, not a location.

A person at the final step does not create meaningful oversight if the evidence, time, competence, authority or organisational permission to disagree is absent.

O/01	Competence	Does the responsible person understand the domain, system limits and consequence?
O/02	Evidence	Can they inspect provenance, uncertainty and relevant counter-evidence?
O/03	Time	Can they deliberate before the workflow makes the decision effectively irreversible?
O/04	Authority	Can they refuse, stay, reverse or escalate without penalty or circumvention?
O/05	Feedback	Does disagreement alter future operation, or merely create an exception around an unchanged system?

For low consequence, reversible activity, oversight can be sampled or exception based. For rights, liberty, safety, livelihood or public power, the institution requires deeper evidence, stronger authorization and genuinely independent routes of contestation.

CHAPTER VI / APPLIED READINGS

Three hypothetical institutional settings.

These vignettes demonstrate the framework. They are not client claims, completed engagements or representations of any named institution.

ILLUSTRATIVE CASE / A

Public administration

Setting. A benefits agency introduces AI triage for incomplete claims.

Institutional risk. Triage can become de facto eligibility policy if certain lives are rendered anomalous or burdensome.

Design response. Keep entitlement rules outside the model; preserve source evidence; make triage reasons visible; guarantee a human route before adverse action; monitor exclusions, delay and reversal rates.

ILLUSTRATIVE CASE / B

Industrial enterprise

Setting. A manufacturer deploys an agent across procurement, maintenance and inventory workflows.

Institutional risk. Local optimisation can transfer risk across departments, hide supplier concentration and create dependency on a vendor-controlled ontology.

Design response. Enumerate action permissions; model cross functional consequences; retain approval thresholds; record overrides; maintain portable process and asset memory; rehearse system-off continuity.

ILLUSTRATIVE CASE / C

Regulated decision

Setting. A regulated institution uses models to prioritise investigations and recommend enforcement pathways.

Institutional risk. Historical enforcement patterns can become future targeting logic while formal discretion remains nominally human.

Design response. Separate detection from legal judgement; expose alternatives; preserve exculpatory evidence; require reasoned authorization; audit feedback effects and provide independent review.

Application sequence

01	Map authority	Identify the decision, its consequence and the role AI actually occupies.
02	Reconstruct the chain	Trace evidence, interpretation, authorization, action, appeal and memory.
03	Declare agency	Enumerate permissions, responsible roles, affected parties, monitoring and dependencies.
04	Design controls	Join capability to calibrated human authority, redress, examination and continuity.
05	Re-examine	Review after material change, incident, drift, new evidence or institutional reorganisation.



PLATE IV

THE CONTINUITY ARCHIVE

CONTINUITY NOTE

An institution that cannot leave a system does not fully govern it.

Memory, portability, retained capability and exit are not procurement appendices. They determine whether the organisation remains sovereign over its own intelligence.

01	Records	Export source evidence, transformation history, outputs, decisions, overrides and incidents in usable form.
02	Ontology	Document classifications, relationships, thresholds and business meaning independently of the provider.
03	Workflows	Retain process maps, permissions, interfaces and manual continuity paths.
04	Capability	Preserve people who can operate, inspect, challenge and rebuild critical functions.
05	Transition	Define notice, assistance, deletion, verification and staged migration before dependency becomes material.

A framework for examination – not a universal compliance checklist.

This transaction synthesises public governance frameworks, management system standards and peer-reviewed research on human-AI collaboration, feedback effects, oversight and algorithmic audit.

Its original contribution is an institutional capacities model and a modes of authority gradient for examining how practical authority moves through human model systems. The framework does not substitute for sector-specific law, constitutional analysis, technical validation, cybersecurity, safety engineering, labour consultation or affected community participation. Its purpose is to establish the institutional questions that must surround those disciplines.

Evidence was selected for relevance to organisational authority, lifecycle governance, public accountability and the practical capacity to contest automated decisions. The source register provides links for independent examination. Publication does not imply peer review unless a later version explicitly records that process.

M/01	Synthesis	The argument combines established governance principles into an institutional architecture rather than restating a single standard.
M/02	Original framework	The six capacities and five modes are analytical instruments proposed by the Foundation.
M/03	No performance claim	No deployment outcome, client result, model benchmark or institutional adoption is claimed.
M/04	Revision	Material criticism, new evidence and implementation experience may require a later version.

SOURCE REGISTER

Evidence should remain reachable.

Primary frameworks and peer-reviewed research used to build the argument are listed with stable public links.

S01	NIST	Artificial Intelligence Risk Management Framework (AI RMF 1.0) (2023) https://www.nist.gov/itl/ai-risk-management-framework
S02	NIST	Generative Artificial Intelligence Profile (2024) https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.600-1.pdf
S03	NITI Aayog	Responsible AI: Approach Document for India, Part 1 (2021) https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf
S04	NITI Aayog	Operationalizing Principles for Responsible AI, Part 2 (2021) https://www.niti.gov.in/node/463
S05	European Commission	AI Act: Regulatory framework and high-risk obligations (2026) https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai
S06	Government Digital Service	Algorithmic Transparency Recording Standard Hub (2025) https://www.gov.uk/government/collections/algorithmic-transparency-recording-standard-hub
S07	U.S. GAO	Artificial Intelligence: An Accountability Framework (2021) https://www.gao.gov/assets/gao-21-519sp.pdf

Governance, collaboration and audit.

The reference register is part of the publication object and should travel with the argument.

S08	UNESCO	Recommendation on the Ethics of Artificial Intelligence (2021) https://www.unesco.org/en/artificial-intelligence/recommendation-ethics
S09	OECD	OECD AI Principles (2024 update) https://www.oecd.org/en/topics/ai-principles.html
S10	ISO / IEC	ISO/IEC 42001: Artificial intelligence management system (2023) https://www.iso.org/standard/42001
S11	Vaccaro, Almaatouq and Malone	When combinations of humans and AI are useful (2024) https://doi.org/10.1038/s41562-024-02024-1
S12	Glickman and Sharot	How human-AI feedback loops alter human judgements (2025) https://doi.org/10.1038/s41562-024-02077-2
S13	Green	The flaws of policies requiring human oversight of government algorithms (2022) https://doi.org/10.1016/j.clsr.2022.105681
S14	Raji et al.	Closing the AI Accountability Gap (2020) https://arxiv.org/abs/2001.00973

COLOPHON

Read. Test. Contest. Build.

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