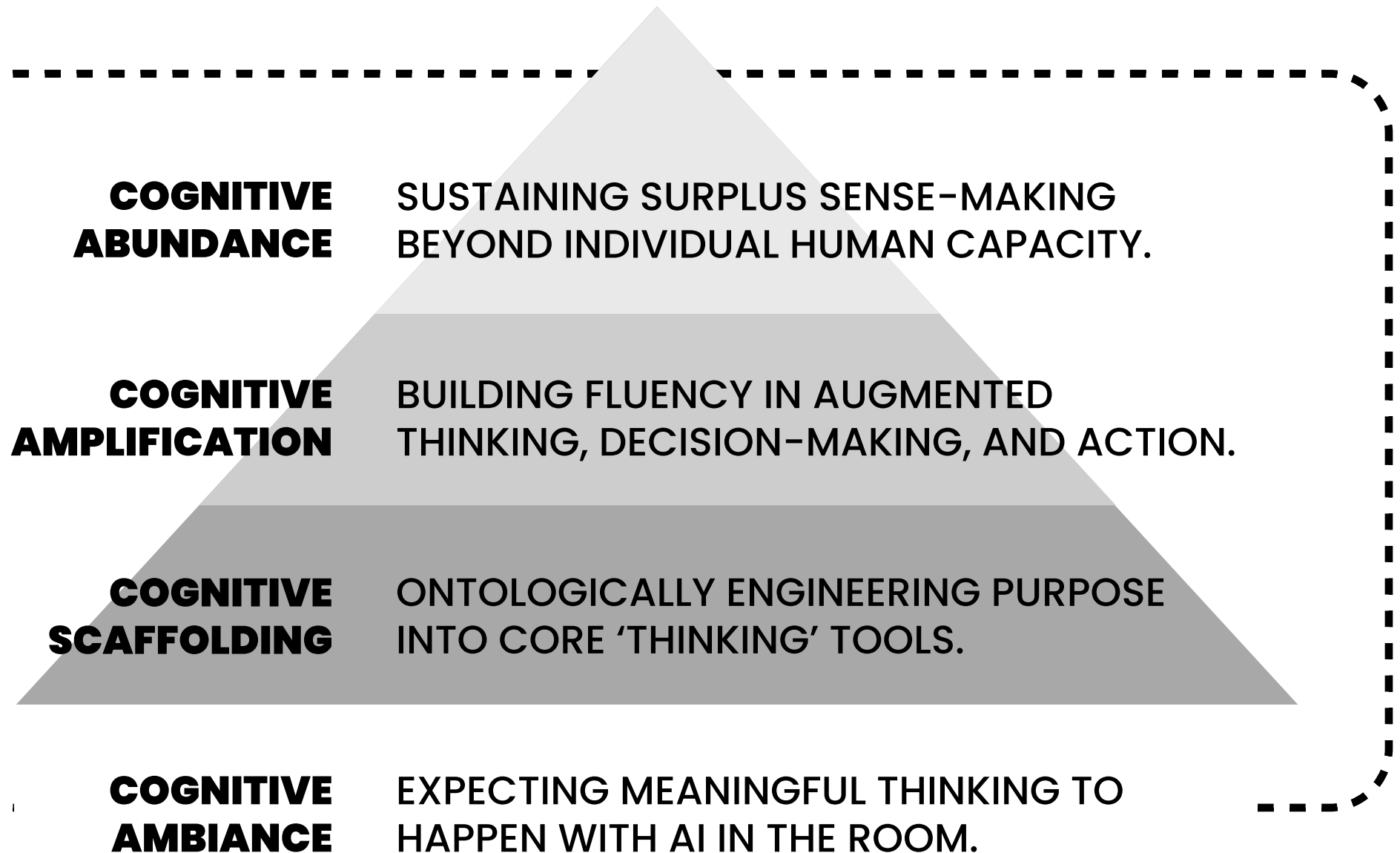


COGNITIVE INFRASTRUCTURE FRAMEWORK V1.0

COGNITIVE INFRASTRUCTURE FRAMEWORK



KEY DEFINITIONS – COGNITIVE INFRASTRUCTURE

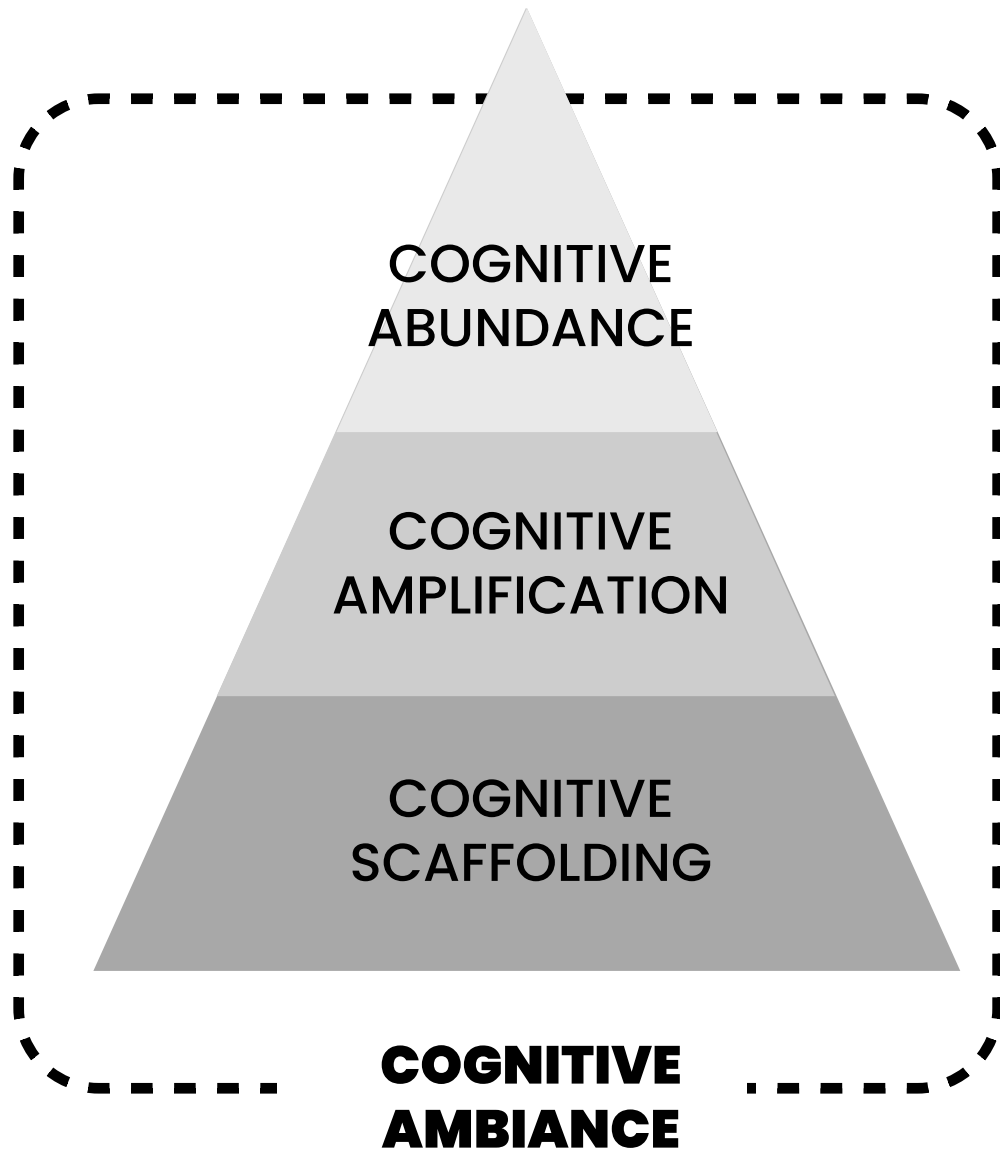
Cognitive Infrastructure refers to the organisational systems, tools, norms, and shared conceptual frameworks that enable augmented sense-making, decision-making, and learning at scale.

It is distinct from culture, technology, or process alone. Culture shapes behaviour but does not necessarily provide cognitive leverage. Technology provides capability but does not determine how that capability is used. Processes prescribe sequences of action but rarely encode judgement.

Cognitive Infrastructure operates at the level of metadesign. Rather than prescribing specific decisions, it designs the conditions under which high-quality thinking can reliably emerge.

The framework is organised around four interdependent dimensions. Each addresses a distinct failure mode commonly observed in AI adoption, and each represents a necessary condition for sustained return on intelligence.

KEY DEFINITIONS – COGNITIVE AMBIANCE

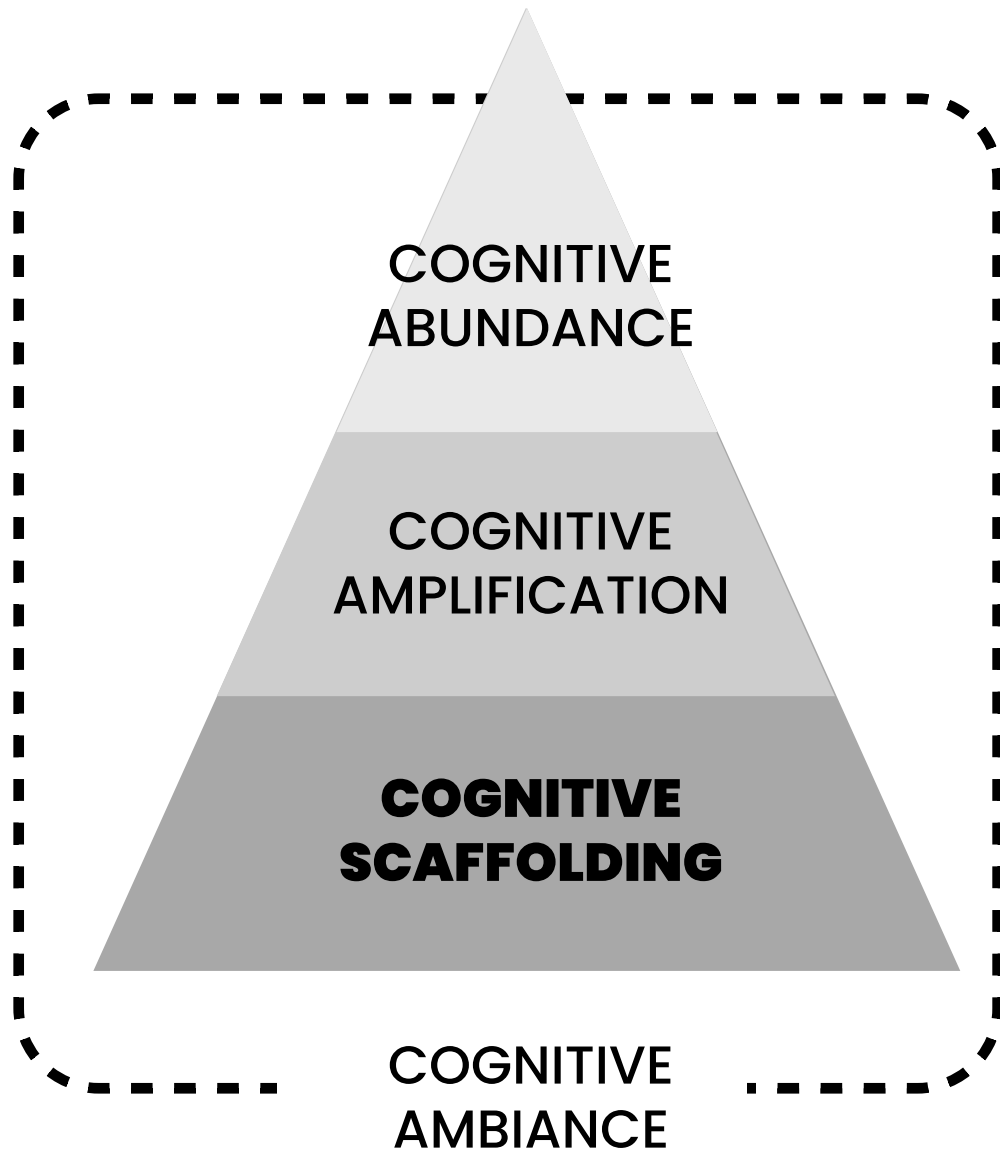


Cognitive Ambiance is the leadership-set expectation that meaningful thinking with AI is normal, safe, and expected.

In organisations where this expectation is absent, AI remains peripheral – used cautiously, quietly, or performatively. Where it is present, people stop asking whether they are allowed to use AI and start asking how to think better with it.

Ambiance is not created through policy alone. It is shaped through visible leadership behaviour, incentives, and what is rewarded or ignored.

KEY DEFINITIONS – COGNITIVE SCAFFOLDING

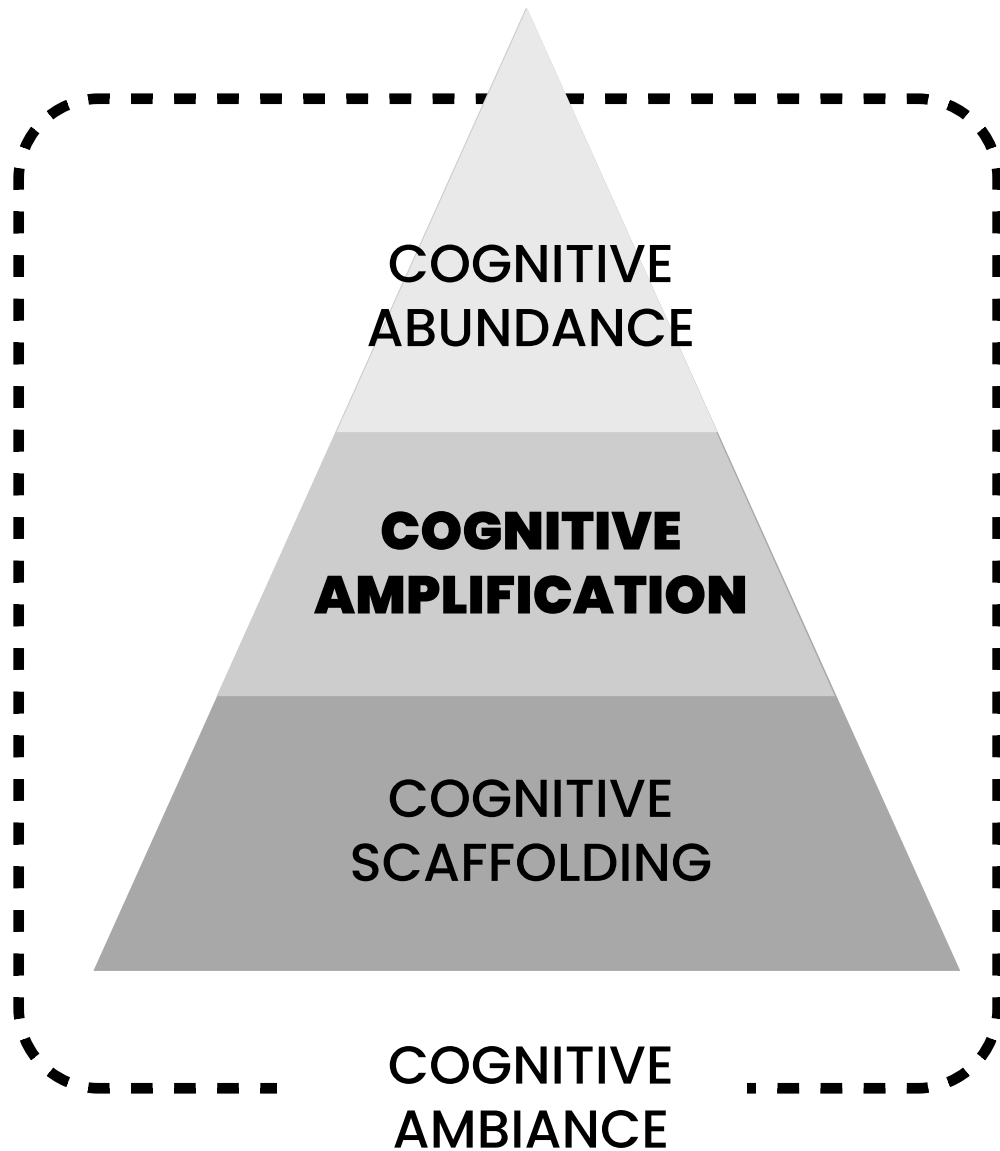


Cognitive Scaffolding is the deliberate embedding of purpose, values, and decision guardrails into AI-augmented thinking.

AI systems optimise for objectives as specified, not as intended. Without scaffolding, organisations increase speed while quietly eroding alignment and trust.

Scaffolding makes values operational at the point of cognition – through decision architectures, reasoning templates, and prompts designed to surface assumptions and trade-offs.

KEY DEFINITIONS – COGNITIVE AMPLIFICATION

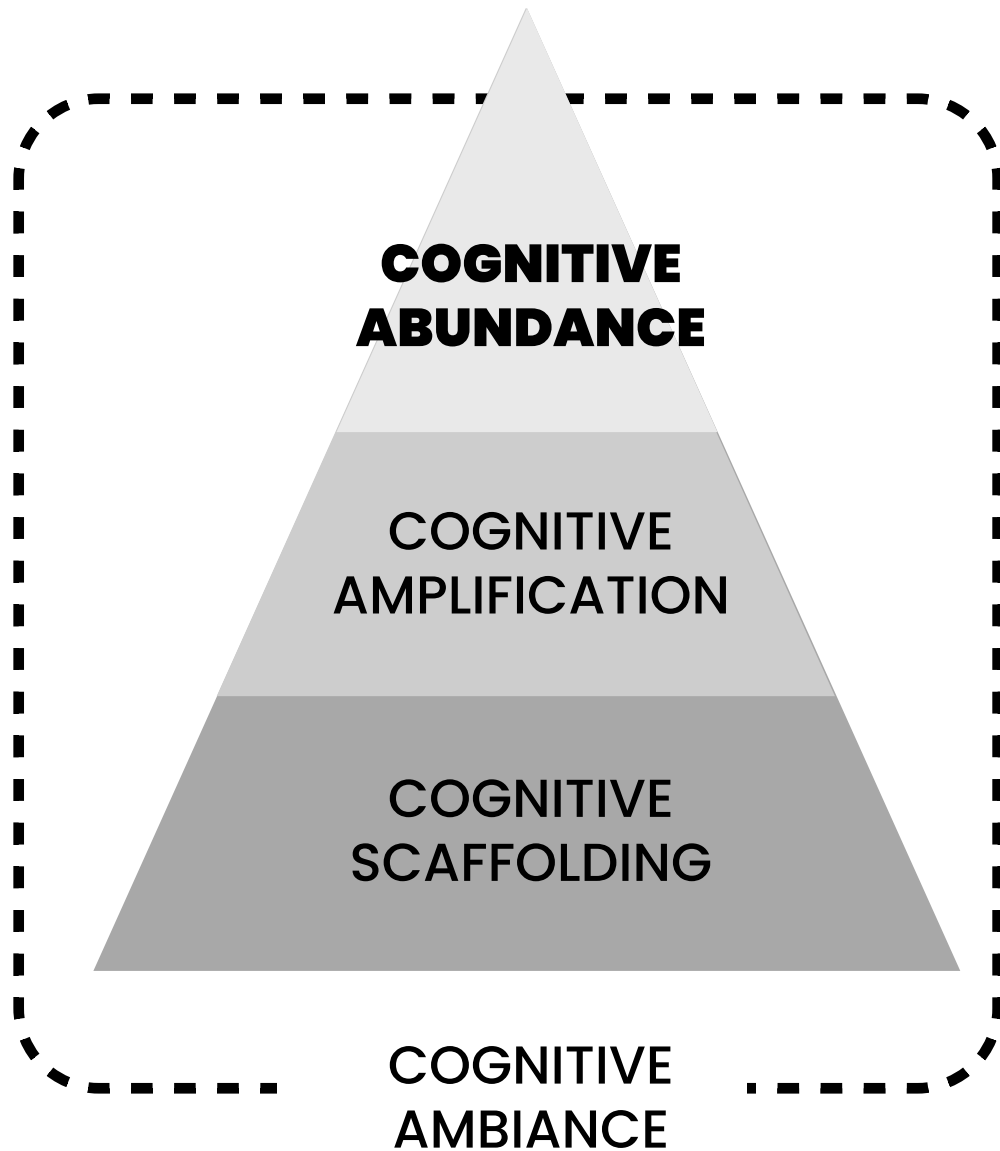


Cognitive Amplification refers to the organisation's collective fluency in working with AI to enhance judgement and action.

AI amplifies the capability of the human using it. This creates uneven returns when fluency is concentrated in a few individuals.

High-performing organisations invest in shared literacy, peer learning, and common mental models so augmented thinking becomes systemic rather than individual.

KEY DEFINITIONS – COGNITIVE ABUNDANCE



Cognitive Abundance is the emergent capacity to sustain surplus sense-making beyond individual human limits.

In this state, insight compounds rather than dissipates. Decision quality improves even as complexity increases. The organisation feels calmer, not busier.

Cognitive Abundance is not about omniscience or control. It is about resilience – the ability to remain oriented amid uncertainty.

DIAGNOSTIC LENS FOR LEADERS

Organisational signal	Under-designed dimension	What this usually indicates	Leadership focus
Many AI pilots, limited repeatable value	Cognitive Ambiance	AI is treated as experimentation rather than a default mode of thinking	Set clear expectations that AI-augmented reasoning is normal, trusted, and accountable in everyday work
Fast AI outputs, low trust in decisions	Cognitive Scaffolding	Speed is increasing without shared judgement or decision criteria	Embed values, risk thresholds, and decision principles directly into AI-assisted reasoning
A few individuals deliver outsized results	Cognitive Amplification	Capability is concentrated in experts rather than distributed	Invest in shared fluency, peer learning, and common mental models
Insights generated but quickly lost	Cognitive Abundance	Sense-making is episodic rather than cumulative	Design mechanisms to retain, connect, and reuse insight across time
Confusion about who owns AI outcomes	Cognitive Ambiance & Scaffolding	Accountability for judgement has not been designed	Clarify leadership and governance responsibility for how intelligence is used
Increasing activity but declining confidence	Multiple dimensions	Intelligence is fragmented across tools and teams	Step back from tools and redesign the system of thinking end-to-end

FRAMEWORK USE & LICENSING

Cognitive Infrastructure is released as an open framework to support shared learning, critique, and responsible experimentation in how organisations design for intelligence in the age of AI.

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UN/DO acts as steward of the framework, maintaining its canonical definition and versioning while encouraging open engagement and evolution through practice.

The latest version of the framework and licensing details can be found at:
www.weundo.co/cognitive-infrastructure



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