

The Judgment Gap: Why Human Judgment Is the Missing Layer in AI-Mediated Work



Alexander Ljungström
Managing Director



Akif Baser
MSc Econometrics & Data Science



Elina Morina
PhD Candidate in Psychology

Research question

How can organizational reasoning be made visible, so that AI systems can learn from human judgment that makes work effective in the first place?

Introduction

Artificial intelligence is increasingly embedded in organizational processes: recommending actions, coordinating workflows, supporting decisions and, in some cases, acting autonomously on behalf of individuals and teams.

Many AI initiatives assume that organizational knowledge can be made available through data, documentation and systems of record. Yet experienced professionals rarely rely on formal information alone. They draw on accumulated experience, intuition, contextual awareness and an understanding of organizational realities that is often difficult to articulate or document.

This is the gap we examine: the reasoning that makes work effective is largely missing from what AI systems are given to work with.

Organizational knowledge is more than data

- Data describes what happened.
- Context explains the circumstances around events.
- Judgment determines what should be done next.

Data and context are held in documents and systems of record. Judgment is held by people, often tacitly, and this is the gap.

Decision traces

We explore decision traces as one lens on the problem: records of the reasoning surrounding a decision. A trace keeps not only what was decided, but why. A decision trace captures:

- Assumptions
- Trade-offs
- Contextual factors
- Rejected alternatives
- Ownership boundaries
- Judgments behind the action

Capturing reasoning: when, not only how

Several approaches differ in form but share the same aim of preserving the why behind decisions: critical incident reviews, storytelling practices, AI-assisted interviews and human-in-the-loop systems.

In the moment

Much consequential reasoning emerges during ongoing work: meetings, escalations, trade-off discussions, incident response calls, approval processes and collaborative problem-solving.

Retrospective

Traditional knowledge management relies on workshops, interviews, questionnaires and process documentation conducted after decisions have been made. Open question: can human judgment be adequately reconstructed after the fact, or must it be captured as it unfolds?

Not only a technical problem

- Expertise is identity: it is a source of professional identity, status, influence and value within the organization.
- Sharing feels risky: requests to externalize knowledge can meet resistance where people see risks to autonomy, ownership, accountability or job security.
- Expertise is intuitive: much of what experts know is developed through experience and is inherently hard to explain or transfer.

AI cannot access judgment that remains tacit. It can only work with traces of reasoning that have been expressed, documented, enacted through organizational activity, or otherwise made visible.

Our argument

From knowledge management to the governance of expertise. The effectiveness of enterprise AI and organizational memory will depend not only on access to data and context, but on the ability to capture, govern and critically evaluate the reasoning that underpins decisions.

The challenge is not how to replace human judgment, but how to preserve and organize it, keeping humans meaningfully involved in the systems they help create.

Drawing on

Organizational learning, psychology, knowledge management, emerging AI practice, and industry experience with AI and knowledge-capture initiatives.

