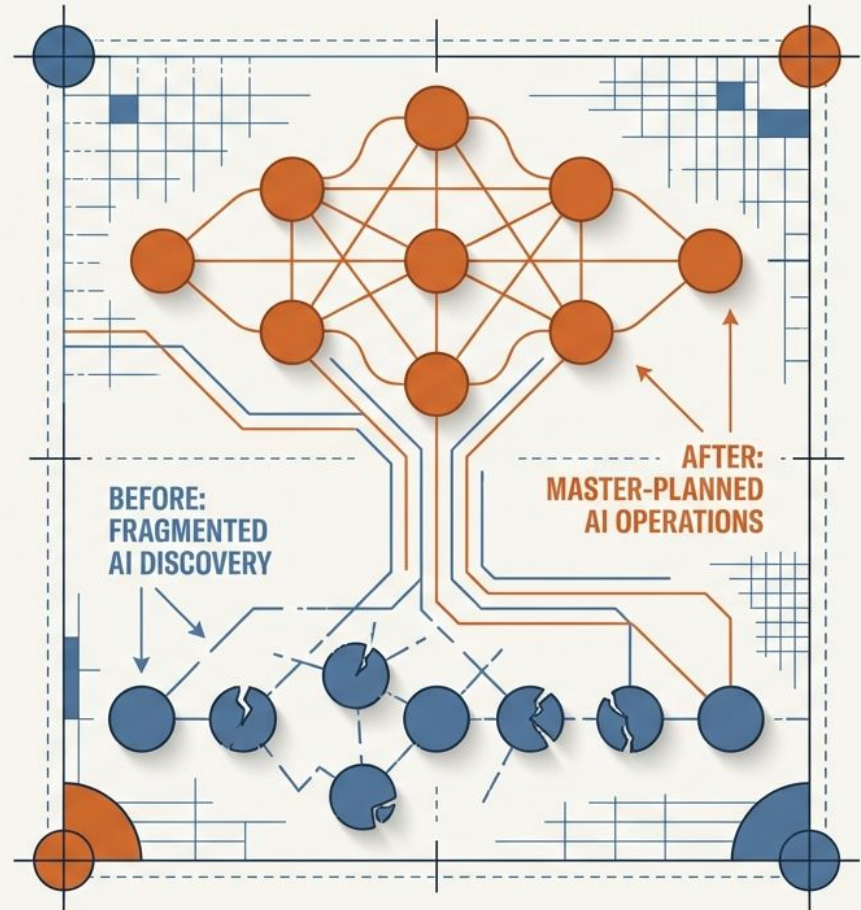


# BREAKING THE AI DISCOVERY BOTTLENECK

WHY MAPPING AI INTO OPERATIONS IS THE KEY TO UNLOCKING REAL VALUE

*Based on research  
by Jonathan H.  
Westover, PhD*



# The AI Productivity Paradox

## The Promise (Task-Level Gains)



Customer Service:  
**+14% faster**

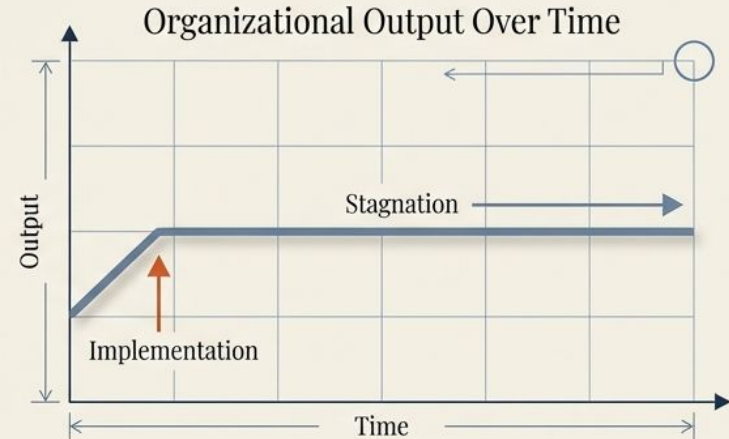


Content Writers:  
**+40% output**



Consultants:  
**+25% faster**

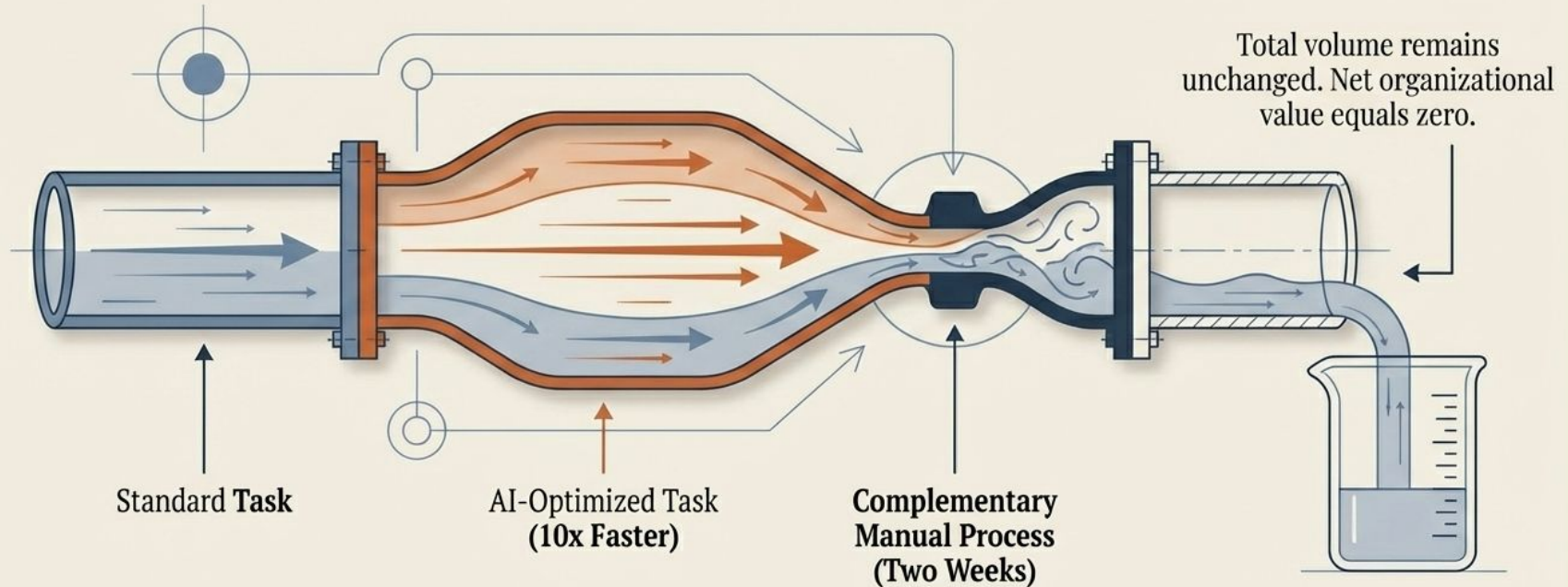
## The Reality (Organizational ROI)



Individual task-level gains are staggering. Yet, aggregate firm-level data shows a frustrating disconnect. Why do isolated speed improvements fail to generate bottom-line **organizational value**?

# The Complementarity Trap

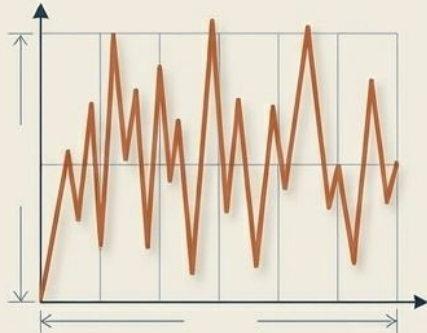
Organizations operate as complementary activity systems. Accelerating a single task without upgrading adjacent nodes yields zero net velocity. The bottleneck simply shifts.



# The Core Challenge is Mapping, Not Access

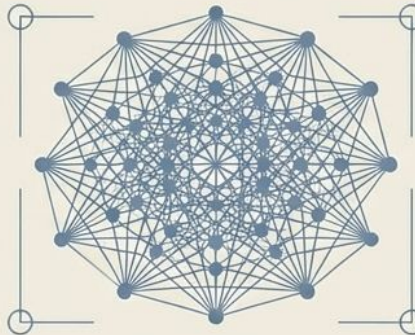
Access to AI tools is ubiquitous. The true constraint is discovering which configurations of AI-enabled processes actually drive value across an interconnected operating model.

## Capability Uncertainty



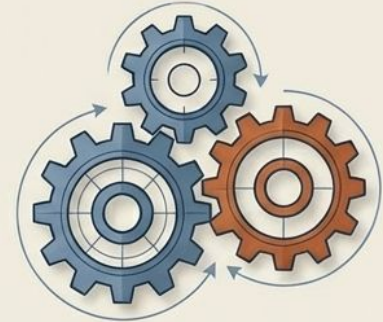
AI performance is highly unpredictable across seemingly similar tasks. Managers systematically misjudge where it will succeed.

## Search Space Vastness



Operations contain hundreds of distinct sub-activities. The combinatorial possibilities for applying AI become paralyzing.

## Complementarity Complexity

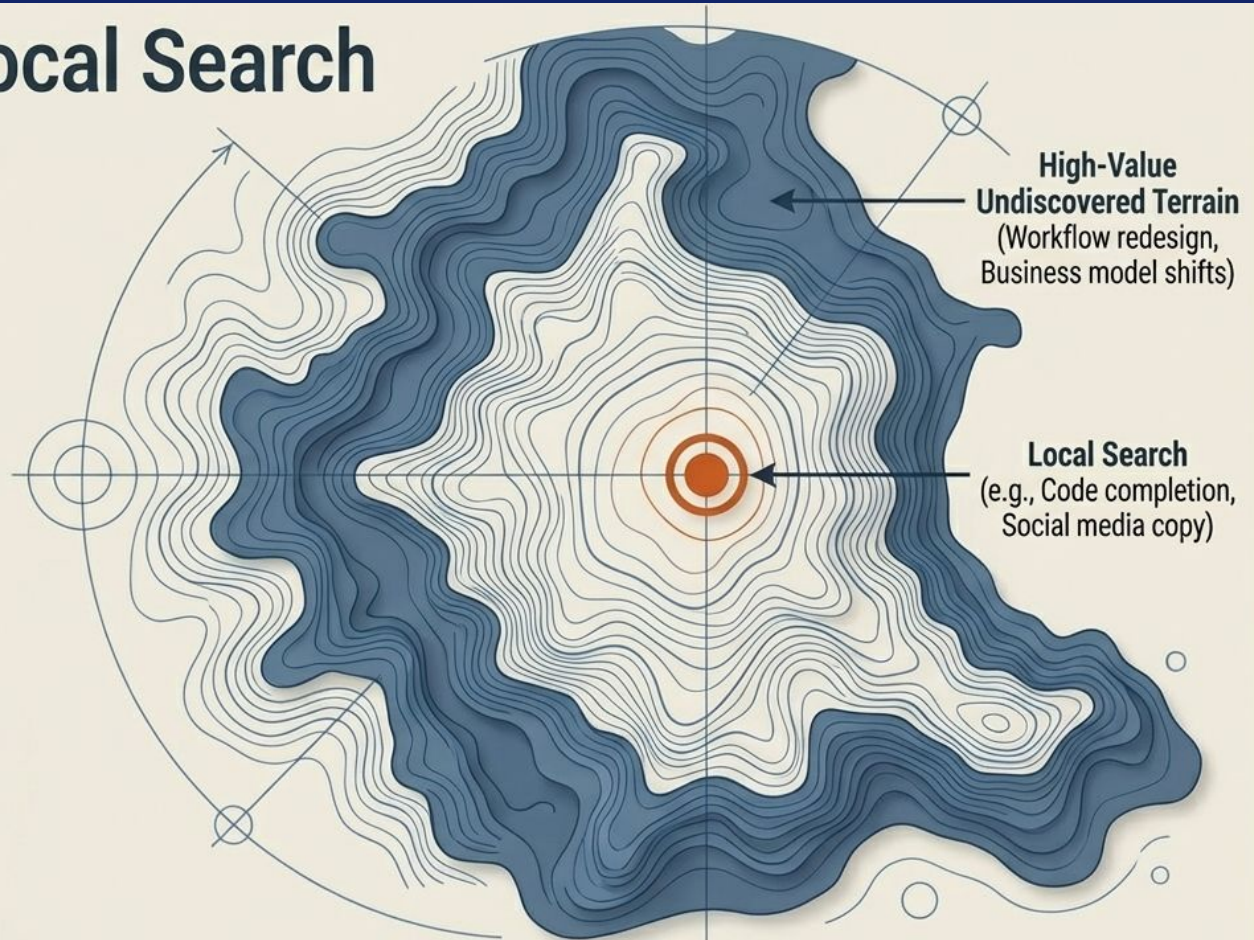


Changing one organizational activity requires redesigning adjacent processes. Isolated upgrades break the system.

# The Trap of Local Search

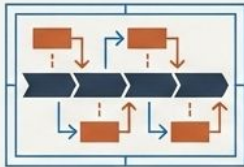
Faced with complexity, organizations default to layering AI onto familiar, nearby tasks.

Experiments across 515 ventures prove that without structured intervention, organizations plateau at obvious, low-value applications.



# Escaping the Trap: Structured Mapping Frameworks

To discover high-value AI configurations, organizations must change the questions they ask. Stop searching for tool applications and start dissecting production architecture.



## Process Decomposition

Identify complete sequences of activities, not just isolated tasks. Which steps are routine enough for AI, and how does automating them shift the bottleneck?



## Complementarity Mapping

If AI accelerated a specific activity by 10x, what else would break? What new activities become possible, and what adjacent processes must adapt?



## Failure Mode Analysis

Target systemic information gaps and operational delays. What typically goes wrong in this process, and could AI address these structural failure points?

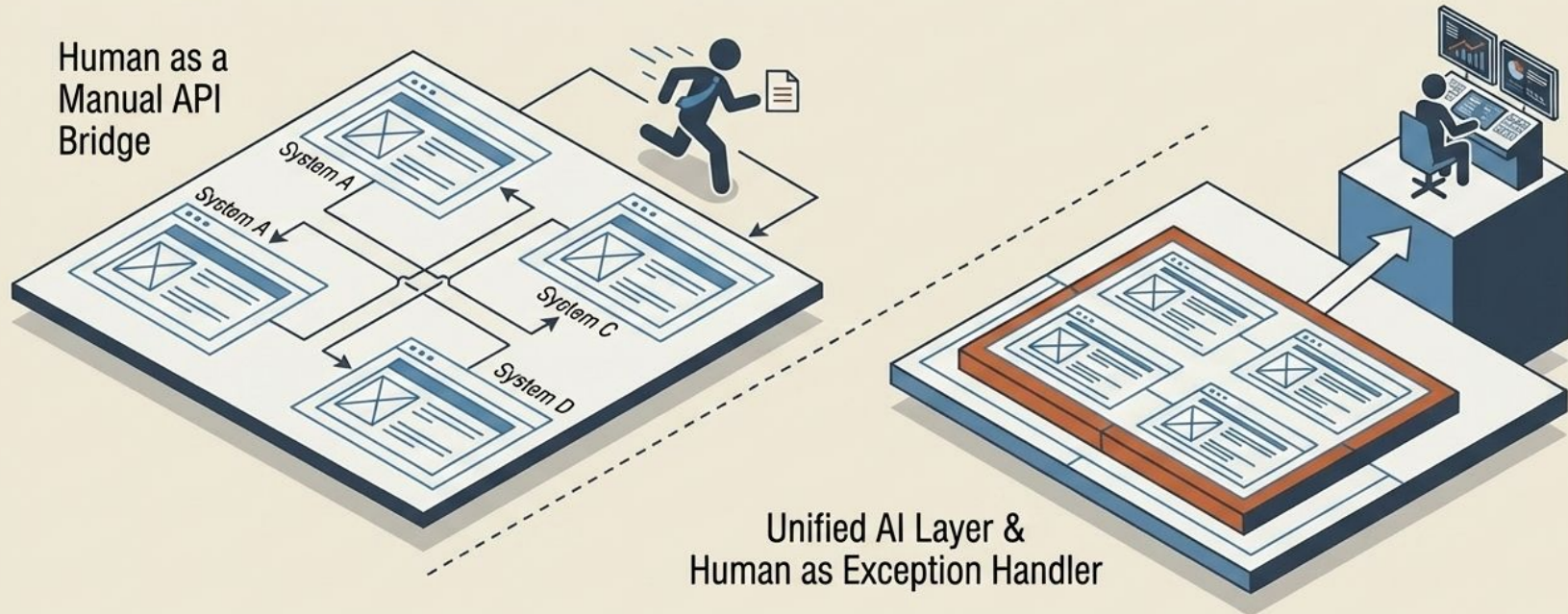
# 4 Archetypes of AI Reorganization

Evidence from 515 ventures: Organizations don't just speed up; they fundamentally alter their operational geometry.

Venture	Reorganization Model	The Structural Insight	Complementary Change Required
Gamma	Compression	Collapse cross-functional product dev into a single AI-assisted role.	Invest heavily in automated AI Evals to handle volume.
Ryz Labs	Parallelization	Build multiple prototypes simultaneously rather than sequentially.	Overhaul user-testing to handle rapid feedback loops.
FazeShift	Bridge-Elimination	Remove humans acting as manual data-bridges between software.	Shift from a service business to a scalable software model.
Ranger	Capital Sequencing	Deliver services manually first to train AI, then scale software.	Delay external fundraising until unit economics are proven.

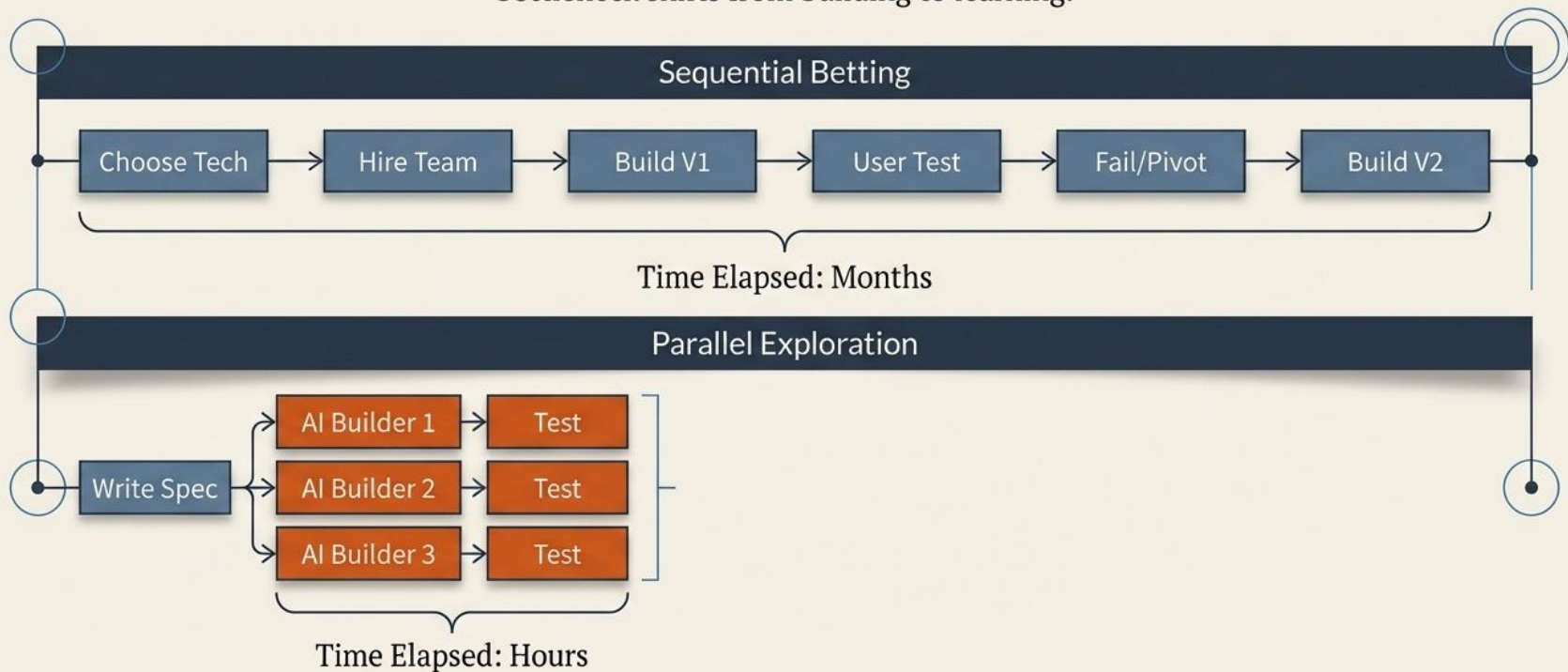
# Deep Dive: Eradicating Human Bridges

Many processes are simply disconnected software patched together by human labor. AI's highest value is eliminating the manual bridge to create a scalable flow.



# Deep Dive: Parallel Exploration vs. Sequential Betting

When prototyping costs drop to near zero, risk profiles transform. The organizational bottleneck shifts from building to learning.



# The New Economics of Production

Successful mapping breaks the traditional linear relationship between resources and growth. Organizations serve more customers while decreasing capital dependency.



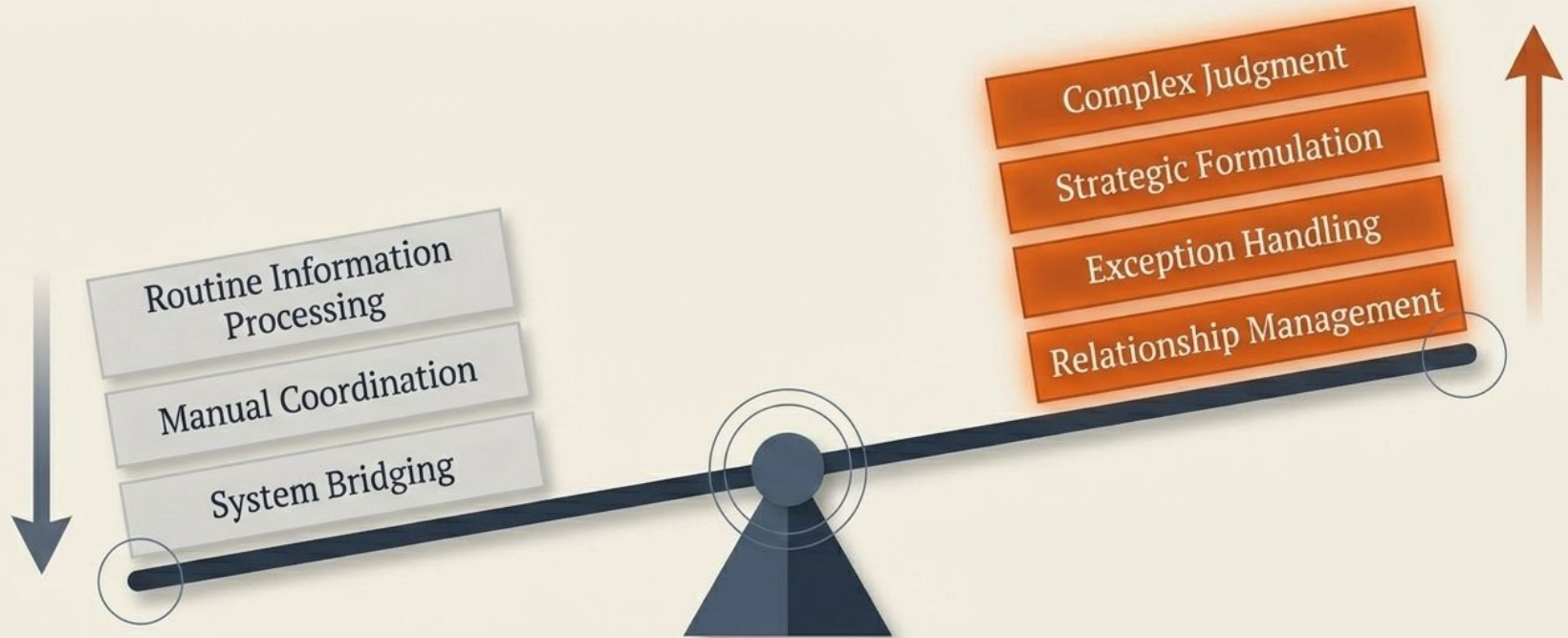
Completed **+12%**  
more operational tasks

Generated **1.9x** higher  
firm-level revenue

Required **39.5%** (\$220k)  
LESS external capital

# The Reallocation of Human Capital

Mapping AI does not eliminate labor; it fundamentally reallocates it. The premium on human judgment becomes the ultimate organizational constraint.



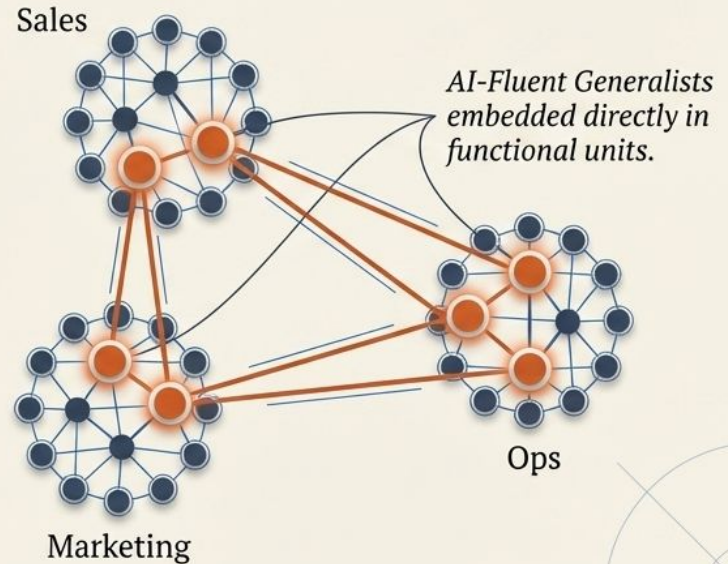
# Building Capacity: Distributed Fluency

*Centralized technical teams lack nuanced operational knowledge.  
The highest-value discovery happens at the functional edges, not at the center.*

## The Trap

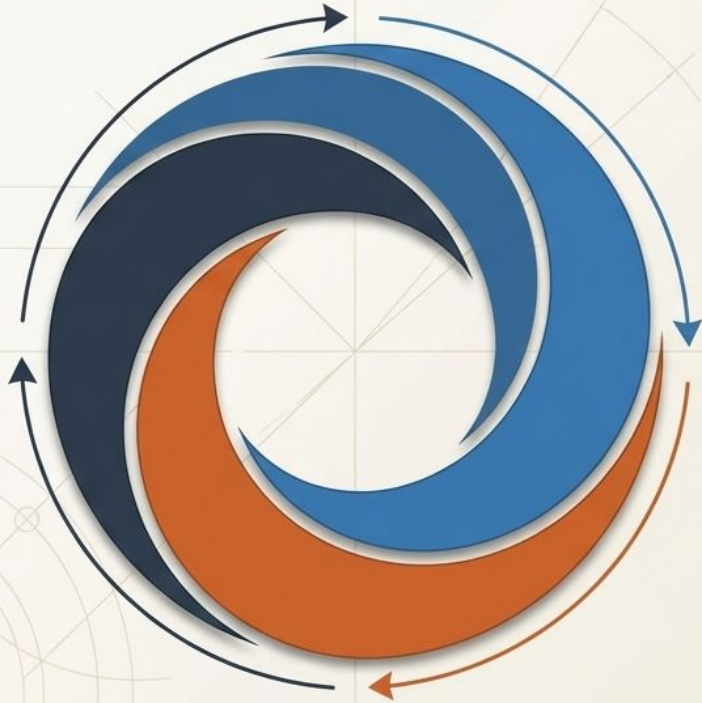


## The Solution



# The Continuous Experimentation Infrastructure

Mapping is an ongoing exploration. Organizations must deliberately build low-friction infrastructure that allows teams to fail fast, capture learnings, and scale.



## 1. Sandbox Environments

Secure, localized data testing grounds mirroring real workflows without risking core operations.

## 3. Learning Capture

A centralized experiment tracker to document both successes and failures, preventing redundant organizational blind spots.

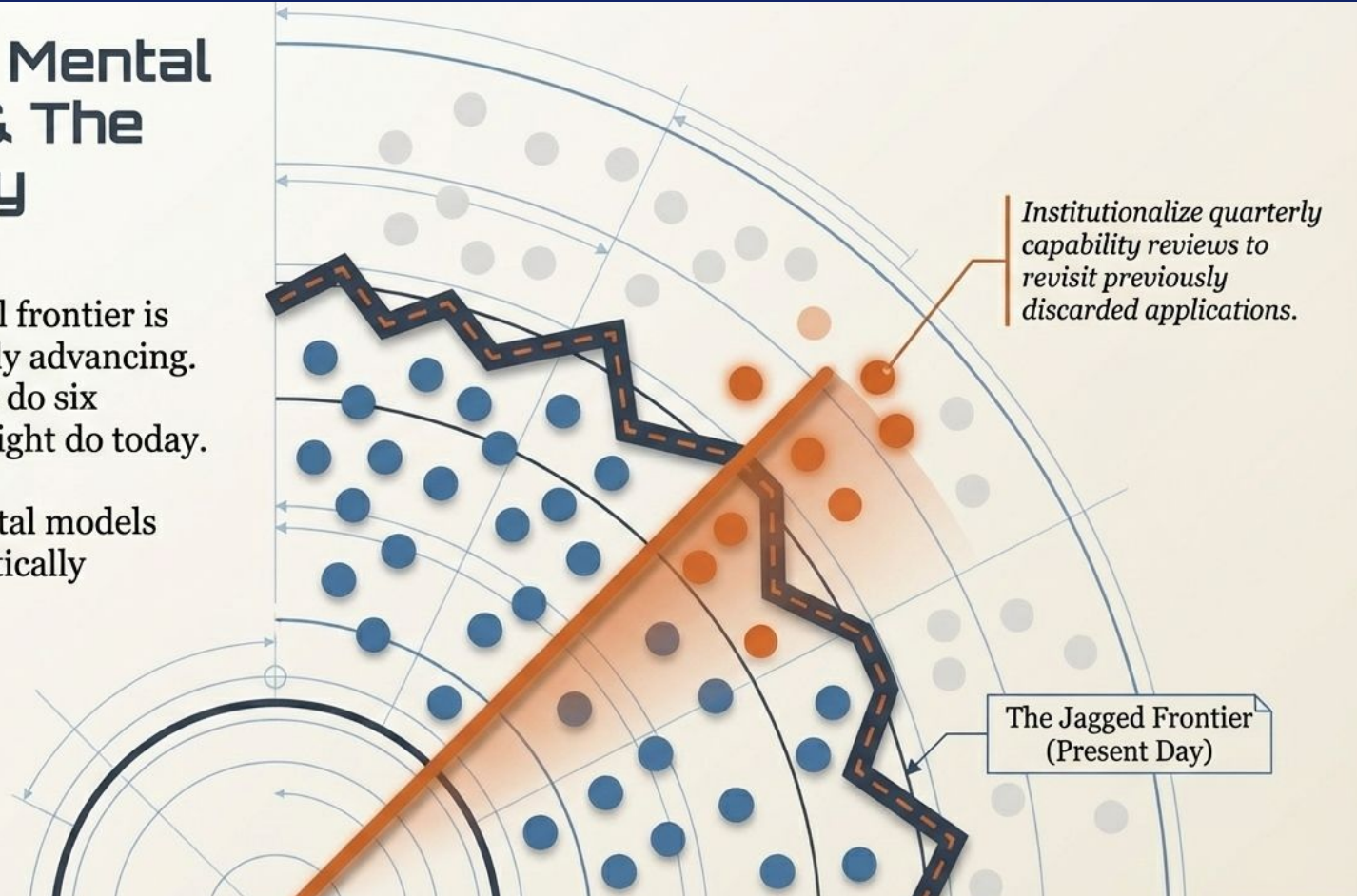
## 2. Rapid Prototyping

Access to tools optimized for days-not-months builds, accelerating the path to initial user feedback.

# Dynamic Mental Models & The Capability Review

The technological frontier is jagged and rapidly advancing. What AI couldn't do six months ago, it might do today.

Operational mental models must be systematically updated.



# The Organizational Mapping Imperative

Access to AI models is a commodity. The winners will be organizations that build the cognitive and structural capacity to relentlessly map AI into interconnected activity systems.

## Discover

Abandon local search. Implement structured mapping frameworks to analyze full activity sequences, structural bottlenecks, and operational failure modes.

## Redesign

Fundamentally alter operational geometry. Eradicate manual human bridges between software and parallelize sequential risk workflows.

## Build Capacity

Embed AI fluency directly into functional business units. Construct low-friction sandbox infrastructure for rapid, continuous prototyping and learning.