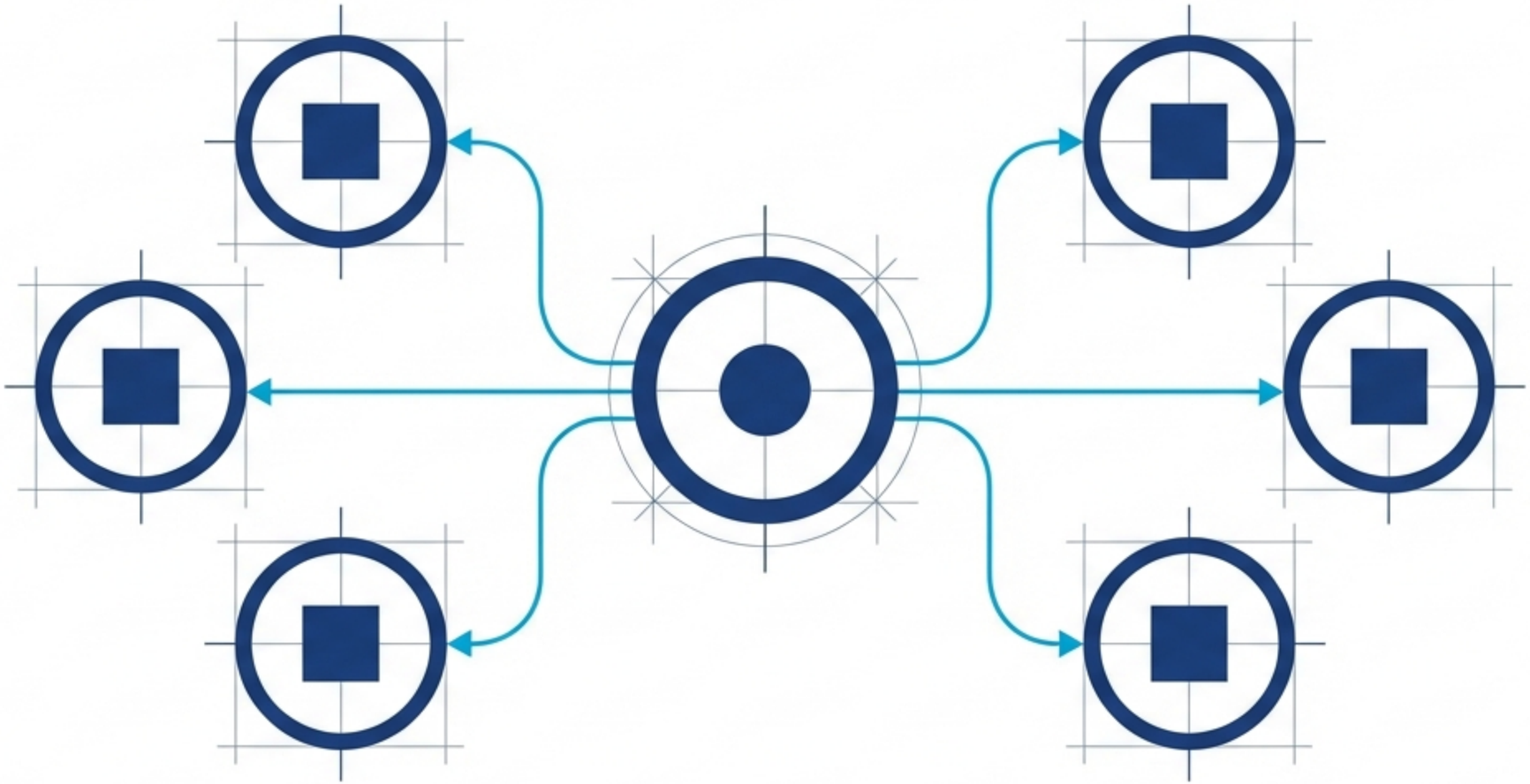
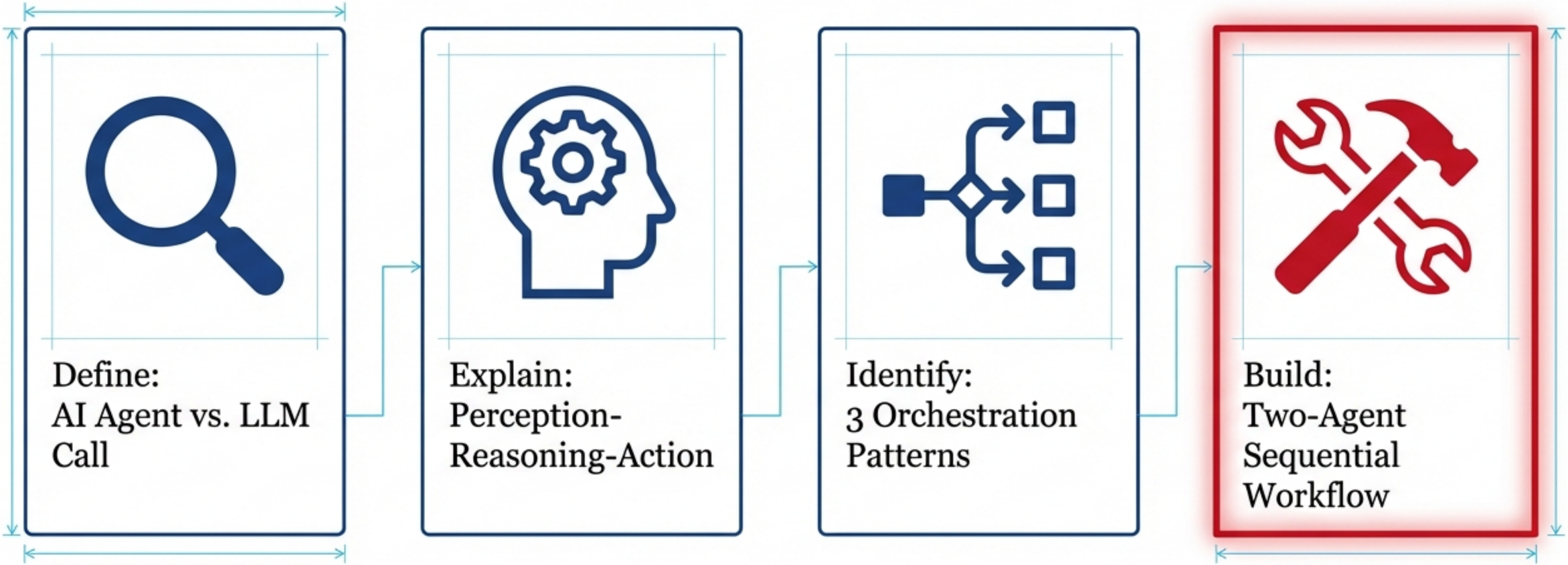
INTRODUCTION TO AGENTIC AI

From Single AI to AI Teams



LEARNING OBJECTIVES

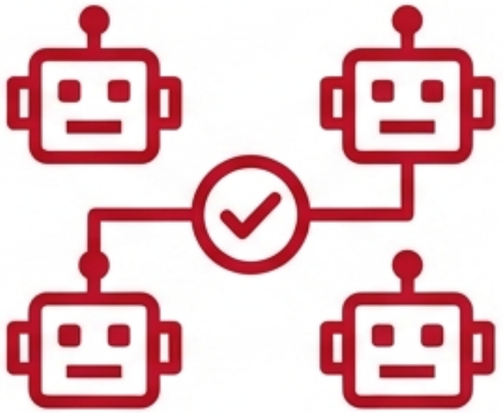


FROM RED TEAMING TO AUTOMATED VERIFICATION

Day 6: Humans Check AI

Manual Adversarial Testing

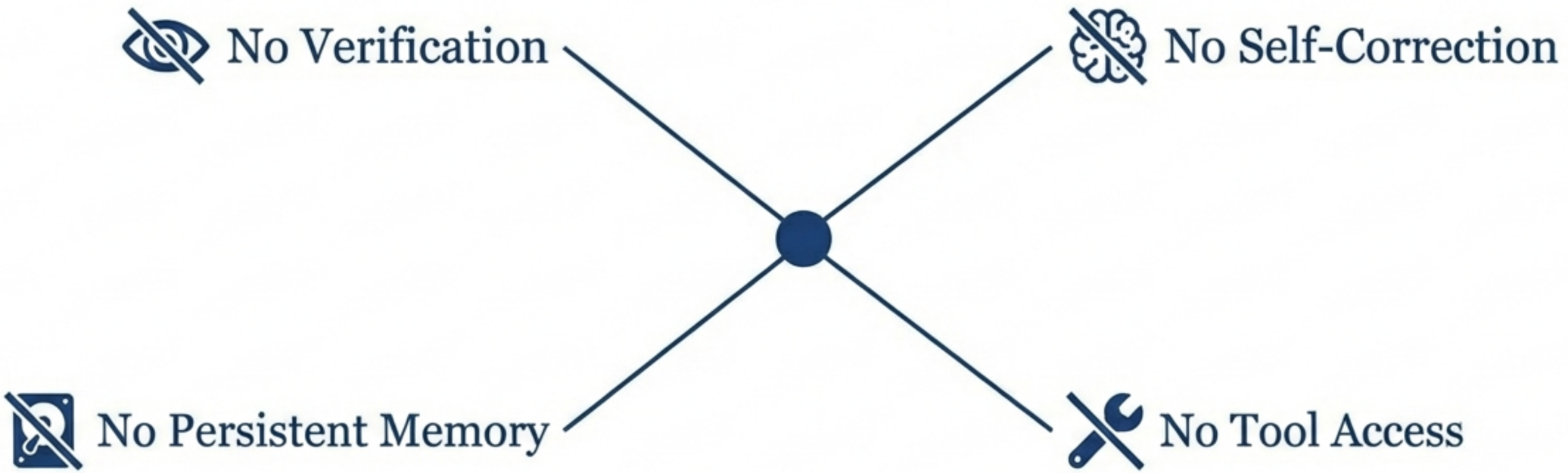
Day 7: AI Checks AI



Automated Quality Verification

Day 6: Humans check the AI. Day 7: AI checks the AI.

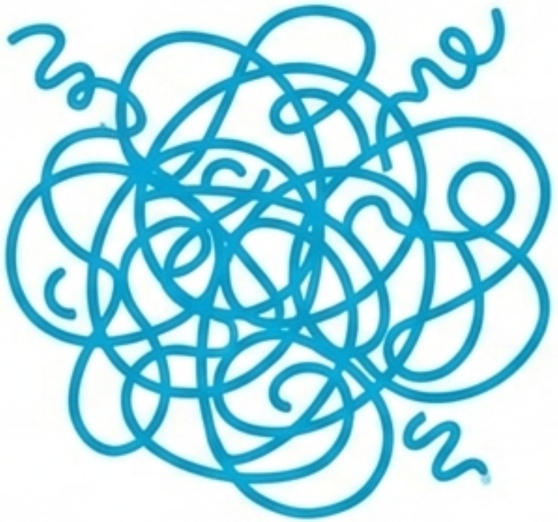
THE LIMITS OF A SINGLE AI



Beacon Context: Your Day 5 email system has no second opinion. It fails silently.

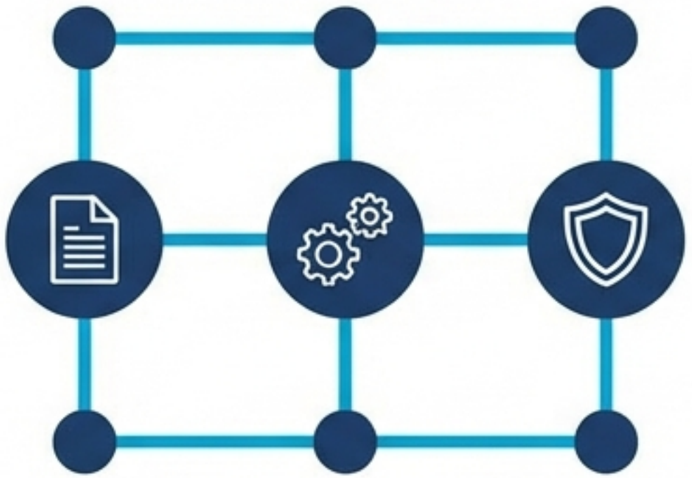
THE VISION: AI TEAMS

Single AI



One employee
doing everything.

AI Team



Specialized roles,
redundancy, verification.

What if AI could work like a well-organized department?

AGENT VS. LLM CALL

Anonymous
Amnesic
Text-Only

Named Role
Context-Aware
Tool-Equipped

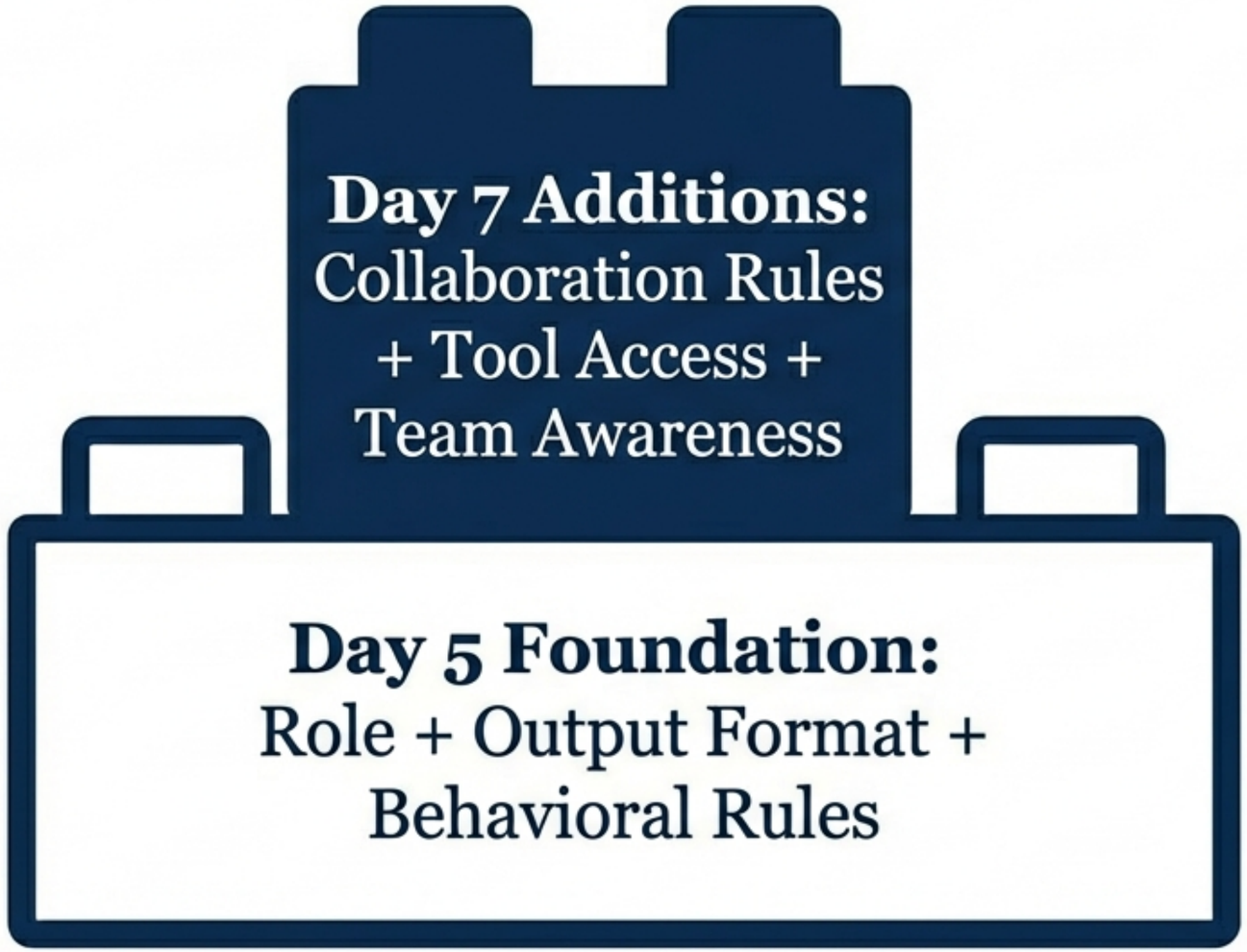
AGENT ANATOMY

PERCEPTION
Reads customer email.

REASONING
Classifies category & urgency.

ACTION
Routes email, drafts response.

AGENT INSTRUCTIONS: SYSTEM PROMPTS, EVOLVED

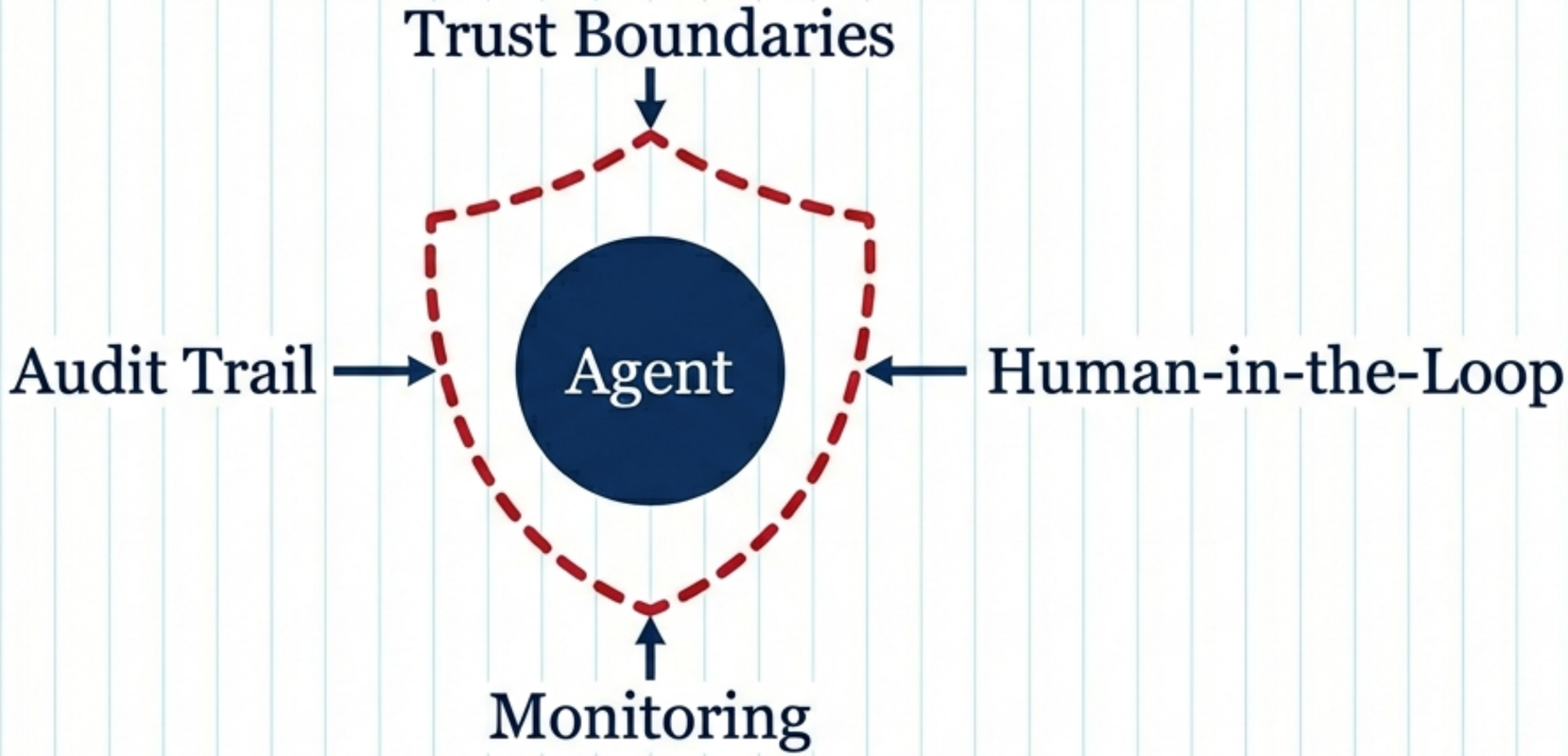


"Your Day 5 prompt becomes Agent 1's instructions. We add: "Pass your classification to the Quality Checker for verification.""

BUSINESS AGENTS IN THE WILD

			
Email Triage	Reads email	Classifies	Routes to queue
Expense Processing	Reads receipt	Checks policy	Approves or flags
Compliance Review	Reads document	Checks regs	Flags violations
Resume Screening	Reads resume	Matches job	Ranks candidates

AGENT GOVERNANCE



The Quality Checker automatically creates a record of *why* a decision was made.

CHECKPOINT QUIZ 1

What is the most accurate distinction between an AI agent and a simple LLM call?

A) An agent uses a newer, more powerful model.

B) An agent has a role, memory, tools, and can collaborate.

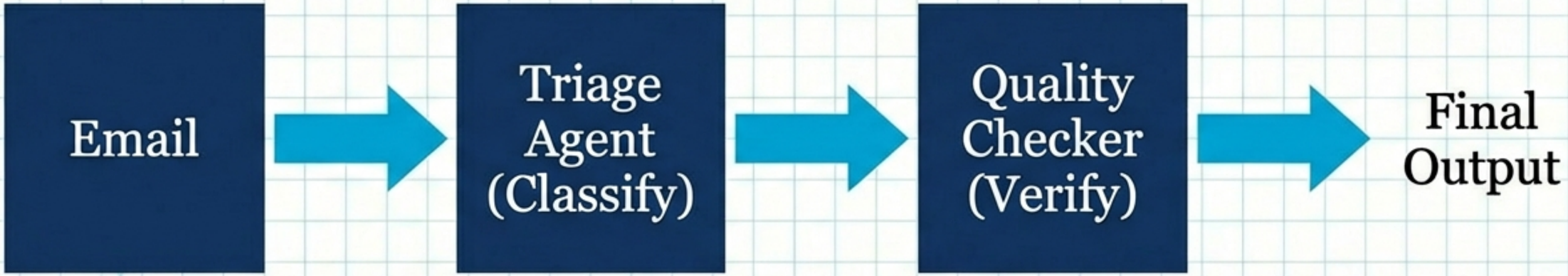
C) An agent always produces better output.

D) An agent requires specialized hardware.

ORCHESTRATION PATTERNS

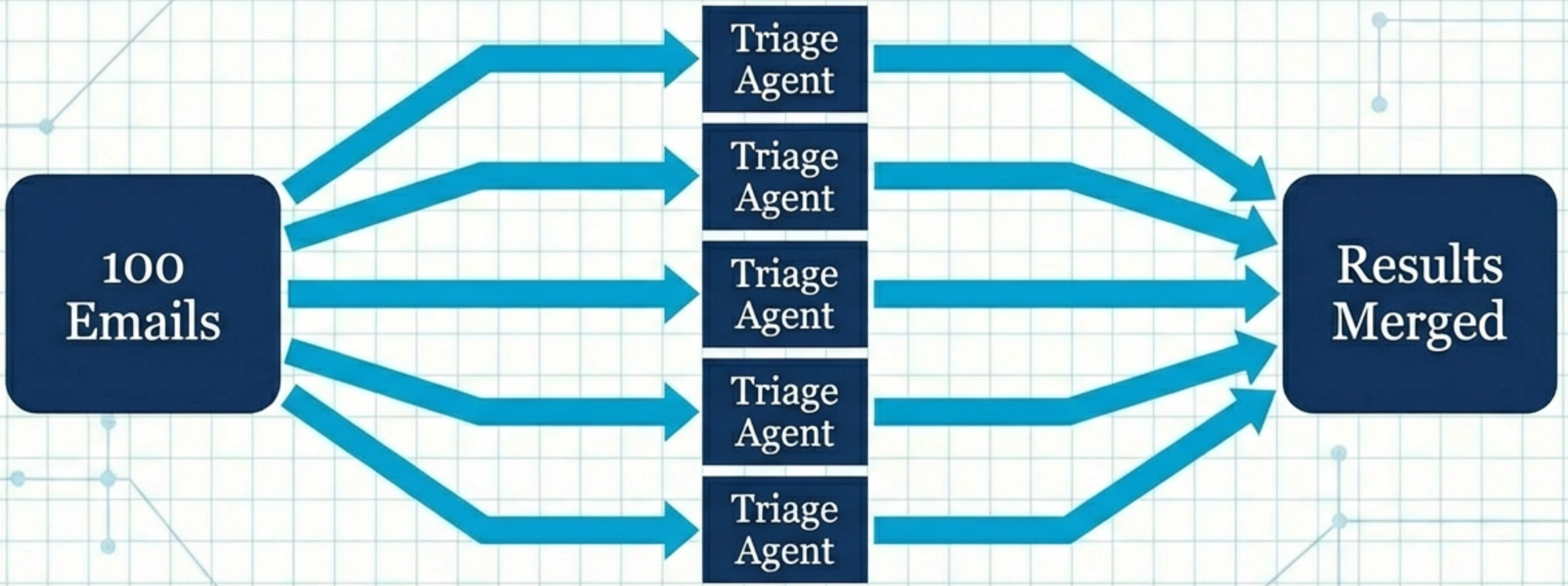
How Agents Work Together

SEQUENTIAL PATTERN



Use Case: Tasks with natural dependencies. “Step B needs Step A”s output.”

PARALLEL PATTERN



Use Case: Independent tasks. Fast, but no shared context.

LOOP PATTERN

Use Case: When Quality > Speed.

WHICH PATTERN SHOULD YOU USE?

SEQUENTIAL	PARALLEL	LOOP
Dependencies exist. Tradeoff: Slower but reliable.	Independent tasks. Tradeoff: Fast, no context.	High quality required. Tradeoff: Costly (API calls).

Today's Lab: Sequential Pipeline (Triage -> Verify)

CHECKPOINT QUIZ 2

Beacon needs to process 500 emails overnight. Each email can be classified independently. Which pattern is appropriate?

A) Sequential (one after another).

B) Parallel (simultaneous processing).

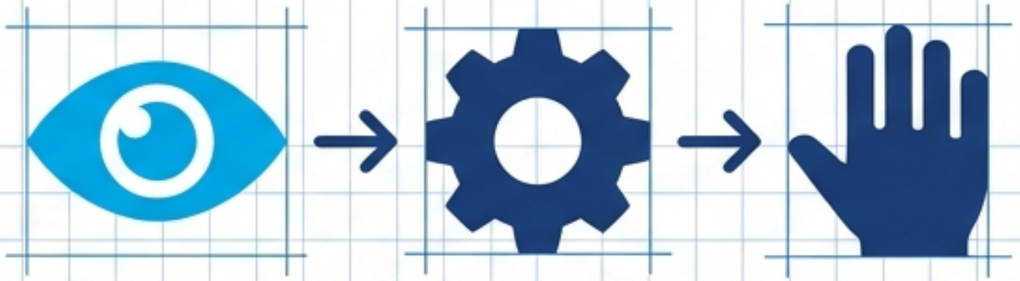
C) Loop (reclassify until perfect).

D) No pattern needed.

TODAY'S LAB: BUILDING A MULTI-AGENT SYSTEM

KEY TAKEAWAYS

Agents > LLMs



Perception-Reasoning-Action

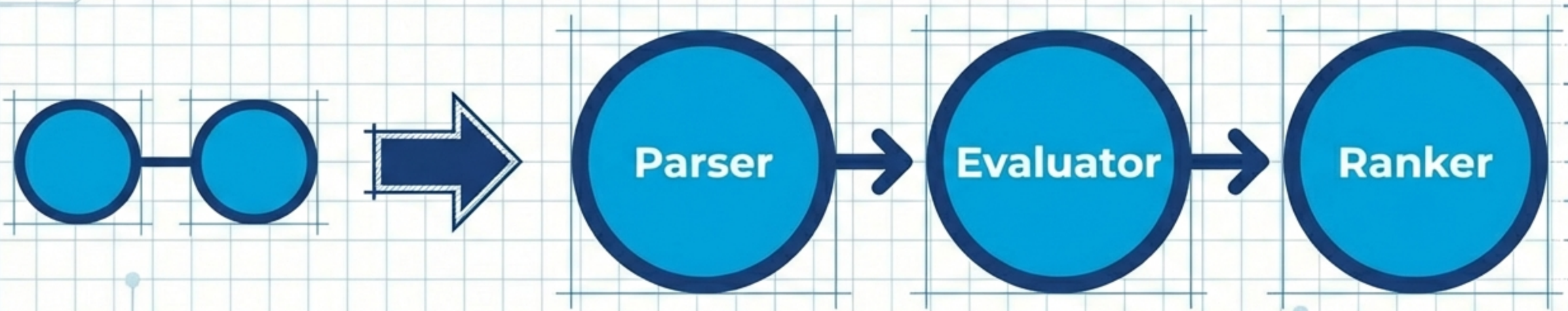
The Toolkit: Sequential, Parallel, Loop

Start with Verification

COMING NEXT: RESUME SCREENING CAPSTONE

Today: 2 Agents

Days 8-9: 3+ Agents



From email triage to talent acquisition.
Scaling the Sequential Pattern.

QUESTIONS?

Before we head into the lab...