

From Completion to Agentic AI

The Evolution of Language models

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Xebia

AGENDA

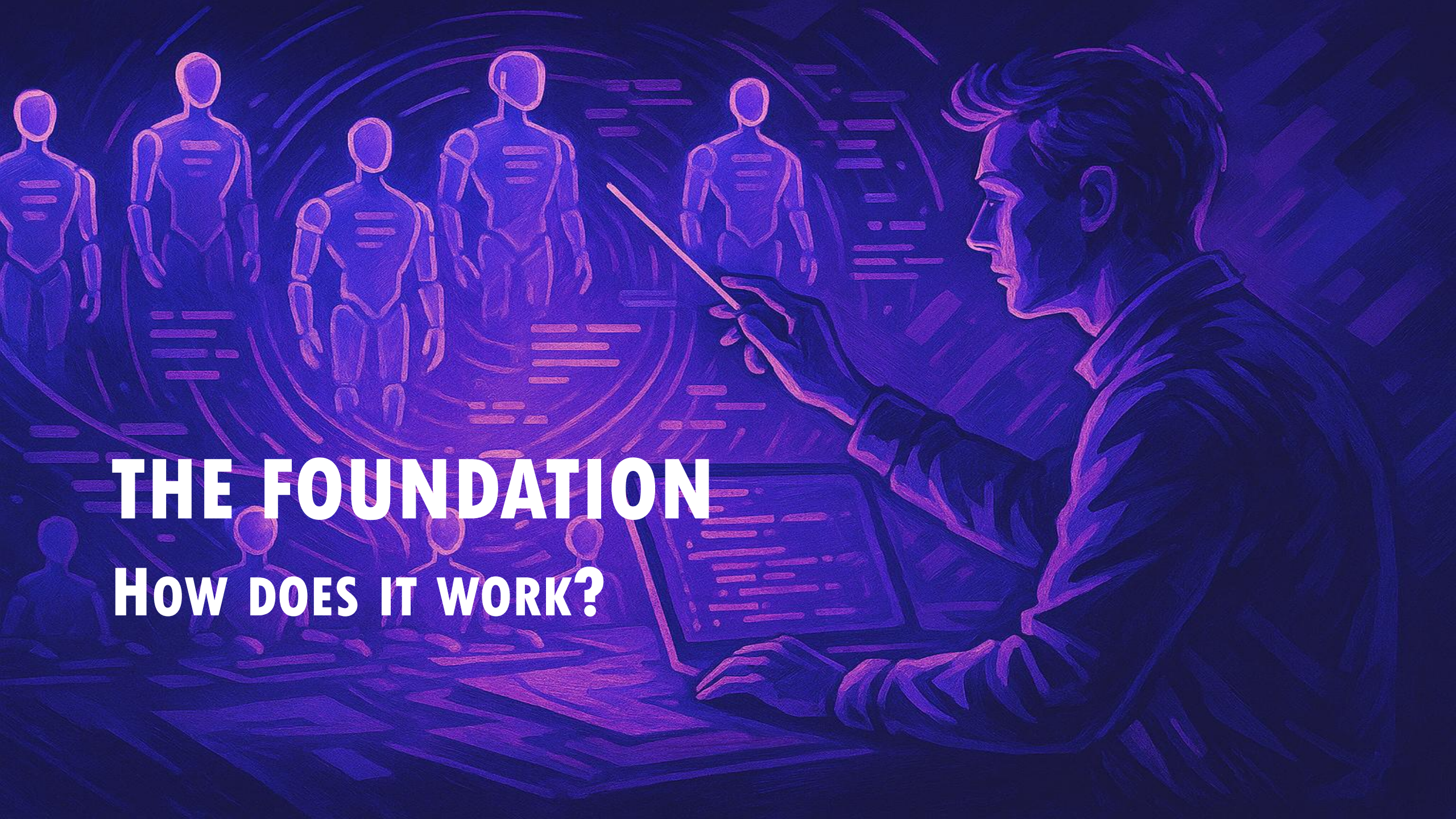
The background is a complex digital composition. It features a large, billowing white cloud in the center, partially obscured by a series of concentric, glowing blue and purple light trails that create a sense of motion and depth. The overall color palette is a mix of soft greys, whites, and vibrant blues and purples. Geometric elements like circles, lines, and wavy patterns are scattered throughout, giving it a high-tech, futuristic feel.

THE FOUNDATION

CONVERSATIONAL AI

KNOWLEDGE ENHANCEMENT

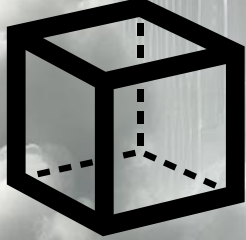
AGENT ORCHESTRATION



THE FOUNDATION

HOW DOES IT WORK?

UNDERSTANDING (LARGE) LANGUAGE MODELS

Conferences are fun to attend, the →  → next

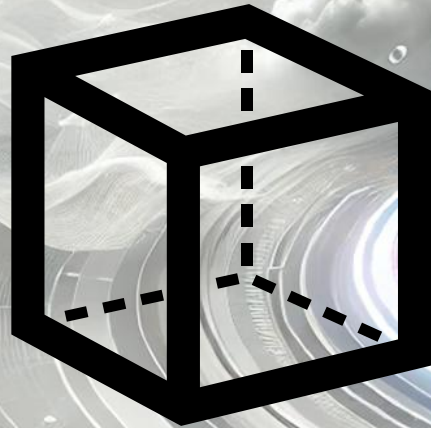
Conferences are fun to attend, the next →  → event

Conferences are fun to attend, the next event →  → takes

Conferences are fun to attend, the next event takes place in

UNDERSTANDING (LARGE) LANGUAGE MODELS

Conferences are fun to attend, the next event takes place in



Token	Probability	Outcome
Brussels	75%	0.41
Antwerp	62%	0.52
London	50%	0.04
Paris	34%	0.15

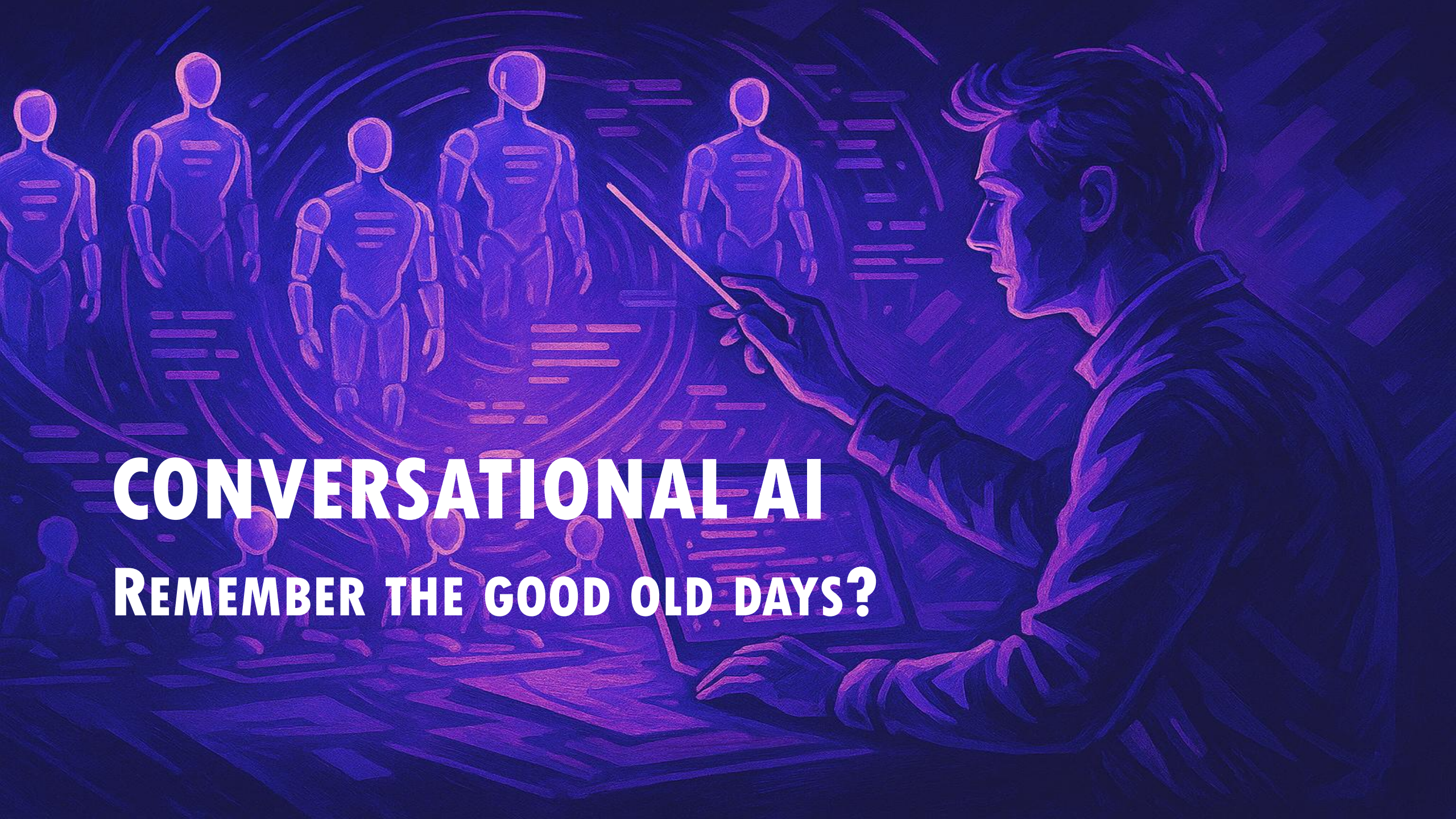
PROBABILITY CALCULATION TEMPERATURE

Token	0.0 - Deterministic	0.7 – Balanced	1.5 – Creative
Brussels	100%	75%	54%
Antwerp	0%	62%	53%
London	0%	50%	50%
Paris	0%	34%	47%

PROBABILITY CALCULATION

TOP P(ERCENTAGE)

Token	30%	50%	65%
Brussels	75%	75%	75%
Antwerp	62%	62%	-
London	50%	50%	-
Paris	34%	-	-

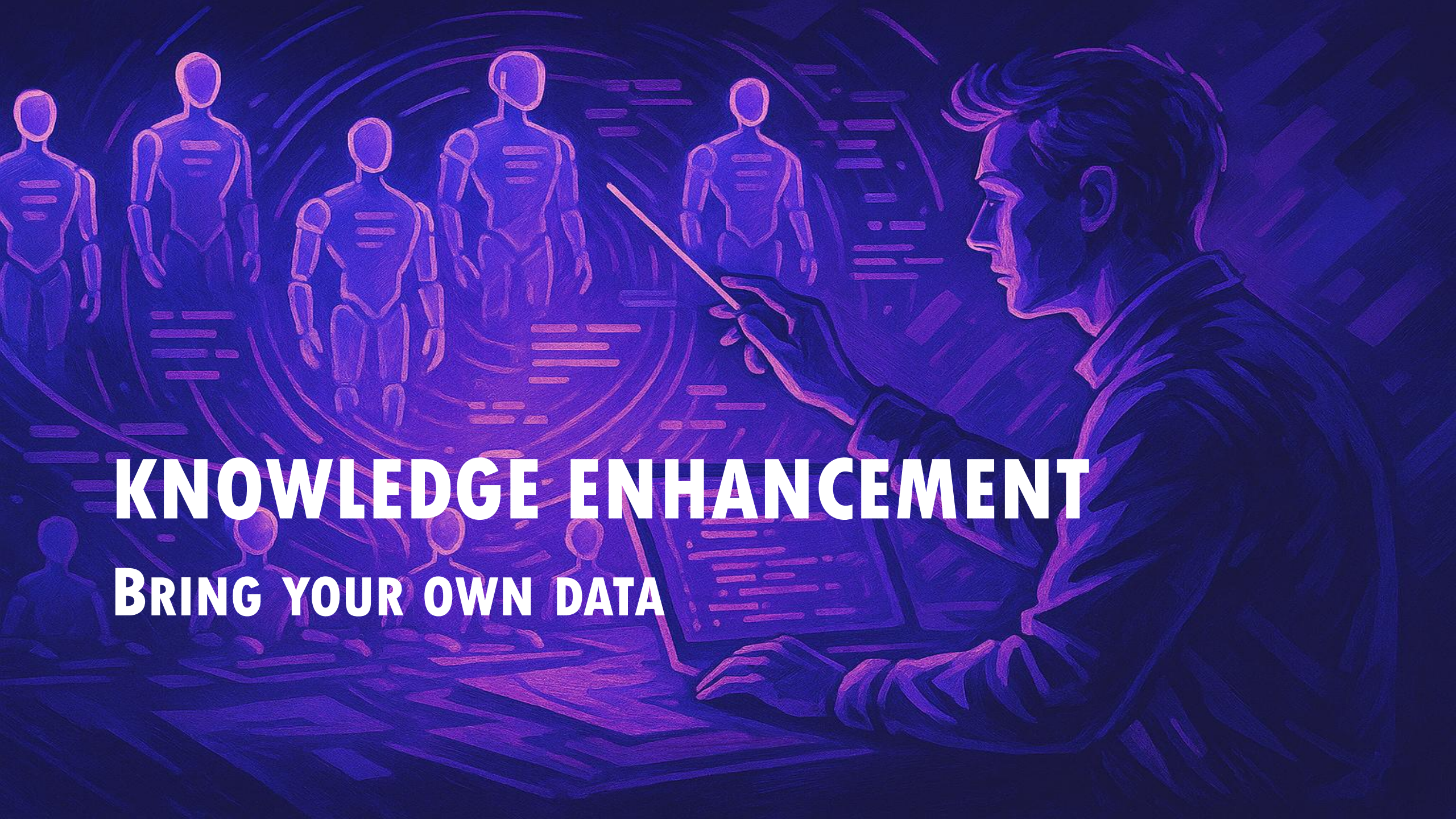


CONVERSATIONAL AI

REMEMBER THE GOOD OLD DAYS?



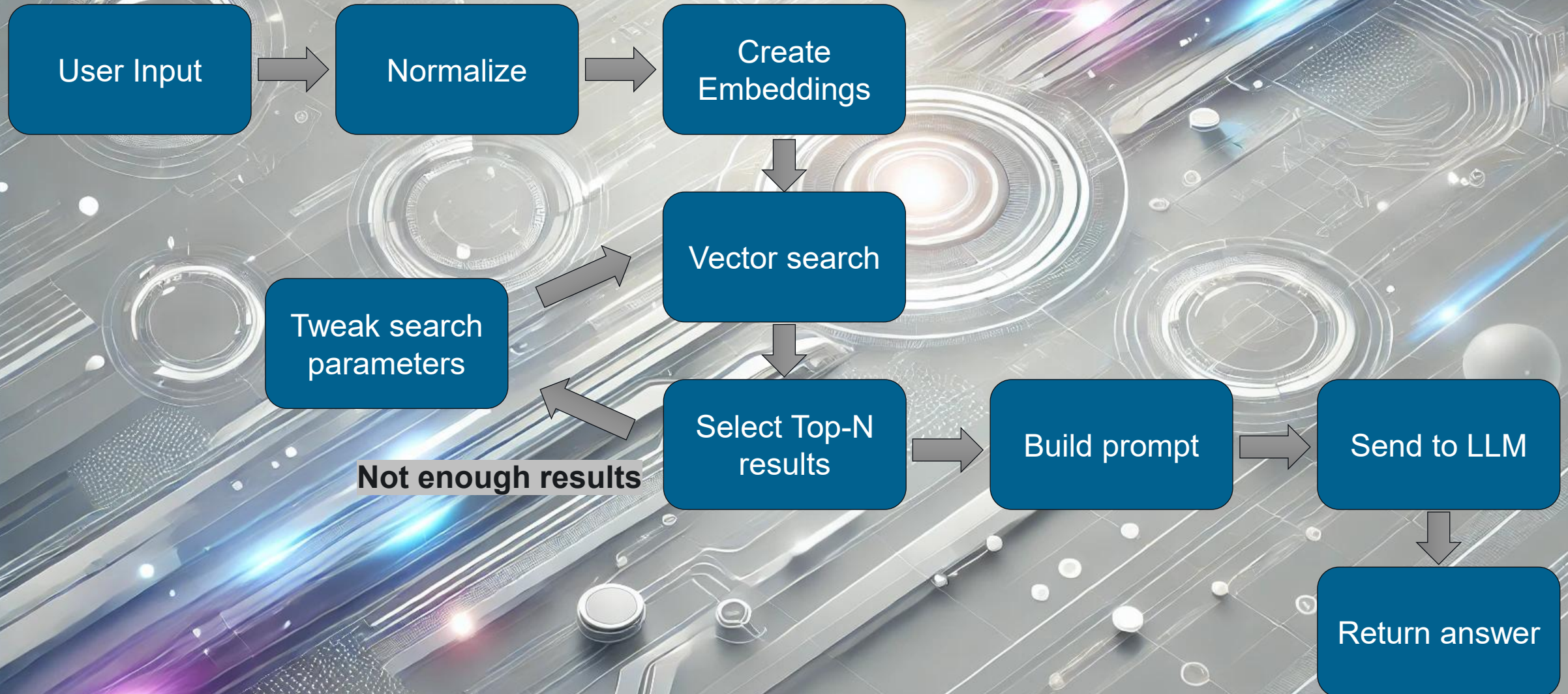
DEMO



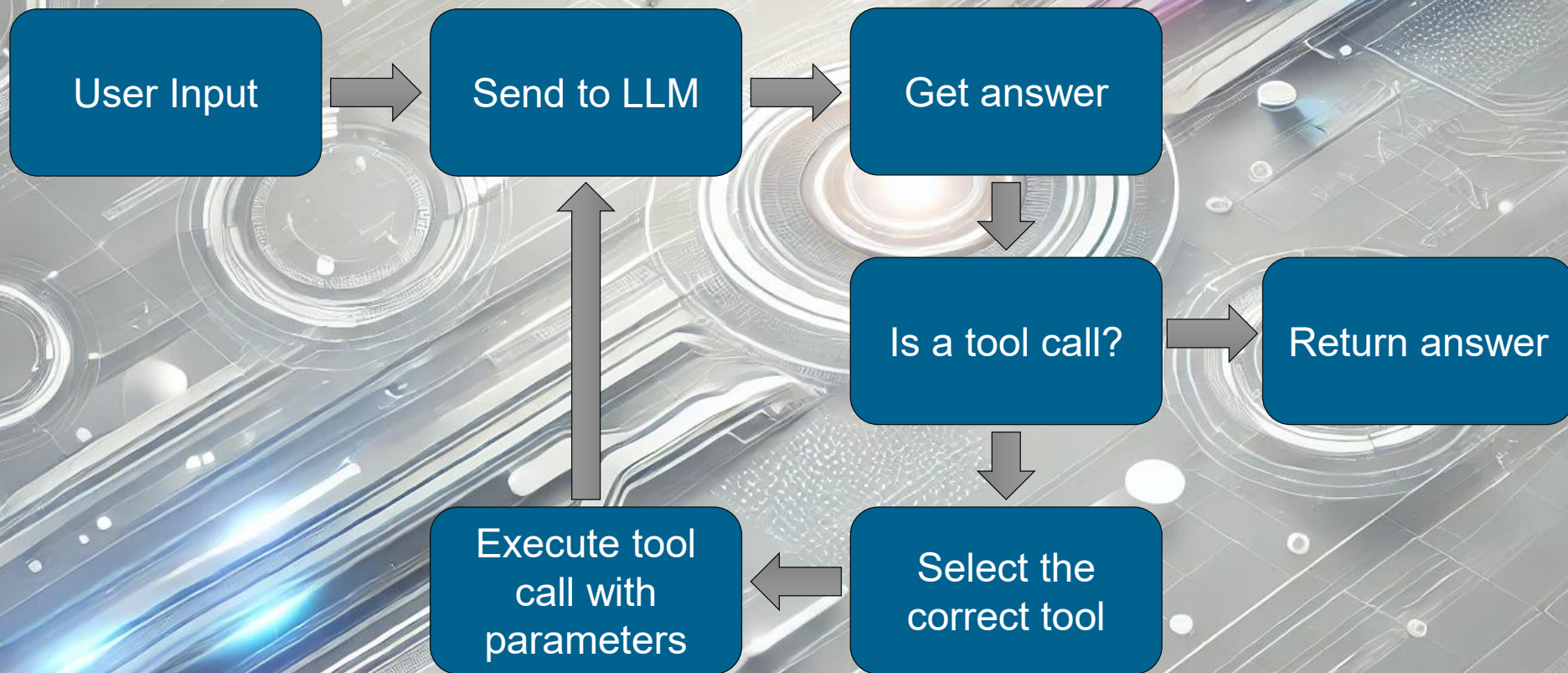
KNOWLEDGE ENHANCEMENT

BRING YOUR OWN DATA

RAG: Retrieval-augmented Generation



Tool calling



The background is a dark, deep purple space. In the center, there is a large, billowing cloud of a lighter, vibrant purple color. Several bright, glowing purple lines streak across the scene, some appearing as long, thin trails and others as sharper, more defined beams. Faint, intricate patterns resembling circuit boards or digital networks are visible in the background, adding to the technological or digital aesthetic.

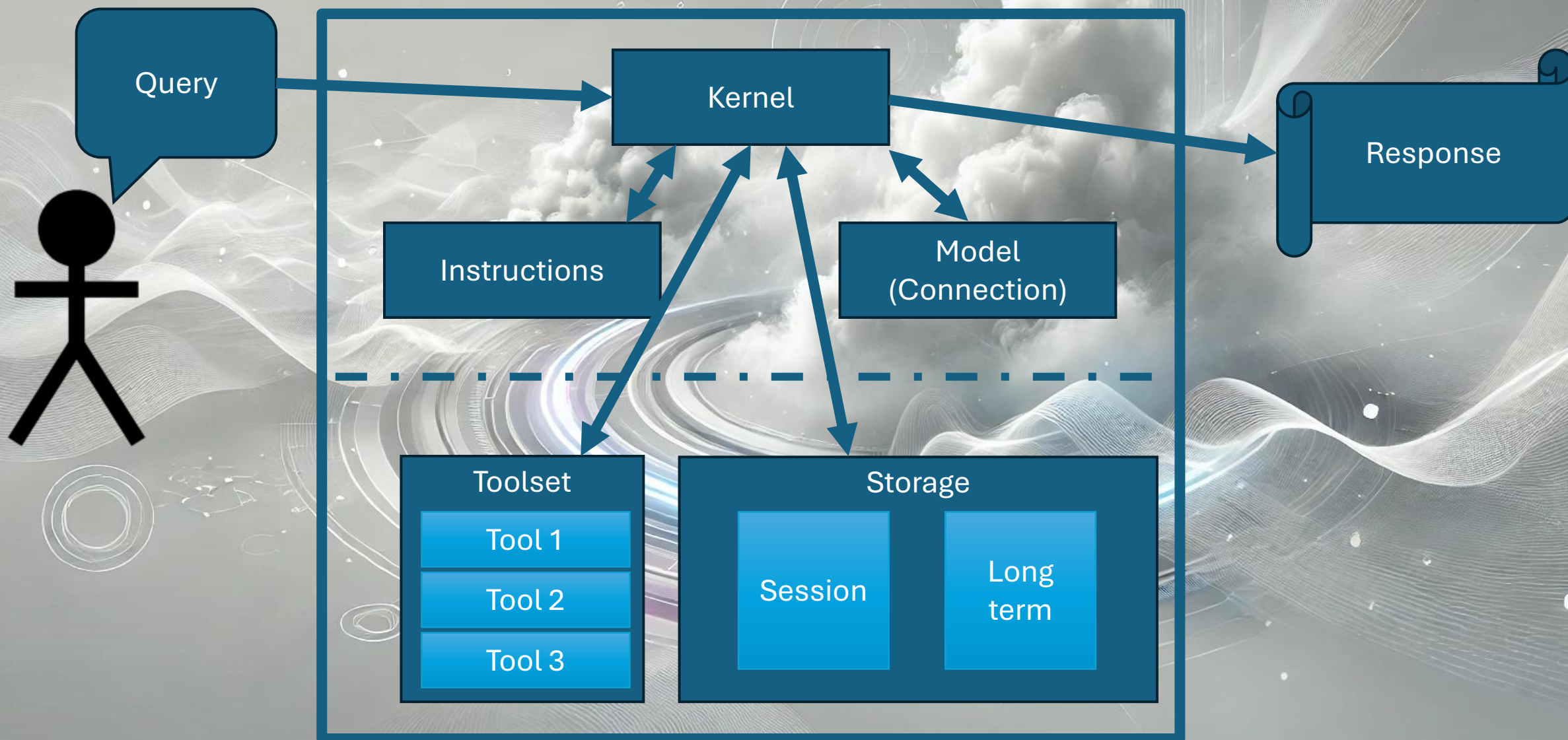
DEMO



AGENTIC ORCHESTRATION

LET THE AI DO IT'S THING

WHAT IS AN AGENT?



WHAT ARE TOOLS?

Code

```
def function(params):  
    ... do something
```

```
def function2(params):  
    ... do something
```

MCP: Model Context Protocol

MCP Client



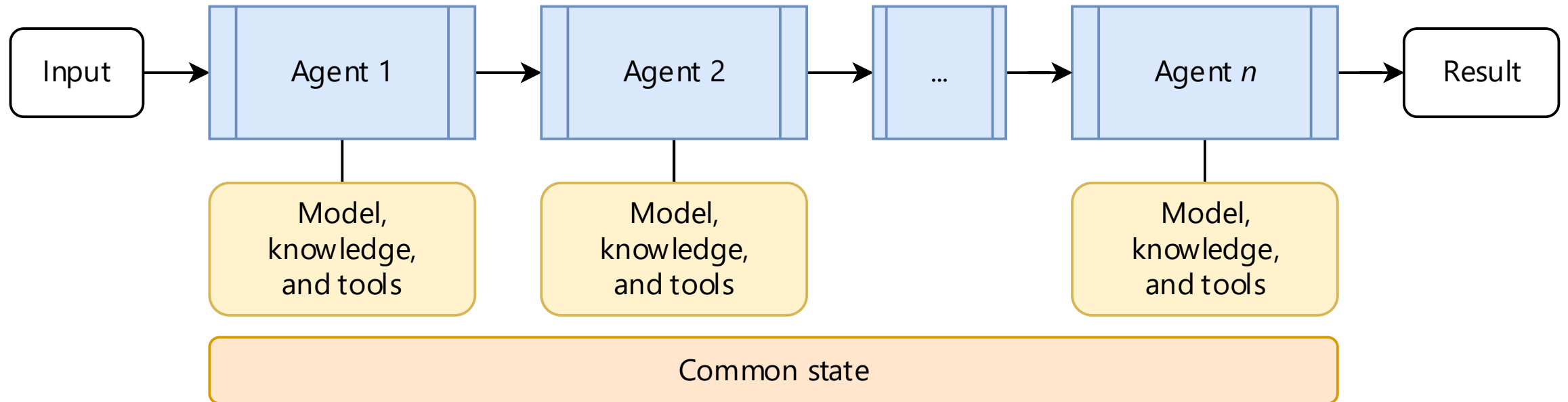
MCP Server

Local on STDIO or Remote via HTTP

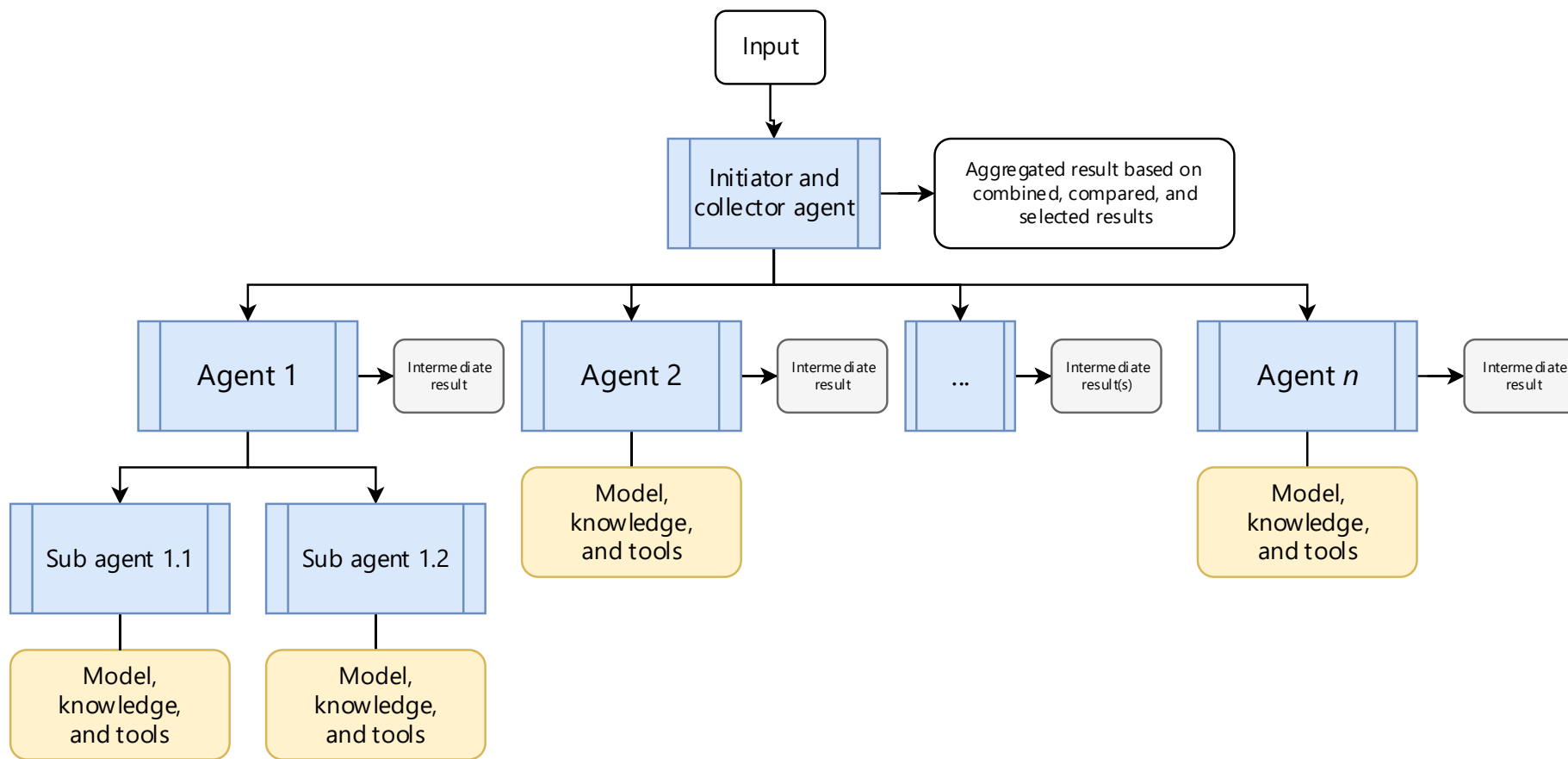


Service

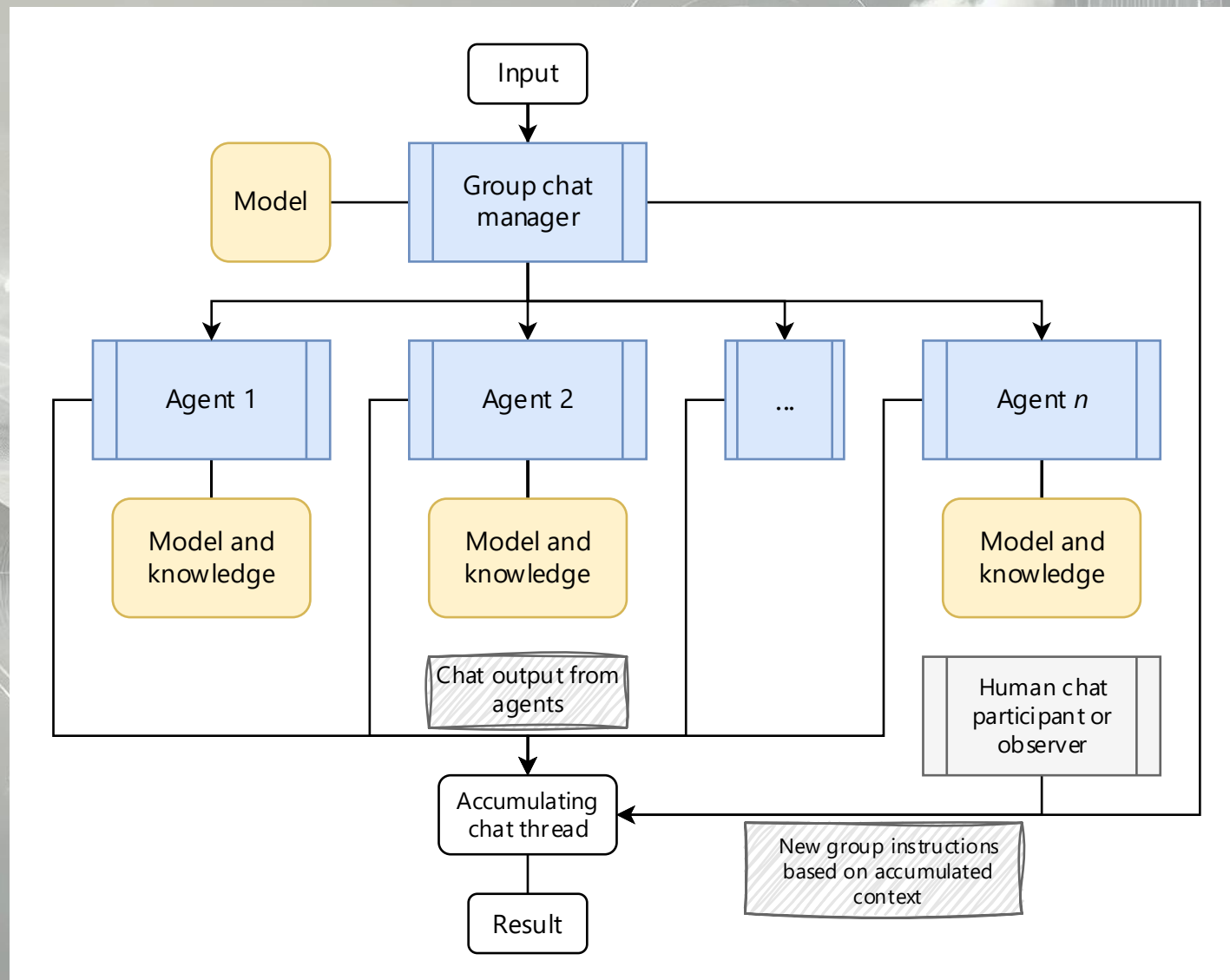
SEQUENTIAL ORCHESTRATION



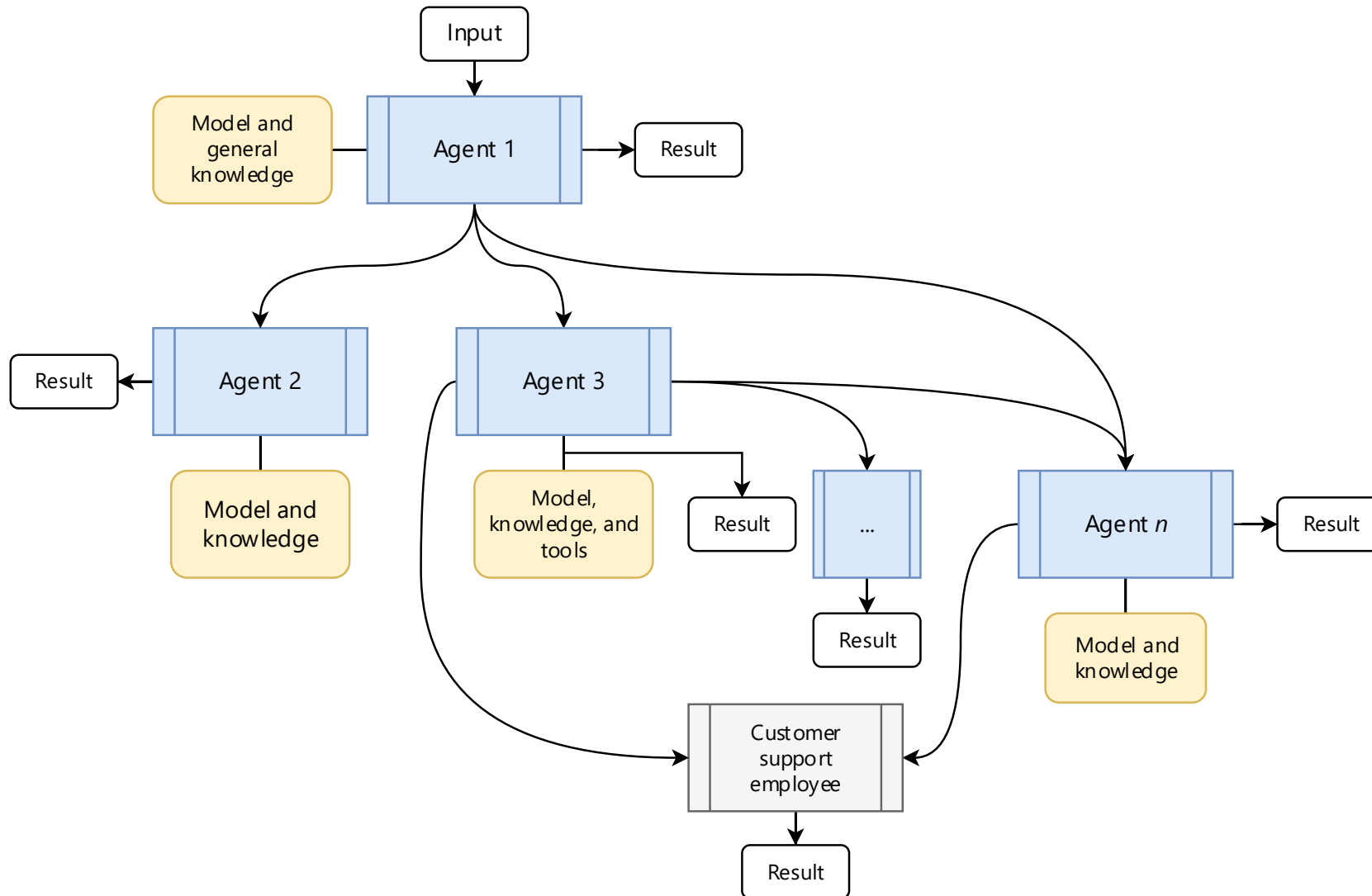
CONCURRENT ORCHESTRATION



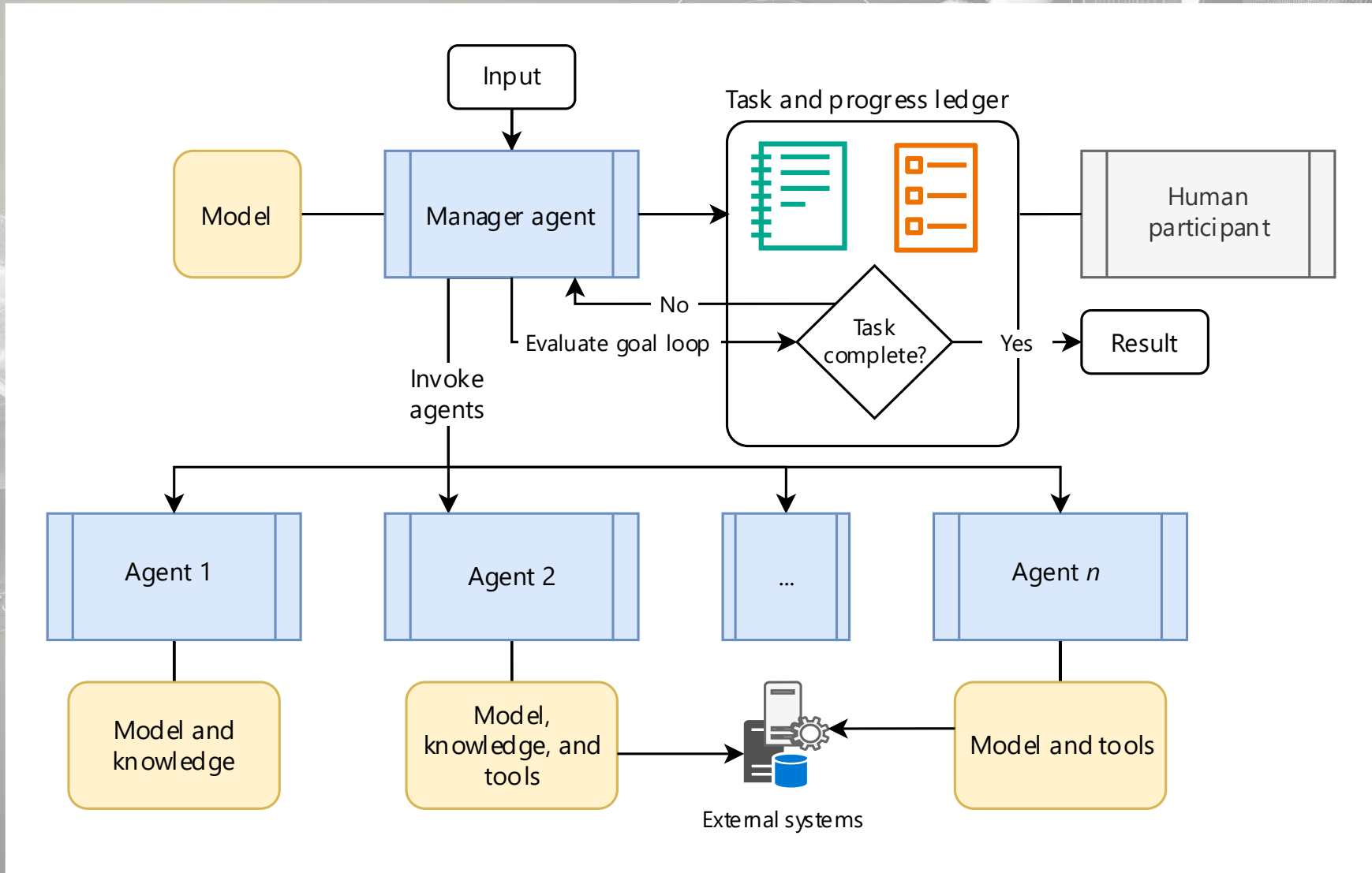
GROUP CHAT ORCHESTRATION



HANDOFF ORCHESTRATION



MAGENTIC ORCHESTRATION





Demo

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Questions?



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