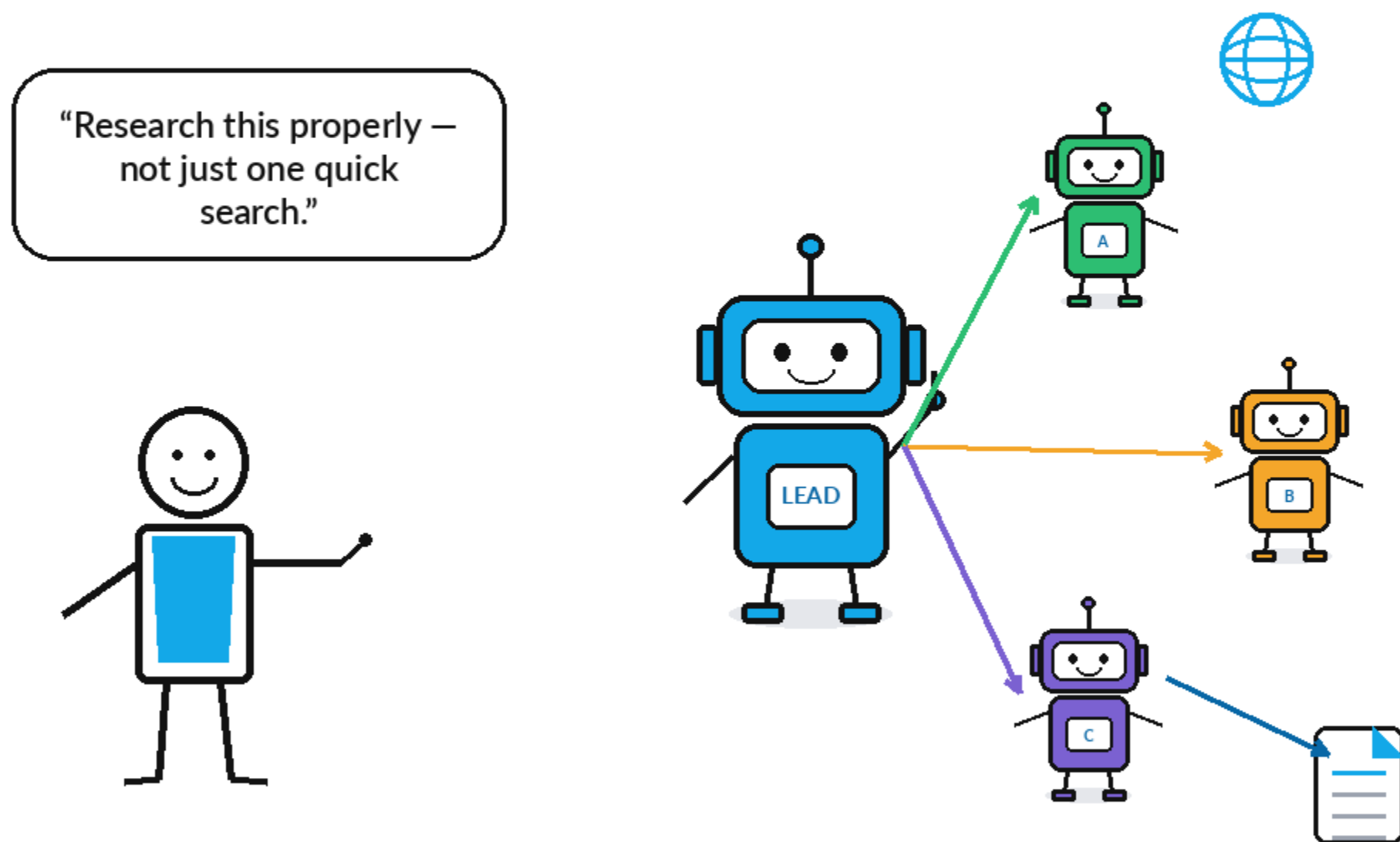


HOW AI AGENTS DO DEEP RESEARCH

From one question to a cited report — explained simply.



Search finds pages. Deep research builds an answer.

QUICK LOOKUP vs DEEP RESEARCH

Both are useful — but they solve different kinds of questions.

QUICK LOOKUP



“What is the capital of Japan?”

- ✓ One narrow fact
- ✓ Usually one or a few sources
- ✓ Fast and inexpensive

DEEP RESEARCH



“Should our company enter the Japanese market?”

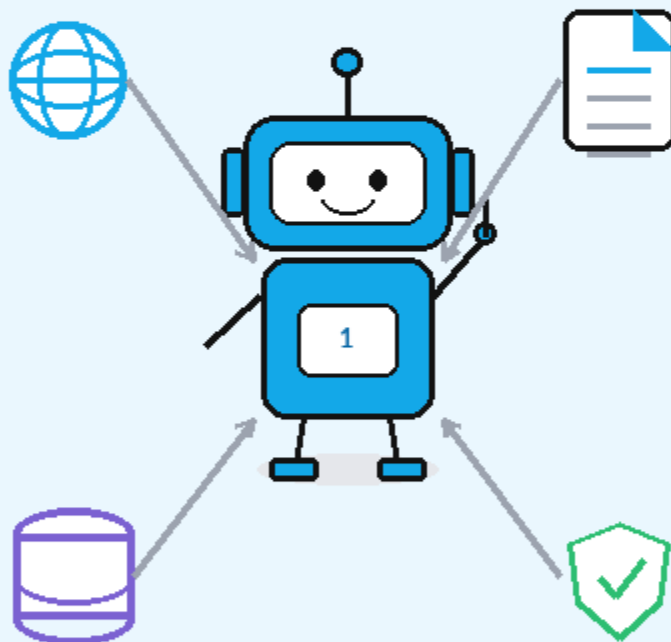
- ✓ Many subquestions
- ✓ Multiple source types
- ✓ Comparison, reasoning and a report

Do not use a research team to answer a one-line fact.

ONE RESEARCHER OR A TEAM?

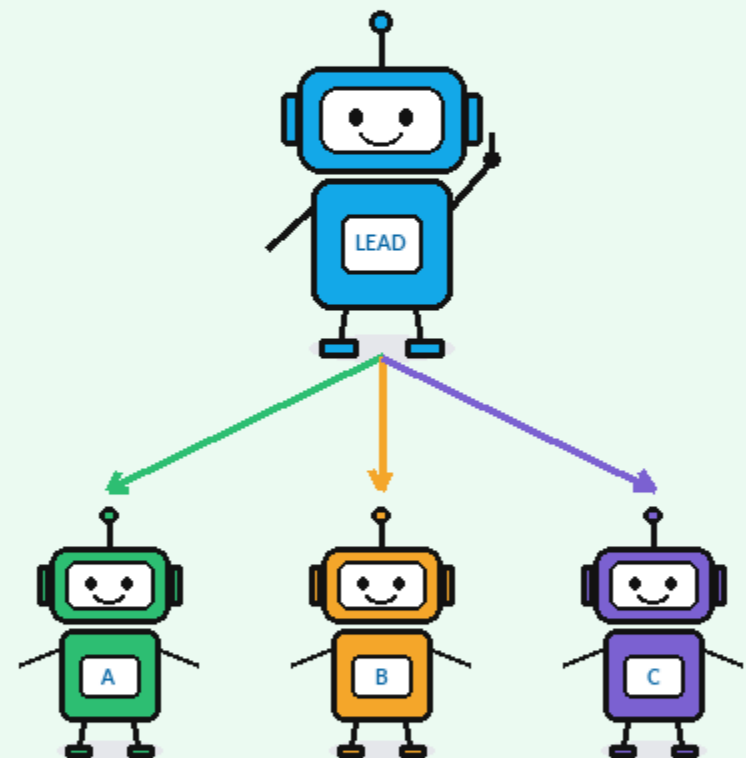
Deep research is a workflow — not one mandatory architecture.

SINGLE RESEARCH AGENT



One agent repeatedly plans, searches, reads and revises.

LEAD + PARALLEL WORKERS

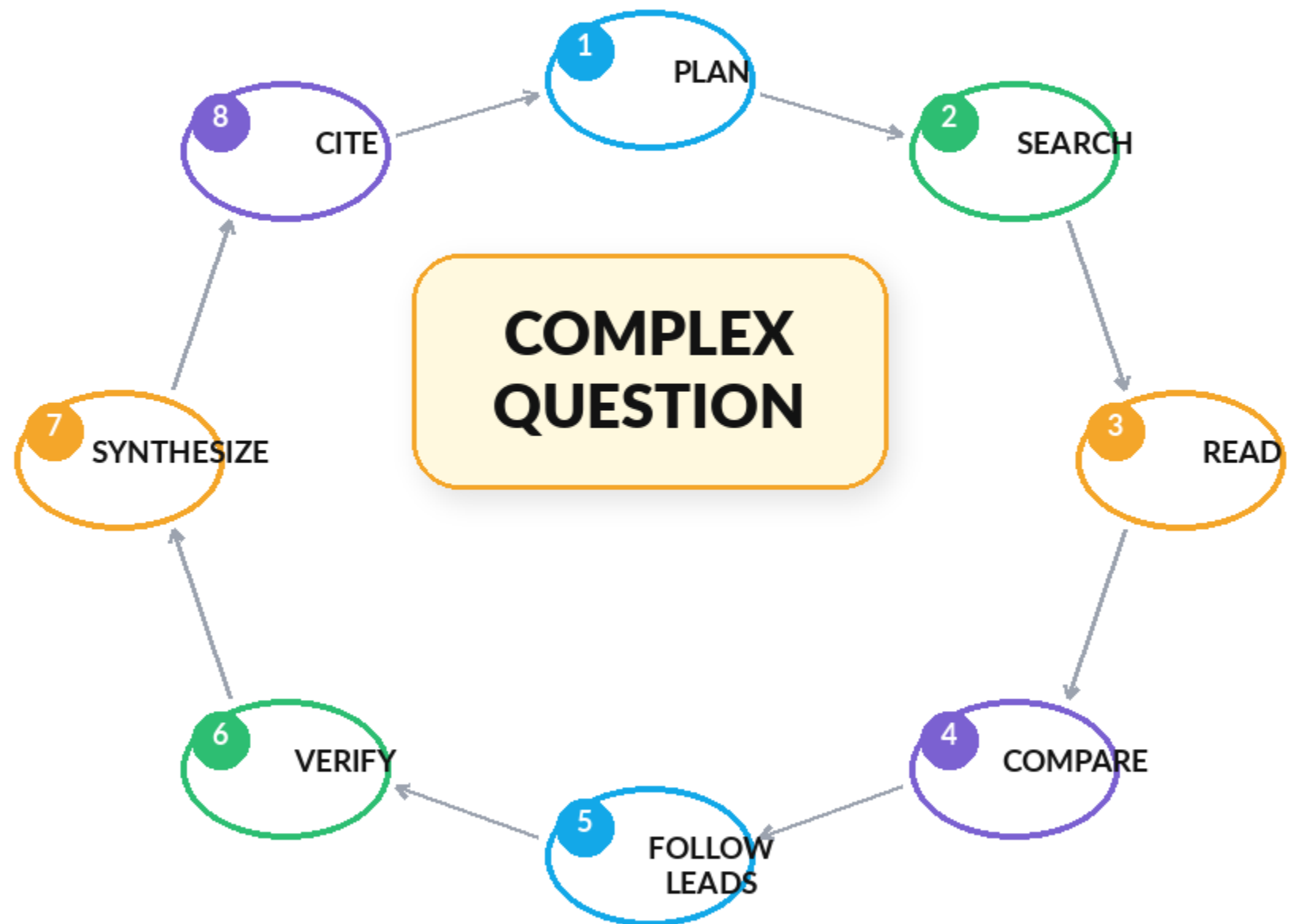


A lead agent divides independent work and combines the findings.

Use a team only when parallel exploration adds real value.

WHAT MAKES THE RESEARCH “DEEP”?

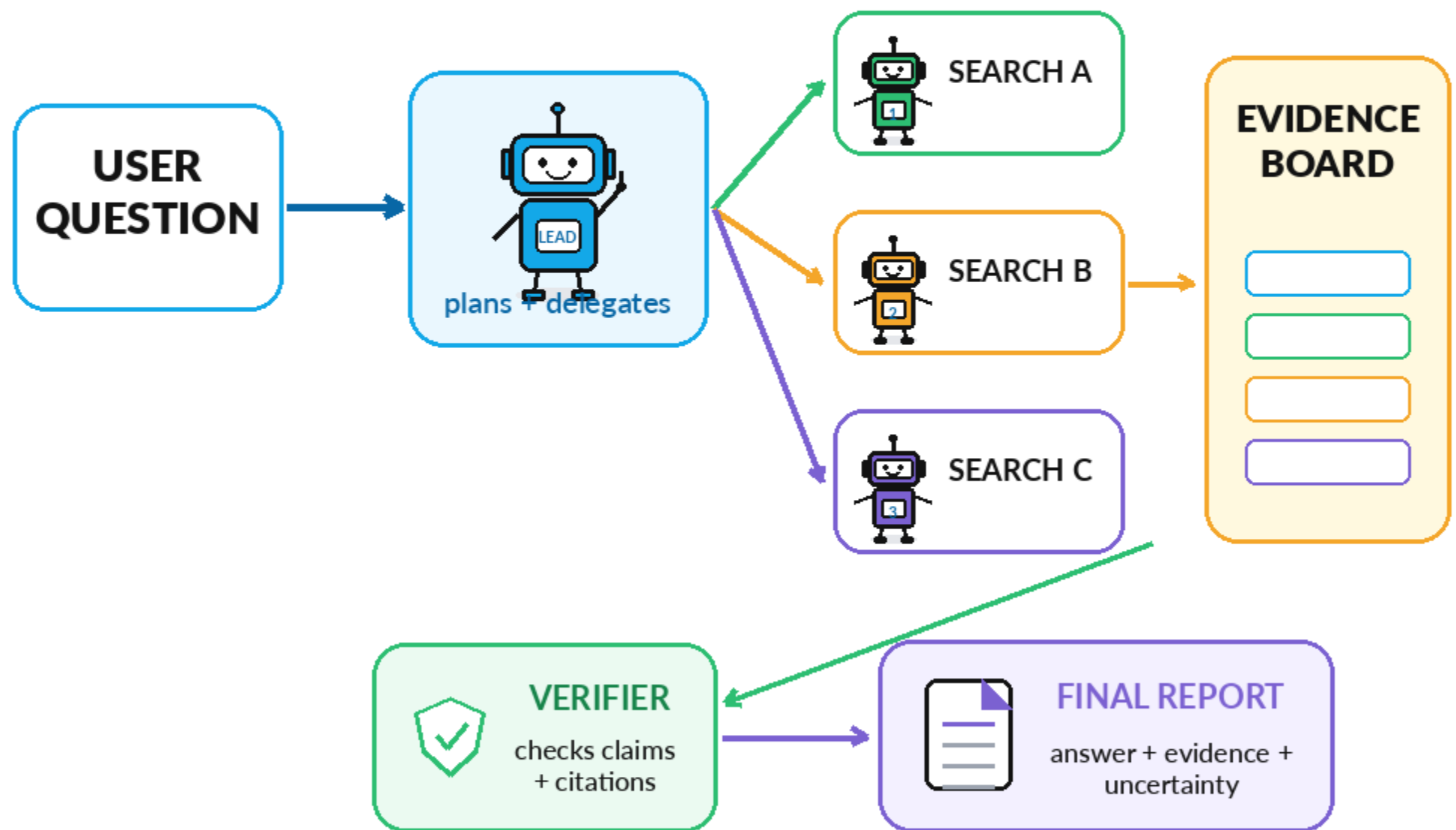
It is not just “search more.” It is a repeated reasoning process.



The agent changes direction when new evidence appears.

A SIMPLE DEEP-RESEARCH SYSTEM

Think of it as a small research desk with clear responsibilities.



One agent can play several of these roles in a simpler system.

STEP 1: CLARIFY THE GOAL

A vague question creates broad searches and a vague report.

VAGUE

“Research restaurant expansion.”



What city?
Which customer?
What budget?
What time period?
What output?

RESEARCH-READY

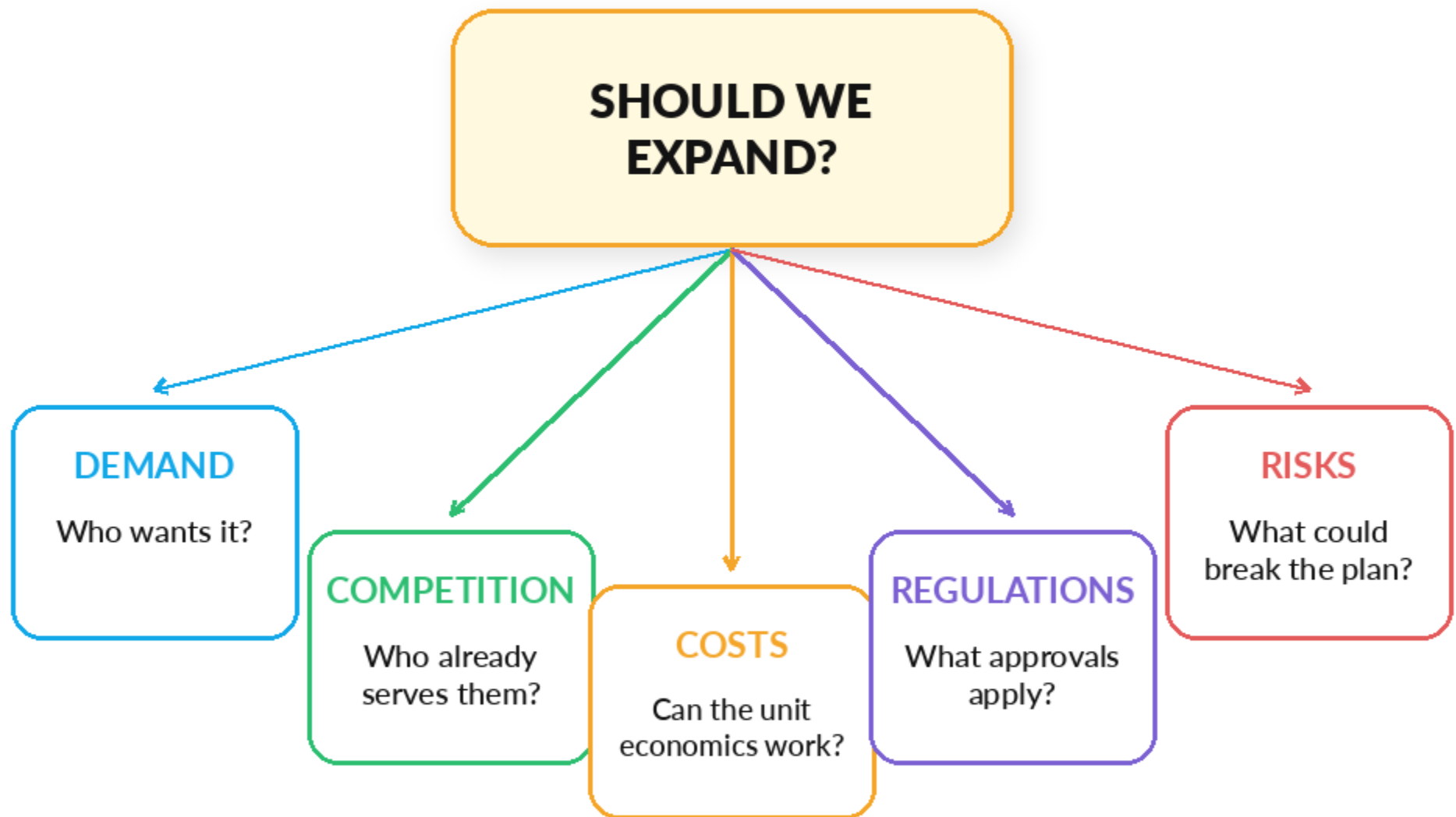
“Should our casual-dining restaurant expand to Bengaluru in 2027?”

- ✓ Target: office workers
- ✓ Budget: ₹1.2 crore
- ✓ Compare 3 neighbourhoods
- ✓ Assess demand, costs, competition and regulations
- ✓ Output: recommendation + evidence

Clear scope tells the agent what to search — and when to stop.

STEP 2: BREAK THE BIG QUESTION APART

Complex research becomes manageable when each part is answerable.



Big question → small questions → evidence → one decision.

STEP 3: MATCH EACH QUESTION TO A SOURCE

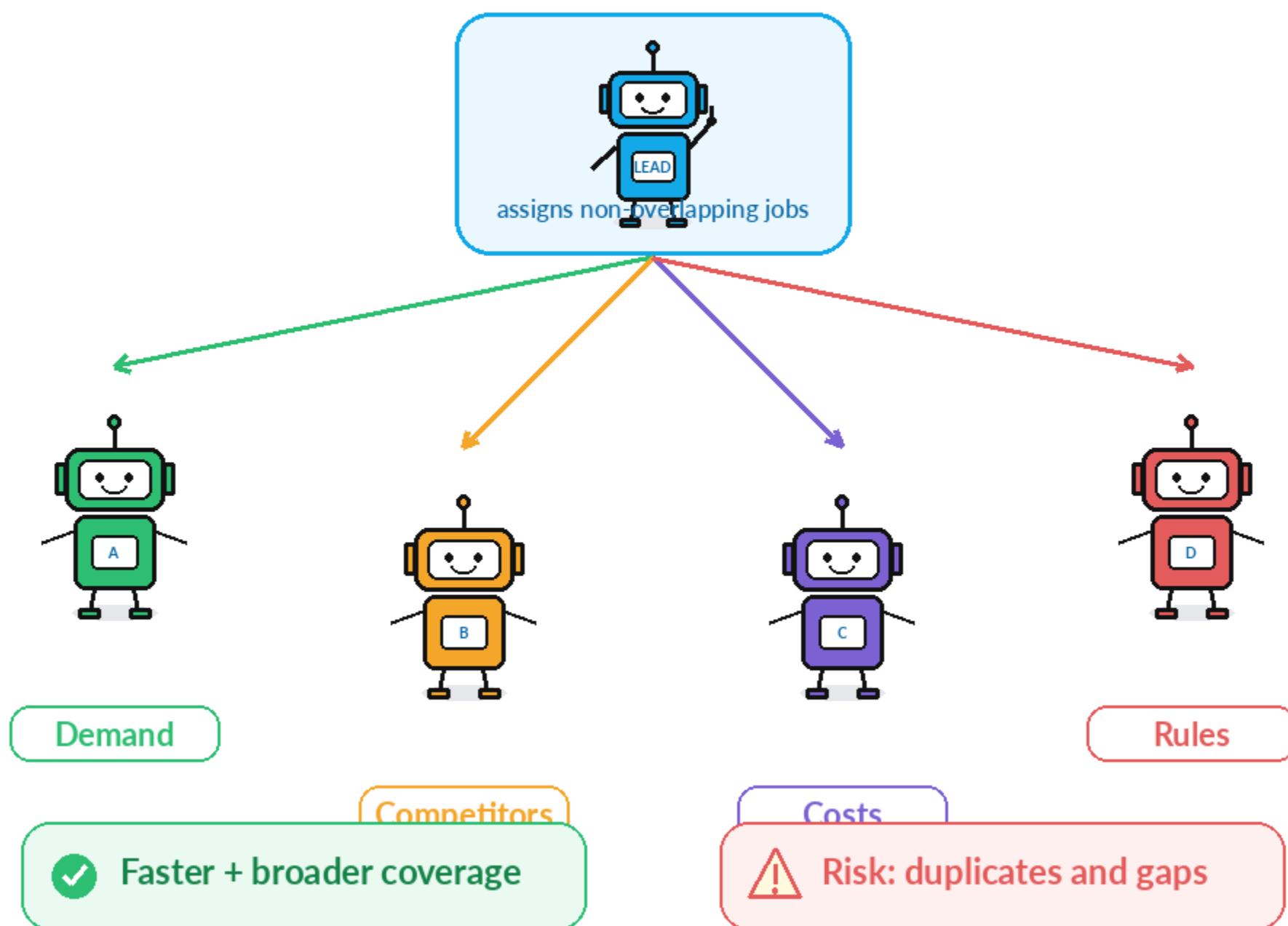
Source selection is part of the agent's reasoning.

SUBQUESTION	BEST STARTING POINT	WHY
Demand	Search trends + internal sales	Shows external interest and real customers
Competition	Maps, menus, reviews	Shows who serves the same need
Costs	Property listings + supplier quotes	Supports a realistic cost model
Regulations	Official government websites	Best source for rules and permits
Internal reality	Files, databases, spreadsheets	Uses company-specific facts

The nearest search result is not always the best evidence.

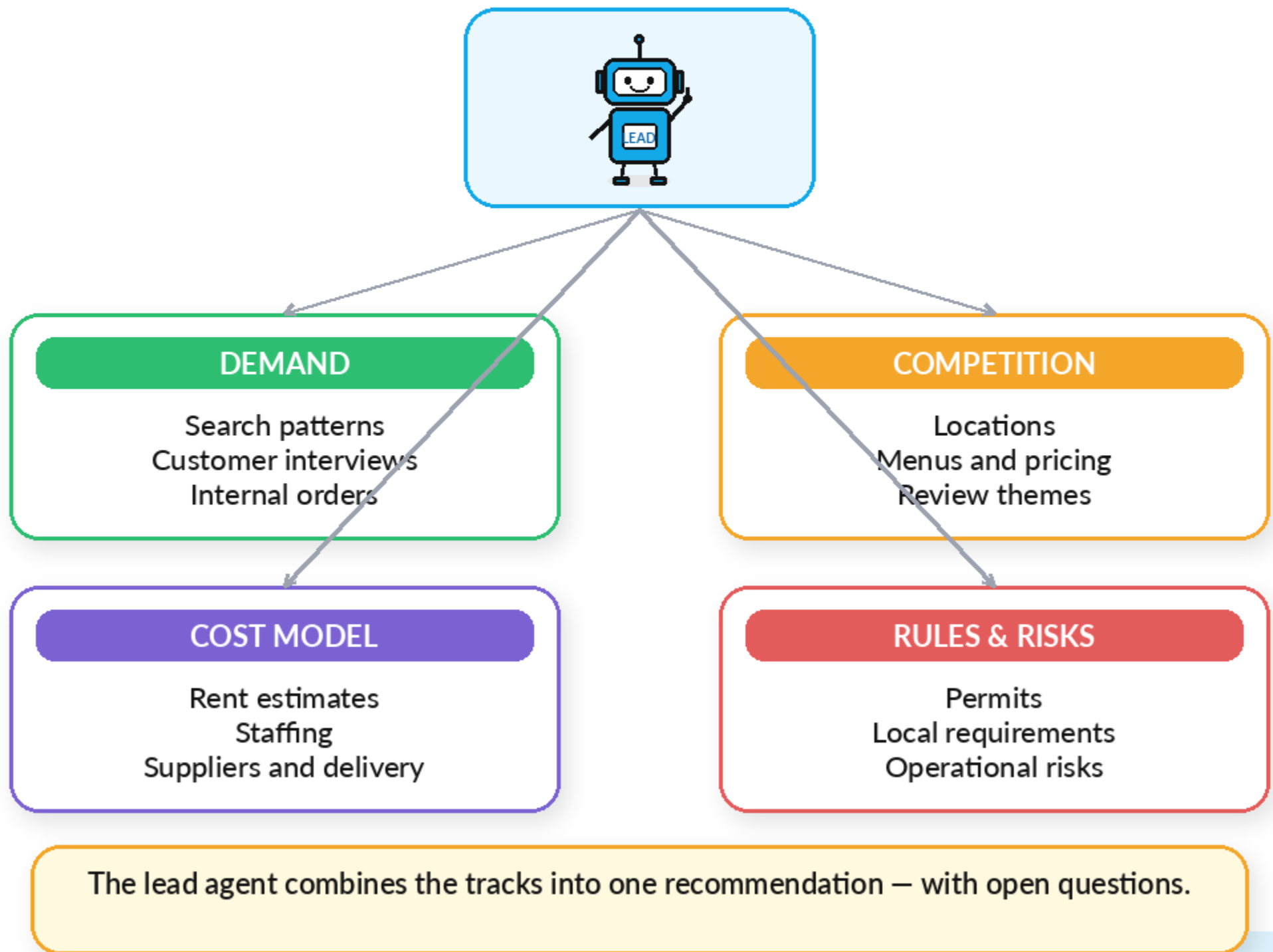
STEP 4: SEARCH IN PARALLEL

Independent questions can be explored at the same time.



EXAMPLE: ONE QUESTION, FOUR RESEARCH TRACKS

A restaurant-expansion agent gathers different evidence in parallel.



STEP 5: EXTRACT EVIDENCE — NOT JUST SUMMARIES

A useful note should show exactly what supports a claim.

EVIDENCE CARD

CLAIM

What does the source appear to show?

DATA / QUOTE

The specific number, sentence or observation

DATE + SCOPE

When, where and for whom it applies

SOURCE

Original page, document, database or file

CONTEXT

What came before and after the extracted detail

CONFIDENCE

High, medium or low — and why

Good research keeps the path from claim → evidence → source visible.

STEP 6: JUDGE SOURCE QUALITY

Popular does not automatically mean reliable.

1 PRIMARY / OFFICIAL Original data, filings, laws, research papers, company records

2 INDEPENDENT ANALYSIS Reputable research with a clear method

3 REPUTABLE REPORTING Useful for context and recent developments

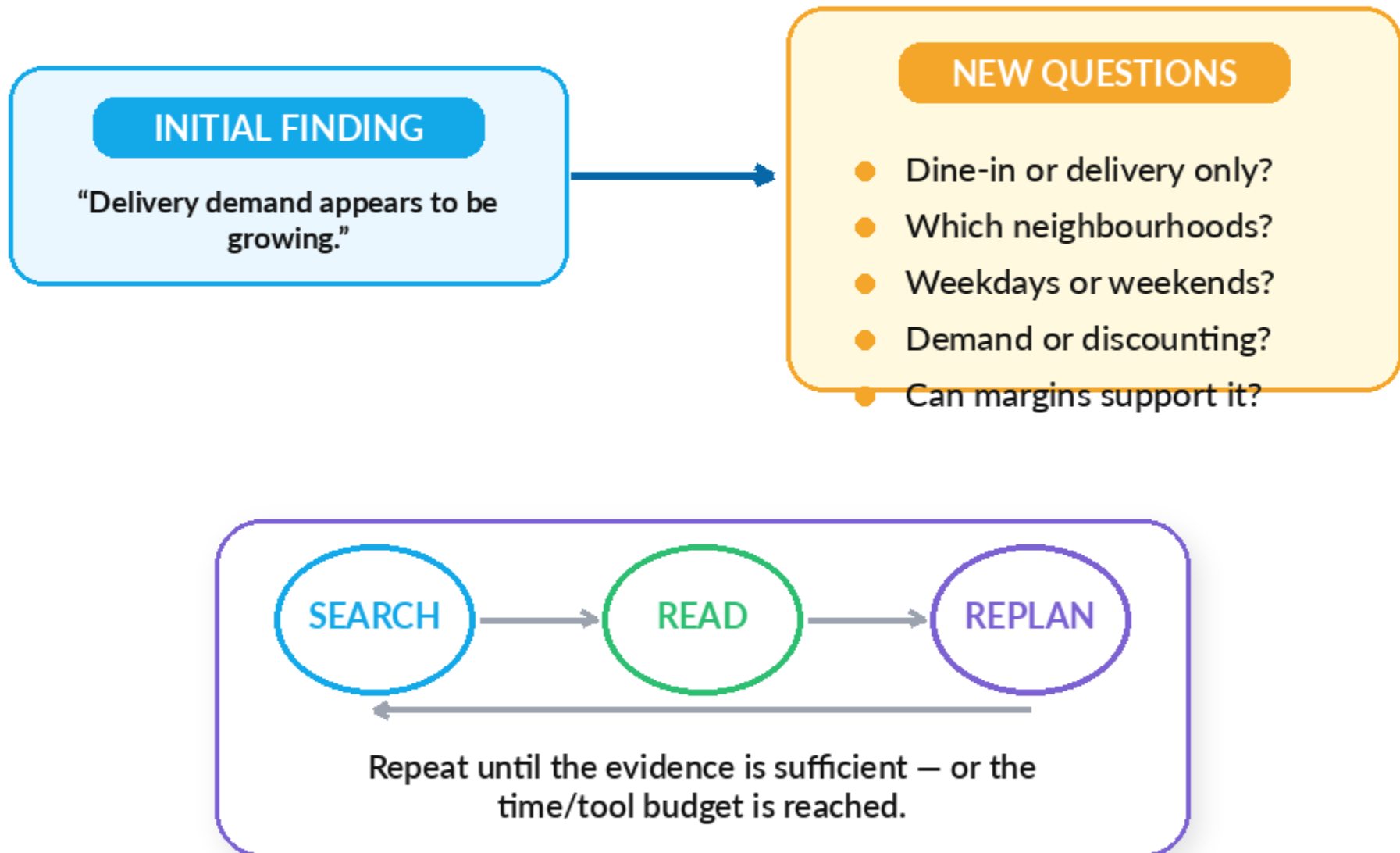
4 VENDOR CONTENT Useful — but may have an incentive

5 ANONYMOUS CLAIM A lead to investigate, not final proof

✓ First-hand? ✓ Recent? ✓ Relevant? ✓ Independent? ✓ Method clear?

STEP 7: FOLLOW LEADS AND ITERATE

New evidence can change the next search.



A research agent should know when to continue – and when to stop.

STEP 8: HANDLE CONFLICTING EVIDENCE

Good research does not hide disagreement.

SOURCE A

“The market has strong demand.”

SOURCE B

“The market is already saturated.”

THE AGENT CHECKS



Definitions

Do they mean the same thing?



Dates

Are they from the same period?



Geography

Citywide or one neighbourhood?



Sample

How much data was used?



Incentive

Who benefits from the claim?

Report what agrees, what conflicts, and what remains unknown.

STEP 9: SYNTHESIZE — DO NOT COPY-PASTE

The final answer should connect evidence to the decision.

EVIDENCE



Demand signals



Competitor map



Cost model



Rules + risks



FINAL SYNTHESIS

- ✓ Answer the question directly
- ✓ Connect findings instead of listing them
- ✓ Cite each important factual claim
- ✓ Separate evidence from
- ✓ State uncertainty and missing data

A link is not proof. The citation must support the sentence.

Research becomes valuable when evidence changes the recommendation.

ANATOMY OF A GOOD RESEARCH REPORT

A reader should be able to inspect how the conclusion was built.

1 EXECUTIVE ANSWER

The conclusion in plain English.

2 KEY FINDINGS

The few facts that matter most.

3 EVIDENCE TABLE

Claim, source, date and confidence.

4 RISKS & UNKNOWNNS

What is uncertain or missing.

5 RECOMMENDATION

What to do next — and why.

6 SOURCE LIST

Clickable references for verification.

The report is not “trust me.” It is “here is how I got here.”

WHERE DEEP RESEARCH HELPS

Use it when the answer depends on many sources and trade-offs.

BUSINESS STRATEGY

Market entry, competitors, pricing

ACADEMIC REVIEW

Compare papers and map debates

DUE DILIGENCE

Company, vendor or investment
research

POLICY ANALYSIS

Rules, stakeholders and impacts

TECHNICAL COMPARISON

Architectures, tools and trade-offs

MAJOR PURCHASE

Cars, appliances, property or travel

For a simple fact, normal search or a trusted database is usually better.

DEEP RESEARCH IN 2026

Modern research agents may go far beyond public web search.



WEB + PRIVATE SOURCES

Search the web, uploaded files and approved internal repositories.



COLLABORATIVE PLAN

Let the user review or refine the research plan before execution.



BACKGROUND WORK

Run long investigations asynchronously and notify the user later.



RICH OUTPUTS

Produce evidence tables, calculations, charts and visual summaries.

Capabilities vary by product. "Deep research" is a category, not one identical implementation.

RESEARCH AGENTS CAN STILL BE WRONG

More browsing does not remove the need for verification.

COMMON FAILURES

- ✗ Unsupported claims
- ✗ Citation does not match the sentence
- ✗ Outdated or duplicated sources
- ✗ One-sided search
- ✗ Instructions hidden inside webpages
- ✗ Too much cost or time

PRACTICAL GUARDRAILS

- ✓ Prefer approved or primary sources
- ✓ Require source diversity
- ✓ Verify citations against claims
- ✓ Set tool, time and cost budgets
- ✓ Use human review for important decisions
- ✓ State uncertainty clearly

Research should inform action – not automatically authorize it.

DAY 13 TAKEAWAY

DEEP RESEARCH = PLAN + EXPLORE + VERIFY + SYNTHESIZE + CITE

- ✓ Clarify the question and scope
- ✓ Break it into answerable parts
- ✓ Use the right source for each part
- ✓ Follow new evidence without searching forever
- ✓ Check conflicts and citation support
- ✓ Explain uncertainty before recommending action

NEXT UP

DAY 14: CAN AN AI AGENT CHECK ITS OWN WORK?

Reflection, verification and evaluator loops

What complex topic would you send to a research agent?

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