AI Automation / AI Agents

Create an agent that searches, summarizes, and synthesizes information from multiple sources.
Difficulty: Advanced
Model: GPT-4 / Claude / Gemini
Use Case: Market Research, Competitive Intelligence, Literature Review
Updated: May 2026
Why This Prompt Exists
Research is time-consuming: searching, reading, extracting, synthesizing. An AI agent can do all of this — but needs the right workflow.

You get:

- agents that search too narrowly (miss important sources)
- agents that search too broadly (drown in irrelevant results)
- summaries that miss key findings (shallow extraction)
- no source prioritization (low-quality sources weighted equally)
- no synthesis across sources (list of summaries, not integrated insights)

But research agents need structure:

- query generation: convert research question into search queries
- source selection: prioritize authoritative sources
- extraction: pull key claims, statistics, and quotes
- synthesis: integrate findings across sources
- citation: track sources for verifiability

Without workflow, research agents produce garbage.

This prompt designs effective research agent workflows.

The Prompt

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Assume the role of a research automation architect who designs AI
research agents.

Your task is to create a workflow for an agent that performs research
tasks.

Generate:

1. RESEARCH QUESTION
   - What the agent needs to answer

2. SEARCH STRATEGY
   - Query generation: [list of search queries to use]
   - Sources to search: [e.g., Google, academic databases, news,
internal docs]
   - Date range: [e.g., "last 12 months"]
   - Number of results per source: [X]

3. SOURCE PRIORITIZATION
   - Tier 1 (highest authority): [e.g., peer-reviewed journals,
official reports]
   - Tier 2 (moderate authority): [e.g., industry blogs, news
articles]
   - Tier 3 (low authority): [e.g., social media, forums]
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4. EXTRACTION PROTOCOL
   - For each source, extract:
     * Main claim
     * Key evidence (statistics, quotes)
     * Methodology (if research study)
     * Limitations (if acknowledged)

5. SYNTHESIS APPROACH
   - Theme clustering: group similar findings
   - Agreement: what do sources agree on?
   - Disagreement: where do sources conflict?
   - Gap identification: what's missing from the literature?

6. OUTPUT FORMAT
   - Executive summary (1 paragraph)
   - Key findings (bullet points with citations)
   - Conflicting evidence (if any)
   - Research gaps
   - Source list with authority ratings

7. READY-TO-USE AGENT PROMPT
   - The system prompt for the research agent

INPUTS:

Research question:
[E.G., "What are the latest trends in AI-powered customer support?"]

Sources available:

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[E.G., "Google Search, internal knowledge base, competitor websites"]

Depth required:
[QUICK (10 sources, 1 hour) / STANDARD (30 sources, 1 day) / DEEP
(100+ sources, 1 week)]

Output audience:
[EXECUTIVE / ANALYST / RESEARCHER]

RULES:
- Prioritize recent sources for fast-moving topics
- Include authority tiers in output (so users know which sources to
trust)
- Always cite sources (uncited claims are useless for research)
- Flag limitations and conflicts — don't smooth over disagreements
- For deep research, include a verification step (check critical
claims)
- Respect copyright and terms of service for each source
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How To Use It

- Start with a specific, well-defined research question (vague questions produce vague results).
- Prioritize source authority — a low-authority source can still be useful, but flag it.
- Always include citations — research without citations is opinion.
- Flag conflicts and gaps explicitly — don’t smooth over disagreements.
- For high-stakes research, have a human verify critical claims.

Example Input

Research question:

“What are the latest trends in AI-powered customer support?”

Sources available:
“Google Search, Gartner reports, competitor websites”

Depth required:
“STANDARD”

Output audience:
“EXECUTIVE”

Why It Works
Most research agents are just search + summarize — missing the critical synthesis step that turns information into insight.

This framework improves outcomes by forcing:

- search strategy (what queries, what sources?)
- source prioritization (which sources to trust more?)
- extraction protocol (what to pull from each source?)
- synthesis approach (how to integrate across sources?)
- output formatting (executive summary, key findings, citations)

Great research agents don’t just find information — they synthesize it into actionable insights with clear provenance.

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