Building Your First AI Agent

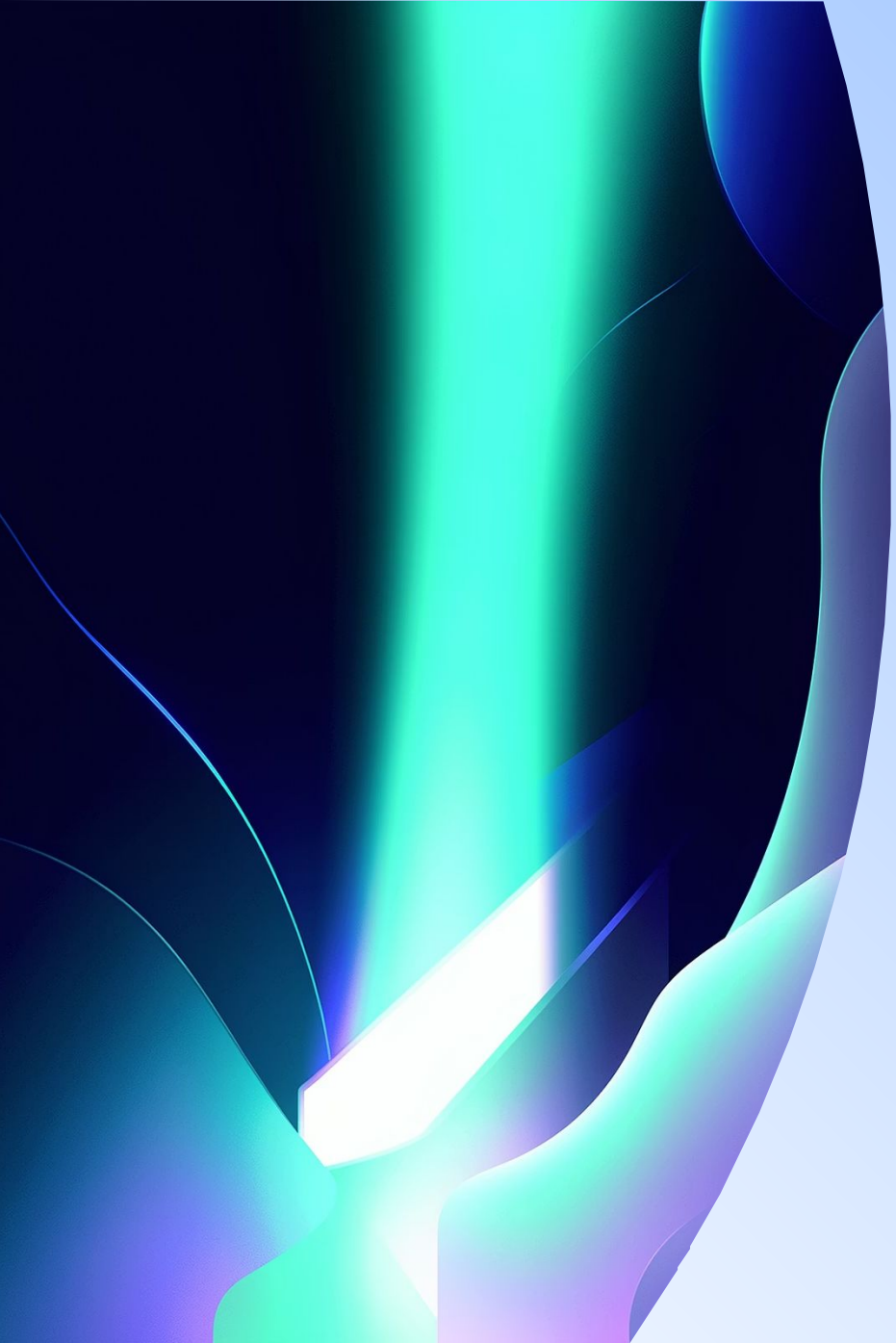
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TECH WEEK
GRAND RAPIDS

NETNERD VENTURES





You already use AI. Today you put it to work.

You're already in the room

Most of this room uses ChatGPT, Claude, Copilot, or Gemini every week.

Chat vs. Agent

Chat is you doing the work with AI's help. An agent is AI doing the work with your oversight.

Today's plan

30 minutes to understand what agents are and aren't, then an hour with laptops open building a working one.

No coding required

You leave with an agent you built yourself.

What an agent actually is (no buzzwords)

An AI agent has four things a chatbot doesn't:



A Goal

An outcome, not a single question — "prep me for Thursday's meeting," not "what does this company do?"



Tools

The ability to reach outside the chat: search the web, read your calendar, create a file, send an email.



A Loop

It takes a step, looks at the result, and decides what to do next until the goal is met.



Judgment

It decides which tool to use and when to stop or ask you.

The Capability Spectrum

Agents aren't one thing. They sit on a ladder, and each rung trades convenience for autonomy.



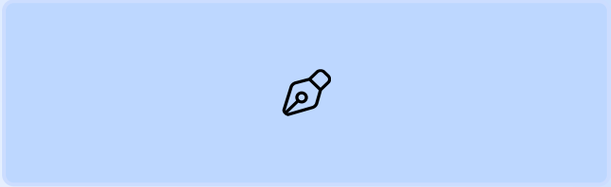
Level 1: Chat

You drive every step



Level 2: Assistant with Reach

AI plus tools, one task at a time



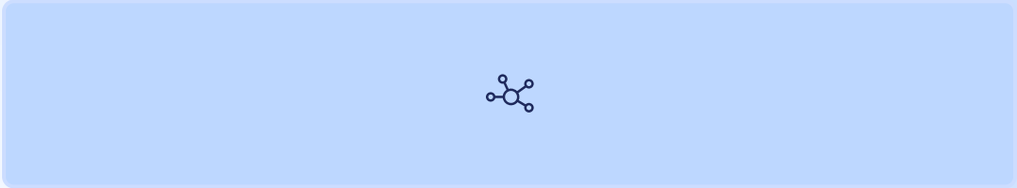
Level 3: Workflow Automation

A fixed path with AI inside the steps



Level 4: Goal-Directed Agent

You give the outcome, it figures out the steps



Level 5: Multi-Agent Systems

Teams of agents working together, running for hours

Most of the business value today lives in rungs 2 through 4. Most of the hype lives in rung 5.



LEVEL 1

Chat — You Drive Every Step

How it works

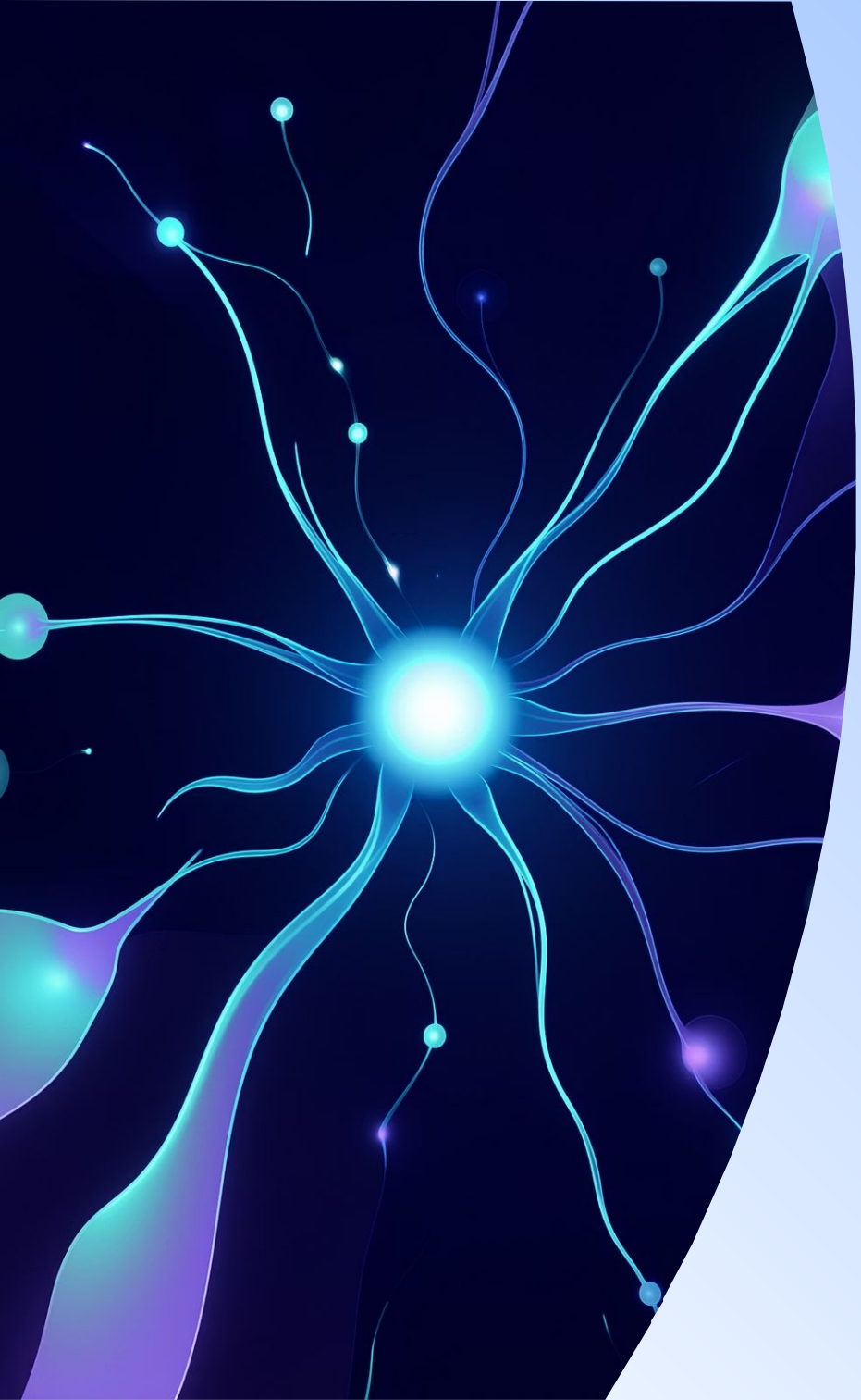
You ask, it answers. You copy, paste, and follow up. Nothing leaves the chat window. It can't see your calendar or your files unless you paste them in.

Great for

Drafting, summarizing, brainstorming, explaining — any task where you supply all the context manually.

The limit

Every step is manual, and the AI forgets the moment you close the tab. This is where 90% of business AI use sits today.



LEVEL 2

Assistant with Reach

Same chat, but now it can search the web, read a document you've connected, or look at a spreadsheet. One task, one turn: "look up this company and summarize what they do."

Examples: ChatGPT with browsing, Copilot inside Microsoft 365, Gemini reading your Google Drive, Claude with a connected folder.

This is the first rung where AI touches real, live information instead of what's in its training.

The limit: it still waits for you between every step.

ChatGPT

Browsing + web search

Copilot

Inside Microsoft 365

Gemini

Reading your Google Drive

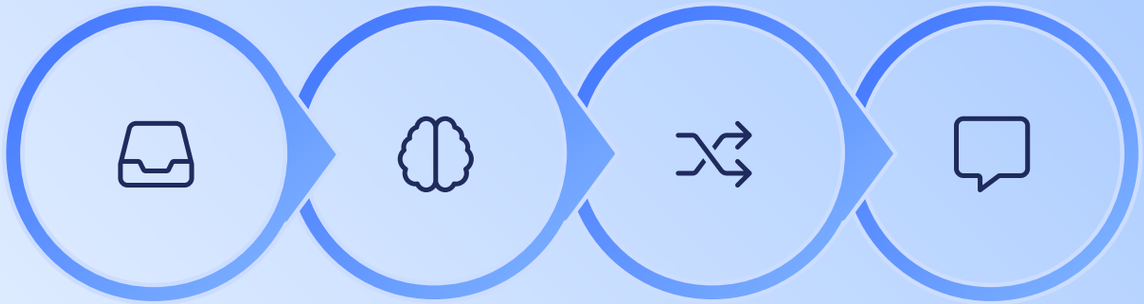
Claude

With a connected folder

LEVEL 3

Workflow Automation

A fixed sequence of steps with AI doing the thinking inside one or more of them.



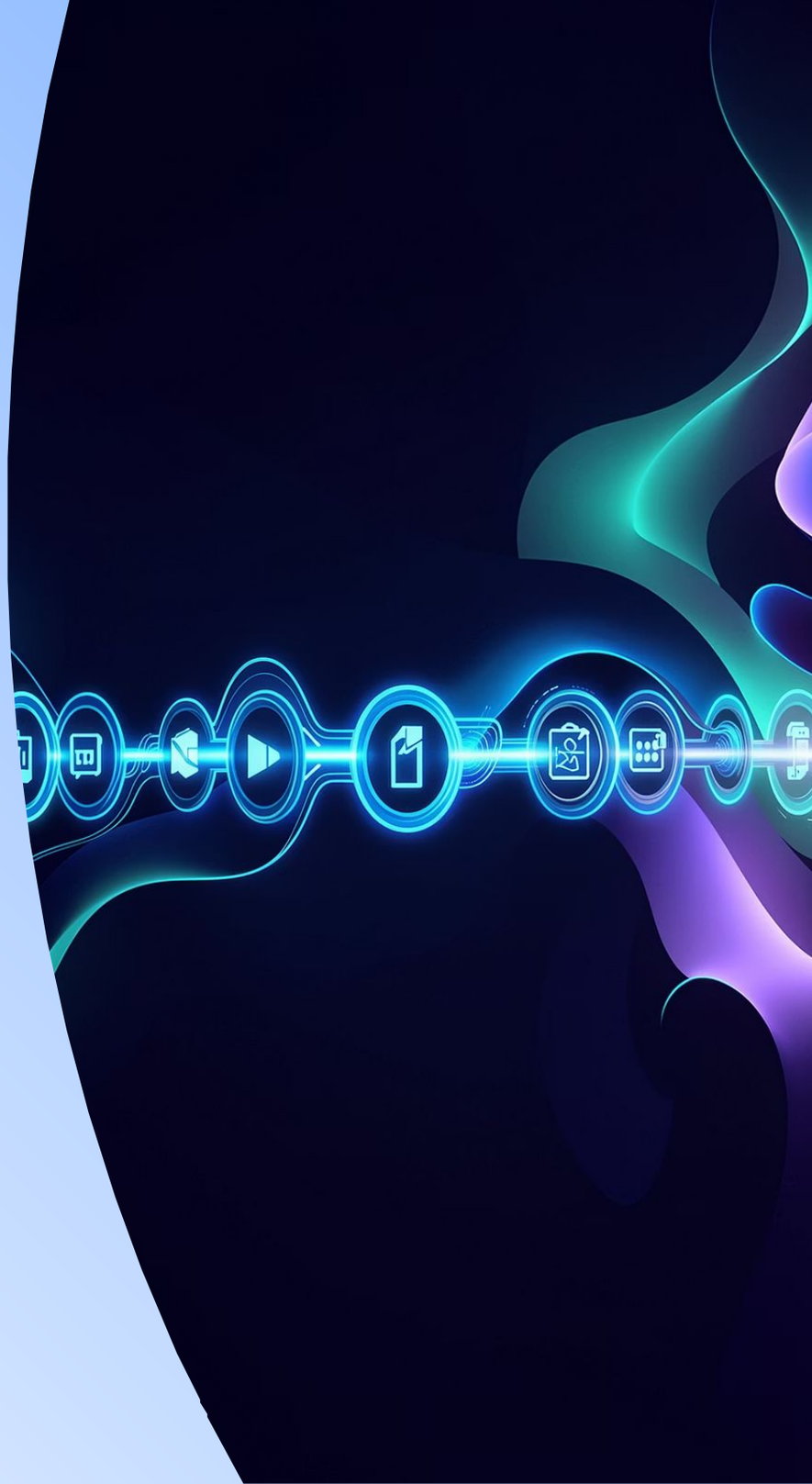
Tools you've heard of

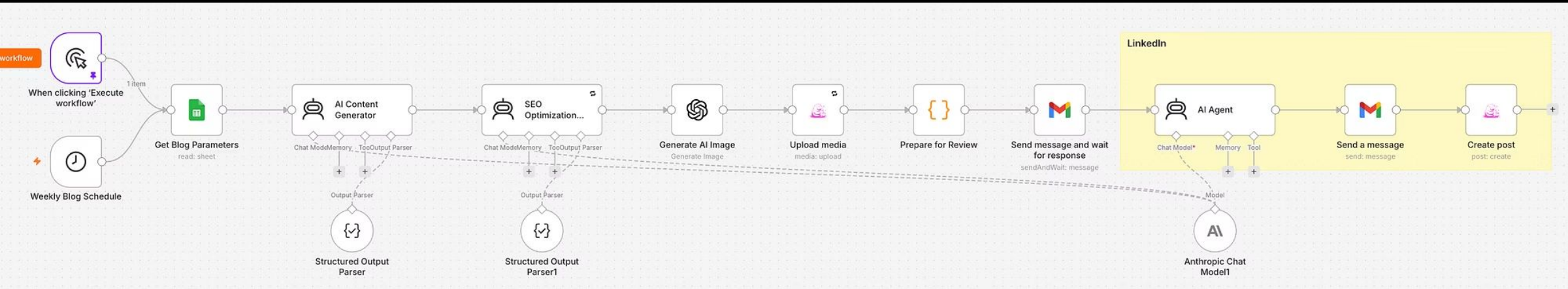
Zapier, Make, n8n, Power Automate, plus the automation features inside ChatGPT and Copilot.

Strength & Limit

Strength: Predictable, repeatable, easy to audit — the same thing happens every time.

Limit: It can't handle a situation the designer didn't anticipate. It follows the path, it doesn't choose one.




workflow
When clicking 'Execute workflow'
1 item
Weekly Blog Schedule
Get Blog Parameters
read: sheet
AI Content Generator
Chat Mode
Memory
Tool
Output Parser
SEO Optimization...
Generate AI Image
Generate Image
Upload media
media: upload
Prepare for Review
Send message and wait for response
sendAndWait: message
LinkedIn
AI Agent
Chat Model*
Memory
Tool
Send a message
send: message
Create post
post: create
Model
Structured Output Parser
Structured Output Parser1
Anthropic Chat Model1

LEVEL 4 — YOU BUILD THIS TODAY

Goal-Directed Agent

You give the outcome. The agent plans the steps, picks the tools, checks its own results, and asks you when it's unsure.

> "Prep me for tomorrow's 10am meeting" → it reads the calendar, looks up the attendees and their company, pulls your last notes with them, and writes a one-page brief to a file.

Flexible by design

Same agent handles a sales call, a board meeting, or a vendor review without being rebuilt for each.

Available today in

ChatGPT (custom GPTs and agent mode), Claude (Projects and Cowork), Copilot (agents), Gemini (Gems), and Codex.

This is the rung you build today.



LEVEL 5

Autonomous Systems

How it works

An orchestrator agent breaks a big job into pieces and hands them to specialist agents: researcher, writer, reviewer, coder.

Scale & scope

Runs for hours or days, not minutes. Software teams use these to build entire features overnight.

Real but early

Expensive, hard to supervise, and one wrong assumption early on compounds through every step.

Where the headlines come from

This is the source of "AI will replace your whole department" stories. Worth watching — not where most businesses should start.

Where Agents Earn Their Keep Today — and Where They Don't

✅ Useful Right Now

- Work that is repetitive, information-heavy, and checkable: meeting prep, daily briefings, research summaries, first-draft reports, inbox triage
- Tasks where a human reviews the output before it matters

⚠️ Overhyped Right Now

- "Set it and forget it" — fully hands-off agents making decisions with no review
- High-stakes, judgment-heavy calls: hiring, pricing, legal, medical
- Anything where a confident wrong answer costs more than the time it saved

The sweet spot: an agent does the 80% of gathering and drafting, you do the 20% of deciding.

Guardrails: Three Questions Before You Turn One Loose

1

What can it touch?

Start read-only: reading calendar and email is low risk; sending email and moving money is not. Grant the minimum.

2

When does it ask?

A good agent stops and checks with you before anything irreversible. Build that in from day one.

3

How do you check its work?

Every output should be verifiable: sources cited, files you can open, a summary you can compare against reality.

Trust is earned one task at a time. Expand what the agent can do as it proves itself.



Now You Build One

Laptops open. Choose **ONE** agent to build in the next hour:

🗓️ Meeting Prep Assistant

Connects two real tools (web lookup + file creation) and writes a briefing for an upcoming meeting.

Guided build — we walk through it together.

- Web lookup tool
- File creation tool
- Produces a one-page meeting brief

☀️ Daily Brief

Connects your own email, calendar, and meeting notes and produces a morning summary.

Practice on the sample first, then point it at your own accounts.

- Email + calendar integration
- Meeting notes reader
- Produces a daily morning summary

Both work in **ChatGPT, Claude, Copilot, Gemini, and Codex**. Step-by-step instructions for each tool are in the workbook.

netnerd.ai/workbook