AI AT WORK · BUILDER · 14 MIN READ

Automate your workflows and research with AI

Triggers, actions and AI steps with Zapier, Make and n8n, plus how to use AI to research the internet without getting fooled.

Pass the check (4 of 5) online to earn the “Automation Architect” badge:
https://digitalbuilders757.com/university/study/automate-workflows-and-research

Every automation is 'when this, do that'

An automation (or workflow) starts with a trigger (a new form entry, a new email with a label, 8am every Monday) and runs one or more actions (add a row to a sheet, send a Slack message, create a calendar event).

Add an AI step in the middle and the workflow can think: summarise the email, sort the request into a category, draft a reply, pull the date and amount out of an invoice.

The main automation tools

- Zapier: the easiest start, with thousands of app connections and AI features including agents.
- Make: a visual canvas for more complex branching workflows, often cheaper at higher volumes.
- n8n: popular with technical teams; can be self-hosted and has strong AI agent building blocks.
- Built-in options: Gmail filters, Google Apps Script, Microsoft Power Automate, and the scheduled tasks inside AI assistants.
- Webhooks: a URL one app calls to tell another 'something happened'. The glue under many automations, including Stripe payments.

Good first automations

- New website enquiry → AI summary and category → message to your team channel → row in a tracking sheet.
- Receipts emailed to you → AI extracts vendor, date and amount → expense sheet.
- Every Friday → AI drafts a weekly update from your completed tasks for you to edit and send.

- Start with a person approving the final step. Remove the approval only once it has run correctly many times.

Researching the internet with AI

AI assistants with web search, and 'deep research' modes that read dozens of pages and write a report, can save hours: comparing tools, scanning a market, finding grants or summarising new laws.

Use them like a research assistant, not an oracle. Ask for sources on every claim, open the important ones, prefer original sources (the company's own docs, government sites, the actual study) over blogs, check dates, and watch for product reviews that are really ads.

Key terms

Automation / workflow
Steps that run by themselves: when this happens, do that.

Trigger
The event that starts an automation.

Action
A step an automation performs after the trigger.

Webhook
A URL one app calls to tell another that something happened.

Zapier
A beginner-friendly automation tool connecting thousands of apps.

Make
A visual automation tool for complex, branching workflows.

n8n
An automation tool popular with technical teams that can be self-hosted.

AI step / agent in a workflow
An automation step where AI summarises, sorts, drafts or decides.

Deep research
An AI mode that searches and reads many sources, then writes a report with citations.

Human in the loop
A person approves important steps before they happen.

Try it: Design an automation on paper first

1. Pick one weekly task you repeat.
2. Write it as: Trigger → Steps → Where the result goes → Who approves.
3. Ask an AI assistant to turn your plan into Zapier, Make or n8n steps.
4. Build it with a test record and keep the approval step on.

KNOWLEDGE CHECK

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5 questions. Circle one answer for each; 4 or more correct passes. Answers are at the back.

1. In 'When a new form is submitted, add a row to a sheet', the trigger is:

A. Adding a row to the sheet
B. A new form submission
C. The sheet
D. The connection between the two apps

2. What is a webhook?

A. A fishing app
B. A type of password
C. A URL one app calls to tell another app that something happened
D. A browser extension

3. Which automation tool can be self-hosted and is popular with technical teams?

A. Gmail
B. Canva
C. Instagram
D. n8n

4. What's the safest way to launch a new AI automation that sends emails?

A. Keep a human approval step at first
B. Let it send everything immediately so you can see how it performs
C. Turn off logging
D. Give it admin access to everything

5. An AI research report makes a surprising claim. What should you do?

A. Share it right away
B. Open the source and confirm it says that, preferring original sources
C. Ask the AI whether it's sure, and trust it if it repeats the same claim twice
D. Ignore all AI research

Official sites

Zapier: https://zapier.com
Make: https://www.make.com
n8n: https://n8n.io

Last reviewed 2026-11-25. AI tools change fast; check each tool's own site for current features, plans and prices.

ANSWER KEY

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1. B: A new form submission
The trigger starts the workflow; the actions follow.

2. C: A URL one app calls to tell another app that something happened
Webhooks deliver events between apps, like Stripe telling your app a payment succeeded.

3. D: n8n
n8n can run on your own server and has strong AI agent building blocks.

4. A: Keep a human approval step at first
Human-in-the-loop catches mistakes while you build trust in the workflow.

5. B: Open the source and confirm it says that, preferring original sources
Check the original source. AI research is a starting point, not proof.