

# AI for Knowledge Workers

## Complete Starter Kit

Your Companion Workbook for the 12-Episode Video Series

*Practical automation for professionals behind the firewall*



*AI Education for the Thoughtful Mind*

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## What's Inside

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- Worksheets & templates for every episode
- Safety checklists that protect your career
- The Mini-Spec template that makes AI actually useful
- The 5-Question Playbook for any future automation
- Quick reference cards for your desk

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## Welcome to Your Starter Kit

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### About This Workbook

This workbook is your hands-on companion to the "AI for Knowledge Workers" video series. It's designed to transform watching into doing—every concept has a worksheet, every lesson has an exercise, every episode builds toward your first automation.

#### How to use this workbook:

1. **Watch the episode** — Get the concepts and context
2. **Complete the worksheets** — Apply what you learned to YOUR workflow
3. **Build progressively** — Each episode builds on the previous one
4. **Keep it accessible** — Print the quick reference cards for your desk

### Before You Start Checklist

Complete these items before beginning Episode 0:

Preparation Step	Done?
I have time available for each episode	<input type="checkbox"/>
I have a specific workflow in mind that frustrates me	<input type="checkbox"/>
I have access to a computer where I can take notes	<input type="checkbox"/>
I understand this is a hands-on course, not passive watching	<input type="checkbox"/>
I'm prepared to build something real, even if imperfect	<input type="checkbox"/>

## Your Learning Journey

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### The Four Phases

Phase	Episodes	What You'll Accomplish
Foundation	0-2	Understand your unique constraints; identify your first workflow; recognize you're already an architect
Safety & Setup	3-6	Learn AI's real capabilities; master data safety; set up your toolkit and workspace
Build	7-10	Organize files; select your project; write a Mini-Spec; build your first automation
Playbook	11-12	Extend to email safely; create your universal automation framework

# Series Roadmap

## PHASE 1: FOUNDATION

- Ep 0: Why I Made This Series
- Ep 1: Why Your World Is Different
- Ep 2: Shadow Systems – You're Already an Architect



## PHASE 2: SAFETY & SETUP

- Ep 3: AI as Your Junior Assistant (Not a Magic Wand)
- Ep 4: Safety First – What Never Leaves Your Network ★
- Ep 5: Your AI Toolkit Behind the Firewall
- Ep 6: Setting Up Your Local Workbench



## PHASE 3: BUILD

- Ep 7: Organizing Your Files
- Ep 8: Choose Your First Excel Workflow
- Ep 9: Turn Your Workflow into a Mini-Spec ★★
- Ep 10: Build Your First Automation with AI



## PHASE 4: PLAYBOOK

- Ep 11: Intro to Mailbox Automation (Safely)
- Ep 12: Your Automation Playbook – Series Finale ★★

★ = High-value standalone material

★★ = Transformation documents (use forever)

# Your Progress Tracker

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Check off each episode as you complete it

Ep	Title	Watched	Worksheet	Homework
0	Why I Made This Series	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Why Your World Is Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Shadow Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	AI as Your Junior Assistant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Safety First ★	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Your AI Toolkit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Setting Up Your Workbench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Organizing Your Files	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Choose Your First Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Turn Your Workflow into a Mini-Spec ★★	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Build Your First Automation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Intro to Mailbox Automation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Your Automation Playbook ★★	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**My start date:** \_\_\_\_\_ **Target completion:** \_\_\_\_\_

## The Progressive Homework Chain

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Each episode's homework builds on the previous:

Episode	Homework	Builds On
1	Identify one repeating workflow	—
2	Document that workflow deeply	Episode 1
3	Test AI with a low-stakes task	Episodes 1-2
4	Create synthetic version of your data	Episodes 1-3
7	Create project folder structure	Episode 4
8	Score candidates and commit to one	Episodes 1-7
9	Write complete Mini-Spec	Episode 8
10	Build the automation	Episode 9
12	Apply 5-Question Playbook	All previous

 **Important:** Don't skip episodes. The chain is designed so each step prepares you for the next.

## Quick Navigation

If You Need...	Section
 Data safety checklist	Episode 4 — Safety First
 Folder structure template	Episode 7 — Organizing Files
 Workflow scoring matrix	Episode 8 — Choose Your Workflow
 Mini-Spec template	Episode 9 — Mini-Spec
 5-Question Playbook	Episode 12 — Playbook
 All quick reference cards	Quick Reference Cards section

## A Note on Pace

This isn't a race. Some people complete the series in a focused week. Others take a month, fitting episodes between meetings. Both approaches work.

### **What matters:**

- Complete the homework before moving on
- Use YOUR real workflow as the case study
- Build one thing successfully before scaling up

You're not just watching videos—you're building a skill that compounds over time.

### **Let's begin.**

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# Phase 1: Foundation — Episodes 0-2

*Understanding your reality and recognizing your existing expertise*

**Outcome:** You'll identify your first automation candidate and recognize you're already doing architect-level work

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## Episode 0: Why I Made This Series

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### Your Motivation Anchor

Why are you here? What do you hope to accomplish?

**What frustrates you about your current workflows?**

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**What would change if you could automate your most tedious tasks?**

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**What's one thing you hope to build by the end of this series?**

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### The Core Message

"The upgrade isn't given. It's earned."

This series exists because generic AI tutorials don't work for knowledge workers behind firewalls. The path forward requires:

Step	What It Means
Showing up	Committing to learn, even when it's uncomfortable
Building	Creating something real, not just consuming content
Failing	Accepting that first attempts won't be perfect
Trying again	Using failures as information, not stopping points

## Episode 1: Why Your World Is Different

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### My Work Reality Audit

Check all that apply to your situation

#### Infrastructure Constraints

Constraint	Applies to Me
I connect through a VPN	<input type="checkbox"/> Yes <input type="checkbox"/> No
My laptop is managed/locked down by IT	<input type="checkbox"/> Yes <input type="checkbox"/> No
I can't install software without approval	<input type="checkbox"/> Yes <input type="checkbox"/> No
My files live on network drives or SharePoint	<input type="checkbox"/> Yes <input type="checkbox"/> No
I use organization-specific software	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Compliance & Oversight

Constraint	Applies to Me
I complete annual security/privacy training	<input type="checkbox"/> Yes <input type="checkbox"/> No
I handle sensitive data (health, financial, HR)	<input type="checkbox"/> Yes <input type="checkbox"/> No
My work is subject to regulatory requirements	<input type="checkbox"/> Yes <input type="checkbox"/> No
Data sharing outside org requires approval	<input type="checkbox"/> Yes <input type="checkbox"/> No
I can't use certain cloud tools for work data	<input type="checkbox"/> Yes <input type="checkbox"/> No

## The Three False Assumptions

Generic AI tutorials assume these—but they're probably wrong for you:

Assumption	Reality Check	Your Situation
"You can install anything"	Most corporate laptops are locked down	<input type="checkbox"/> Can install <input type="checkbox"/> Need approval <input type="checkbox"/> Can't install
"You can upload anything"	Data policies restrict what leaves your network	<input type="checkbox"/> Can upload freely <input type="checkbox"/> Some restrictions <input type="checkbox"/> Strict limits
"Compliance doesn't matter"	Your job depends on following data rules	<input type="checkbox"/> No compliance <input type="checkbox"/> Some rules <input type="checkbox"/> Heavy compliance

**Your reality score:** Count your "Yes" answers above.

- **0-4 constraints:** Standard environment—many tutorials may work
- **5-7 constraints:** Restricted environment—this series is for you
- **8+ constraints:** Heavily restricted—this series is definitely for you

## Episode 1 Homework: Workflow Identification Sheet

Find one repeating workflow that's a candidate for automation

## Criteria for a Good First Workflow

Criterion	What It Means	✓
Repeated often	You do it daily, weekly, or monthly	<input type="checkbox"/>
Involves data manipulation	Copy-paste, filtering, rearranging, summarizing	<input type="checkbox"/>
Tedious when tired	Error-prone, boring, or frustrating	<input type="checkbox"/>
You understand it completely	No black boxes or mystery steps	<input type="checkbox"/>

## My Workflow Candidate

Field	Your Answer
What do you call this task?	
How often do you do it?	<input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Other: _
How long does it take?	_ minutes
Where does the data START?	
What do you DO to it?	
What is the FINAL RESULT?	
Why is this annoying?	

## Episode 2: Shadow Systems — You're Already an Architect

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### What Are Shadow Systems?

Shadow systems are the informal tools and processes you've built that aren't designed by IT or vendors. They exist because official systems don't match your real work.

#### Examples:

- The 47-tab Excel workbook that tracks everything
- The "temporary" Access database from 2017 that's still running

- The color-coded project tracker everyone depends on
- The email template you created that the whole team uses

## Shadow System Inventory

List the informal systems you've created or maintain

System Name	What Problem Does It Solve?	Who Uses It?	What Would Break If It Disappeared?

## Architect Skills Self-Assessment

You're already doing these things—even if you don't use these labels

Skill	What It Looks Like	I Do This
Requirements Work	Figuring out what information matters and what doesn't	<input type="checkbox"/>
Data Modeling	Deciding what columns to include, how to structure data	<input type="checkbox"/>
Process Design	Creating step-by-step workflows others can follow	<input type="checkbox"/>
Quality Control	Using formulas, conditional formatting, or checks to catch errors	<input type="checkbox"/>
Documentation	Adding comments, README sheets, or instructions	<input type="checkbox"/>
Integration	Connecting data from multiple sources	<input type="checkbox"/>
Training	Teaching others how to use your systems	<input type="checkbox"/>

Count your checkmarks: \_\_\_\_\_ / 7

If you checked 3+: **You're already an architect.** You just didn't have the title.

## Episode 2 Homework: System Deep Dive

Pick your most important shadow system and analyze it

## The System

Field	Your Answer
System name	
How long has it existed?	
Did you create it or inherit it?	

## The Problem It Solves

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### Who Depends On It

User/Team	How They Use It

### Data Flow Analysis

Question	Your Answer
What information flows INTO this system?	
Where does that information come from?	
What information flows OUT of this system?	
Where does that output go?	

### Key Fields/Columns

List the most important data elements

Field/Column Name	What It Contains	Why It Matters

## Risk Assessment

Question	Your Answer
What happens if this system disappears tomorrow?	
How many hours/week does this system save?	
What errors does this system prevent?	
Could someone else maintain it if you left?	<input type="checkbox"/> Yes <input type="checkbox"/> Partially <input type="checkbox"/> No

## The Key Insight

### You're not "just good at Excel."

When you build a shadow system, you're doing the same work as professional software architects:

- Gathering requirements
- Designing data structures
- Creating processes
- Building quality controls
- Documenting for others

The difference? They get paid six figures and have job titles. You do it between meetings and call it "just a spreadsheet."

**This series helps you formalize and extend these skills—not learn them from scratch.**

## Phase 1 Checkpoint

Before moving to Phase 2, confirm:

Checkpoint	Complete?
I understand why generic AI tutorials don't work for me	<input type="checkbox"/>
I've identified at least one repeating workflow	<input type="checkbox"/>
I've documented at least one shadow system	<input type="checkbox"/>
I recognize I'm already doing architect-level work	<input type="checkbox"/>

**All checked?** You're ready for Phase 2: Safety & Setup.

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## Phase 2: Safety & Setup — Episodes 3-6

*Setting realistic expectations and building your safe foundation*

**Outcome:** You'll understand AI's real capabilities, master data safety, and have a working development environment

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### Episode 3: AI as Your Junior Assistant (Not a Magic Wand)

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#### What AI Actually Is

Think of AI as a **brilliant intern** who:

Capability	Reality	What You Need to Do
Has broad knowledge	May not know your specific domain	Provide context
Works fast	Makes confident mistakes	Always verify
Doesn't understand office politics, compliance	Lacks real-world judgment	You provide the judgment
Each conversation starts fresh (usually)	No memory between sessions	Re-provide context as needed
Doesn't know current events	Training data has a cutoff date	Verify time-sensitive info

# The Five Rules for Working with AI

## Rule 1: Never Trust It Blindly

What it means	Treat every AI output as a draft that needs review
What to do	Read the output. Check the facts. Test the code.
Red flags	AI saying "Done!" without proof, invented function names, too-confident answers

## Rule 2: Be Specific

What it means	The more detail you provide, the better the output
What to do	Include context, constraints, examples, and format requirements
Bad prompt	"Help me with Excel"
Good prompt	"I have a weekly sales report in Excel with columns Date, Product, Region, Units, Revenue. I need a formula to sum Revenue for rows where Region equals 'North' and Date is in January 2025."

## Rule 3: Share Your Constraints

What it means	AI doesn't know about your VPN, locked laptop, or compliance rules
What to do	State your environment: "I'm using Excel 365, can't install Python, need to use synthetic data only"
Why it helps	AI can suggest solutions that actually work in your situation

## Rule 4: Expect to Iterate

What it means	First response is rarely perfect; it's a conversation
What to do	Ask follow-ups, provide corrections, request alternatives
Iteration examples	"That's close, but I also need..." / "Can you make it simpler?" / "This didn't work, I got error X"

## Rule 5: You Make the Final Call

What it means	AI suggests; you decide. Your name is on the work.
What to do	Review, modify, approve. Never send/deploy AI output without checking.
Your responsibility	The formula, email, code, or process—you're accountable for it

## Five Rules Quick Reference

Rule	One-Liner
1	Never trust blindly — It's a draft, not a deliverable
2	Be specific — Detail in = quality out
3	Share constraints — AI doesn't know your environment
4	Iterate — First try is a starting point
5	You decide — AI suggests, you approve

## AI Experiment Log

Use this template to document your AI experiments

## Experiment Details

Field	Your Entry
Date	
Task description	
AI tool used	
Prompt I used	

## Results

Field	Your Entry
What AI did well	
What AI got wrong or missed	
Did I need to iterate?	<input type="checkbox"/> No, first try worked <input type="checkbox"/> Yes, _____ rounds

## Reflection

Field	Your Entry
How would I improve my prompt next time?	
Overall usefulness	<input type="checkbox"/> Very useful <input type="checkbox"/> Somewhat useful <input type="checkbox"/> Not useful

## Episode 3 Homework

1. Pick one low-stakes, non-sensitive task
2. Use AI to help with it, following the Five Rules
3. Complete the AI Experiment Log above
4. Reflect: What did you learn about working with AI?

### Good starter tasks:

- Draft an email (review before sending)
- Explain a concept you're learning
- Brainstorm ideas for a project
- Create an Excel formula (test before using)

# Episode 4: Safety First — What Never Leaves Your Network

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 **HIGH-VALUE EPISODE** — This is standalone material you'll reference throughout your career

## The Core Principle

**Safety isn't about restriction—it's about enablement.** When you know exactly what data is safe to share, you can use AI tools confidently without second-guessing every interaction.

**Default stance:** When in doubt, don't share. Make a fake version instead.

## PHI Quick Reference: The 18 HIPAA Identifiers

If your data is health-related AND contains ANY of these identifiers, it NEVER goes to public AI tools.

### Category 1: Direct Identifiers

Identifier	Examples	Safe Alternative
Names	First, last, maiden names	"Patient A", "John Doe"
Full addresses	Street, city (elements smaller than state)	State only, or "00000"
Dates	Birth date, admission, discharge, death (except year)	Year only, or age range
Phone numbers	Any format	555-000-0000
Fax numbers	Any format	555-000-0000
Email addresses	personal@email.com	fake@example.com

## Category 2: System Identifiers (Tied to Person)

Identifier	Examples	Safe Alternative
Social Security numbers	123-45-6789	000-00-0000
Medical record numbers	MRN-12345	MRN-XXXXX
Health plan beneficiary numbers	Insurance member IDs	PLAN-00000
Account numbers	Patient accounts, billing	ACCT-00000
Certificate/license numbers	Provider licenses	LIC-00000

## Category 3: Device & Biometric Identifiers

Identifier	Examples	Safe Alternative
Vehicle identifiers	License plates, VINs	Remove entirely
Device identifiers/serial numbers	Medical device IDs	DEV-00000
Web URLs	Personal pages	Remove entirely
IP addresses	192.168.1.1	0.0.0.0
Biometric identifiers	Fingerprints, voice prints	Remove entirely
Full-face photos	Identifiable images	Remove entirely
Any other unique identifying number	Custom org IDs	ID-00000

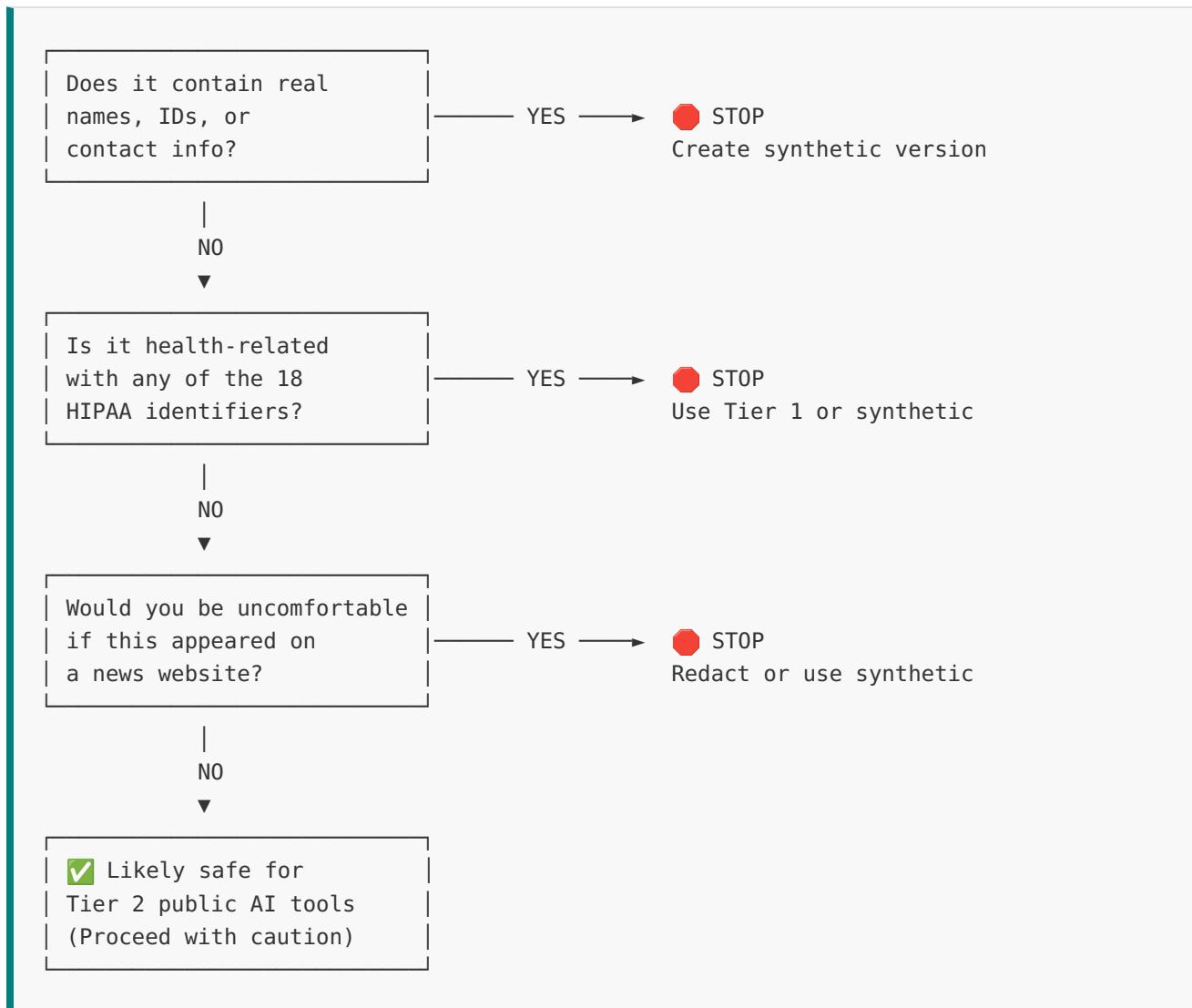
## PII Quick Reference: Beyond Healthcare

Even if not health-related, this data requires protection

Data Category	Examples	Risk Level
HR Records	Salaries, reviews, disciplinary actions	 HIGH
Customer Data	Names + purchase history, complaints	 HIGH
Financial Information	Bank accounts, transaction details	 HIGH
Student Records	Grades, disciplinary records, addresses	 HIGH
Legal Documents	Contracts with names, litigation details	 HIGH
Contact Lists	Names + emails + phone numbers	 MEDIUM
Internal Communications	Sensitive emails, strategy discussions	 MEDIUM

**The Screenshot Test:** Would you be uncomfortable seeing this data on a news website with your name attached? If yes, treat it as sensitive.

## Data Safety Decision Flowchart



## Creating Synthetic Data

### What Is Synthetic Data?

Synthetic data is **fake data that has the same structure as your real data**. It lets you test workflows and get AI help without risking exposure.

## Quick Replacement Guide

Real Data	Synthetic Version
John Smith	Person_001
555-123-4567	555-000-0001
john.smith@company.com	user001@example.com
123 Main St, Boston	100 Example St, [ADDRESS REMOVED], MA
04/15/1980	01/01/1980 (or just "1980")
SSN: 123-45-6789	SSN: 000-00-0001
MRN: 7891234	MRN: TEST001

## Synthetic Data Creation Checklist

Step	Done?
Identified all columns/fields with real identifiers	<input type="checkbox"/>
Created replacement values that preserve data structure	<input type="checkbox"/>
Verified no real identifiers remain	<input type="checkbox"/>
Saved synthetic version with clear naming	<input type="checkbox"/>
Stored in appropriate folder	<input type="checkbox"/>

**Naming convention:** YYYY-MM-DD\_[workflow]\_synthetic\_v1.xlsx

## Episode 4 Homework: Create Your First Synthetic Dataset

Take your Episode 1 workflow and create a synthetic version of the data.

## Step-by-Step

Step	Action	Done?
1	Open your real data file	<input type="checkbox"/>
2	Save as new file with "_synthetic_v1" suffix	<input type="checkbox"/>
3	List all columns with identifiers	<input type="checkbox"/>
4	Replace each identifier with synthetic version	<input type="checkbox"/>
5	Double-check: search for real names, emails, IDs	<input type="checkbox"/>
6	Save and close	<input type="checkbox"/>
7	Store in project input folder	<input type="checkbox"/>
8	Delete or secure any temporary files	<input type="checkbox"/>

## Your Synthetic Data Map

Column/Field	Original Type	Synthetic Approach

Final filename:  synthetic\_v1.xlsx

## Episode 5: Your AI Toolkit Behind the Firewall

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### The Three Tiers of AI Tools

Tier	Type	When to Use	Data Rules
1	Organizational (Copilot, etc.)	Real work data	If org-approved
2	Public AI (ChatGPT, Claude, Gemini)	Learning, generic help	Synthetic only
3	Local AI (GPT4All, Ollama, LM Studio)	Sensitive experiments	Data stays local

## Tier 1: Organizational Tools

These are AI tools **your organization has vetted and approved**.

Tool	Common Uses	Key Benefit
Microsoft Copilot (365)	Email drafts, document summaries, Excel help	Integrated, org-approved
Enterprise ChatGPT	Various	Data protection agreements in place
Org-specific tools	Varies	Built for your compliance needs

### How to find out what your org has:

- Ask IT or your manager
- Check your organization's software catalog
- Look for "AI" or "Copilot" in recent communications

### My Tier 1 Inventory

Tool	Available?	I Have Access?	Approved Uses
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No	

## Tier 2: Public AI Tools

These are general-purpose AI tools available to anyone.

Tool	Best For	Limitation
ChatGPT	Versatile, widely used	Data goes to OpenAI servers
Claude	Strong reasoning, long documents	Data goes to Anthropic servers
Google Gemini	Google integration	Data goes to Google servers

**Golden Rule:** Never put real sensitive data in Tier 2 tools. Use synthetic data only.

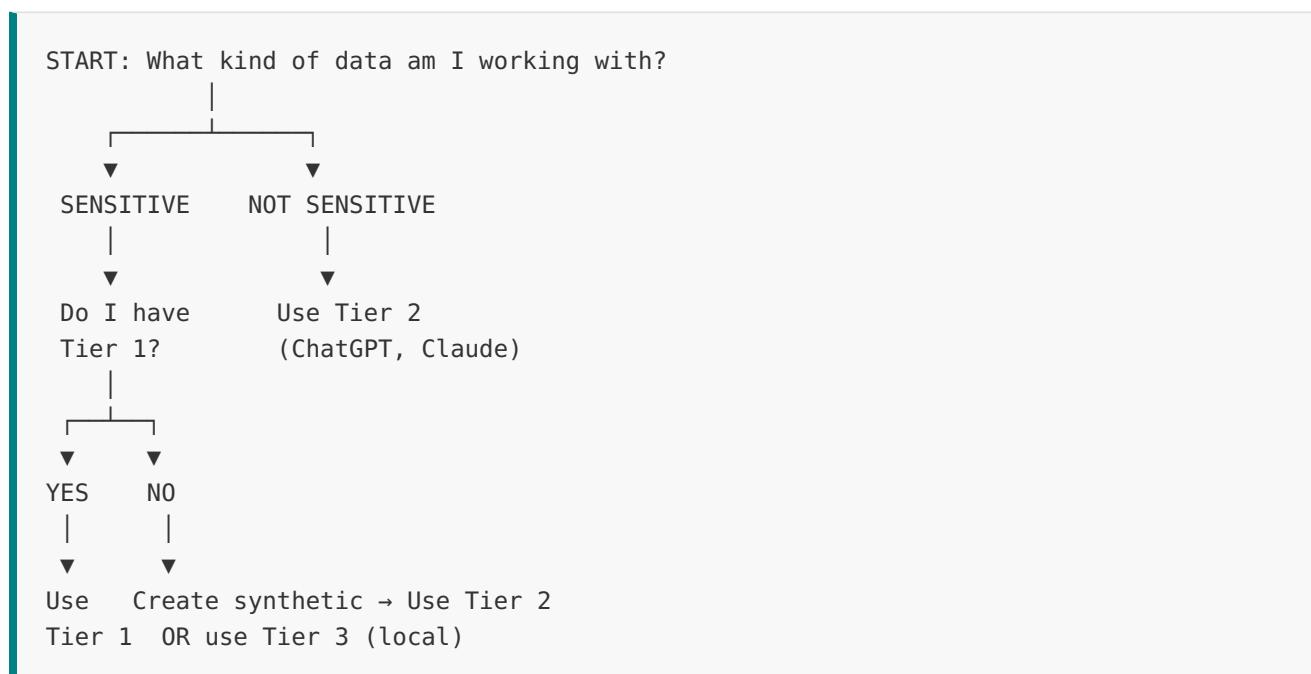
## Tier 3: Local AI Tools

These run entirely on your computer—data never leaves your machine.

Tool	Best For	Setup Difficulty
GPT4All	Beginners, simple interface	Easy
LM Studio	Experimenting with models	Medium
Ollama	Command-line users	Medium

**Trade-off:** Local AI is safer but typically less capable than cloud AI.

## Choosing the Right Tier



## Episode 5 Homework: Tool Inventory

Complete this inventory to understand your toolkit options.

## Tier 1 (Organizational) — Check with IT

Question	Answer
Does my organization offer any AI tools?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
What are they?	
Do I have access?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need to request
What can I use them for?	

## Tier 2 (Public) — Your Personal Accounts

Tool	Have Account?	Used Before?
ChatGPT	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Claude	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Google Gemini	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other: _	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Tier 3 (Local) — For Future Reference

Tool	Interested?	Notes
GPT4All	<input type="checkbox"/> Yes <input type="checkbox"/> No	
LM Studio	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Ollama	<input type="checkbox"/> Yes <input type="checkbox"/> No	

# Episode 6: Setting Up Your Local Workbench

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## What You'll Install

Tool	What It Does	Required?
Python	Programming language for automation	Yes
VS Code	Code editor	Yes
Python Extension	Makes VS Code work with Python	Yes

## Python Installation Checklist

Step	Action	Done?
1	Go to <a href="https://python.org/downloads">python.org/downloads</a>	<input type="checkbox"/>
2	Download Python 3.12 (or latest 3.x)	<input type="checkbox"/>
3	Run installer	<input type="checkbox"/>
4	<input checked="" type="checkbox"/> CHECK "Add Python to PATH"	<input type="checkbox"/>
5	Click "Install Now"	<input type="checkbox"/>
6	Verify: Open command prompt, type <code>python --version</code>	<input type="checkbox"/>

**Expected result:** `Python 3.12.x` (or similar)

## VS Code Installation Checklist

Step	Action	Done?
1	Go to code.visualstudio.com	<input type="checkbox"/>
2	Download for your OS	<input type="checkbox"/>
3	Run installer with defaults	<input type="checkbox"/>
4	Open VS Code	<input type="checkbox"/>
5	Go to Extensions (Ctrl+Shift+X)	<input type="checkbox"/>
6	Search "Python" and install Microsoft's extension	<input type="checkbox"/>
7	Restart VS Code	<input type="checkbox"/>

## Your First Python Test

Create a file called `hello.py` with this content:

```
print("Hello, Automation!")
print("Python is working correctly.")
```

### Run it:

1. Open terminal in VS Code (View → Terminal)
2. Type: `python hello.py`
3. You should see the two lines printed

Verification	Result
Python installed correctly	<input type="checkbox"/> Yes <input type="checkbox"/> No
VS Code opens without errors	<input type="checkbox"/> Yes <input type="checkbox"/> No
Python extension installed	<input type="checkbox"/> Yes <input type="checkbox"/> No
hello.py runs successfully	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Phase 2 Checkpoint

Before moving to Phase 3, confirm:

Checkpoint	Complete?
I understand the Five Rules for working with AI	<input type="checkbox"/>
I can identify PHI and PII in my data	<input type="checkbox"/>
I've created at least one synthetic dataset	<input type="checkbox"/>
I know which AI tools I have access to (Tier 1, 2, 3)	<input type="checkbox"/>
Python and VS Code are installed and working	<input type="checkbox"/>

**All checked?** You're ready for Phase 3: Build.

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# Phase 3: Build — Episodes 7-10

*From organized files to working automation*

**Outcome:** You'll build your first working automation using the Mini-Spec methodology

## Episode 7: Organizing Your Files

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### The Standard Project Structure

```
Automation_Projects/
└ Project_01_[Short_Descriptive_Name]/
    ├── input/          ← Source files (read-only)
    ├── output/         ← Generated results
    ├── archive/        ← Old versions
    ├── scripts/        ← Your code files
    ├── docs/           ← Mini-specs, notes
    └── README.txt      ← How to run this project
```

### Folder Creation Checklist

Step	Action	Done?
1	Create <code>Automation_Projects</code> in your documents	<input type="checkbox"/>
2	Inside, create <code>Project_01_[Your_Workflow_Name]</code>	<input type="checkbox"/>
3	Inside Project_01, create: input, output, archive, scripts, docs	<input type="checkbox"/>
4	Create a blank README.txt	<input type="checkbox"/>
5	Copy your synthetic data file to input/	<input type="checkbox"/>

## File Naming Convention

**Format:** YYYY-MM-DD\_description\_tag\_vN.ext

Component	Meaning	Example
YYYY-MM-DD	Date created/modified	2025-02-01
description	What it is	weekly-report
tag	Category	raw, processed, synthetic
vN	Version number	v1, v2, v3
ext	File type	.xlsx, .py, .csv

### Examples:

- 2025-02-01\_weekly-report\_raw\_v1.xlsx
- 2025-02-01\_weekly-report\_synthetic\_v1.xlsx
- 2025-02-01\_process-report\_v3.py

## Episode 7 Homework

Task	Done?
Create the Automation_Projects folder	<input type="checkbox"/>
Create Project_01_[Your_Workflow_Name]	<input type="checkbox"/>
Create all subfolders (input, output, archive, scripts, docs)	<input type="checkbox"/>
Move your synthetic data to input/ folder	<input type="checkbox"/>
Create a README.txt with basic info	<input type="checkbox"/>

## Your Project Structure

Fill in your actual folder names:

```

Automation_Projects/
└ Project_01 / 
    └ input / 
        └ _____ .xlsx
    └ output / 
    └ archive / 
    └ scripts / 
    └ docs / 
    └ README.txt

```

## Episode 8: Choose Your First Excel Workflow

---

### The Five Selection Criteria

Criterion	What to Look For	Score 1-5
<b>Frequency</b>	Weekly or daily is ideal; annual is too rare	
<b>Time</b>	15-30 min per run is ideal; under 5 min may not be worth it	
<b>Risk</b>	Low risk (internal reports) beats high risk (money, clinical)	
<b>Understanding</b>	You know every step vs. "I figure it out each time"	
<b>I/O Clarity</b>	Clear start and end points vs. "it depends"	

### Workflow Candidate Scoring Matrix

Score each candidate 1-5 on each criterion:

Candidate	Freq	Time	Risk	Understanding	I/O	TOTAL
						/25
						/25
						/25

**Decision:** Pick the highest scorer.

**Tiebreaker:** Which one annoys you most? That annoyance is fuel.

## Episode 8 Homework

Task	Done?
List 2-3 workflow candidates	<input type="checkbox"/>
Score each on the 5 criteria	<input type="checkbox"/>
Pick your winner	<input type="checkbox"/>
Commit to it (write it down!)	<input type="checkbox"/>

## My Committed Workflow

Field	Your Answer
Workflow name	
Total score	/25
Why this one?	
I commit to automating this	<input type="checkbox"/> Yes, I'm doing this

## Episode 9: Turn Your Workflow into a Mini-Spec

 **TRANSFORMATION DOCUMENT** — Use this template for every future automation

### What Is a Mini-Spec?

A Mini-Spec is a **precise, structured description** of your workflow. It's the document you give to AI (or yourself) to build automation.

**Key principle:** If you can't explain it precisely, you can't automate it reliably.

## The 8 Sections of a Mini-Spec

Section	Core Question
1. Purpose	What does this do and why?
2. Trigger	How do I know when to start?
3. Inputs	What files/data do I need?
4. Outputs	What's the final deliverable?
5. Process	What are the exact steps?
6. Assumptions	What must be true?
7. Edge Cases	What can go wrong?
8. Testing	How do I verify it works?

## Mini-Spec Template

**PROJECT:** [Your Workflow Name]

**OWNER:** [Your Name]

**CREATED:** [Date]

**LAST UPDATED:** [Date]

### 1. Purpose

[One or two sentences explaining in plain English]

*What does this do?*

---

*Why does it matter?*

---

### 2. Trigger

*What event or condition tells me to start this workflow?*

Trigger Type	Details
Time-based	<input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Other: _
Event-based	<input type="checkbox"/> Email arrives <input type="checkbox"/> File appears <input type="checkbox"/> Other: _
On-demand	<input type="checkbox"/> When requested by: _

*Specific trigger:*

---

### 3. Inputs

*What files or data do I need before I can start?*

Input	Source Location	Format

*Are there any prerequisites?*

---

### 4. Outputs

*What is the final deliverable?*

Output	Destination	Format

*How do I know it's "done"?*

---

### 5. Process

*What are the exact steps, in order?*

Step	Action	Notes
1		
2		
3		
4		
5		
6		
7		
8		

## 6. Assumptions

*What must be true for this to work?*

Assumption	What if it's false?

## 7. Edge Cases

*What unusual situations might occur?*

Edge Case	How to Handle

## 8. Testing

*How do I verify the automation works correctly?*

Test	Expected Result	Pass?
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

## Episode 9 Homework

Task	Done?
Fill out all 8 sections of the Mini-Spec	<input type="checkbox"/>
Review for completeness	<input type="checkbox"/>
Save in your project's docs/ folder	<input type="checkbox"/>
Complete the safety checklist for your data	<input type="checkbox"/>

## Episode 10: Build Your First Automation with AI

---

### The Two Build Paths

Path	Best For	Approach
<b>Path A: AI-Assisted</b>	Those comfortable with AI	Give Mini-Spec to AI, iterate on code
<b>Path B: Step-by-Step</b>	Those who prefer guidance	Follow structured prompts, build piece by piece

Choose your path:  Path A  Path B

### Path A: AI-Assisted Build

**The prompt formula:**

I need to automate a workflow. Here's my Mini-Spec:

[PASTE YOUR MINI-SPEC]

My constraints:

- I'm using Python [version]
- I have Excel files (.xlsx)
- I can't install packages that require admin rights
- I need to use synthetic data for testing

Please create a Python script that:

1. Reads the input file
2. Performs the transformations in my process steps
3. Saves the output file
4. Prints confirmation of what was done

## Build Log

Track your progress as you build:

Step	Action	Status	Notes
1	Share Mini-Spec with AI	<input type="checkbox"/> Done	
2	Get initial code	<input type="checkbox"/> Done	
3	Run code on synthetic data	<input type="checkbox"/> Done	
4	Fix errors (iterate)	<input type="checkbox"/> Done	Rounds: __
5	Verify output matches expectations	<input type="checkbox"/> Done	
6	Test edge cases	<input type="checkbox"/> Done	
7	Save final script to scripts/	<input type="checkbox"/> Done	
8	Update README with instructions	<input type="checkbox"/> Done	

## Common Issues and Fixes

Issue	Likely Cause	Fix
"Module not found"	Package not installed	Run <code>pip install [package]</code>
"File not found"	Wrong path	Check file location, use full path
"Permission denied"	File is open	Close Excel before running
Wrong output	Logic error	Check Mini-Spec steps vs. code

## The Rollout Checklist

Before using your automation on real data:

Step	Action	Done?
1	Run on synthetic data successfully	<input type="checkbox"/>
2	Compare output to manual result	<input type="checkbox"/>
3	Test at least one edge case	<input type="checkbox"/>
4	Run side-by-side with manual process once	<input type="checkbox"/>
5	Document how to run it in README	<input type="checkbox"/>
6	Create backup of real data before first real run	<input type="checkbox"/>
7	Run on real data with output to separate folder	<input type="checkbox"/>
8	Verify real output before using	<input type="checkbox"/>

## Automation Maturity Levels

Level	Description	Your Status
1	Works on synthetic data	<input type="checkbox"/>
2	Works on real data (verified)	<input type="checkbox"/>
3	Documented and repeatable	<input type="checkbox"/>
4	Handles edge cases gracefully	<input type="checkbox"/>

**Current level:** \_\_\_\_\_

## Phase 3 Checkpoint

Checkpoint	Complete?
I have an organized project folder structure	<input type="checkbox"/>
I selected and committed to one workflow	<input type="checkbox"/>
I completed a full Mini-Spec	<input type="checkbox"/>
I built a working automation (at least Level 1)	<input type="checkbox"/>

**All checked?** You're ready for Phase 4: Playbook.

---

## Phase 4: Playbook — Episodes 11-12

*Building your sustainable automation practice*

**Outcome:** You'll have a universal framework for any future automation project

---

### Episode 11: Intro to Mailbox Automation (Safely)

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#### The Four Absolute Rules of Email Automation

Rule	Why	Consequence of Breaking
1. Never auto-send without human review	One wrong send = chaos	Career damage, data breach
2. Don't auto-respond to sensitive topics	HR, legal, medical need judgment	Liability, hurt relationships
3. Don't process PHI/PII without encryption	Same rules as all data	Compliance violation
4. Don't auto-delete	Moving is fine; deletion is forever	Lost important data

## Safe vs. Unsafe Email Automation

✓ Safe Patterns	✗ Unsafe Patterns
Auto-sort to folders	Auto-send anything
Flag for review	Auto-reply to sensitive
Create summaries (you review)	Process PHI/PII unencrypted
Draft responses (you send)	Auto-delete
Mark as read/unread	Auto-forward outside org

## Email Automation Ideas (Safe)

Idea	Complexity	Value
Sort newsletters to a folder	Low	Medium
Flag emails from VIPs	Low	High
Summarize long email threads	Medium	High
Draft standard responses	Medium	High
Create weekly email digest	Medium	Medium

## Your First Email Rule

Field	Your Answer
What emails will it affect?	
What will it do?	<input type="checkbox"/> Move <input type="checkbox"/> Flag <input type="checkbox"/> Categorize <input type="checkbox"/> Other
Where will affected emails go?	
How will you verify it's working?	

## Episode 11 Homework

Task	Done?
Create one auto-sort rule in your email client	<input type="checkbox"/>
Test it with a sample email	<input type="checkbox"/>
Verify emails are going to the right place	<input type="checkbox"/>
Complete the safety checklist for your rule	<input type="checkbox"/>
Identify one more email category to auto-sort	<input type="checkbox"/>

## The Key Principle

**Safe email automation = You always control the send button.**

Everything else — sorting, flagging, summarizing, drafting — is fair game. But the moment an email goes out, a human must have approved it.

## Episode 12: Your Automation Playbook — Series Finale

 **TRANSFORMATION DOCUMENT** — Use this framework for every future automation

## Your Journey So Far

You've transformed from "just good at Excel" to **Workflow Automation Architect**:

Phase	What You Learned	Episodes
Foundation	Your constraints are different; you're already an architect	0-2
Safety & Setup	AI is a junior assistant; safety enables confidence	3-6
Build	Organize → Select → Specify → Build	7-10
Playbook	Email safety; universal framework	11-12

**Now you have a repeatable system for ANY future automation.**

# The 5-Question Automation Playbook

Use this framework every time you consider automating something

## Question 1: Is This Worth Automating?

### The ROI Formula:

$$\text{Frequency} \times \text{Time Saved} \times \text{Pain Factor} = \text{Value}$$

Factor	How to Measure	Your Workflow
Frequency	Times per year (daily=250, weekly=52, monthly=12)	____ /year
Time per run	Minutes currently spent	____ min
Pain factor	1 = mildly annoying, 2 = tedious, 3 = hate it	____

### Calculate:

$$\text{Frequency} \times \text{Time} = \underline{\hspace{2cm}} \text{ minutes/year}$$

$$\div 60 = \underline{\hspace{2cm}} \text{ hours/year}$$

$$\times \text{Pain factor} = \underline{\hspace{2cm}} \text{ weighted hours}$$

### Decision Guide:

Weighted Hours/Year	Verdict
50+	 Strong candidate — prioritize this
20-50	 Good candidate — worth building
10-20	 Maybe — consider if pain is high
Under 10	 Probably not worth build time yet

## Question 2: Is It Safe to Automate?

Safety Criterion	Check
No PHI/PII involved (or using org-approved tools)	<input type="checkbox"/> Yes <input type="checkbox"/> No — STOP
No auto-send without human review	<input type="checkbox"/> Yes <input type="checkbox"/> No — STOP
No critical decisions without human in loop	<input type="checkbox"/> Yes <input type="checkbox"/> No — STOP
Failure would be annoying, not catastrophic	<input type="checkbox"/> Yes <input type="checkbox"/> No — STOP
I have a manual fallback if automation breaks	<input type="checkbox"/> Yes <input type="checkbox"/> No — Plan one

**All boxes checked?** Proceed to Question 3.

**Any "No — STOP"?** Redesign the automation scope or defer.

## Question 3: Do I Fully Understand the Process?

Understanding Check	Response
Can I write down every step without guessing?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do I know ALL the inputs (files, sources, triggers)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do I know exactly what "done" looks like?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Can I list the edge cases and exceptions?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Have I done this manually at least 5+ times?	<input type="checkbox"/> Yes <input type="checkbox"/> No

**All "Yes"?** Proceed to Question 4.

**Any "No"?** Document the process first. Create a Mini-Spec (Episode 9).

## Question 4: What's My MVP?

**MVP = Minimum Viable Product:** the smallest piece that delivers value

Question	Your Answer
What's the most time-consuming single step?	
What's the most error-prone step?	
What can I automate while keeping human review?	
What's the smallest change that saves real time?	

### Your MVP:

---

**Remember:** You can always expand later. Start small, prove value, then grow.

### Question 5: How Will I Maintain It?

Maintenance Factor	Assessment
Time available	Do I have 30 min/month for maintenance?
Process stability	Does this workflow change frequently?
Documentation	Is my Mini-Spec up to date?
Fallback plan	Can I do this manually if automation breaks?
Knowledge transfer	Could someone else maintain this if needed?

### Maintenance Warning Signs:

- Workflow changes every month → Maybe don't automate yet
- Only you understand it → Document before automating
- No fallback plan → Create one first

## 5-Question Playbook: Complete Worksheet

**Workflow:** \_\_\_\_\_

<b>Q#</b>	<b>Question</b>	<b>Your Assessment</b>	<b>Decision</b>
1	Worth it?	Freq: ___ × Time: ___ min × Pain: ___ = ___ hrs/yr	<input type="checkbox"/> Yes <input type="checkbox"/> No
2	Safe?	PHI: <input type="checkbox"/> Auto-send: <input type="checkbox"/> Critical: <input type="checkbox"/> Fallback: <input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
3	Understand?	Steps: <input type="checkbox"/> Inputs: <input type="checkbox"/> Outputs: <input type="checkbox"/> Edge cases: <input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	MVP?	Smallest valuable piece: ___	Defined
5	Maintain?	Time: <input type="checkbox"/> Stable: <input type="checkbox"/> Docs: <input type="checkbox"/> Fallback: <input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No

### Final Decision:

<b>Decision</b>	<b>Criteria</b>
<input type="checkbox"/> PROCEED	All questions answered positively
<input type="checkbox"/> DEFER	Worth it, but need to prepare first (document, create fallback, etc.)
<input type="checkbox"/> SKIP	Not worth the investment right now

## Friction Log: Finding Your Next Projects

Track your "ugh, not this again" moments for one month

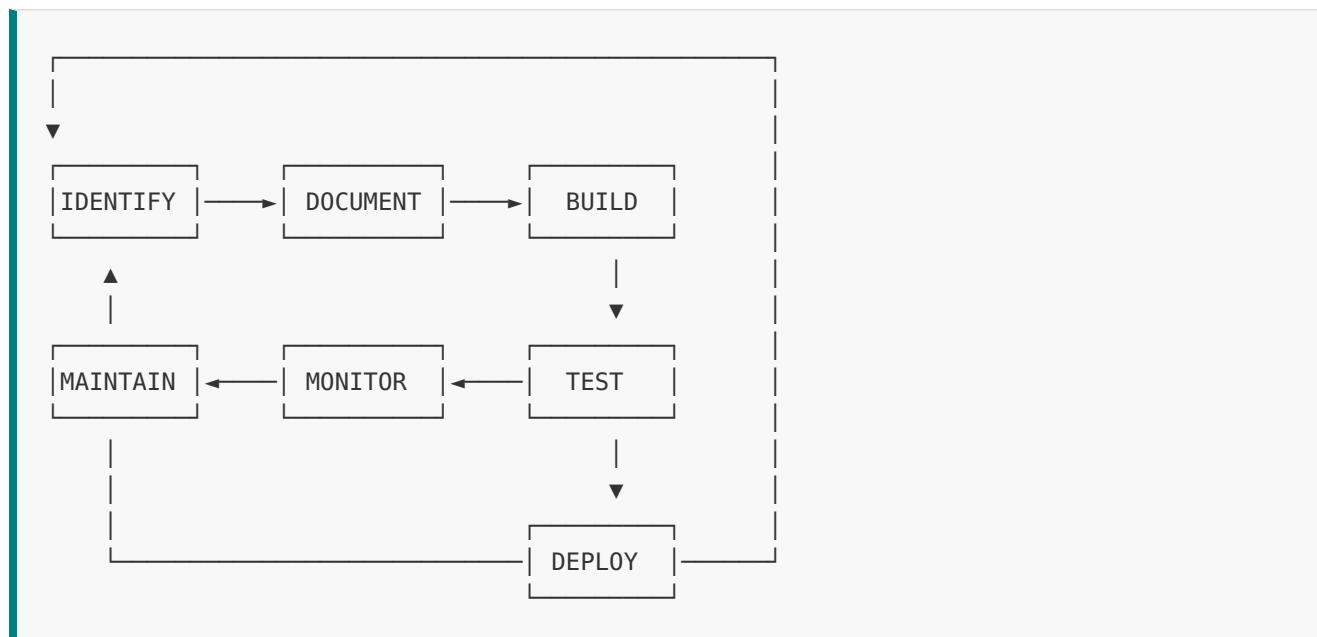
<b>Date</b>	<b>Task</b>	<b>Duration</b>	<b>Frequency</b>	<b>Pain Level</b>	<b>Notes</b>
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	
		___ min	/week /month	1 2 3	

## Monthly Review

Rank	Task	Hours/Year	Pain	Automate?
1				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maybe
2				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maybe
3				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maybe

## The Automation Lifecycle

Automation isn't a one-time event—it's a continuous cycle



<b>Phase</b>	<b>Key Questions</b>
Identify	Is this worth automating? (Q1)
Document	Mini-Spec complete? (Q3)
Build	MVP defined? (Q4)
Test	Does it match manual results?
Deploy	Side-by-side complete?
Monitor	Any issues arising?
Maintain	Updates needed? (Q5)

---

# Quick Reference Cards

*Print these pages and keep at your desk*

## Card 1: Data Safety Checklist

---

### Before Sharing ANY Data with AI Tools:

#	Question	If Yes...
1	Does this contain real names, contact info, or IDs?	 STOP — Use synthetic
2	Is this health-related with any HIPAA identifier?	 STOP — Use Tier 1 or synthetic
3	Would you be uncomfortable if it appeared on a news website?	 STOP — Redact or synthetic
4	Does your organization allow this tool for this data?	If No — Check policy first

**Safe to proceed?**  Use appropriate tier.

### Quick Synthetic Replacements:

Real	Synthetic
John Smith	Person_001
555-123-4567	555-000-0001
john@company.com	user001@example.com
123 Main St	100 Example St
SSN: 123-45-6789	SSN: 000-00-0001

## Card 2: The Five Rules for AI

Rule	One-Liner
1. Never Trust Blindly	It's a draft, not a deliverable
2. Be Specific	Detail in = quality out
3. Share Constraints	AI doesn't know your environment
4. Iterate	First try is a starting point
5. You Decide	AI suggests, you approve

### Good Prompt Formula:

I need to [specific task].

Context:

- My data looks like [describe structure]
- I'm using [tools/software]
- I can't [constraints]

Please [specific deliverable].

### Remember:

AI is a junior assistant, not a magic wand.

## Card 3: 5-Question Automation Playbook

Q#	Question	Quick Assessment
1	Is it worth automating?	Frequency × Time × Pain = ??? hrs/year saved
2	Is it safe?	No PHI, no auto-send, has fallback
3	Do I understand it?	Can write every step without guessing
4	What's my MVP?	Smallest piece that delivers value
5	Can I maintain it?	Have time, process is stable, documented

**Decision:**

- All Yes → **PROCEED**
- Need prep → **DEFER** (document, create fallback, etc.)
- Low value → **SKIP**

## Card 4: Mini-Spec Sections

Section	Core Question	Common Mistake
1. Purpose	What does this do and why?	Too vague
2. Trigger	How do I know when to start?	Assuming "I just know"
3. Inputs	What files/data do I need?	Missing locations
4. Outputs	What's the final deliverable?	Unclear "done" state
5. Process	What are the exact steps?	Skipping "obvious" ones
6. Assumptions	What must be true?	Not listing any
7. Edge Cases	What can go wrong?	Assuming nothing fails
8. Testing	How do I verify it works?	No test plan

**The Test:**

If you can't explain it precisely, you can't automate it reliably.

## Card 5: Project Folder Structure

```
Automation_Projects/
└── Project_[Name]/
    ├── input/      → Source files (read-only)
    ├── output/     → Generated results
    ├── archive/    → Old versions
    ├── scripts/    → Code files
    ├── docs/       → Mini-specs, notes
    └── README.txt  → How to run this
```

**File Naming:**

YYYY-MM-DD\_description\_tag\_vN.ext

### Examples:

- 2025-02-01\_weekly-report\_raw\_v1.xlsx
- run\_workflow\_v3.py

## Card 6: AI Tool Tiers

---

Tier	Type	When to Use	Data Rules
1	Organizational (Copilot)	Real work data	If org-approved
2	Public AI (ChatGPT, Claude)	Learning, generic help	Synthetic only
3	Local AI (GPT4All, Ollama)	Sensitive experiments	Data stays local

### Decision Tree:

1. Does it involve real sensitive data? → Use Tier 1 (if available) or Synthetic + Tier 2
2. Just learning or generic help? → Tier 2 is fine
3. No org tool but need sensitive? → Consider Tier 3 or stay manual

## Card 7: Email Automation Safety

---

### The Four Absolute Rules:

#	Rule	Why
1	Never auto-send without human review	One wrong send = chaos
2	Don't auto-respond to sensitive topics	HR, legal, medical need judgment
3	Don't process PHI/PII without encryption	Same rules as all data
4	Don't auto-delete	Moving is fine; deletion is forever

### Safe Patterns:

-  Auto-sort to folders
-  Flag for review

- Create summaries (you review)
- Draft responses (you send)
- Auto-send anything
- Auto-delete anything

## Card 8: Workflow Selection Criteria



### Five Criteria for First Project:

Criterion	Ideal	Avoid
Frequency	Weekly or daily	Once a year
Time	15-30 minutes	Under 5 min or over 60
Risk	Low (internal reports)	High (money, HR, clinical)
Understanding	Crystal clear	"I figure it out each time"
I/O Clarity	"Starts here, ends here"	"It depends"

### Scoring Guide:

Score each 1-5, total out of 25. Pick the highest scorer.

**Tiebreaker:** Which one annoys you most? That annoyance is fuel.

### How to Use These Cards

1. Print on cardstock or regular paper
2. Cut along the section breaks (or keep as pages)
3. Laminate if possible (optional but helpful)
4. Post near your monitor or keep in desk drawer
5. Reference whenever you're working with AI or automation



# Appendix

## Glossary of Terms

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Term	Definition
Automation	Using technology to perform tasks with minimal human intervention
BAA	Business Associate Agreement — contract ensuring data protection compliance
Edge Case	An unusual situation that might cause your process to fail
Hallucination	When AI generates plausible-sounding but incorrect information
HIPAA	Health Insurance Portability and Accountability Act — US healthcare privacy law
Iteration	The process of refining something through repeated cycles of feedback
Local AI	AI models that run on your computer, not in the cloud
Mini-Spec	A concise document describing a workflow in precise detail
MVP	Minimum Viable Product — the smallest version that delivers value
PHI	Protected Health Information — health data tied to an individual
PII	Personally Identifiable Information — data that can identify someone
Power Query	Excel tool for importing and transforming data
Python	A programming language designed to be readable and beginner-friendly
Redaction	Removing or replacing sensitive information from data
Shadow System	Informal tools/processes created outside official IT systems
Synthetic Data	Fake data with the same structure as real data, used for testing
Tier 1/2/3 Tools	Classification of AI tools by data safety level
VS Code	Visual Studio Code — a code editor made by Microsoft
Workflow	A sequence of steps to accomplish a specific task

# Episode Reference Guide

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Ep	Title	Key Takeaway
0	Why I Made This Series	"The upgrade is earned, not given"
1	Why Your World Is Different	Your constraints are real; generic tutorials don't work for you
2	Shadow Systems	You're already an architect
3	AI as Your Junior Assistant	AI needs supervision; follow the Five Rules
4	Safety First ★	Know what data never leaves your network
5	Your AI Toolkit	Three tiers of tools; pick the right one for your data
6	Setting Up Your Workbench	Python + VS Code = your automation toolkit
7	Organizing Your Files	Structure enables repeatability
8	Choose Your First Workflow	Five criteria; scoring matrix
9	Mini-Spec ★★	8-section template transforms how you document
10	Build Your First Automation	Two paths; careful rollout
11	Email Automation	Four absolute rules; safe patterns only
12	Your Automation Playbook ★★	5-Question framework for any future project

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## Resource Links

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### Episode 6: Installation

Resource	URL
Python Download	<a href="https://www.python.org/downloads">python.org/downloads</a>
VS Code Download	<a href="https://code.visualstudio.com">code.visualstudio.com</a>
Python Extension	Search "Python" in VS Code Extensions

## AI Tools (Tier 2)

Tool	URL	Notes
ChatGPT	chat.openai.com	General purpose, widely used
Claude	claude.ai	Strong reasoning, longer context
Google Gemini	gemini.google.com	Integrated with Google services

## Local AI Tools (Tier 3)

Tool	URL	Notes
GPT4All	gpt4all.io	Beginner-friendly GUI
LM Studio	lmstudio.ai	Good for experimenting with models
Ollama	ollama.ai	Command-line focused

## Synthetic Data Generation

Tool	URL	Notes
Mockaroo	mockaroo.com	Generate realistic fake data
Faker (Python)	pypi.org/project/Faker	Library for generating fake data

## Learning Resources

Resource	URL	Notes
Python Tutorial	python.org/tutorial	Official beginner guide
Excel Power Query	Microsoft Learn	Search "Power Query"

# Troubleshooting Quick Reference

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## Python Installation

Problem	Solution
"python is not recognized"	Reinstall Python with "Add to PATH" checked
"pip is not recognized"	Same as above — reinstall with PATH
Wrong Python version shows	Uninstall old versions; install 3.12 fresh

## VS Code

Problem	Solution
Python not recognized	Install Python extension; restart VS Code
Can't find terminal	View → Terminal (or Ctrl+`)
Code doesn't run	Make sure file is saved (.py extension)

## Excel/Python Scripts

Problem	Solution
"No module named openpyxl"	Run <code>pip install openpyxl</code>
"File not found"	Check file path; verify file exists in expected folder
"Permission denied"	Close the Excel file if it's open

## AI Tools

Problem	Solution
AI gives wrong answer	Be more specific; provide more context
AI invents things	Verify facts; don't trust code without testing
AI doesn't understand context	Re-explain your situation; include constraints

## Your Automation Portfolio

Track all your automation projects in one place

#	Project Name	Status	Maturity	Notes
1		<input type="checkbox"/> Active <input type="checkbox"/> Paused <input type="checkbox"/> Retired	1 2 3 4	
2		<input type="checkbox"/> Active <input type="checkbox"/> Paused <input type="checkbox"/> Retired	1 2 3 4	
3		<input type="checkbox"/> Active <input type="checkbox"/> Paused <input type="checkbox"/> Retired	1 2 3 4	
4		<input type="checkbox"/> Active <input type="checkbox"/> Paused <input type="checkbox"/> Retired	1 2 3 4	
5		<input type="checkbox"/> Active <input type="checkbox"/> Paused <input type="checkbox"/> Retired	1 2 3 4	
6		<input type="checkbox"/> Active <input type="checkbox"/> Paused <input type="checkbox"/> Retired	1 2 3 4	

## Next Steps

### After Completing This Series:

1. Keep using the 5-Question Playbook for every automation decision
2. Maintain your Friction Log to identify future opportunities
3. Level up your first automation from Level 2 to Level 3
4. Share your success with colleagues who face similar challenges
5. Stay connected with hitit.ai for advanced content

### Continuing Your Learning:

If You Want To...	Explore...
Go deeper with Python	Official Python tutorial; Automate the Boring Stuff book
Master Excel automation	Power Query training; VBA basics
Learn about scheduling	Windows Task Scheduler; cron (Mac/Linux)
Build web interfaces	Streamlit; Flask basics
Connect to databases	SQLite with Python; SQL basics

## Feedback & Community

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### Share Your Experience

Your journey matters. Consider:

- What was your first successful automation?
- What challenges did you overcome?
- What would you tell someone just starting?

### Connect with hitit.ai

Channel	Purpose
Website	hitit.ai
Updates	Subscribe for advanced content
Feedback	Help improve future materials

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# Completion Certificate

## I have completed the AI for Knowledge Workers Starter Kit

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Milestone	Date Completed
Watched all 12 episodes	
Completed all worksheets	
Built my first automation	
Applied the 5-Question Playbook	

**My biggest takeaway:**

---

**My first automation:**

Field	Details
Workflow name	
Time saved per run	_____ minutes
Frequency	
Annual hours saved	_____ hours

**My next automation target:**

---

**Signed: \_\_\_\_\_ Date: \_\_\_\_\_**

 **Congratulations on completing the Starter Kit.**

**You are now a Workflow Automation Architect.**

*AI for Knowledge Workers — Complete Starter Kit*

*hitit.ai — AI Education for the Thoughtful Mind*