

**THE SMALL BUSINESS**

# **AI CAPABILITY MAP**



474 practical skills and implementation ideas for small business

From first prompt to integrated AI systems

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[polarispixels.com/ai-playbook](https://polarispixels.com/ai-playbook)

# How to use this map

This is not a list of products to buy. It is a map of capabilities you can learn, build, connect, and improve.

## **Start with friction, not technology.**

Ask where time, attention, quality, or money is leaking before choosing an AI tool.

## **Move one level at a time.**

An Appetizer is a technique. An Entree is a repeatable workflow. Chef's Table work changes the operating system of the business.

## **Treat context as an asset.**

Every useful document, meeting, decision, process, and example can become future context.

## **Keep humans at judgment points.**

The more consequential the action, the stronger the need for verification, permissions, and approval.

## **Improve the system continuously.**

The compounding advantage comes from better context, instructions, processes, tools, and judgment over time.

**A broad map, not a finish line.** The field changes quickly, and no checklist is truly exhaustive. The goal is enough structure to choose the next useful skill or system to build.

# Three maturity levels

Use the menu as a commitment filter: how deep do you want to go right now?

## Three levels of implementation

Move from learning a technique to redesigning the way work gets done.



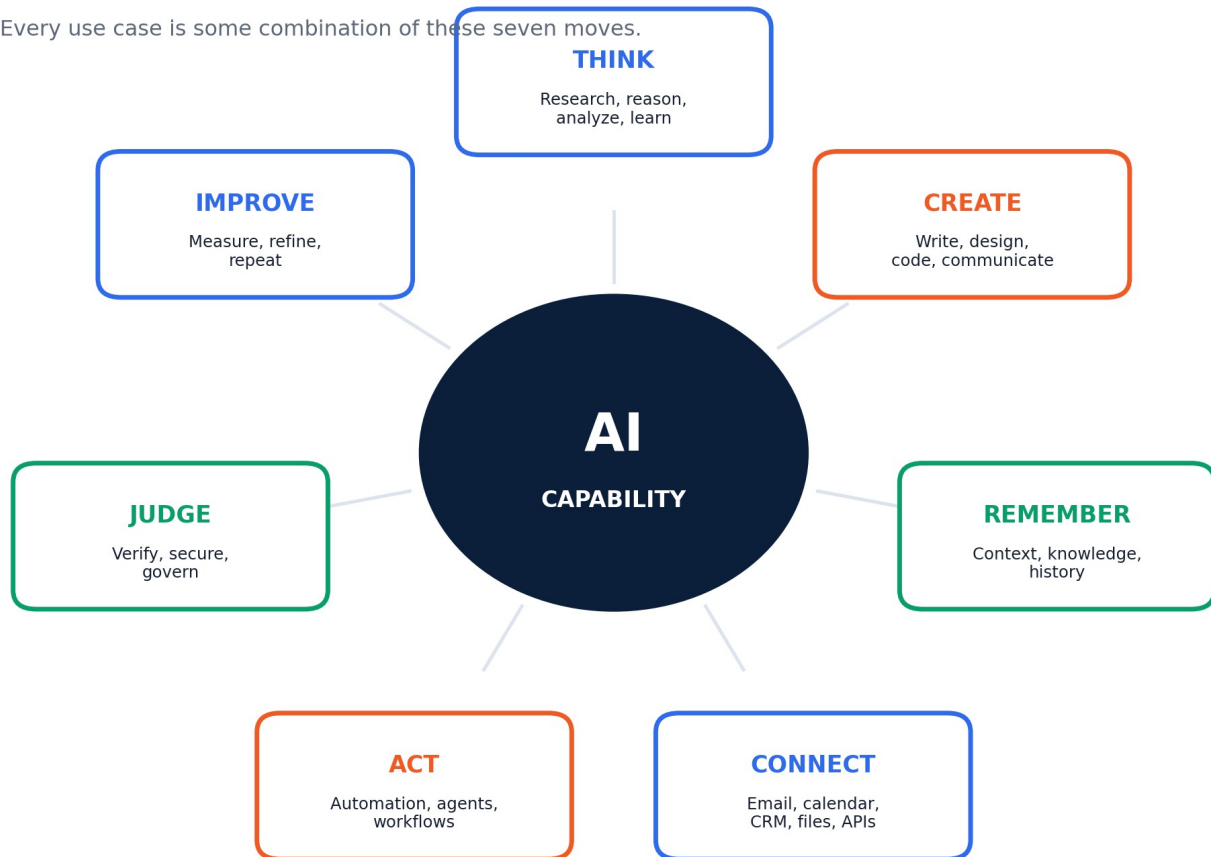
*Rule of thumb: Do not jump to the Chef's Table because it sounds impressive. Build the smallest useful thing, learn from it, then deepen the system when the value is obvious.*

# The seven capabilities beneath the map

The 25 domains that follow look different, but nearly every implementation is some combination of these seven capabilities.

## The seven capabilities beneath the map

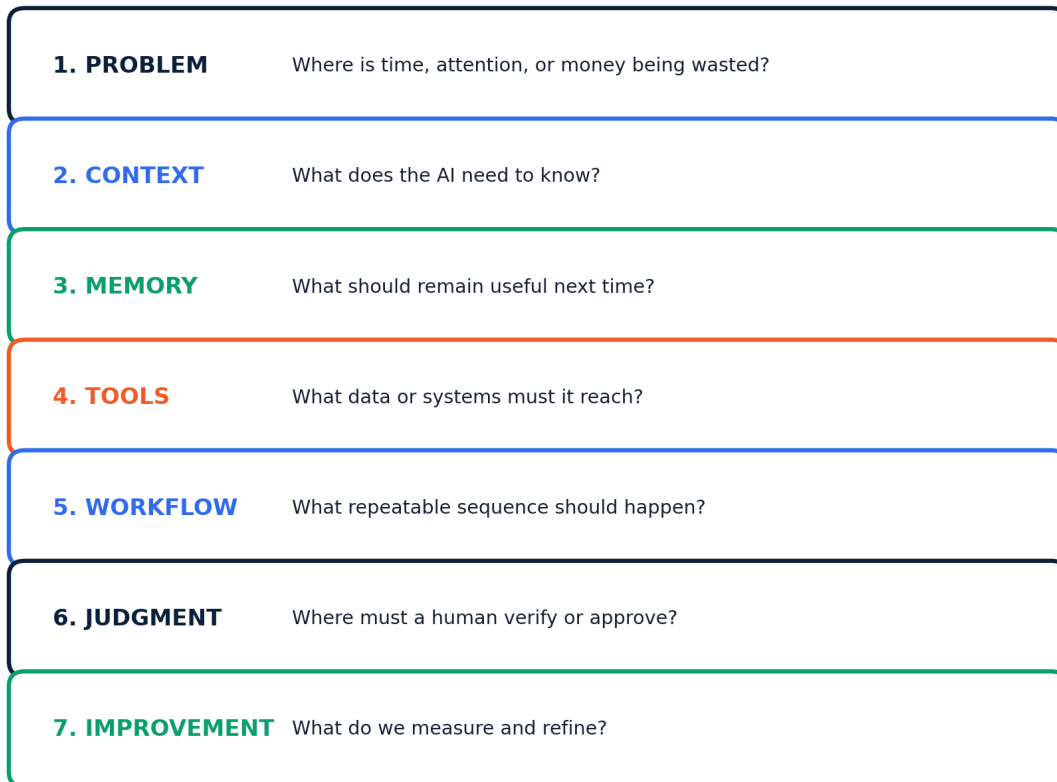
Every use case is some combination of these seven moves.



# From chatbot to operating system

A useful AI system starts with a business problem and ends with a feedback loop. Context, memory, connected tools, actions, judgment, and measurement turn isolated chats into operating capability.

## From chatbot to operating system



# The capability domains

The map is organized into 25 domains. Use the groups below as navigation, not rigid boundaries.

## 25 capability domains at a glance

### FOUNDATION & THINKING

- Foundations & mental models
- Prompting & instruction design
- Context engineering
- AI memory & knowledge
- Research & learning
- Evaluation & quality
- Security & governance

### PERSONAL WORK & COMMUNICATION

- Meetings & relationships
- Email, calendar & productivity
- Writing & communication
- Personal development
- Voice & mobile AI

### BUSINESS FUNCTIONS

- Marketing
- Sales
- Customer service
- Operations
- Data & reporting
- Finance & administration
- HR & people

### BUILD, CONNECT & SCALE

- Software development
- Automation & integration
- Agents
- Multimodal AI
- Local/private AI
- Organizational adoption

## 01 AI Foundations & Mental Models

Build the basic mental models that let you choose the right tool, recognize limitations, and focus on business outcomes rather than hype.

### APPETIZERS | 15-30 MINUTES

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- Understand what an LLM actually does
- Learn the difference between a model and an application
- Understand hallucinations
- Understand context windows
- Understand tokens at a conceptual level
- Compare major AI ecosystems
- Understand free vs. paid tiers
- Learn when AI is the wrong tool

### ENTREES | 1-3 HOURS

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- Choose a primary AI ecosystem
- Establish personal AI usage conventions
- Create a list of your highest-friction work
- Identify tasks suitable for AI
- Separate automation opportunities from augmentation opportunities
- Map recurring knowledge work across your week

### CHEF'S TABLE | 5-20+ HOURS

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- Define an organization-wide AI strategy
  - Define where AI should and should not operate
  - Create a maturity roadmap for your company
  - Establish an AI operating model
-

## 02 Prompting & Instruction Design

Move from vague requests to instructions that communicate goals, context, constraints, examples, and evaluation criteria.

### APPETIZERS | 15-30 MINUTES

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- Give AI a clear goal
- Supply relevant context
- State constraints
- Specify the desired output format
- Ask AI to ask clarifying questions
- Provide examples
- Tell AI what a good answer looks like
- Request multiple options
- Ask for critique
- Ask AI to challenge assumptions
- Iterate instead of expecting one perfect prompt
- Use Markdown for structured instructions

### ENTREES | 1-3 HOURS

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- Build reusable prompt templates
- Create role-specific prompts
- Build checklists into prompts
- Create evaluation criteria
- Build multi-stage prompts
- Separate research from synthesis
- Create prompts that verify their own work
- Develop a prompt library
- Convert your best work into examples AI can imitate

### CHEF'S TABLE | 5-20+ HOURS

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- Build reusable instruction systems
- Maintain organization-level prompting standards
- Create structured prompt pipelines
- Build automated evaluation loops

## 03 Context Engineering

Give AI the right background at the right time so it can reason inside your real business constraints instead of producing generic output.

### APPETIZERS | 15-30 MINUTES

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- Tell AI about your company
- Explain your customer
- Provide examples of your writing
- Provide past work
- Define your goals
- Define your constraints
- Explain industry-specific terminology

### ENTREES | 1-3 HOURS

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- Create a one-page company context document
- Create project-specific instructions
- Create customer-persona context
- Create brand-voice context
- Build pricing and service context
- Upload standard operating procedures
- Add successful proposals and past deliverables
- Create reusable project environments

### CHEF'S TABLE | 5-20+ HOURS

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- Build persistent business context
  - Maintain separate context layers for company, department, project, customer, and task
  - Automatically retrieve relevant context
  - Build context-management standards across a team
  - Create context versioning and maintenance processes
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## 04 AI Memory & Knowledge Management

Turn scattered files, conversations, and tribal knowledge into organized context that can be found and reused later.

**KEY PRINCIPLE** Every meeting, decision, document, and process should become useful future context.

### APPETIZERS | 15-30 MINUTES

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- Organize important documents
- Use consistent filenames
- Start using Projects
- Create meeting notes
- Save decisions
- Store useful prompts
- Use Markdown files
- Experiment with a personal knowledge tool

### ENTREES | 1-3 HOURS

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- Build a personal knowledge base
- Build a company knowledge base
- Organize people, projects, meetings, decisions, and tasks
- Create person/contact profiles
- Maintain project journals
- Build decision logs
- Create meeting archives
- Build searchable FAQs
- Create internal reference libraries
- Use NotebookLM with a body of source material

### CHEF'S TABLE | 5-20+ HOURS

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- Build a COMPASS-style knowledge system
- Connect your knowledge base directly to AI
- Implement semantic/vector search
- Build retrieval-augmented generation
- Automatically ingest meetings and documents
- Create long-term organizational memory
- Automatically link people, meetings, projects, and decisions
- Develop retention, archival, and cleanup rules

## 05 Research & Learning

Use AI to compress research time, synthesize multiple sources, learn unfamiliar subjects, and create decision-ready briefings.

### APPETIZERS | 15-30 MINUTES

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- Ask AI to explain an unfamiliar topic
- Compare two concepts
- Summarize an article
- Summarize a PDF
- Analyze a website
- Explain jargon
- Generate questions before a meeting
- Ask for pros and cons

### ENTREES | 1-3 HOURS

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- Use Deep Research
- Build a competitive research workflow
- Research vendors
- Research prospective customers
- Research industries
- Research legislation or regulation
- Create a NotebookLM notebook
- Build a source-based learning package
- Turn source material into quizzes
- Generate study guides
- Create briefing documents
- Build a Council of Experts

### CHEF'S TABLE | 5-20+ HOURS

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- Build recurring intelligence reports
  - Automatically monitor competitors
  - Create industry-change monitoring
  - Build research agents
  - Create source-quality evaluation systems
  - Maintain an internal research repository
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## 06 Meetings & Relationships

Use AI before, during, and after meetings to improve preparation, follow-through, and relationship memory.

**KEY PRINCIPLE** The goal is not better meeting notes. The goal is accumulated relationship and organizational memory.

### APPETIZERS | 15-30 MINUTES

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- Generate an agenda
- Prepare questions
- Research attendees
- Summarize meeting notes
- Draft a follow-up email

### ENTREES | 1-3 HOURS

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- Build a meeting-preparation workflow
- Transcribe meetings
- Extract decisions
- Extract action items
- Identify commitments
- Create tasks automatically
- Create meeting retrospectives
- Update contact profiles after meetings
- Generate follow-up messages
- Produce pre-meeting briefing sheets

### CHEF'S TABLE | 5-20+ HOURS

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- Build the full augmented meeting loop: Prepare -> Meet -> Capture -> Digest -> Act -> Remember -> Prepare
  - Connect meeting memory to CRM/contact records
  - Retrieve relationship history before future conversations
  - Build automatic meeting intelligence
  - Create relationship-maintenance reminders
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## 07 Email, Calendar & Personal Productivity

Reduce administrative drag by letting AI help prioritize communication, prepare your day, and convert information into action.

### APPETIZERS | 15-30 MINUTES

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- Summarize a long email thread
- Draft replies
- Improve tone
- Identify important messages
- Turn emails into tasks
- Review your calendar
- Create daily priorities

### ENTREES | 1-3 HOURS

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- Build email triage rules
- Label messages using AI
- Generate suggested responses
- Create a daily inbox briefing
- Create a morning calendar briefing
- Identify scheduling conflicts
- Automatically prepare for meetings
- Generate end-of-day summaries
- Connect email to task management
- Create follow-up reminders

### CHEF'S TABLE | 5-20+ HOURS

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- Build an executive-assistant agent
  - Connect email + calendar + contacts + tasks
  - Automatically prioritize inbound communication
  - Maintain a unified personal operating queue
  - Create recurring personal briefings
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## 08 Writing & Communication

Use AI as an editor, drafting partner, and repurposing engine while preserving human voice and judgment.

### APPETIZERS | 15-30 MINUTES

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- Rewrite something more clearly
- Shorten text
- Change tone
- Proofread
- Generate outlines
- Brainstorm headlines
- Draft emails
- Draft proposals
- Create social posts

### ENTREES | 1-3 HOURS

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- Create a reusable writing voice
- Build proposal templates
- Turn transcripts into articles
- Repurpose long-form content
- Build customer-email sequences
- Generate FAQs
- Create presentations
- Build documentation
- Transform technical material for nontechnical audiences

### CHEF'S TABLE | 5-20+ HOURS

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- Build an AI-assisted content production system
  - Maintain brand voice across a team
  - Automatically repurpose content across channels
  - Create review/approval workflows
  - Build a searchable library of approved examples
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## 09 Marketing

Apply AI to customer understanding, campaign planning, content, SEO, feedback analysis, and performance reporting.

### APPETIZERS | 15-30 MINUTES

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- Brainstorm campaigns
- Develop customer personas
- Generate ad concepts
- Analyze competitors
- Generate keywords
- Improve landing-page copy
- Analyze reviews

### ENTREES | 1-3 HOURS

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- Build a content calendar
- Analyze customer feedback
- Conduct SEO research
- Generate campaign variants
- Build lead magnets
- Segment audiences
- Analyze call transcripts
- Build landing pages
- Generate marketing reports
- Perform website teardowns

### CHEF'S TABLE | 5-20+ HOURS

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- Create an AI-assisted marketing engine
  - Automatically analyze campaign performance
  - Build lead-scoring systems
  - Connect marketing data across platforms
  - Personalize messaging using CRM context
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## 10 Sales

Improve prospect research, discovery, follow-up, proposals, pipeline visibility, and account planning.

### APPETIZERS | 15-30 MINUTES

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- Research a prospect
- Prepare discovery questions
- Analyze an RFP
- Draft outreach
- Handle common objections
- Summarize sales calls

### ENTREES | 1-3 HOURS

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- Build sales-call preparation workflows
- Generate personalized outreach
- Analyze call recordings
- Extract objections
- Create follow-up sequences
- Generate proposals
- Build account plans
- Identify stalled opportunities

### CHEF'S TABLE | 5-20+ HOURS

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- Build AI-assisted sales operations
  - Automatically enrich CRM records
  - Create opportunity-risk scoring
  - Generate pipeline intelligence
  - Build account intelligence systems
  - Create automated pre-call and post-call workflows
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## 11 Customer Service

Use AI to improve response quality, surface knowledge, classify issues, and identify recurring customer pain points.

### APPETIZERS | 15-30 MINUTES

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- Draft customer responses
- Summarize complaints
- Categorize support requests
- Improve FAQs
- Analyze reviews

### ENTREES | 1-3 HOURS

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- Build internal support assistants
- Create response libraries
- Automatically classify tickets
- Surface relevant documentation
- Analyze sentiment
- Identify repeat issues
- Create escalation rules

### CHEF'S TABLE | 5-20+ HOURS

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- Build customer-facing AI assistants
  - Connect AI to customer history
  - Build human-escalation workflows
  - Automate routine support without hiding that automation
  - Analyze support patterns for product/process improvements
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## 12 Operations & Process Improvement

Document work, identify bottlenecks, standardize repetitive tasks, and automate semi-structured operations.

### APPETIZERS | 15-30 MINUTES

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- Document a process
- Ask AI to identify bottlenecks
- Create a checklist
- Convert tribal knowledge into an SOP
- Analyze a recurring task

### ENTREES | 1-3 HOURS

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- Build SOP libraries
- Turn emails into workflows
- Standardize repetitive deliverables
- Analyze process variation
- Create QA checklists
- Generate daily/weekly operational reports
- Create exception reports
- Extract information from forms/documents

### CHEF'S TABLE | 5-20+ HOURS

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- Build automated operational workflows
  - Connect systems through APIs or automation tools
  - Create exception-driven management
  - Build AI-assisted quality assurance
  - Build process-monitoring agents
  - Automate semi-structured administrative work
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## 13 Data Analysis & Reporting

Use AI to interrogate spreadsheets, explain metrics, generate reports, and create proactive business intelligence.

### APPETIZERS | 15-30 MINUTES

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- Upload a spreadsheet
- Ask questions about the data
- Generate charts
- Identify anomalies
- Calculate trends
- Explain metrics

### ENTREES | 1-3 HOURS

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- Build recurring reports
- Analyze sales performance
- Analyze customer cohorts
- Analyze profitability
- Forecast scenarios
- Identify correlations
- Create dashboards
- Generate executive summaries
- Analyze survey responses

### CHEF'S TABLE | 5-20+ HOURS

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- Connect live data sources
- Build automated management reporting
- Build natural-language business intelligence
- Create anomaly detection
- Generate proactive alerts
- Build forecasting workflows

## 14 Finance & Administration

Use AI to make routine finance and administrative work faster while keeping human review high for consequential decisions.

### APPETIZERS | 15-30 MINUTES

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- Categorize expenses
- Analyze budgets
- Compare vendors
- Explain financial reports
- Model simple scenarios

### ENTREES | 1-3 HOURS

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- Build budget-review workflows
- Create monthly financial summaries
- Analyze margin by service
- Build cash-flow scenarios
- Review contracts
- Organize receipts/invoices
- Extract data from financial documents

### CHEF'S TABLE | 5-20+ HOURS

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- Build finance reporting assistants
  - Create automated variance analysis
  - Integrate finance data with operational data
  - Build management decision-support systems
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## 15 Human Resources & People Management

Apply AI to hiring, onboarding, training, employee communication, and development while keeping people decisions human-led.

### APPETIZERS | 15-30 MINUTES

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- Write job descriptions
- Develop interview questions
- Draft onboarding material
- Summarize employee feedback
- Create training plans

### ENTREES | 1-3 HOURS

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- Build onboarding assistants
- Create role scorecards
- Build training materials
- Analyze employee surveys
- Generate performance-review preparation
- Maintain internal policy knowledge bases

### CHEF'S TABLE | 5-20+ HOURS

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- Create employee self-service knowledge systems
  - Automate administrative HR workflows
  - Build personalized training systems
  - Connect competency models to development plans
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## 16 Software Development & Vibe Coding

Use coding agents to prototype tools, modify applications, automate technical work, and accelerate development.

**KEY PRINCIPLE** Prototype is not production. Speed changes what you can test, not what quality requires.

### APPETIZERS | 15-30 MINUTES

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- Ask AI to explain code
- Generate a simple script
- Build a calculator
- Create a tiny web page
- Modify an existing application

### ENTREES | 1-3 HOURS

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- Learn Claude Code or another coding agent
- Build an internal utility
- Build a dashboard
- Build a form
- Create a data-processing tool
- Prototype a product
- Create tests
- Debug an application
- Write documentation

### CHEF'S TABLE | 5-20+ HOURS

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- Build production applications with AI-assisted development
  - Implement CI/CD
  - Use multiple coding agents
  - Build internal APIs
  - Create AI-native product features
  - Maintain automated testing and code review
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## 17 Automation & Integration

Connect AI to the software where work already happens and replace manual copy-paste handoffs with reliable workflows.

### APPETIZERS | 15-30 MINUTES

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- Connect one service
- Use an existing connector
- Trigger a simple automation
- Understand APIs conceptually

### ENTREES | 1-3 HOURS

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- Connect email and calendar
- Connect CRM
- Connect task management
- Use workflow automation tools
- Use webhooks
- Build conditional workflows
- Connect AI to files
- Create scheduled automations

### CHEF'S TABLE | 5-20+ HOURS

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- Build multi-system workflows
  - Implement API-driven orchestration
  - Create agent-to-agent workflows
  - Build event-driven automations
  - Create failure handling and retries
  - Build observability around automation
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## 18 Agents

Move from one-shot requests to goal-driven systems that can choose tools, take multiple steps, and operate within boundaries.

### APPETIZERS | 15-30 MINUTES

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- Understand model vs. tool vs. agent
- Let AI perform a single tool action
- Experiment with scheduled tasks

### ENTREES | 1-3 HOURS

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- Build a research agent
- Build an email assistant
- Build a meeting assistant
- Build a CRM assistant
- Build an administrative agent
- Create agent instructions and boundaries

### CHEF'S TABLE | 5-20+ HOURS

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- Build multi-step agents
  - Build multi-agent systems
  - Add memory
  - Add approval gates
  - Add tool permissions
  - Add monitoring
  - Add retries/failure recovery
  - Build human-in-the-loop systems
  - Create agent orchestration
-

## 19 Security, Privacy & Governance

Set boundaries around data, permissions, credentials, approvals, and accountability before AI can take consequential actions.

**KEY PRINCIPLE** Reading is different from writing. Writing is different from executing. Match permissions to consequences.

### APPETIZERS | 15-30 MINUTES

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- Understand what information you are sharing
- Use strong authentication
- Protect passwords
- Protect API keys
- Learn your vendor privacy controls

### ENTREES | 1-3 HOURS

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- Define read/write/execute permissions
- Identify sensitive data classes
- Create AI-use guidelines
- Establish human approval points
- Define prohibited actions
- Create verification rules
- Maintain backups
- Rotate credentials

### CHEF'S TABLE | 5-20+ HOURS

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- Implement least-privilege access
  - Centralize secrets management
  - Audit agent actions
  - Build logging and monitoring
  - Establish governance policies
  - Create incident procedures
  - Evaluate vendor risk
  - Perform AI security reviews
-

## 20 Evaluation & Quality Control

Measure whether AI work is actually good, faster, safer, and more reliable rather than assuming productivity gains.

**KEY PRINCIPLE** If you cannot define what good looks like, you cannot tell whether AI made the work better.

### APPETIZERS | 15-30 MINUTES

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- Ask: How will I know this is good?
- Verify facts
- Check sources
- Compare AI output against your own work

### ENTREES | 1-3 HOURS

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- Build evaluation rubrics
- Create gold-standard examples
- Measure time saved
- Measure error rates
- Track adoption
- Measure customer outcomes
- Review failed outputs
- Maintain feedback loops

### CHEF'S TABLE | 5-20+ HOURS

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- Build automated evaluations
  - Compare models systematically
  - Create benchmark datasets
  - Monitor quality over time
  - Test prompts/workflows after model updates
-

## 21 Multimodal AI

Work across text, images, audio, video, screenshots, charts, and documents instead of limiting AI to typed conversation.

### APPETIZERS | 15-30 MINUTES

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- Analyze photographs
- Interpret screenshots
- Ask questions about charts
- Transcribe audio
- Generate images
- Analyze PDFs

### ENTREES | 1-3 HOURS

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- Analyze job-site photos
- Extract data from documents
- Create marketing imagery
- Generate presentation visuals
- Analyze recorded calls/video
- Convert voice ideas into structured notes

### CHEF'S TABLE | 5-20+ HOURS

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- Build vision-enabled workflows
  - Process document/image queues
  - Analyze field inspection photos
  - Create multimodal knowledge systems
-

## 22 Voice & Mobile AI

Use voice as a fast capture and interaction layer for ideas, tasks, meeting preparation, and field work.

### APPETIZERS | 15-30 MINUTES

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- Talk to AI instead of typing
- Capture ideas by voice
- Ask for summaries while walking or traveling
- Create voice notes

### ENTREES | 1-3 HOURS

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- Automatically process voice notes
- Turn dictation into tasks/projects
- Create mobile capture workflows
- Use voice as the front door to your knowledge system

### CHEF'S TABLE | 5-20+ HOURS

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- Build a persistent mobile executive assistant
  - Connect voice input to business systems
  - Create voice-first field workflows
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## 23 Local AI & Private Models

Understand when local or private inference makes sense for privacy, cost, offline use, or specialized internal workloads.

### APPETIZERS | 15-30 MINUTES

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- Understand cloud vs. local inference
- Learn what model size means
- Understand why privacy/local execution may matter

### ENTREES | 1-3 HOURS

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- Run a small model locally
- Experiment with a local model runner
- Use local embeddings/search
- Evaluate local vs. cloud performance

### CHEF'S TABLE | 5-20+ HOURS

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- Operate private business models
  - Build hybrid local/cloud architecture
  - Deploy local RAG systems
  - Host specialized internal models
  - Create offline/private workflows
-

## 24 Organizational Adoption

Turn isolated individual experimentation into repeatable company learning, standards, pilots, governance, and shared capability.

**KEY PRINCIPLE** Company capability grows when useful experiments become shared standards, knowledge, and habits.

### APPETIZERS | 15-30 MINUTES

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- Share useful prompts with coworkers
- Run an AI lunch-and-learn
- Identify an internal champion
- Ask employees where repetitive work lives

### ENTREES | 1-3 HOURS

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- Create a shared prompt library
- Run pilot projects
- Train employees
- Establish AI office hours
- Create acceptable-use rules
- Track use cases and wins
- Hold workflow-improvement sessions

### CHEF'S TABLE | 5-20+ HOURS

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- Build an internal AI center of excellence
  - Establish governance
  - Maintain company-wide knowledge infrastructure
  - Redesign roles and processes around augmentation
  - Establish ongoing training and evaluation
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## 25 Personal Development & Thinking

Use AI as a thinking partner for reflection, learning, decisions, goals, and personal operating systems.

### APPETIZERS | 15-30 MINUTES

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- Journaling
- Brainstorming
- Socratic questioning
- Decision analysis
- Goal clarification
- Habit planning
- Learning plans

### ENTREES | 1-3 HOURS

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- Build a personal advisory council
- Maintain decision journals
- Conduct weekly reviews
- Analyze patterns across journal entries
- Build personalized learning systems

### CHEF'S TABLE | 5-20+ HOURS

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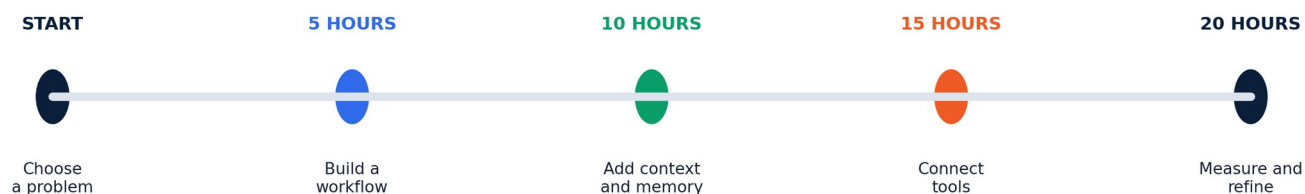
- Build a personal operating system
- Connect goals, calendar, tasks, notes, relationships, and learning
- Develop long-term personal memory

# Your next 20 deliberate hours

Do not spend them watching other people talk about AI. Spend them building, connecting, organizing, testing, and improving.

## Your next 20 deliberate hours

Build. Connect. Organize. Test. Improve.



**Hours 0-5** Pick one recurring problem. Create context. Build the smallest useful workflow.

**Hours 5-10** Add examples, persistent instructions, and reusable knowledge.

**Hours 10-15** Connect one real system: files, calendar, email, CRM, tasks, or data.

**Hours 15-20** Measure what changed. Fix failure points. Decide what deserves a second iteration.

# BUILD ONE THING THIS WEEK.

*Don't automate being human.*

*Automate the things that keep you from having enough time to be human.*

## **POLARIS PIXELS**

Practical technology systems for small businesses.

[polarispixels.com/ai-playbook](https://polarispixels.com/ai-playbook)