

YourAIPlaybook

Data to Decision

How to use AI to turn messy data into clear, actionable insights. A step-by-step playbook for anyone who works with data.

[Free Guide](#)

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The Problem

You have data. Lots of it. But data alone doesn't make decisions.

The gap between "here's a spreadsheet" and "here's what we should do" is where most teams get stuck. Reports pile up. Dashboards go unread. People stare at numbers and still don't know what to do next.

AI can close that gap. Not by replacing your judgment, but by doing the heavy lifting between raw data and clear recommendations. It summarizes, finds patterns, translates technical findings into plain language, and helps you structure your thinking so decisions come faster.

The shift: Stop asking "what does this data show?" and start asking "what should we do about it?"
That single reframe changes everything.

The 5-Step Framework

Follow these five steps to go from raw data to a clear recommendation. Each step builds on the last.

- 1 Clarify the question.** Before touching any data, write down the decision you need to make. "What should we do about X?" is better than "analyze this data." A focused question keeps everything that follows on track.
- 2 Clean and contextualize.** Upload your data to AI and ask it to identify patterns, outliers, and gaps. Let AI do the first pass so you can focus on what matters instead of scrolling through rows.
- 3 Analyze with purpose.** Ask AI targeted questions tied to your decision. Don't ask "what does this data show?" Ask "based on this data, which region should we prioritize for Q2?"
- 4 Visualize the story.** Use AI to suggest the best chart types and key takeaways for your audience. Data without a visual story gets ignored.
- 5 Draft the recommendation.** Have AI structure your findings into a recommendation format: situation, findings, options, recommendation. This is where data becomes action.

Framework Prompts

Use these prompts at each stage of the framework to get the most out of AI.

Step 2: Clean and Contextualize

```
"Here's our Q1 sales data. Identify the top 3 trends and any data quality issues you notice."
```

Step 3: Analyze with Purpose

```
"Based on this data, which region should we prioritize for Q2? Consider revenue growth, customer acquisition cost, and market saturation."
```

Step 4: Visualize the Story

```
"I need to present these findings to our leadership team. Suggest 3 visualizations and the key message for each."
```

Step 5: Draft the Recommendation

```
"Structure these findings as a recommendation with four sections: Situation (what's happening), Findings (what the data shows), Options (what we could do), and Recommendation (what we should do and why)."
```

Prompt Templates for Data Work

Copy these and adapt them for your own data. Each one targets a common data task.

```
"Summarize this dataset in 5 bullet points. Focus on trends, not raw numbers."
```

```
"Compare these two time periods and highlight what changed and why it matters."
```

```
"I need to explain this data to a non-technical executive. Rewrite my findings in plain language with a clear recommendation."
```

```
"Based on this data, what questions should I be asking that I haven't thought of?"
```

```
"Create an executive summary with: key finding, supporting evidence, recommended action, and risk if we do nothing."
```

Pro tip: The last prompt is especially powerful. "Risk if we do nothing" forces AI to make the case for action, which is often the hardest part of any data presentation.

Common Data Tasks AI Handles Well

AI won't replace your expertise, but it will handle the grunt work so you can focus on interpretation and decisions.

Analysis and Discovery

- ✓ Summarizing large datasets
- ✓ Finding patterns and outliers
- ✓ Cleaning and formatting data
- ✓ Writing data narratives
- ✓ Suggesting visualizations

Communication and Action

- ✓ Comparing time periods
- ✓ Generating hypotheses
- ✓ Translating findings for executives
- ✓ Creating presentation talking points
- ✓ Drafting recommendations

Watch Out For

AI is a powerful data partner, but it has blind spots. Keep these in mind every time you use AI with data.

Important cautions:

- ⚠️ AI can find patterns that don't exist (correlation vs. causation). Always ask "does this make sense?" before acting on a pattern.
- ⚠️ Always verify numbers AI generates against your source data. AI can miscalculate, misread columns, or hallucinate statistics.
- ⚠️ AI doesn't know your organizational context. It doesn't know your boss's priorities, your budget constraints, or last quarter's politics. Add that context yourself.
- ⚠️ Sensitive data needs careful handling. Check your organization's policies before uploading data to any AI tool. Know what's allowed and what isn't.

A good rule: Use AI to generate the first draft of your analysis. Use your brain to validate it. The best data work happens when you combine AI speed with human judgment.

Your Data-to-Decision Checklist

Run through this checklist before you present or act on any data-driven recommendation.

- Defined the decision I need to make
- Cleaned and uploaded relevant data
- Asked targeted, decision-focused questions
- Verified AI findings against source data
- Created visualizations for my audience
- Drafted a clear recommendation
- Added organizational context AI couldn't know

The last item matters most. AI gives you the analysis. You give it the context. Together, that's how decisions get made.

Stop drowning in data. Start making decisions.

The gap between data and decisions is where careers are built. AI helps you close it faster.

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