



# HOW TO **THINK** WITH AI



## Checklist for Framing Problems for AI Assistance

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# Checklist

## Framing Problems for AI Assistance

### 1. Clarify the Problem Statement

- Clearly articulate the problem.
- Define specific goals and successful outcomes.
- Avoid vague or ambiguous language.

Example: Change "I want to improve my company's performance" to "I want to identify the factors contributing to our 15% decrease in customer retention over the past quarter."

### 2. Break Down Complex Problems

- Decompose complex issues into smaller, manageable components.
- Identify sub-problems that AI can address.
- Use an AI chatbot to explore various aspects of the problem.

Example: For climate change in a city, break it down into reducing energy consumption, optimizing public transportation, and increasing green spaces.

### 3. Identify Relevant Data

- Determine what data is necessary for your problem.
- Collect relevant and high-quality data.
- Ask an AI chatbot for a comprehensive list of related data.

Example: For a marketing problem, consider customer demographics, purchase history, website analytics, and social media engagement metrics.

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### 4. Structure Your Query

- Use clear, concise language.
- Provide necessary context.
- Specify the desired type of output (numerical prediction, categorization, recommendations, etc.)

Example: "Based on current market trends in the tech industry, provide three potential strategies for a small software company to increase its market share over the next two years. Include potential benefits and risks for each strategy."

### 5. Consider Constraints and Parameters

- Define any constraints or parameters for the AI (budget limitations, time constraints, ethical considerations, etc.).

Example: For optimizing a manufacturing process, specify constraints like maximum production costs, minimum quality standards, or environmental impact limitations.

### 6. Anticipate Potential Biases

- Be aware of biases in training data, problem framing, or AI system limitations.
- Interpret AI output with these biases in mind.

Example: In hiring decisions, recognize potential biases in historical hiring data.

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### 7. Iterate and Refine

- Be prepared to refine your problem statement and approach based on initial AI results.
- Adjust queries, provide additional context, or further break down the problem as needed.

Example: If initial AI results are not useful, modify the query or provide more detailed sub-problems.