FIRST PRINCIPLES PROBLEM-SOLVING

A Guide to Do More by Doing Less

Purpose:

This guide helps you cut through complexity by focusing on the core problem and challenging every assumption. Use it to streamline projects, avoid unnecessary work, and accelerate results.

Why it Matters:

- Eliminate Over-Engineering: Stop wasting time on unnecessary details.
- **Increase Efficiency:** Focus on the core problem and key constraints to drive faster, more effective solutions.
- **Boost Impact:** Achieve measurable outcomes by aligning your work with what really matters to your organization and stakeholders.

How to Use This Guide

- 1. **Follow the Steps:** Work through each part sequentially.
- 2. **Customize:** Fill in the interactive sections with details relevant to your project or challenge.
- 3. **Document:** Save your responses and share with your team to align on priorities.
- 4. **Review & Iterate:** Revisit your answers as new insights emerge and adjust your strategy accordingly.



Step 1: Identify the Core Problem

Objective:

Define precisely what you are trying to solve. Avoid getting lost in peripheral issues.

Actions:

· Clarify the Issue

- What is the one key problem or challenge you must overcome?
- Why is this the most important issue to address right now?

• Interactive Section:

- Core Problem Statement:
 - Write a clear, one-sentence statement of the core problem
- Impact:
 - Describe how this problem is affecting your team, project, or organization

Step 2: Question the Constraints

Objective:

Identify and challenge every assumption or limitation that might be preventing progress.

Actions:

List Your Constraints:

- What are the current limitations (resources, processes, policies) that might be holding you back?
- Are these constraints truly fixed, or can they be reexamined?

• Interactive Section:

- Constraint List:
 - List the key constraints you see
- Challenge Each Constraint:
 - Next to each constraint, note one question or idea to challenge it. For example: "Why do we need this signature?" or "Can we simplify this process?"



Step 3: Create Only What's Necessary

Objective:

Avoid over-building. Focus on minimal, effective solutions that directly solve the core problem.

Actions:

Plan Minimal Solutions:

- What is the simplest version of a solution that addresses the core problem?
- Which elements are essential, and what can be removed or postponed?

• Interactive Section:

- Minimum Viable Solution (MVS):
 - Describe your lean solution approach.
- Must-Haves vs. Nice-to-Haves:
 - List the features or actions that are absolutely necessary vs. those that can be added later.

Step 4: Shorten the Timeline

Objective:

Set a tight, realistic deadline to force prioritization and efficiency.

Actions:

Define a Short Timeline:

- What is the fastest you can realistically implement your minimum solution?
- How will a compressed timeline force you to eliminate non-essential tasks?

Interactive Section:

- · Deadline:
 - Write down your target deadline, e.g., "Go live in 30 days".
- Action Plan:
 - Outline the critical actions that must be completed by each milestone to meet your deadline.



Final Checks & Next Steps

1. Review Your Answers

• Ensure that each section is clear and that your plan remains laser-focused on the core problem.

2. Communicate with Stakeholders

 Share this guide with your team and leadership to align on priorities and timelines.

3. Iterate as Needed

• Use feedback and real-world results to adjust your approach—keep refining your process for continuous improvement.





