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THE PROBLEM-SOLVING PROCESS

STEP 1: CLARIFY

- Create a **written problem statement**
- Clarify **your goals** (and their relative importance)
- Understand the **goals of others**
- **Reframe** the problem (Are we pursuing the right goals? What are the main assumptions - are they true? How would an outsider describe the problem?)

STEP 2: CAUSES

- **Gather data** about the problem situation
- Explore the **context**
- Identify possible **root causes** (logic tree)
- Develop **hypotheses** about the most likely root causes - which analyses and data are needed to test them?
- **Test** hypotheses

STEP 3: CREATE

- **Divergent thinking** for idea creation, **convergent thinking** for choosing the best idea
- How to **find possible solutions**
  - Ask other people (Who solved a similar problem, also in other domains?)
  - Brainstorming (but let people work individually or in small groups first) & reverse brainstorming
  - Overcoming assumptions and constraints
  - Logic tree
  - Mind map
  - Thought experiment
  - More abstract formulation of the problem

STEP 4: CHOOSE

- Find the **optimal solution** (brings you closest to your goals)
- **I2 matrix** (impact & ease of implementation)
- **Pros and cons**, weigh them, best case/worst case
- Taking a **second look**
  - Information check
  - Sunk costs check
  - Sensitivity check
  - 'No regrets' check
  - 'Heart check'

STEP 5: COMMIT

- Making progress through iterations
- The **learning loop**
  - 1 Plan (concrete SMART tasks)
  - 2 Test (try it out)
  - 3 Review (What works - and what not?)
  - 4 Learn (What will you do (differently)?)
- Getting the **commitment of others**
  - Build the relationship first
  - Involve them in the problem-solving journey early on