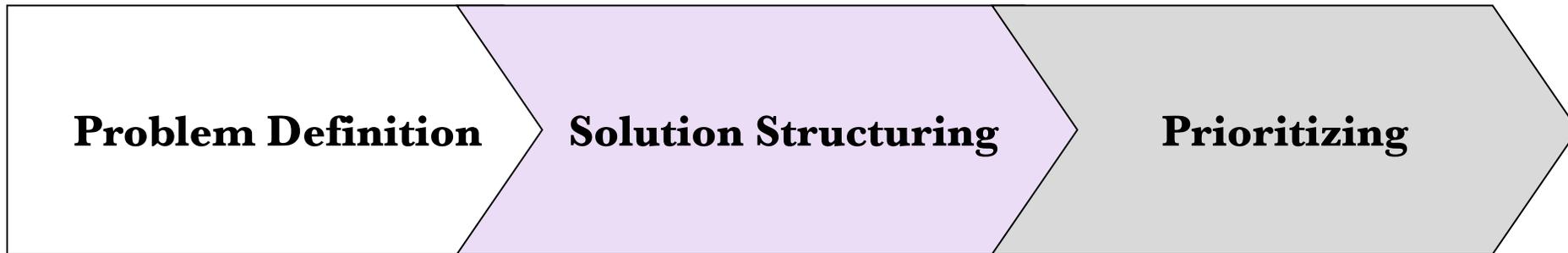*Module 1:*
Problem Solving

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Who can solve problems?

Any Problem Solving has at least 3 components!

Problem Definition > **Solution Structuring** > **Prioritizing**

Objectives & Agenda

- Defining the right problem

- Structuring the solutions

- Prioritizing the actions

CET	Topics and Activities
09:00 − 09:30	Check-in & Overview
09:30 − 10:15	**Problem Definition**
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Any Problem Solving has at least 3 components!

Problem Definition | **Solution Structuring** | **Prioritization**
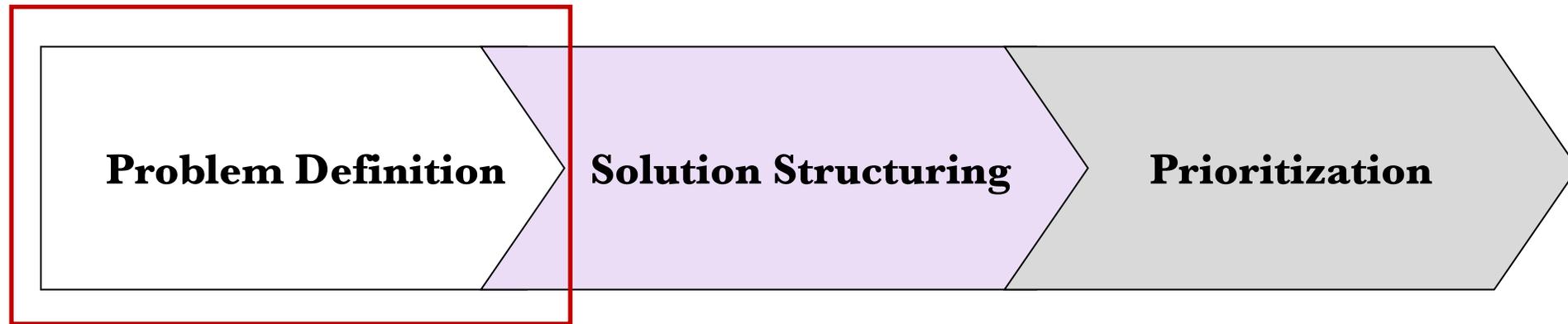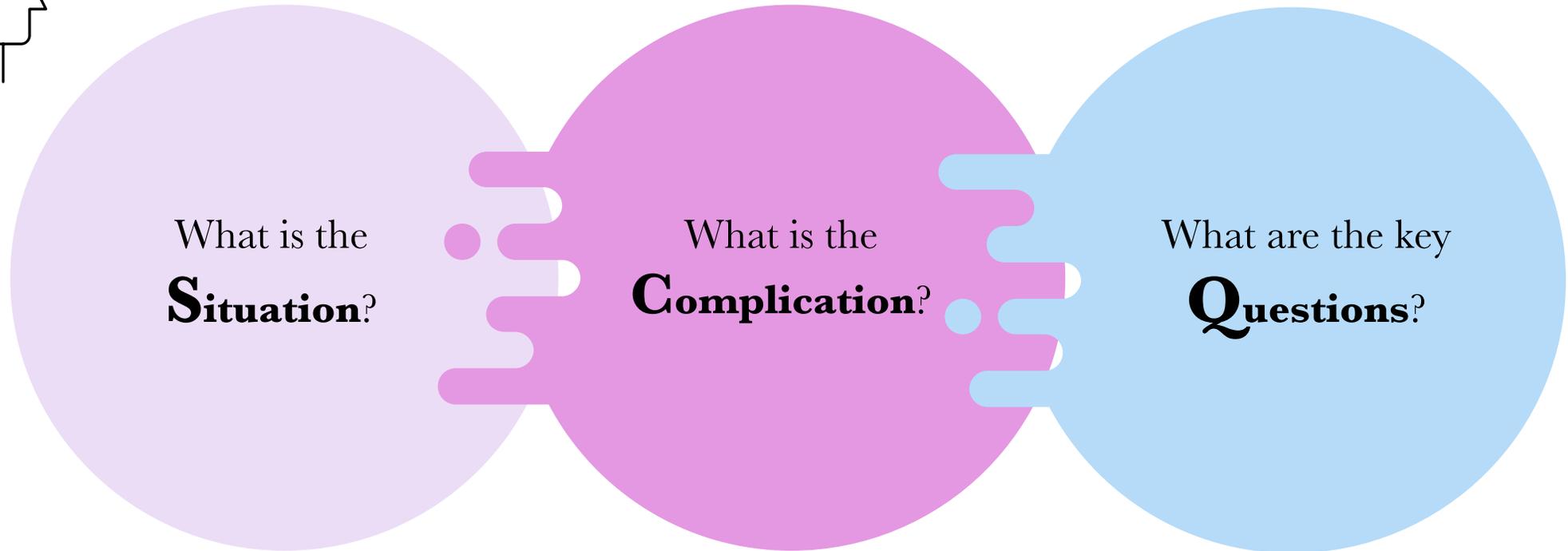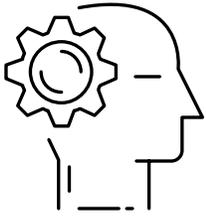
The ability to ask the right question is more than half the battle of finding the (right) answer.

- Thomas J. Watson

What is the Situation, Complication, and Questions we need to address?

What is the

Situation?

What is the

Complication?

What are the key

Questions?

SCQ Approach: Business Example

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EXAMPLE

Current Situation

- The company XYZ has decided to offer a new product offering

- This new product is critical part of the strategy and expected to be change the market dynamics

- There is high level of support and attention from Executive Team

Challenges & Complications

- The new product is very different from current products and will potentially need:

  – Different Distributors

  – Potentially different IT systems to manage

- The product is new for the Swiss market, even though there are other countries where it has been a success.

Key Questions

1 What will be the total **3-5 years cost** for entering a new product segment, considering additional distribution costs?

2 When should we enter with a new product in the market?

3 How could we **leverage insights** from different countries?

What could be SCQ Use Cases?

New Project, New Story

- *Assessing:* Understand which situation and dynamics you are entering
- *Alignment:* Align with your people on how you see the big picture. Tell them and be open that you may be wrong.

Expectation Management

- *Introduction:* Ask right questions at the beginning in a structured way
- *Scoping*: Clear alignment on *What's in and What's Out.*

Existing Project, Different Task

- *Connecting the Dots:* Check whether the new task is aligned with the agreed questions or the questions have changed?
- *Change Management:* If the context have changed than do we need a new SCQ? Has priority changed?

Stakeholder Alignment (New People or New Task)

- *Structured:* Link back big picture to stay on the course of "*why we are doing what we are doing?*"
- *Communication*: Everyone has a different context, provide yours!

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Problem Definition → Solution Structuring → Prioritization
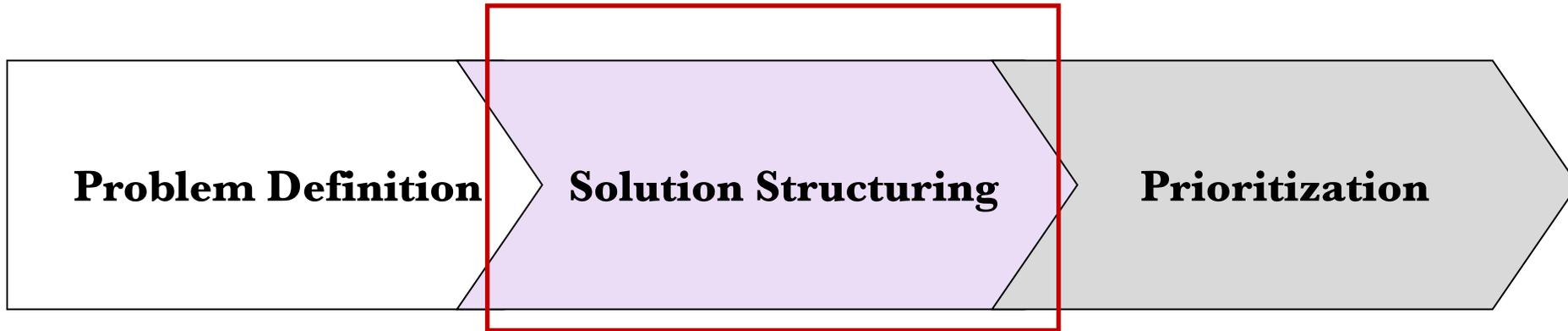
Selling the Lemonade!

Top down Vs. Bottom Up – The Pyramid Principle

Key point

Topic 1   Topic 2
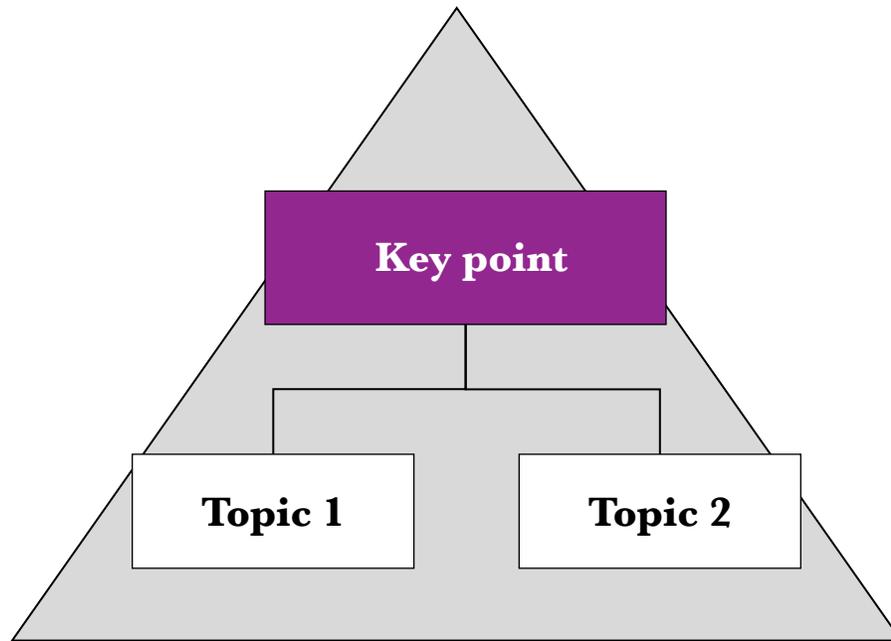
- **Top Down Structuring:** Having a key point and determining affiliated topics
  - Why we are doing what we are doing? What will be the implications?

- **Bottom-Up Structuring:** Sorting large quantities of information into distinct logical groups in order to make it comprehensible
  - How can we group our observations to find answers?

And Kevin grows up..

Decision Tree is a tree of potential logical A(nswers); mainly for "How" Questions

How? **How?** **Data?**

How can Kevin have more money at the end of the month without incurring a debt?

Increase income
- Receive an Inheritance
  - Legally — 1% chance
  - Illegally
- Receive more $ from investments
- Receive more $ from work
  - Work more hours — ~20% more work possible
  - Make more per hour — ~10% more wage possible

Reduce expenses
- Pay less for same amount of items
  - Buy lower quality items
  - Shop around for specials — ~10% more reduction possible
- Buy less
  - • Food
  - • Clothing
  - • Utensils
  - • Travel
  - • Other — ~15% more reduction possible

Simplify trees - do not explore branches that are not action-able!

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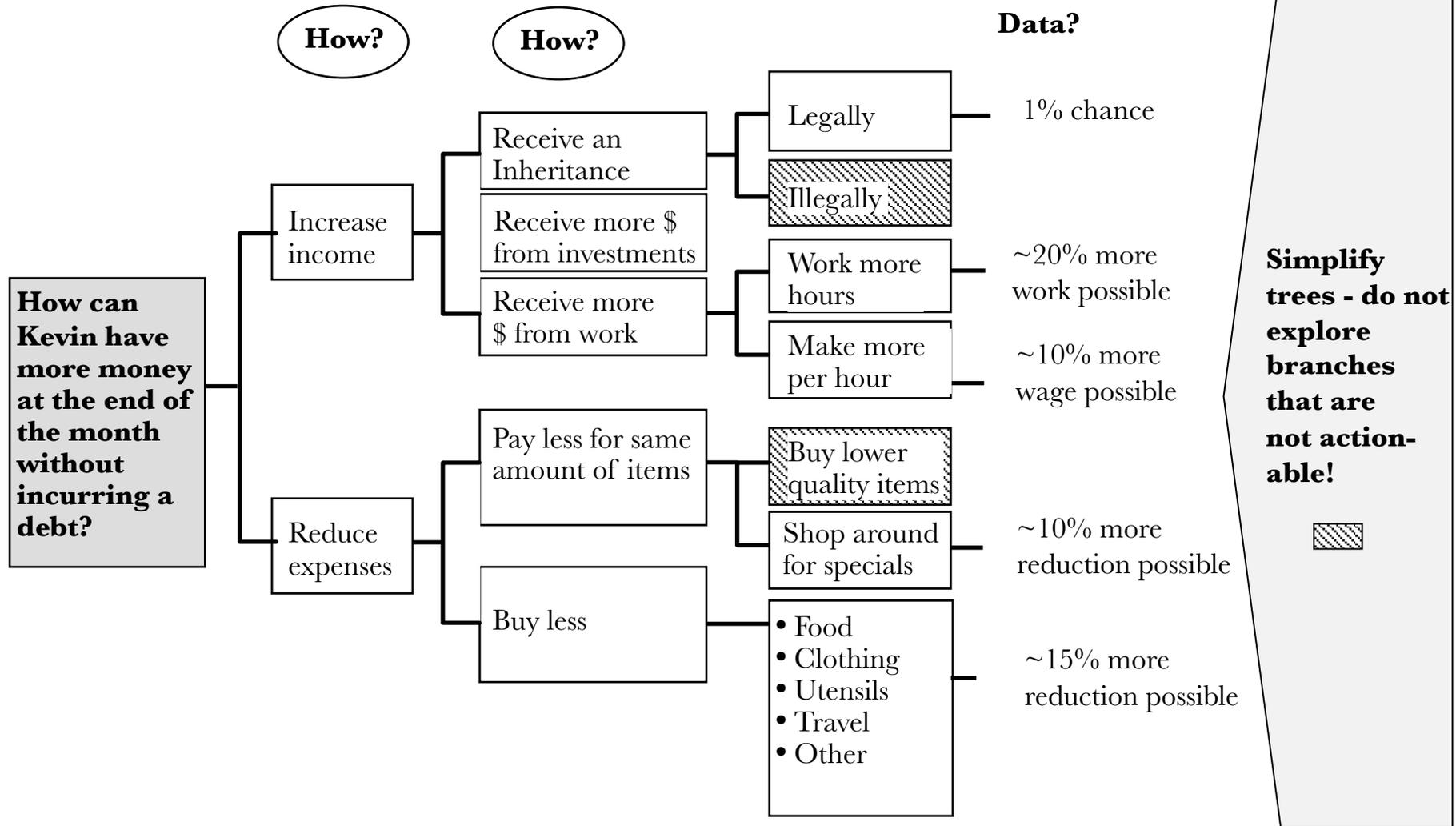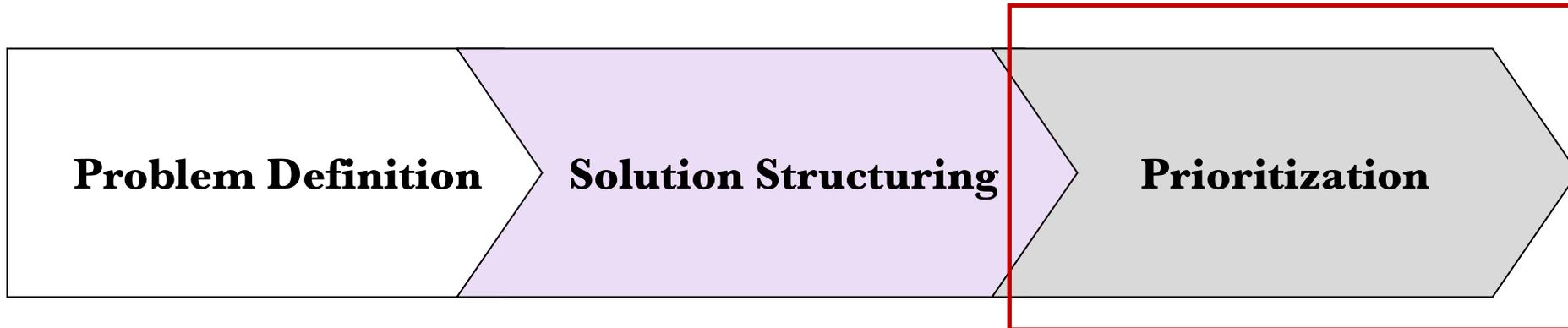| CET	Topics and Activities
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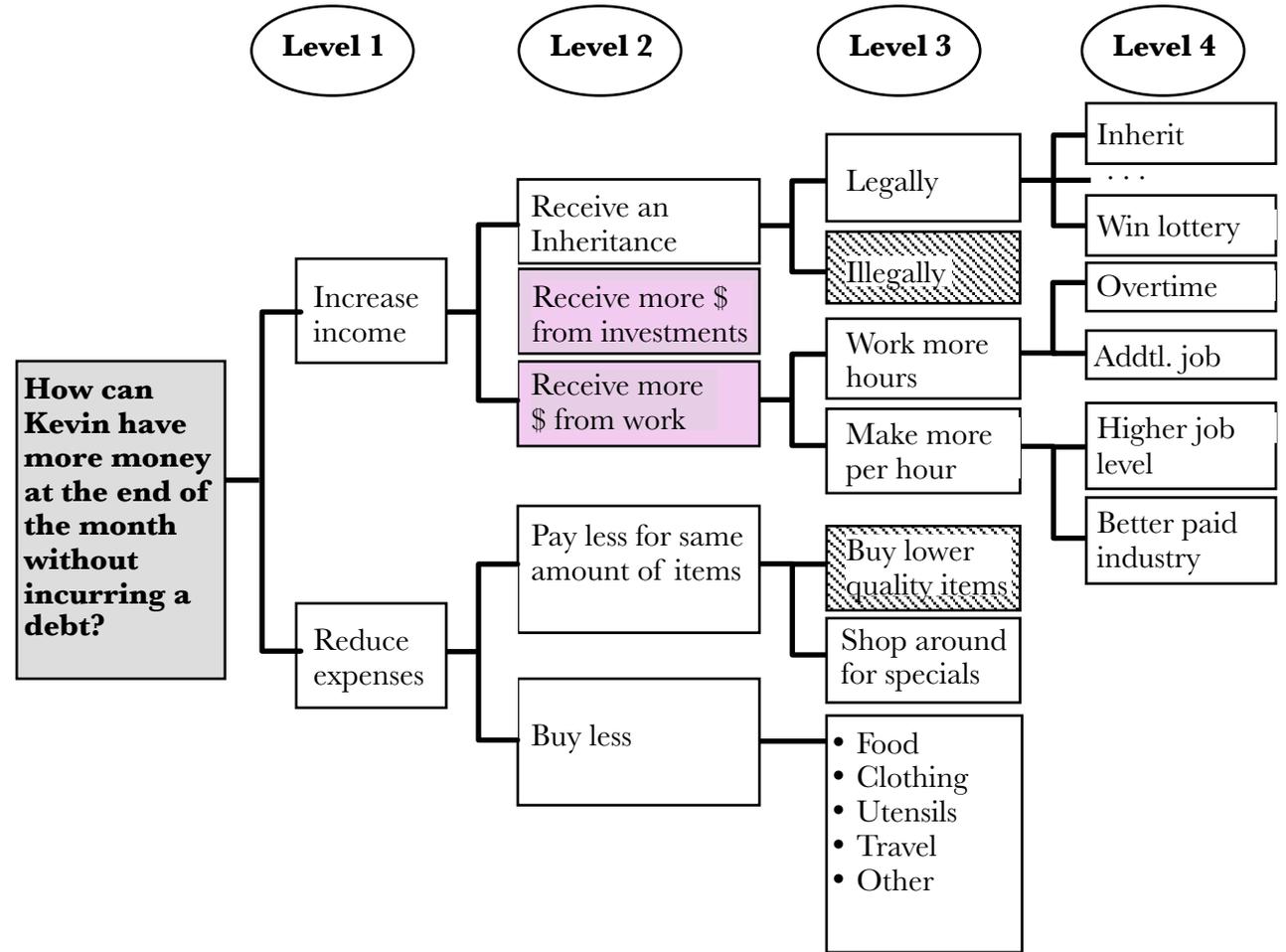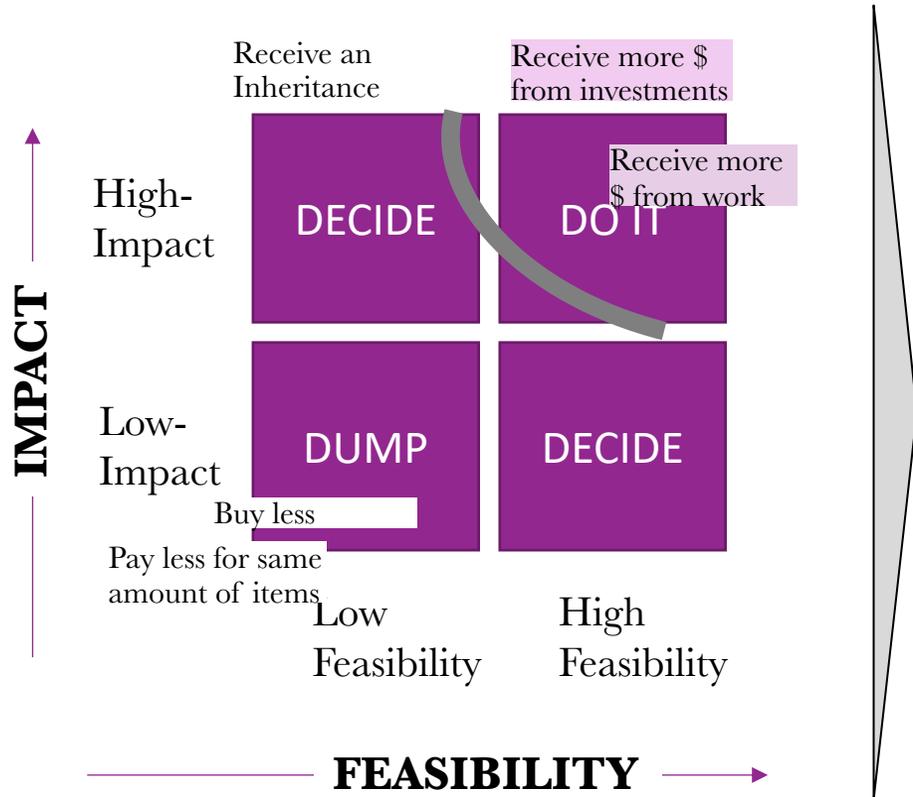
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Problem Definition > **Solution Structuring** > **Prioritization**

**Pick your battles big enough to matter,
small enough to win.**

- Jonathan Kozol

Impact Feasibility Matrix for Kevin

Impact Feasibility Matrix

IMPACT (vertical axis)

FEASIBILITY (horizontal axis)

	Low Feasibility	High Feasibility
High-Impact	DECIDE	DO IT
Low-Impact	DUMP	DECIDE

- Receive an Inheritance
- Receive more $ from investments
- Receive more $ from work
- Buy less
- Pay less for same amount of items

Logic Tree

Level 1 — **Level 2** — **Level 3** — **Level 4**

How can Kevin have more money at the end of the month without incurring a debt?

- Increase income
  - Receive an Inheritance
    - Legally
      - Inherit
      - . . .
      - Win lottery
    - Illegally
  - Receive more $ from investments
  - Receive more $ from work
    - Work more hours
      - Overtime
      - Addtl. job
    - Make more per hour
      - Higher job level
      - Better paid industry
- Reduce expenses
  - Pay less for same amount of items
    - Buy lower quality items
    - Shop around for specials
  - Buy less
    - • Food
    - • Clothing
    - • Utensils
    - • Travel
    - • Other

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Other Ways to drive Prioritizations..

Logic Tree

Relative order of importance

?

2

1

3
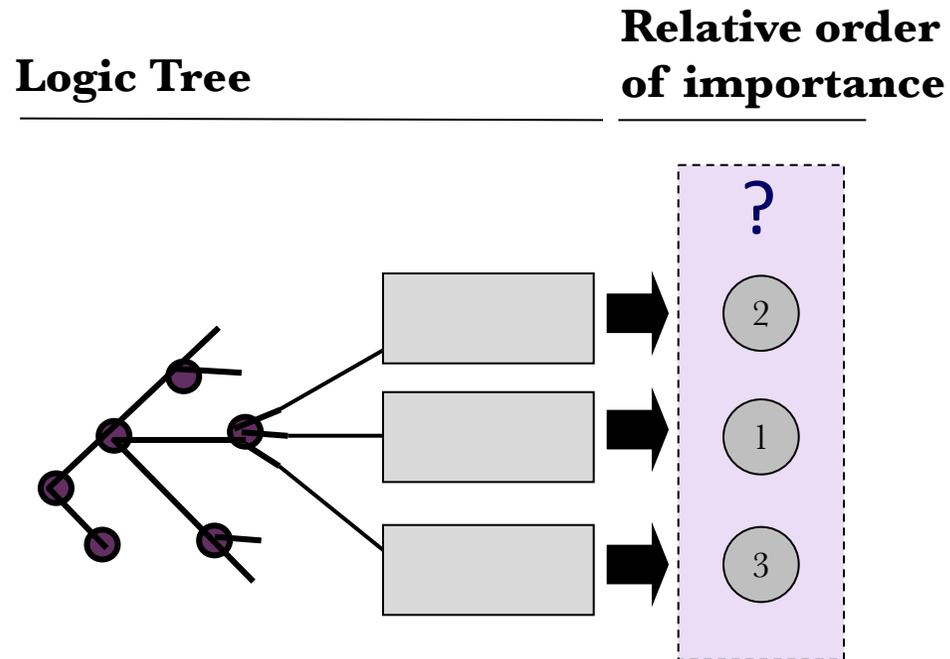
- **Prioritization** based on specific context
  - **80/20 Rule – Pareto Principle**
  - Relative size of issue (e.g. cost reduction potentials relative to each other)
  - Timeframe to solve issue (quick wins)

- **Add scope if relevant (Product, Geography…)**

- **Take Input** on prioritization from business partners, experts, previous experience, …

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Summary: Any Problem Solving has at least 3 components!

Problem Definition	Solution Structuring	Prioritization
(SCQ)	*(Top-Down, Logic Trees)*	*(Impact-Feasibility)*
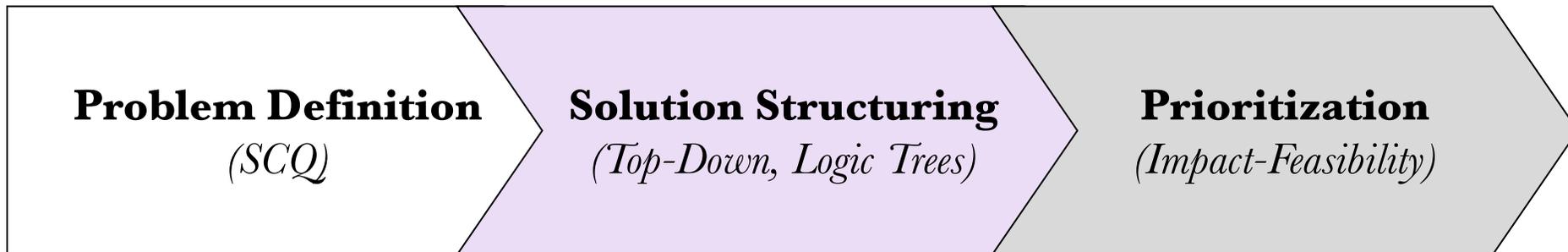
Learnings and Reflections?

- Reflect on 2-3 Learnings from this section for your daily life
- State and Write them!

Module 1:
Problem Solving

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