DEVELOPING A BUSINESS MINDSET AS AN ENGINEER

MOTIVATION

- Nearly 90% of you want to either start a business in the long run, or rise up to managerial positions
  - Practice makes perfect
- Post-AI, your domain knowledge and your people skills are going to be your most valuable assets.
- You are in a 'consulting' company and your goal is to become a consultant. A consultant is not just a handyman.
- Your growth at Antematter and as a professional is dependent on developing this mindset. It's non-negotiable, not optional.

LET'S START WITH PROBLEMS

PROBLEMS

○ This is what you get paid to solve whether as an engineer or businessperson
- Types of problems change
- The nature remains the same

THE **DISCONNECT**

- Engineers and businesspeople do not understand each other's "problemscape"
  - e.g., businesspeople think engineering problems aren't even problems, "Uber has this feature, why can't you just copy paste?"
  - e.g., engineers think business problems are non-problems, or just dead ends, or just 'somebody else's problem (this is more common); e.g., "the client is adding to scope without increasing the timeline, the client sucks"

THE NATURE OF PROBLEMS

- A problem is a state of affairs that you don't like. You would like for it to change.
- Every problem has a:
  - Problem statement <- you get better here
  - A solution <- it's almost implicit in stating something clearly as a problem
  - A set of tools, knowledge or resources that can be used to solve the problem
  - Grades of solution

EXAMPLES

- **Problem statement:** the application needs to show live data and you get a data feed from the provider but there's a problem in the WebSockets library that throttles you every 2 hours.
- **Solution:**
  - Just change the library, right?
  - What if you're using this library in multiple places throughout the project, including parts that are not written by you.
- **Tools:** Programming
- **Grades of solution:** Discuss

EXAMPLES

- **Problem statement:** The prospect was engaged during the sales calls and said he'll respond back but he hasn't. You followed up and he says, "I'm still thinking about it".
- **Solution:**
  - Just move to the next client, right?
- **Tools:** Language? Communication skills?
- **Grades of solution:** Discuss

THE MINDSET SHIFT

- Look at business problems as 'problems' too
  - **Key insight:** they also have a solution
  - **Another key insight:** you already know all of the tools required to solve them.
- Instead of *libraries*, you're dealing with *people*.
- Instead of writing *code*, you're speaking/writing *words*.
- Instead of an end *product*, you have an end *state that you (or ideally everybody) likes*.
- The limiting factor: Tools.

THE TOOLS

"The limits of my language are the limits of my world" - Ludwig Wittgenstein

- When you start out as a programmer, you don't know much, so you don't really know what's possible.

- Same thing happens when your communication skills lag; you see solvable situations as hopeless

GUIDELINES

- Deal in truth and truth only
- Don't compromise the truth for being too kind

- Ideally, you know how to deliver the harsh truth in a diplomatic way

  - In business contexts, being direct is better than beating around the bush

YOUR TRUTH

- Try to understand what information the other side lacks and ask yourself:

  "If they knew what I knew, will they still think the same?"

- If the answer is yes, give them the information
    - If the answer is no, question your assumptions until the answer is yes or you conclude that somebody is being unfair
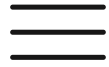
THEIR TRUTH

- Listen very, very carefully, and acknowledge everything.
  - Active listening lowers their 'defense'
- Speak in a downward inflection, and use pauses strategically
- Use calibrated questions
  - Open-ended questions
  - Acknowledge first -> ask the question
  - It gets the other side thinking from your perspective without losing autonomy

RESOURCES

- "Never Split the Difference" by Chris Voss
- The Black Swan Group on Linkedin
- Josh Braun on Linkedin
- Movie: "12 Angry Men"

THANK YOU