How To Talk To Non-Engineers

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Has This Happened To You?

• Designer: “Make it look exactly like this.”

• Product Manager: “These 17 initial features are all equally critical for launch!”

• Salesperson: “These entirely separate 17 initial features are all equally important for me to get any customers!!”
Some Assumptions

You and your colleagues:

• want each other to succeed

• are all good at your jobs
Your Work Context

![Image of an older man sitting on a couch]

!=

![Image of Bill Gates smiling]


Are engineers more precise than non-engineers?
Auto-editing

- They don’t care about implementation details.
- Unless they are not implementation details.
- They don’t care about your abstract ideas, they care about the thing being built.
Ask Questions

- Don’t just do what you’re told.
Ask about Scale

- Sizes, rates, changes, freshness
- Initial usage vs. Expected growth
- Plan on different systems for different time horizons
Ask about Limits

- “There is no limit” means someone doesn’t understand the problem well enough.

- Even if consumers are told there’s no limit, you need to understand what the practical limits are.
Ask about Differential Treatment

- Different data, different users, different experiences don’t all need the same expensive treatment
Understand the Cost of Failure

“99.9999…..%”

vs

“We could lose up to 15 minutes of newly added data and it will take us up to 20 minutes to come back after a catastrophic failure.”
\[ \text{cost} \times \text{risk} \geq \text{expense} \]

- Shave off high purity
- Determine the comparative importance of all content
P0 means you’re doing it wrong

• Ask “stakeholders” to stack rank features. No groups of priorities.

• That ranking must be allowed to change when new information is learned!
Beware
“Executive Suggestion”

• “Those buttons would look nice if they were blue.”

• “My phone never works in the subway, it would be cool if I could enter new tasks when offline.”
Beware
“Engineer Intimidation”

- “VARCHAR fields can’t be longer than 255 characters”
- “You can’t sort internationalized text properly.”
Balancing vs. Absolutes

• Try to understand their costs

• Elucidate your costs

• “We can’t do X” (not helpful) VS

  • “X would be very expensive” (helpful)

  • “X means we won’t have time or money for Y.” (helpful)
If you only remember one slide...

- Assume *goodwill* until proven wrong

- Develop your *understanding* of others’ constraints as you help them understand yours

- “Here’s what it costs” vs “No”
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