MMMRRRRR

or approaches to leadership and execution for senior engineers

Josh Leners, Two Sigma

josh@superlegit.biz

This talk: literally my thoughts

- Bona fides
- *Management* versus *Leadership*
- Essential skills
- Memes and comic sans

Bona Fides: about me

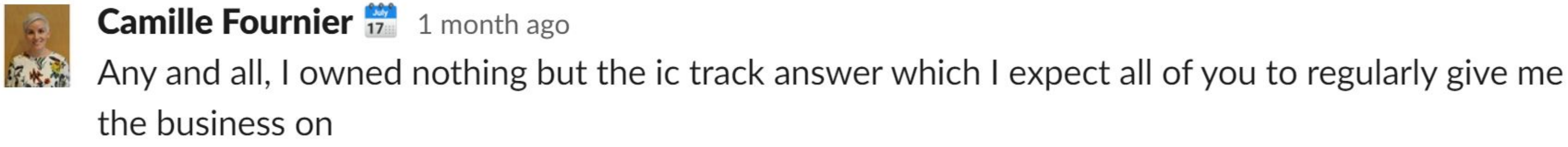
I’m basically feral:

- “Early career” == grad student
- Never had a real line manager*
- Prior “industry experience” was in a research lab

At TS:

- Super lucky (plus hard work and great management support)

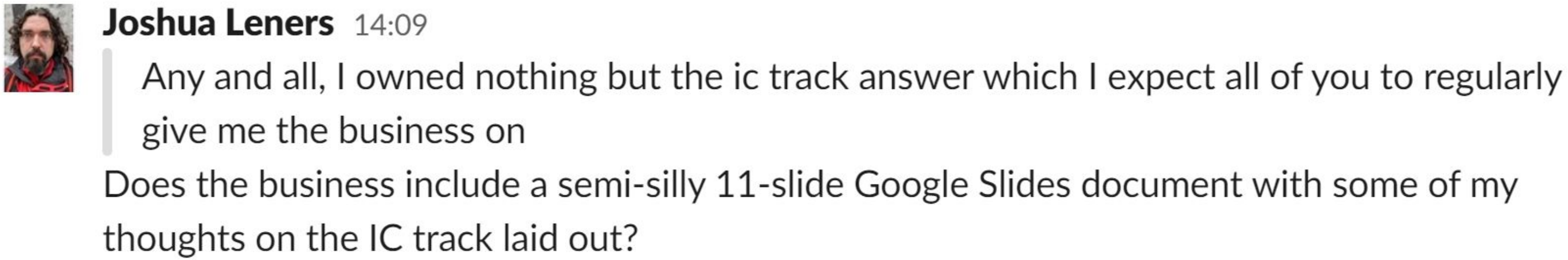
Bona fides: why I'm giving this talk



Camille Fournier 📅 1 month ago

Any and all, I owned nothing but the ic track answer which I expect all of you to regularly give me the business on

+ Comic Sans!!



Joshua Leners 14:09

> Any and all, I owned nothing but the ic track answer which I expect all of you to regularly give me the business on

Does the business include a semi-silly 11-slide Google Slides document with some of my thoughts on the IC track laid out?

Bona fides: the original slides

Basically: “lol, you guys have to deal with this dissonance”

What doesn’t ever happen

I have rewritten a core system to a service-oriented architecture, increasing resource efficiency and improving research throughput.

What does happen

I have advocated to prioritize architectural changes, gotten buy-in from stakeholders, and written some of the least time-critical features.

Bona fides: this talk

"lol, but could you be more constructive?"

MMM: *Management versus Leadership*

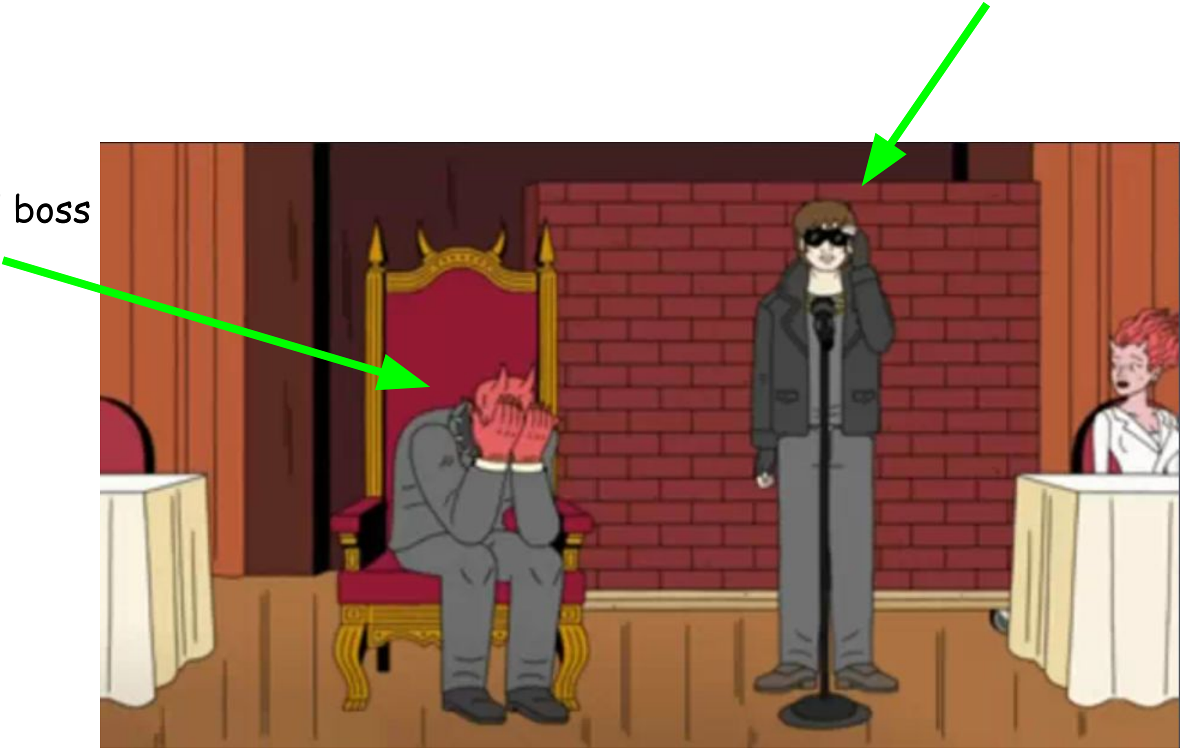
Leaders can escape people management, but they can't escape all management

Three essential aspects of *Leadership*

- Team management
- Execution management
- People Management

“Team management” - or, S02E13 of *Ugly Americans*

Premise of episode



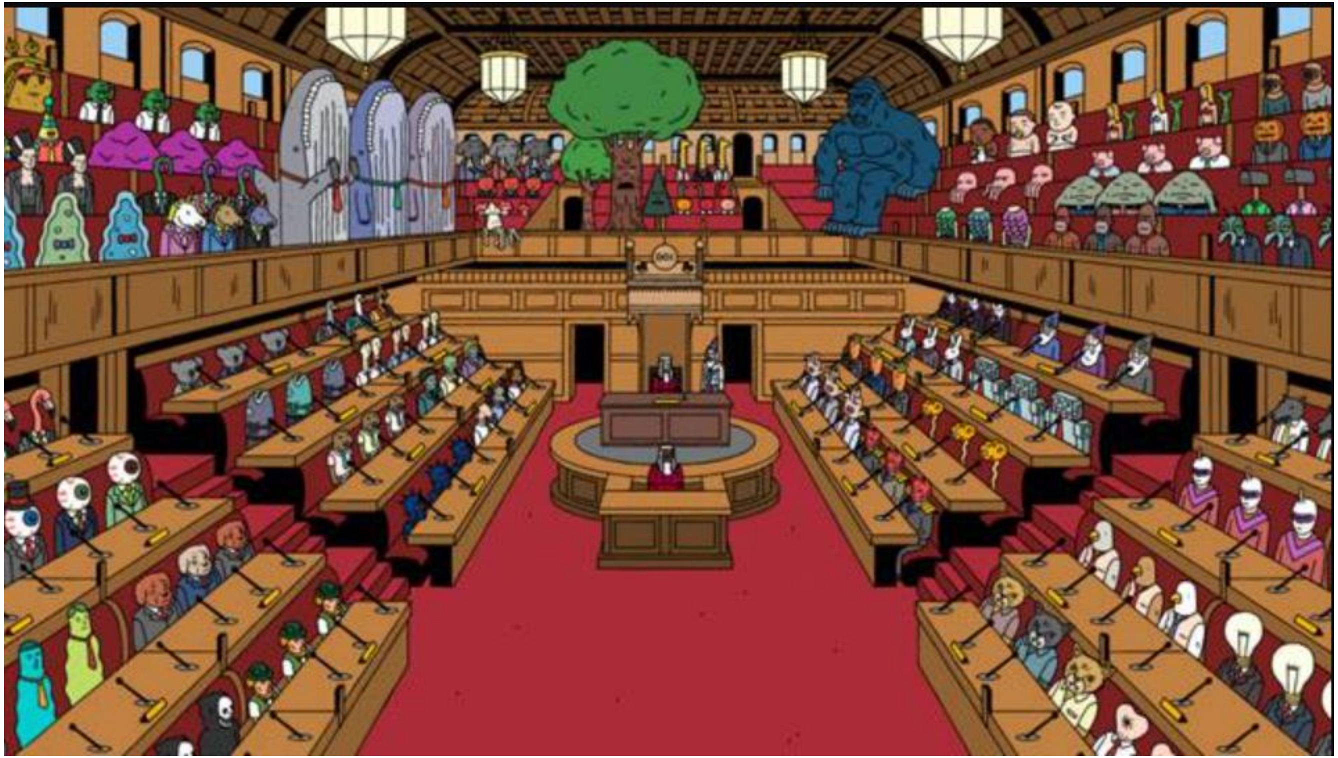
Depressed boss

Unappreciative employee

Employee found and eliminated “waste”

department of birthdays

Result: near collapse of civilization



“Team management“

What did we learn?

1. Social cohesion / belonging is paramount to organizational success
2. (bonus) Delegation
3. (bonus) Copyright law isn’t so bad? They wrote a catchy birthday jingle.

Senior ICs are responsible for executing aspects of “team management”, but are not accountable for team-wide cohesion.

“Execution management” - the one you’ll need.

Assigning work, providing feedback, keeping a team on schedule, and communicating progress.

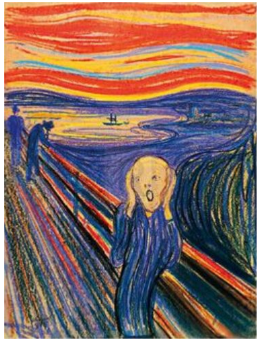
All high-level personnel do this, probably can’t even escape this as an Senior SWE

Part of your new job: Steering the ship

I do not know who I am...
I don't know why I'm here
ALL I KNOW IS THAT I MUST PROVIDE FEEDBACK
All I know is that I must kill

“People management” - or, why “individual contributor” is confusing

> *General Staff Engineer Description: ... **may manage a small team** ....*



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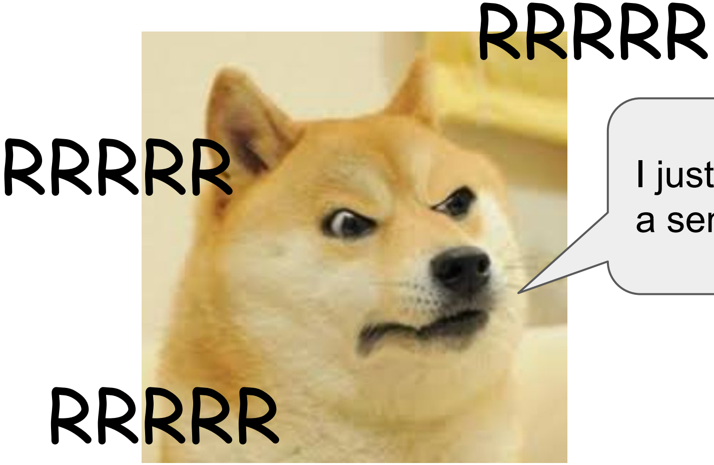
Why do ICs manage people?

- It's pretty hard to hire managers, and "no one knows until they try ;)"
- Managers leave, or go on unexpected leave, and a team's or org's leadership is expected to spread the load (as a senior IC, you are part of leadership!)
- Everyone loves interns!
- It can make sense for some projects, to have a more senior engineer manage the day-to-day.

Why are you so mad, career doge?



I just found out about the five “R”s I have to master to become a senior IC

Risk Reliability Reputation Relationships Reducing complexity

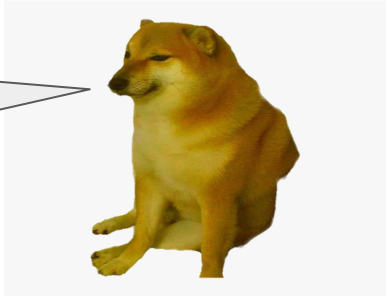
Risk - can you place good bets?

Everything would be better if $COMPANY just used the *schmergardz* library.

Ever found yourself thinking this about some “obviously dumb” thing that $COMPANY or your team is doing??

DO SOMETHING ABOUT IT!

but my OKRs are already packed and I don’t really have time to import the schmergardz library, but someone should do something!!!



Risk - putting your money where your mouth is

Just because your boss doesn't ask you to do it, doesn't mean you shouldn't. It's called "exceeding expectations" for a reason.

BUT WHYYY

Being “irresponsible” and choosing stuff to do yourself gives you great opportunity to buff your reputation (more in a bit), but here’s the holy grail:

> General Staff Engineer Description: ... sets own priorities ....

A recipe for risk taking

Find something you disagree with your team on and that you think will take you ~1 working day to prove that you are right.

Take a day, ignore everything else and prove yourself right.

If you're really risk-averse, that can be a hackday, but really #yolo

If you're right and have the evidence to convince your team 🎉

If you're wrong, or can't convince your team, try and figure out why

Either way, try to repeat with something like quarterly frequency (or a little more when you start getting more wins)

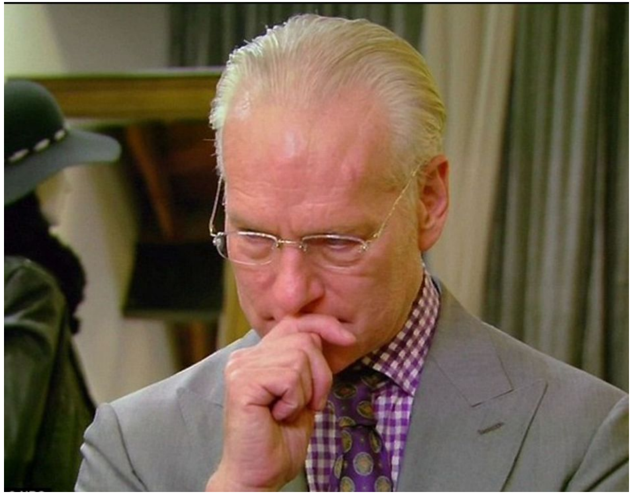
Reliability - or, how Tim Gunn of Project Runway should live in your head

What “making it work is not”

Getting it right 100% of the time

Finishing everything

Doing everything you said you would do

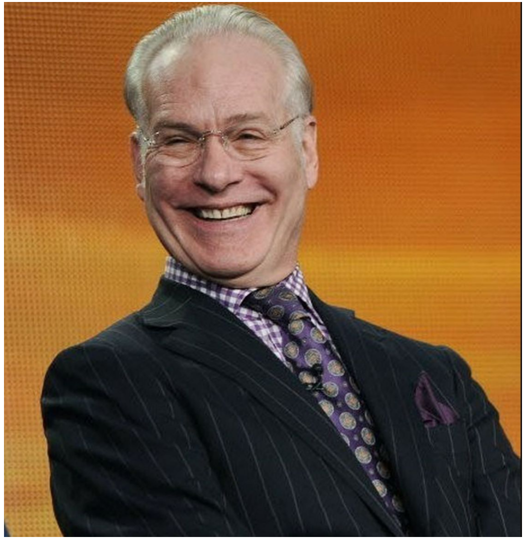


What “making it work” is

Understanding the nuanced objective

Timely and incremental delivery of results

Willingness to adapt



“Making it work” is… ~~je nes c’est quois~~ je ne sais quoi

But here are some tips:

- Focus on what you need to do, not what you said you’ll do
- Prioritization
- Time-efficiency
- Detach yourself from plans

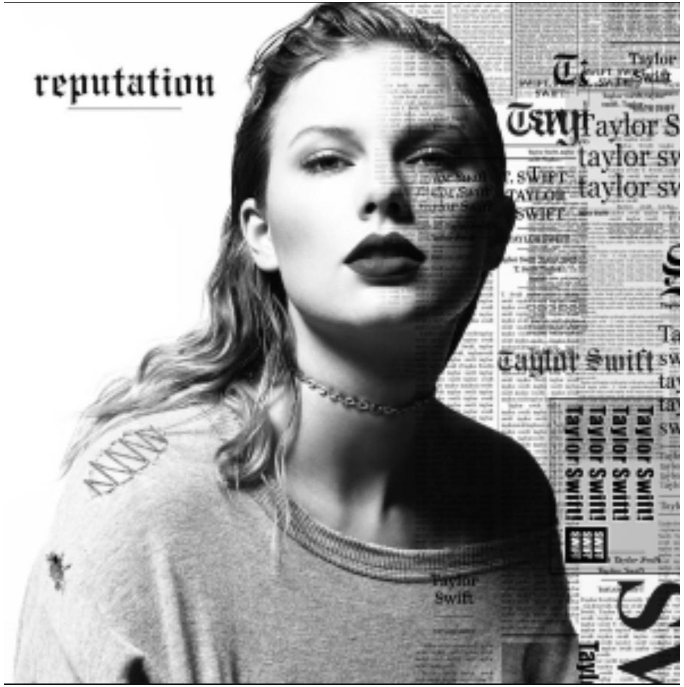
How you can practice “making it work”

Set (internal) hard deadlines.

Keep the objectives in mind.

Don’t obsess about missing.

Reputation



You have a reputation

Your team has a reputation

Your organisation has a reputation

$COMPANY has a reputation (but I will skip this one)

Personal reputation

How do you present yourself in person (or in virtual meetings)?

How do you present yourself in writing? (Slack, email, documents, code)?

Team and Org Reputation

Do you throw people under the bus?

Do you connect people who should be connected?

Are you just trying to make yourself shine bright?

Uh-oh career doge, you’re getting too close to the truth!!1!

Relationships

Networking isn't great

Instead, think about

favor gifting

But I promise it's not in a sociopathic way!!!

favor gifting

favor gifting is a great basis for establishing trusting professional relationships.

Examples:

1. Taking very strong ownership when on support rotations
2. Spending some of your “Risk” budget to help a team with a teeny change to unblock them.
3. Negotiating a change in OKRs to spend some of your team’s “Risk” budget to try and get a bigger change to accelerate a business deliverable.

Reducing Complexity

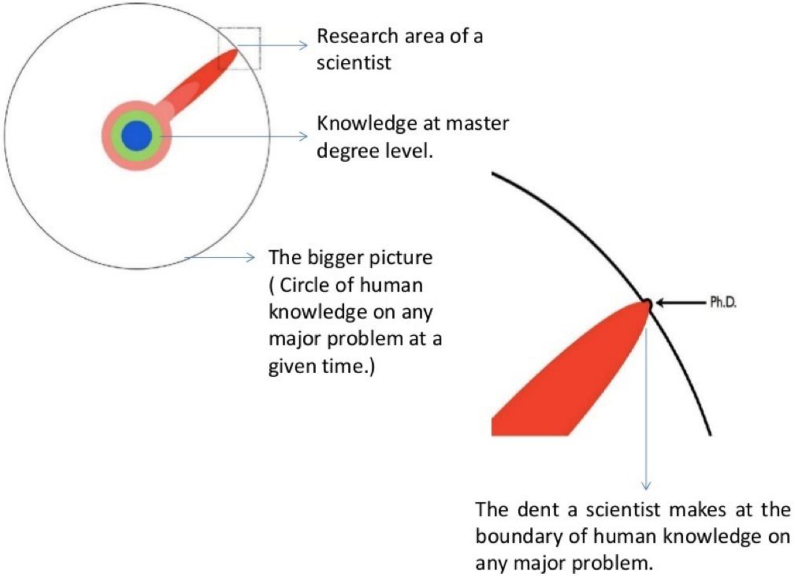
Early execution is “depth-first”

Leadership is “breadth-first”

Bridging the gap requires

summarization

(Or, reducing complexity for the **R**)



Research area of a scientist

Knowledge at master degree level.

The bigger picture (Circle of human knowledge on any major problem at a given time.)

The dent a scientist makes at the boundary of human knowledge on any major problem.

Helping engineers learn to Reduce Complexity

- Teach “elevator pitches” of their team or task
- Have potential leaders write more, with good feedback on style + content
- Encourage and reward curiosity to unfamiliar areas

Risk, Reliability, Reputation, Relationships, and Reducing complexity? I have to think about all that on top of the technology?

Sorry buddy, if you want to be a leader these are just some aspects of leadership you've got to get down!