carta

### Navigators: Connecting Execs with Staff Plus Engineers to Shape Strategy

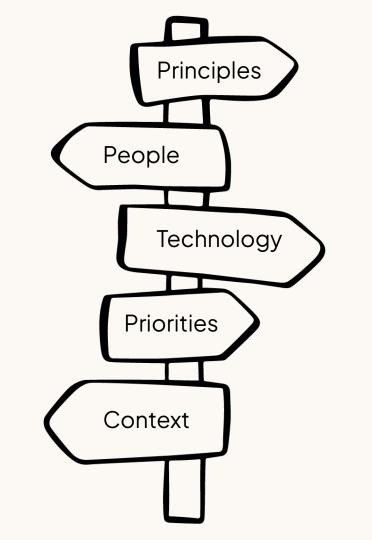
Dan Fike & Shawna Martell

StaffPlus NYC 2024









"We don't have an Engineering strategy."



Shawna Martell, Sr. Staff Eng



Dan Fike, Deputy to the CTO

# Navigators

### Make Better Decisions More Quickly

- What failed?
- What else?
- What works?
- What's new?
- What now?







- Clear decision makers
- Regular availability

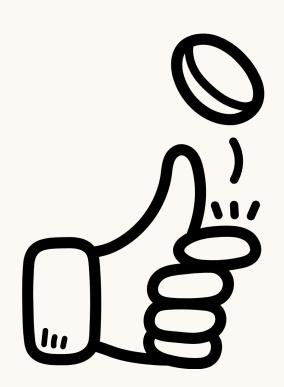
Status symbol

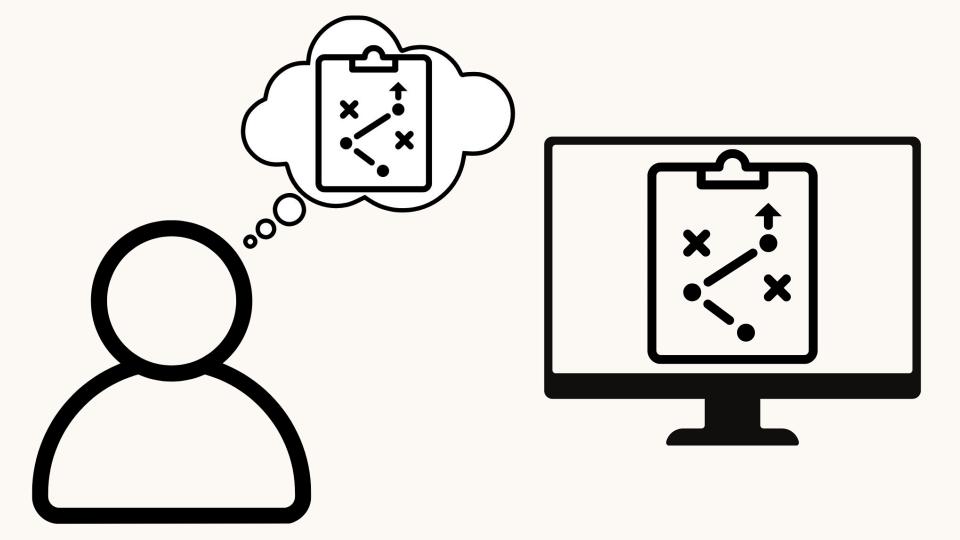
Long lead times

"We don't have an Engineering strategy."

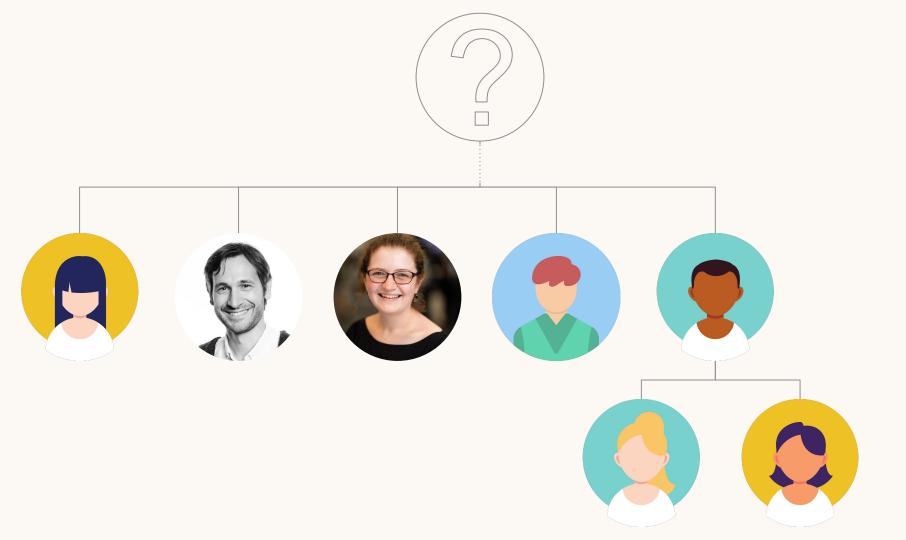
**The best platform solutions enable simplicity**, not complexity; and they are built simply.

Prefer "buy" over "build"





# carta (\$\frac{1}{2}\fr



Irrational Exuberance

Popular

#### Will Larson

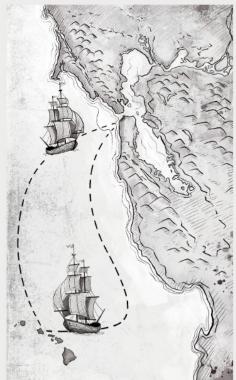
Want help with something? <u>Here are ways I'm available to help!</u>
Looking for my investments? <u>Here they are!</u>
Bio and headshots for an event? Check at the bottom.

Hi folks,

I'm a writer and a software engineering leader. I currently have the good fortune to serve as the CTO for Calm's engineering team. I've previously worked at Stripe, Uber, Digg, a few other places, and much earlier I cofounded a misguided iOS gaming startup with Luke Hatcher, Monocle Studios. (We made tens of thousands of dollars in a year, and spent the next six years trying to figure out how to stop paying taxes.)

In 2019, I published my first book, <u>An Elegant Puzzle</u>, and in 2021 I published my second book, <u>Staff Engineer</u>. I track sales numbers in my annual review posts, <u>the latest of which is for 2021</u>. I'm not working on any book at the moment, although imagine I will write another sooner than later!

I've been writing on this blog, <u>Irrational Exuberance</u>, since 2007. In 2018, I started doing <u>some speaking as well</u> most notably about <u>infrastructure migrations at QCon</u> SF, and the <u>infamous Digg v4 launch</u> on the Internet History Podcast.



#### Staff Engineer

Leadership beyond the management track
Will Larson

#### cy, consensus, and conviction: Three p styles for effective engineering

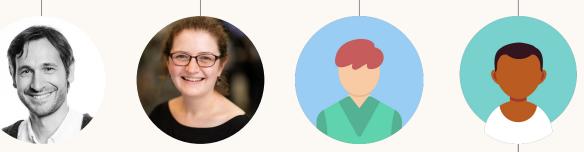
with one finely honed leadership style, and routinely stepped style for every situation. In this talk, Will shares the situations olkit of leadership styles, the new styles he has added, and sing them.









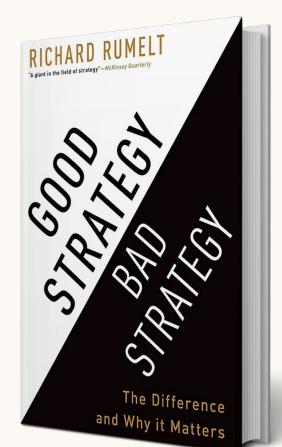












# Diagnosis The current situation

Sometimes platform tech is viewed as introducing problems as much as solving them. Over-generalized solutions are difficult to adopt and reason about for a specific use case, increasing the load on product teams.

# Guidance

Principles behind decisions

**Platforms should initially prioritize solving** *one problem* before attempting to solve *all problems*. Focus on addressing the needs and requirements of a specific customer, rather than attempting to create a one-size-fits-all solution.

# Actions Steps we're taking

No new platform projects without approval from the  $\ensuremath{\mathsf{CTO}}$ .

# Diagnosis The current situation

**We continue to have unstaffed systems and features.** While some of these have well-defined owners who are accountable for them, that ownership is often not backed by sufficient staffing or familiarity with the system itself.

# Guidance Principles behind decisions

**Finish it or delete it.** Leaving work unfinished often means we made most of the investment and reaped none of the impact. Only code that doesn't exist can't break.

# Actions

Steps we're taking







Pre-Strategy

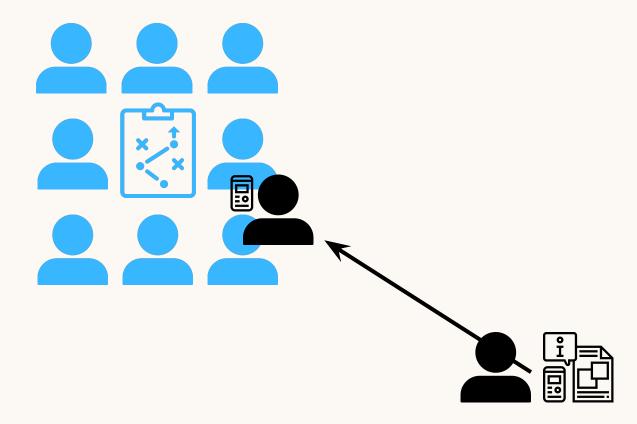
V

**v**2

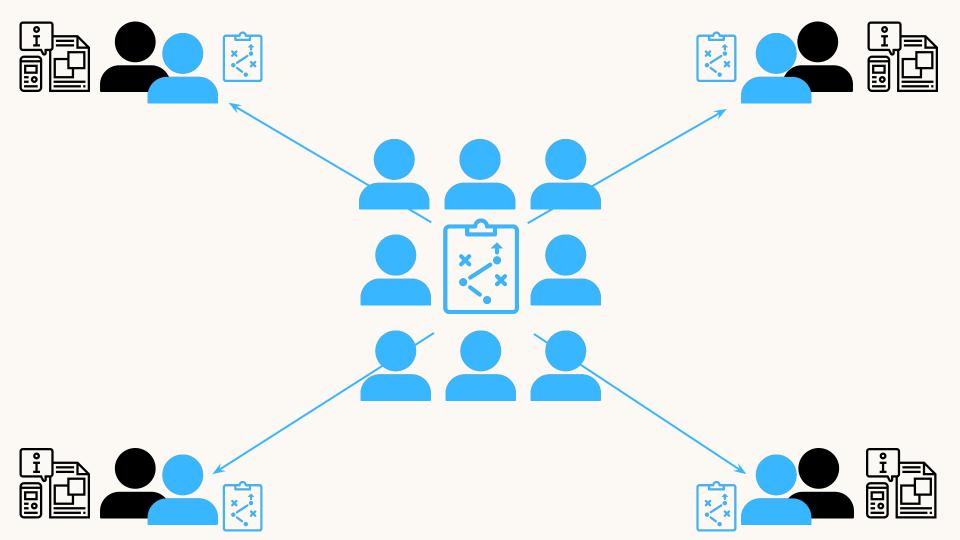
# Navigators











#### Navigators @ Carta

As we begin to explicitly document and iterate our Engineering Strategy, we need additional levers to help our engineering teams understand how their work intersects with that strategy. It can be difficult to navigate the delta between where a team is today and where the strategy is driving us. This is why we're going to explicitly identify a small set of Navigators across Carta who help teams in their area interpret and apply the strategy. Navigators are responsible for building/providing alignment between their teams and the broader engineering strategy.

Each navigator is an existing technical leader that will seek to replace the need for wide consensus and boost velocity by bringing their technical context, domain context, strategic alignment, and judgment together to make engineering decisions more quickly.

- Accountable to both the CTO (for acting in accordance with the Engineering Strategy) and their existing management (for representing the interests of their teams and making sound technical decisions). If management and the strategy are misaligned, escalate to the CTO
- Expected to find alignment with the CTO's strategy; this shouldn't just be "disagree and commit"
- Informing the CTO elements of the Engineering Strategy that are not working or are missing

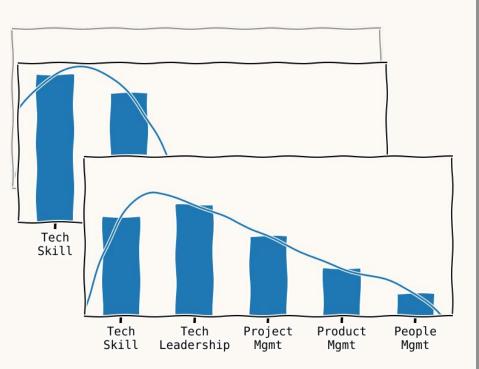
#### Navigators are NOT

- Micromanaging every design or implementation decision at Carta
- Architects responsible for writing all your TDDs
- Blockers; they are unblockers
- Responsible for execution speed/quality of their teams

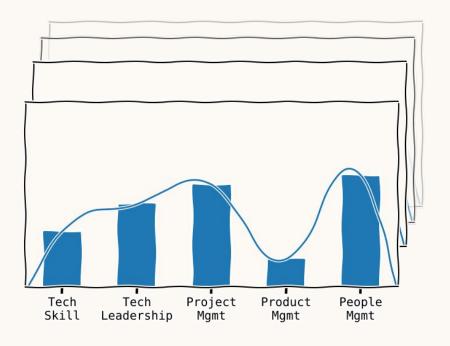
In many cases, the engineers we designate Navigators are already doing this work. It is not a new job description or a promotion. The intent behind formalizing this is to

- establish new chains of communication to make them even more effective
- bring that same behavior and judgment to a wider set of teams
- help others understand how to leverage the role better

### Senior ICs



### Eng Manager





#### Don't

Micromanage Write every design spec



#### Do

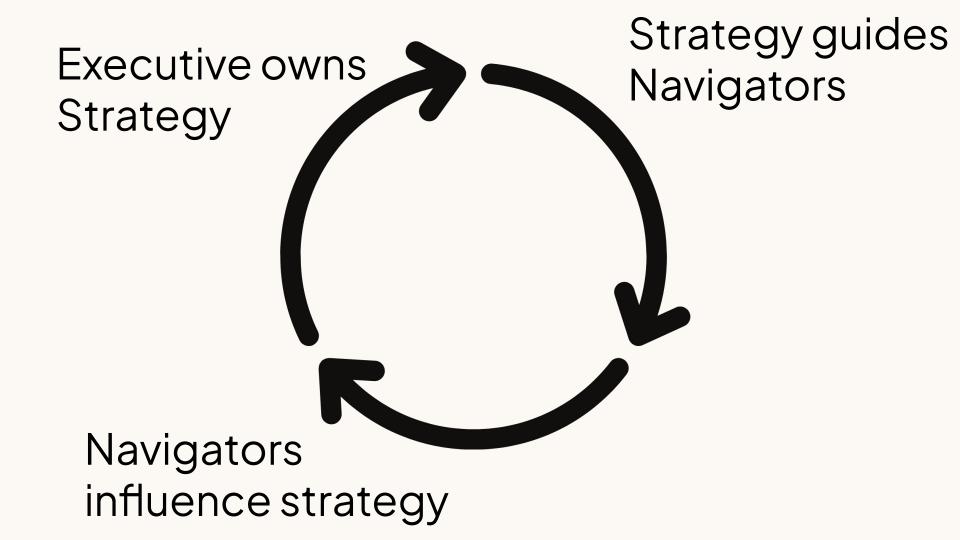
Unblock tech decisions

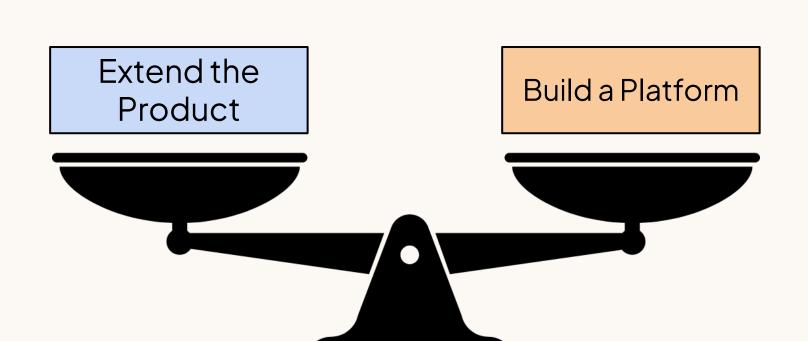
Maintain team alignment

Maintain strategy alignment

Resolve conflict with strategy







### Diagnosis

The current situation

Teams often view platform tech as introducing problems as much or more as solving them. Over-generalized solutions are difficult to adopt and reason about for a specific use case, increasing the load on product teams.

Platforms should initially prioritize solving one problem before attempting to solve all problems. Building in phases, each one built alongside their first adopter, powers incremental progress and iteration.

Focus on addressing the needs and requirements of a specific customer, rather than attempting to create a one-size-fits-all solution.

Actions

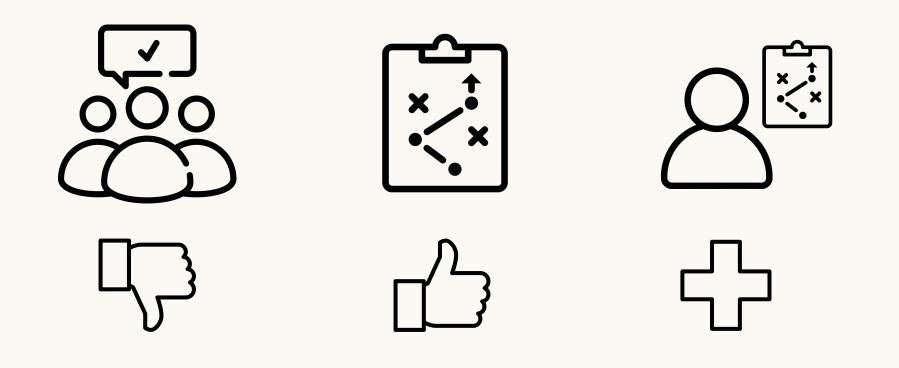
Steps we're taking

Platforms are the exception, not the rule. No new platform projects without approval from the CTO. Requirements that bundle capabilities and state but are not a long-lived platform team should be built into the product-specific application.

## WELL THAT ESCALATED

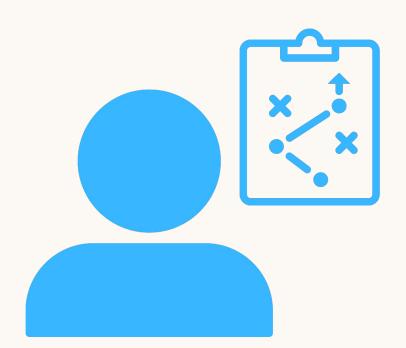


imgflip.com



"Start wherever you are, and start now."

@DAN Speed matters, but not at the expense of quality. In most cases, we should focus on making things incrementally better, and not get stuck designing/building the perfect solution first. When we don't know what to build, build to learn. The faster you iterate, the faster you improve. It's OK to accrue tech debt carefully; we don't need our code to exist forever, but we need it to work and be maintainable while it does exist. Don't ship solutions that create more problems than they solve. Don't introduce more complexity when a simple solution exists instead. Kill failed experiments and remove dead code. > usability > stability/teliability > maintainability > performance > .... or something? @REVIEW Prefer simple solutions over complex ones: introduce complexity only to overcome realchallenges encountered with simple alternatives. Note that a single solution can be both simple and innovative i Only accrue tech debt intentionally. IREVIEW When it's as easy to do the right thing as it is the wrong thing, do the right thing. We are fine accruing good tech debt strategically, but artificially limiting yourself to your personal preferences orcomforts is not good tech debt. Make time to learn something new f. @REVIEW Pay down technical debt responsibly. Kill failed experiments. Harden and improve testsuites for successful experiments. Remove feature flags after the end of an experimental period to reduce S-vivalence-about REVIEW Prioritize stability, quality, and accuracy. Encapsulation and testing reduce risk and inability. Our numbers have to add up. Alerts should be actioned or silenced. Logs should provide-observability-and-not-noise:



Documented Strategy

Navigators to interpret

Bypass consensus

Iterate

