

Leading with Context (Visibility)

I'm James

- 10+ years writing software
- Previously Head of Engineering @ TIER
- Engineering Manager @ Reddit
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Congratulations!

You're now a manager



What I
thought it
would look
like



Congratulations! You're now a manager

Welcome to engineering manager's world



Congratulations! You're a manager

More questions than there are answers



Team wants to know why ...



Upper management wants to know why ...



I want to know why ...



Context! More Context!!

Context is the **circumstances** that form the setting for an **event, statement,** or idea, and in terms of which it can be **fully understood.**

- ✓ Leadership is influence and you need context to influence
- ✓ Context helps you make informed decisions



How to lead with context (visibility)

Four pillars for leading with visibility



Process

Understand how stuff gets built on time and on budget



Operation

Understand if the stuff built will continue to run



People

Understand if the folks building the stuff are engaged and happy to continue building the stuff



Product

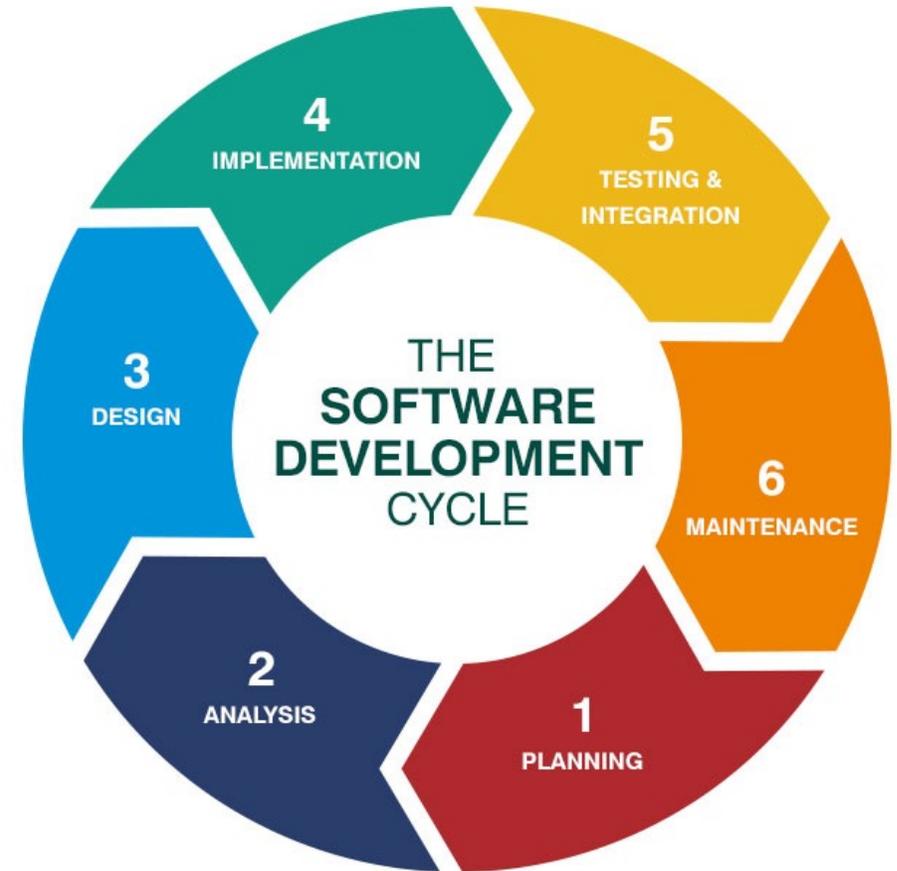
Understand if users are happy and getting values from what is being built



Pillar 1: Process

Understand how stuff is being built on time and on budget

- ❑ Process is the way you habitually do things
- ❑ You always have a process. It might not be a thoughtfully-designed, intentional process but there is always one
- ❑ You'll have to deal with three constraints: cost (budget), scope, and time



Software Development Life Cycle (SDLC) [Internet]. Big water Consulting. 2019 [cited 2022 Sep 25]

What you need to understand Process

To understand how things get built on time and on budget, you first need to understand where engineers spend their time and what affects execution.

- ❑ **Architecture/codebase:** Does it allow teams to go fast?
- ❑ **Developer Experience:** Can teams build, scale and deploy services easily?
- ❑ **Autonomy:** Are teams empowered to ideate, figure out things and deliver values independently?
- ❑ **Delivery Process:** How fast can teams put code in production?
- ❑ **Collaboration:** How do different functions within teams work together? Do they have a shared understanding of what's being built?



Keeping a pulse on Process: 1-on-1s

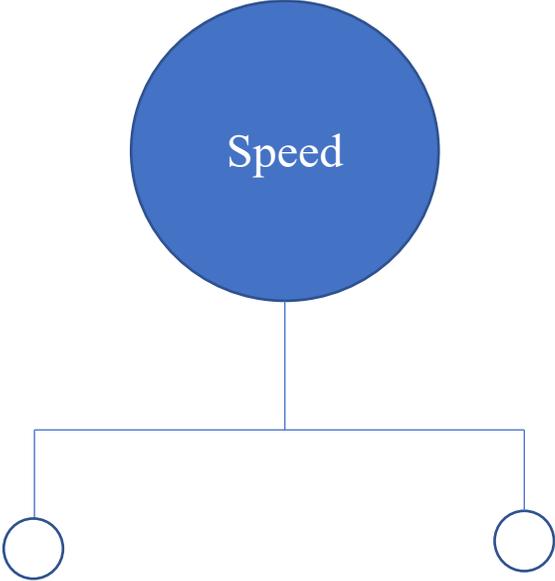
Understanding how stuff gets built on time and on budget

Use 1-on-1s to pick signals of things going well or wrong.



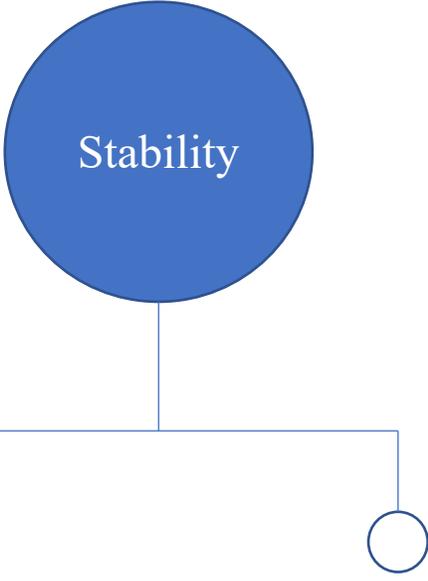
Keeping pulse on Process: DORA metrics

Understanding how stuff gets built on time and on budget



Deployment frequency

Lead time for changes



Change fail rate (%)

Time to restore or recover

Keeping a pulse on Process: Engineering Surveys

Understanding how stuff gets built on time and on budget

Documentation

How easy is it to find and access documentation?

Automation

What manual work the team does that can be automated?

Processes

What processes are useful and what processes are obsolete?

Tooling

How satisfied is the team with tooling used daily e.g., linters, IDE?

Pillar 2: Operation

How to lead with context (Visibility)



Understand if the stuff built will continue to run or be operable

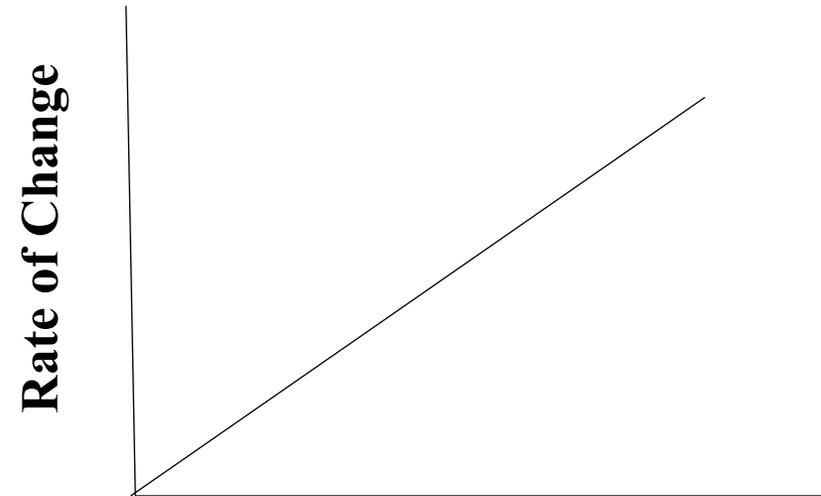
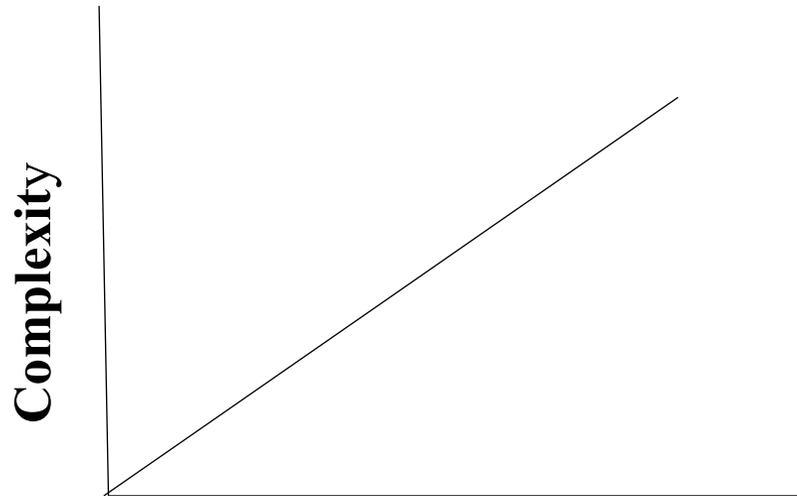


Pillar 2: Operation

How to lead with context (Visibility)

Your organization is experiencing growth if :

- Complexity is high
- Rate of change is high



Complexity (Φ) X Rate of change (Δ) = Growth

Pillar 2: Operation

How to lead with context (Visibility)

Reliability and **Performance** will go under pressure when you grow fast.

“How did you go bankrupt?” Two ways. Gradually, then suddenly.

— Ernest Hemingway, *The Sun Also Rises*

Keeping a pulse on operation pillar

Understanding if the stuff built will continue to run

❑ Define Service Level Objectives (SLOs)

- **SLIs:** Key measurements to determine the reliability of a system
- **SLOs:** Goals that you set for how much reliability you expect out of a system
- **SLAs:** What will happen if the system doesn't meet its SLOs
Example: *X should be true (SLI) Y portion of the time (SLO), or else Z will happen (SLA)*

 Don't just measure availability and latency, measure what directly affects your users in their journey.

Pillar 3: People

How to lead with context (Visibility)

Hire

Do you have the right folks in the team?

Build

Are these folks growing and working well together?

Retain

Are they interested in continuing working on what they're working on?

Are the folks building the stuff engaged and happy to continue building the stuff being built?



Engagement drivers

How to lead with context (Visibility)

1 Autonomy

2 Purpose

3 Growth

4 Recognition

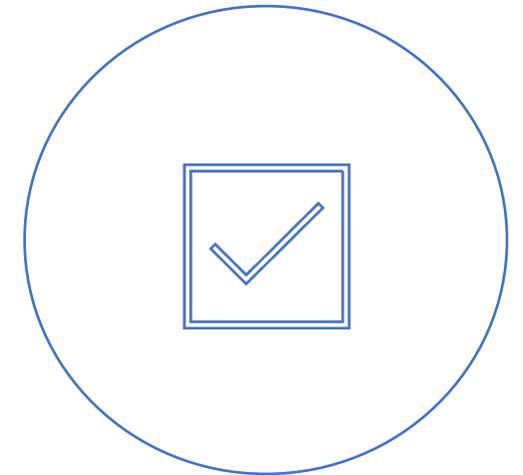
5 Compensation

6 Challenging Work

Keeping a pulse on people pillar

Understanding if the folks building the stuff are engaged and happy to continue building it

- ❑ Perform engagement checks through anonymous surveys regularly



Peakon



Pillar 4: Product

How to lead with context (visibility)

- ❑ Are users getting values and satisfaction from what is being built?
- ❑ You can have an engaged product team that delivers on time and budget and build features with reliability and scalability pillars necessary to ensure your application runs well, yet your users are unhappy.

Keeping a pulse on product

Understanding if users are getting values and satisfaction from what is being built.

Google HEART Framework

Happiness

Do users find your product helpful, fun and easy to use?

Engagement

Are users engaging with your product? Do they find values in it?

Adoption

Are new users completing onboarding process to become regular users?

Retention

What percentage of users are returning to the product?

Task Success

Are users achieving their goals or tasks quickly and easily?

People, Product, Process & Operation

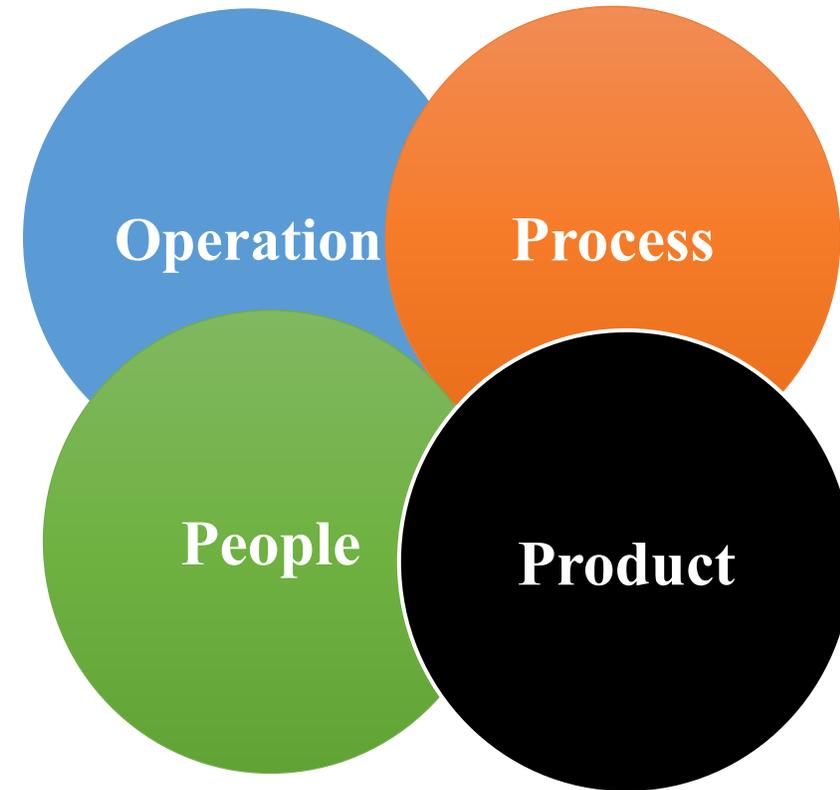
How to lead with context (Visibility)

 Numbers don't tell the whole story

 Support metrics with personal interviews

 Metrics that don't meet expectations should be viewed as a coaching opportunity

 Start, tune and refine





Thank you