

Controlling Wildfires

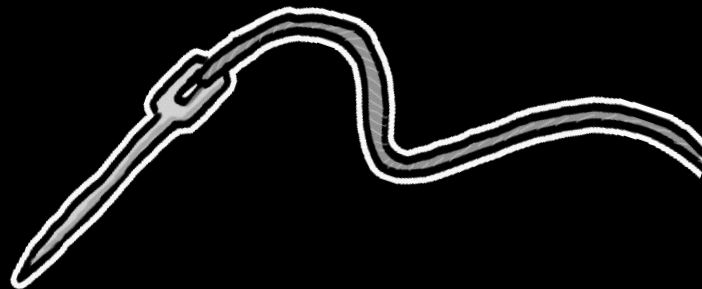
While Only Getting Singed.

Jessica White

“A pre-loved, vintage system with a lot of its own personality”



“Where do I start?”



The Battle Plan

Get an overview

Prioritise

Measure

Communicate

Be ready for failure

Developers

Dependant
Teams

Product

Architects

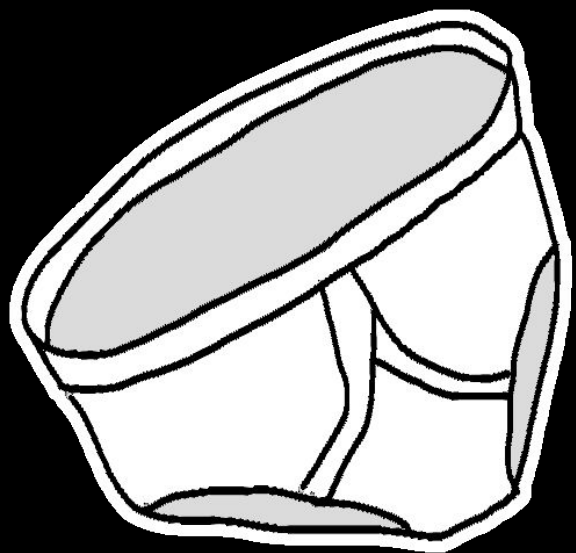
Language

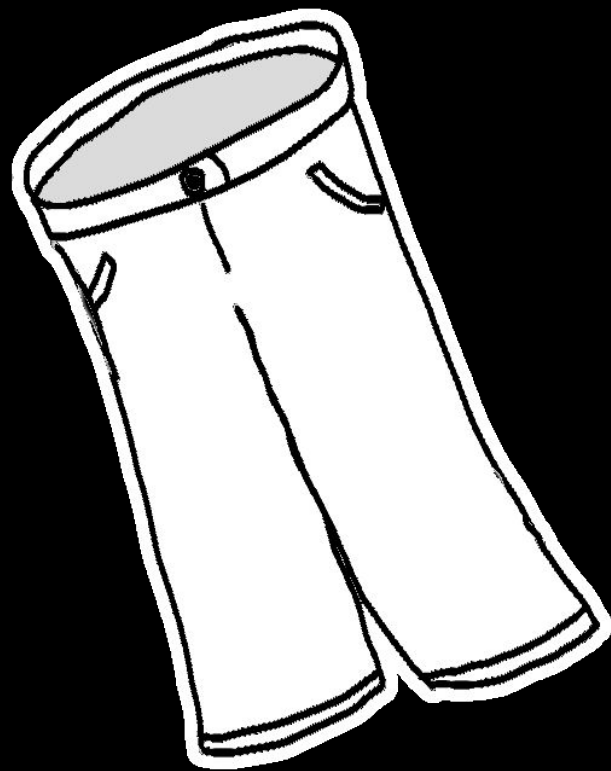
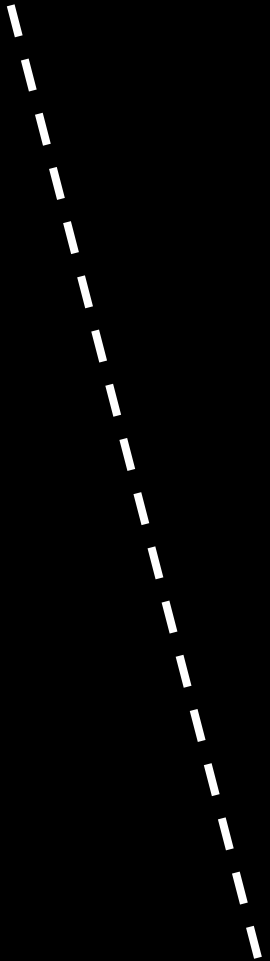
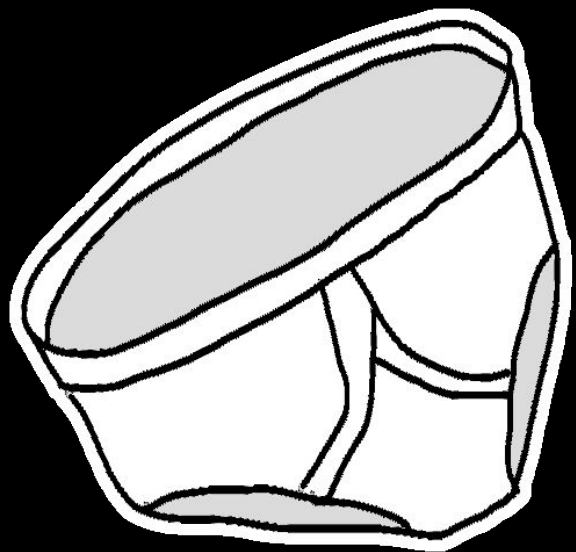
Management

Stakeholders

Other departments

Consumers

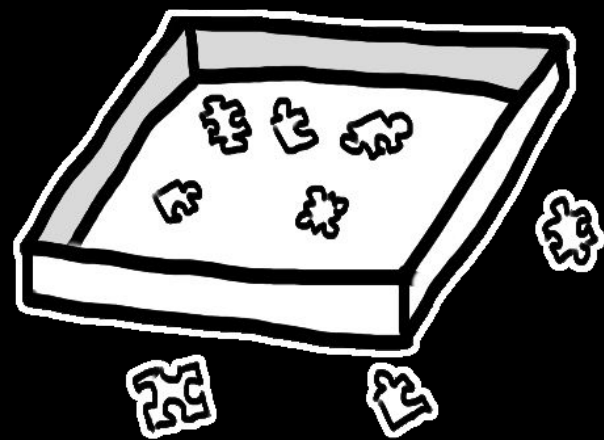


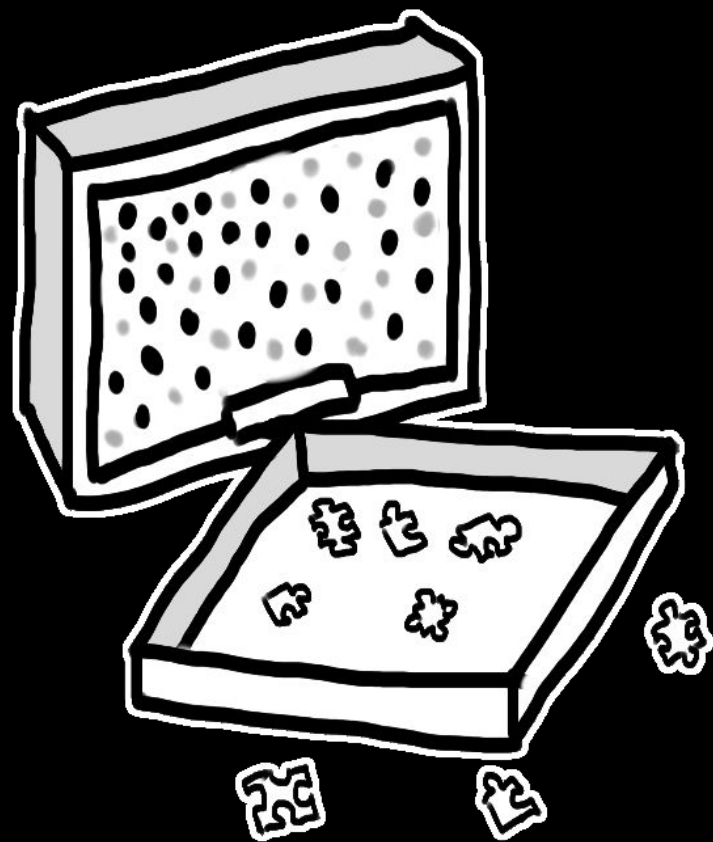




Start on the same page

Understanding Domain





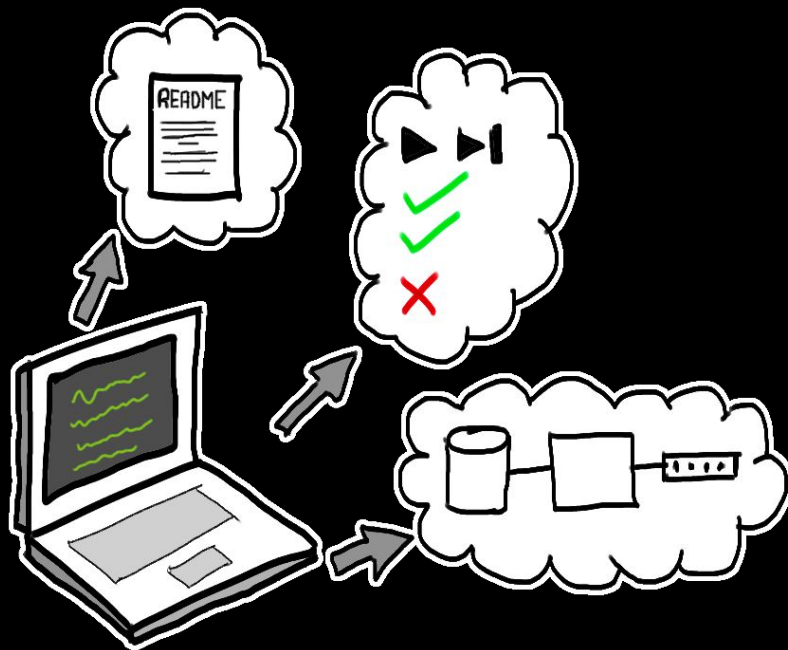
Users and Stakeholders



Talking through domain

Key Performance Indicators

Assessing components



Reactive Work



"Here's what you do when someone breaks something or finds something very difficult to debug: You say thank you. Thank you for finding this edge case. Thank you for highlighting this overcomplicated part of our system. Thank you for pointing out this gap in our docs. And then you go make it so nobody can break it the same way again."

Tanya Reilly, Google SRE 2005 - 2018

Engage those working on live issues

Have a visible business impact

Increase the teams depth of knowledge

Living Documentation

Documentation as measurable
work?

React and Evolve

Proactive Work

The  list

Security

Deadlines

Stability

Architectural Cost

Alignment To Product Need

Standardisation

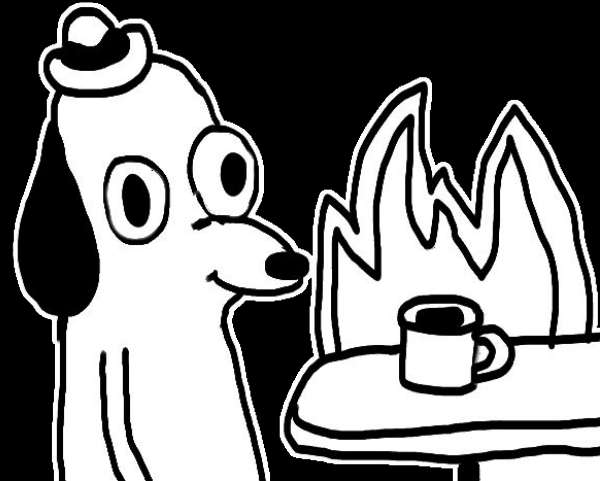
Upcoming Technical Requirements

Keep it visible, Keep it safe

Prioritising when
everything is urgent



Letting things burn



Transparency

Cost/Benefit Analysis

Mapping User Behaviour

Avoiding Personal Burnout

Deployment



Hold Onto
Your Butts

“How do I know it’s working?”

Diagnostics

Observability

Analytics

Alerts

Tracing

Monitoring

Reporting

Metrics

Data Analysis

Logs

Key Performance Indicators

Systems Monitoring

Monitoring

@JessPWhite

SLOs, SLAs, SLIs

Service Level Objectives

Defined and measurable expectations of the service for availability and reliability.

These are measured by SLIs and sometimes “enforced” by SLAs.

Service Level Agreements

Contracts agreed with consumers, users and other parties determining the consequences of not meeting certain levels of service. These may link to higher level objectives and are measured by SLIs.

Service Level Indicators

A quantifiable measure of some level of service provided. Help to measure if SLAs and SLOs are met.

Error Budgets

Targets for the maximum amount of time a service is unavailable/unreliable in a quarter.

How they feed into each other

- **Pizza SLO:** 99% of pizzas will be delivered within 4 hours.
- **Pizza SLA:** If a pizza isn't delivered within 4 hours, you will be refunded half the cost.
- **Pizza SLI:** Timer from order to delivery.

Testing

Start from the top

- Are current tests automated or manual?
- Do the tests match the expected behaviour?
- Do they match the code?
- Are they maintainable?
- What's the lightest most effective touch?

But what about the unit tests?

In Summary

Get an overview

Prioritise

Measure

Communicate

Be ready for failure

This content will happen in parallel

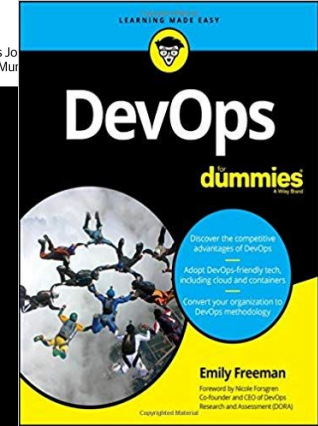
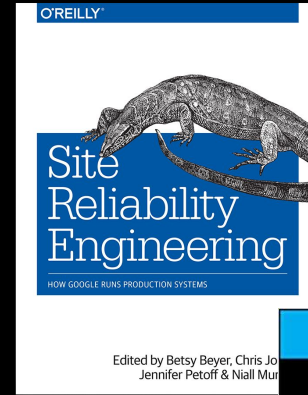
You can't fix the world

Resources

Resources

@JessPWhite

- Books
- Talks at NDC
- The hallway track



Thank You

Twitter: @JessPWhite
Webpage: jesswhite.co.uk