

The world is how we shape it

sopra  steria

Leading by doing

How to work in IT



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Senior Cloud Engineer

> whoami

Introductions are in order after all

- Worked at Sopra Steria for 3+ years
- Studied engineering (electronics + IT)
- 24 years old
- Qualifications:
 - Overworked developer
 - Cloud Native Competency Lead at Sopra Steria
 - Some titles for credibility: Architect, Solution Architect, Infrastructure Lead and more
 - Speaker and (soon to be) author

Agenda

01

Intro

02

Process

03

Why it matters

04

Demo/Showcase

05

Being a team player

06

QA + Ending

2.

Processes

What is a process?

According to what?

- Broad definition
- More details and specific
- Specific to methodology



A process is a series of sequential actions or steps taken to achieve a particular end. It involves the systematic progression of activities that transform inputs into outputs, guiding the way tasks are performed to reach a specific goal efficiently and effectively.

A process refers to a set of interrelated or interacting activities that use resources to convert inputs into desired outcomes. It provides a structured framework that outlines how work flows through different stages, ensuring consistency, repeatability, and the ability to analyse and improve upon the methods used.

A process is a structured set of practices, workflows, and guidelines that teams adopt to plan, execute, and deliver work efficiently and effectively. It defines how teams organize themselves, collaborate, communicate, and utilize tools to achieve their objectives while remaining adaptable to change and focused on continuous improvement.

Practically speaking

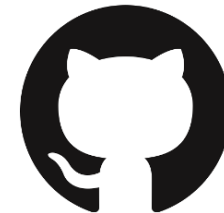
- We have some set of principals which we use to ground ourselves (framework)
- We plan our work and deliver based on those principals
- Most often these are based on culture

**That's how
it's done.**

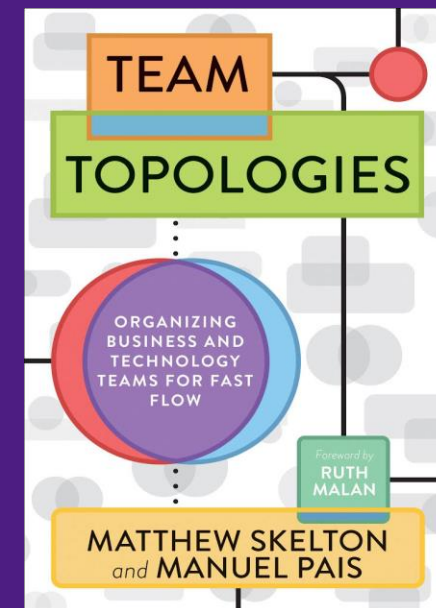
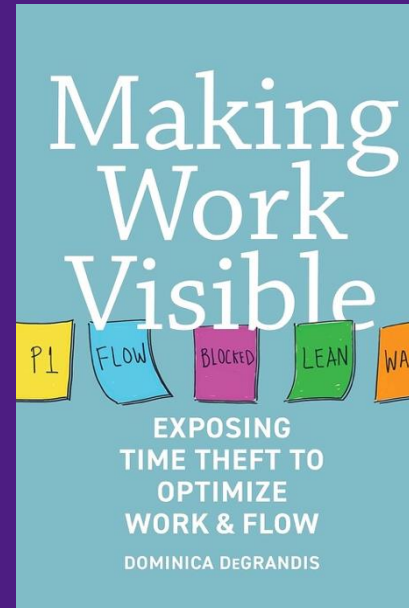
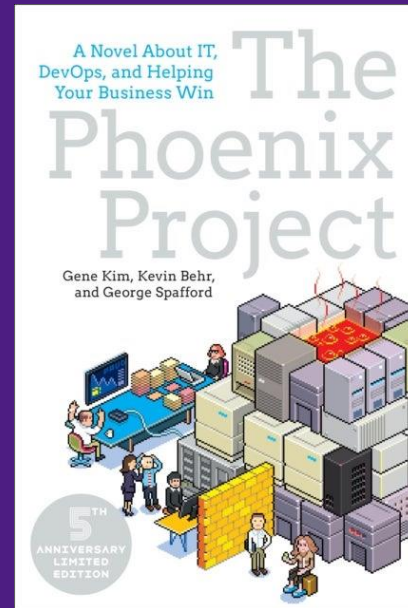
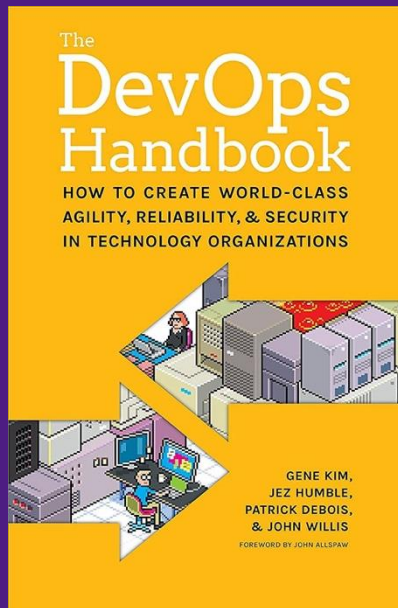


What processes do we use?

- You've already learned about Lean and Agile
 - These are fundamentals which we use in modern IT
- Old frameworks/practices:
 - Mode 1 and mode 2 IT -
 - ITIL, ITSM and similar work culture (think ticketing systems)
- Current frameworks/practices:
 - DevOps, development & operations – extension of Agile methodology
 - Scrum and Kanban – ways of implementing Agile methods
 - DevSecOps, FinOps, etc. – iterations of DevOps which focus on different areas of practice
 - OKRs
- Modern frameworks/practices:
 - Platform engineering – an extension of DevOps
 - Team Topologies (kind of current but no one can manage to implement it properly)
 - Dora Metrics (current in advanced teams)



Read These:



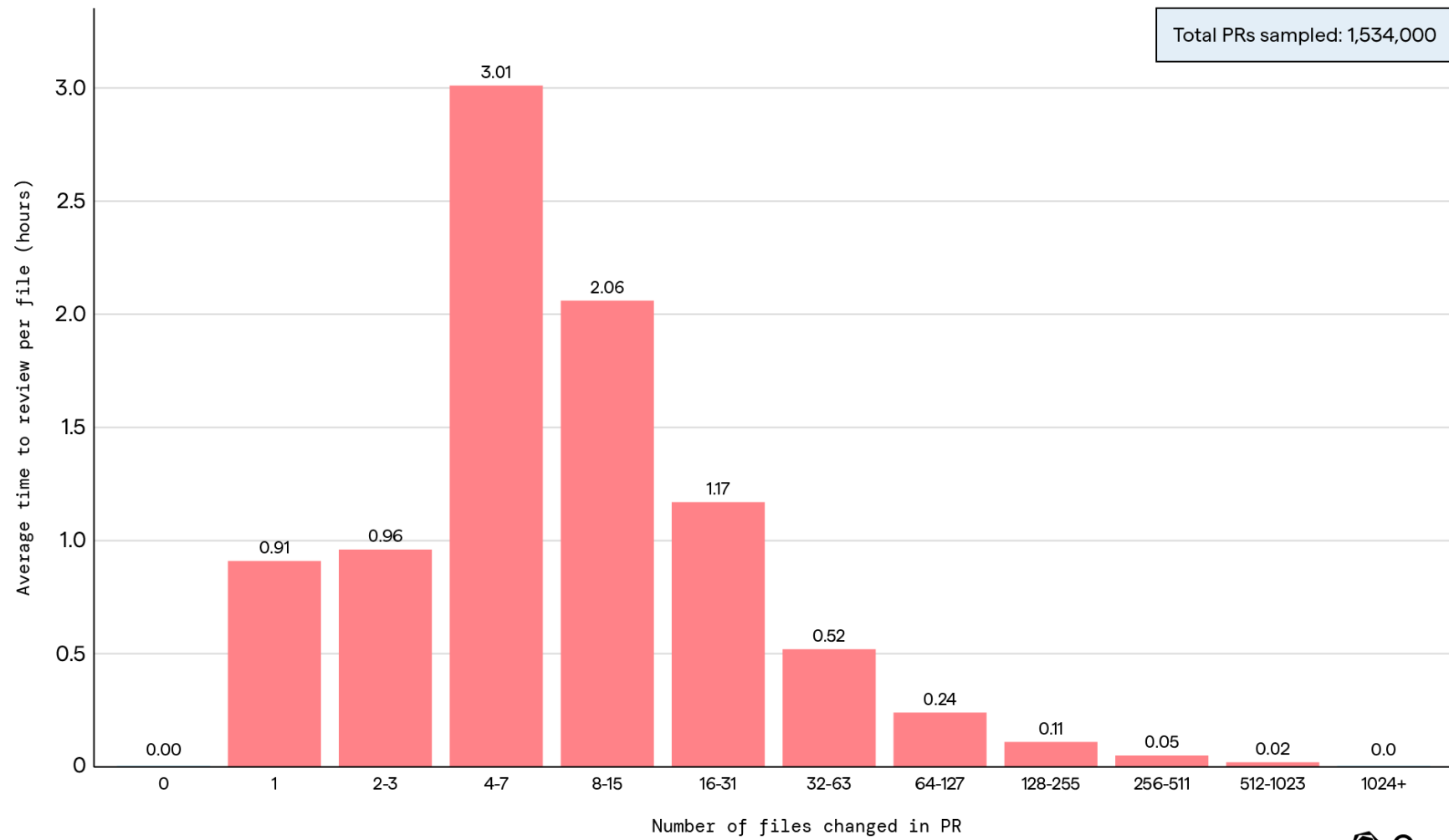
3.

Why it matters

Statistics from IN2000

Construct	Rater	Variable	No. items	2019		2020		2021	
				Mean	SD	Mean	SD	Mean	SD
Team Quality (TWQ)	Team member	Communication	10	4,17	0,37	3,99	0,51	4,15	0,35
		Coordination	4	4,05	0,40	3,98	0,45	4,14	0,33
		Mutual support	7	4,42	0,37	4,33	0,47	4,50	0,33
		Cohesion	10	4,26	0,45	4,20	0,45	4,37	0,37
		Effort	4	3,86	0,65	3,73	0,62	3,97	0,53
		Balance of contribution	3	4,25	0,41	4,24	0,50	4,32	0,46
Team members' success	Team member	Work satisfaction	4	4,28	0,44	4,37	0,40	4,41	0,43
		Learning	4	4,41	0,47	4,42	0,45	4,55	0,31
Team performance	Team member	Effectiveness_TM	10	3,86	0,42	4,03	0,34	4,07	0,42
		Efficiency_TM	5	3,81	0,60	3,98	0,55	4,07	0,51
	Team leader	Effectiveness_TL	10	3,83	0,65	4,30	0,54	4,15	0,58
		Efficiency_TL	5	3,83	0,74	4,20	0,75	4,12	0,72
	Product owner	Effectiveness_PO	10	3,90	0,72	4,07	0,56	4,11	0,63
		Efficiency_PO	5	3,71	0,87	3,92	0,73	4,12	0,72

Average time to review per file by number of files changed in PR



People are not structured

- By nature, people become disorganised and act randomly
- They become lazy when overburdened
- Leadership is usually critical to how people work
- IT has a different culture compared to most work cultures
 - Problem solving is a huge part of it
 - Qualifications are different
 - People work and interact different
- Working outside of the confinements of a framework is also a choice
 - You don't always have to follow the rules



If you have trust issues

Exploring National Culture in Software Development Practices

Aileen Cater-Steel and Mark Toleman

A Cumulative Culture Theory for Developer Problem-Solving

CATHERINE M. HICKS, Developer Success Lab

ANA HEVESI, Uploop

Academy of Strategic Management Journal

Volume 21, Special Issue 1, 2022

THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE, ORGANIZATIONAL CULTURE AND WORK MOTIVATION TOWARD EMPLOYEE PERFORMANCE (STUDY ON DEVELOPER COMPANIES IN MAKASSAR)

Muhammad Idris, STIE Nobel

Maryadi, STIE Nobel

Saripuddin D, STIE Nobel

Ahmad Firman, STIE Nobel

Muhammad Hidayat, STIE Nobel

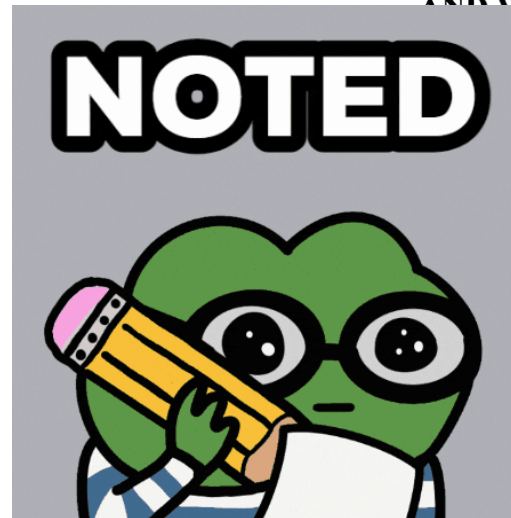
ABSTRACT

Journal of Scientific and Engineering Research, 2022, 9(1):150-154

Research Article

ISSN: 2394-2630

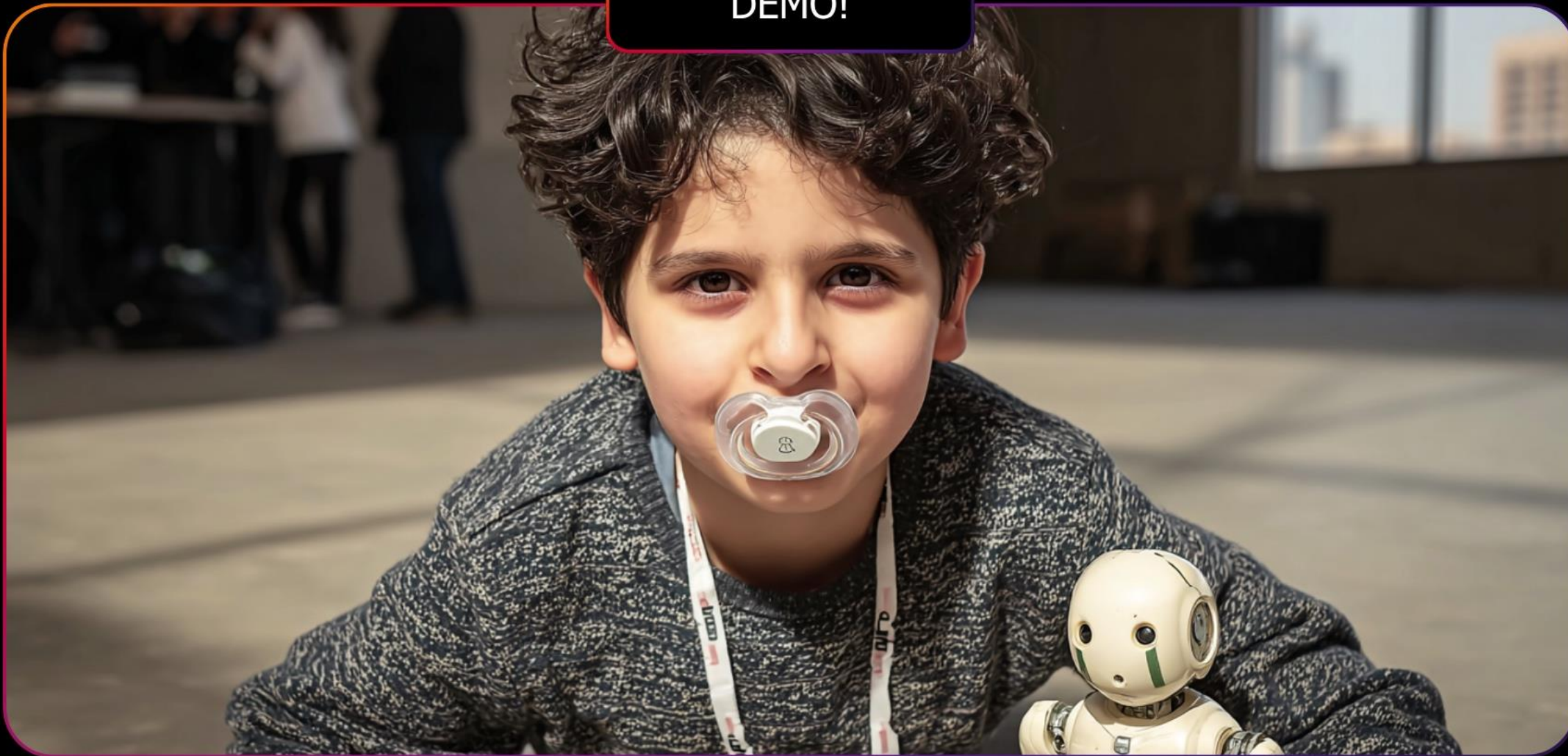
CODEN(USA): JSERBR



Exploring Cultural and Organizational Dynamics in Software Developer Retention: Insights for Effective Practices

Srividhya Chandrasekaran

DEMO!



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5.

Being a team player

Learning outcomes:

“Will be a professional and skilled participant and facilitator in a team that develop IT systems.”

Let's break it down

- Most facilitators organize, finding systems that work for their team or job
- Based on my experience:
 - These roles are often covered by roles like team leader, scrum master, etc.
 - People who work in these role perform them very differently
- Facilitating for a team is dependant on:
 - The team
 - The facilitator
 - The culture (of the workplace, team, company)
 - Stakeholders – people who have an interest in what the team does

What is a “good facilitator”?

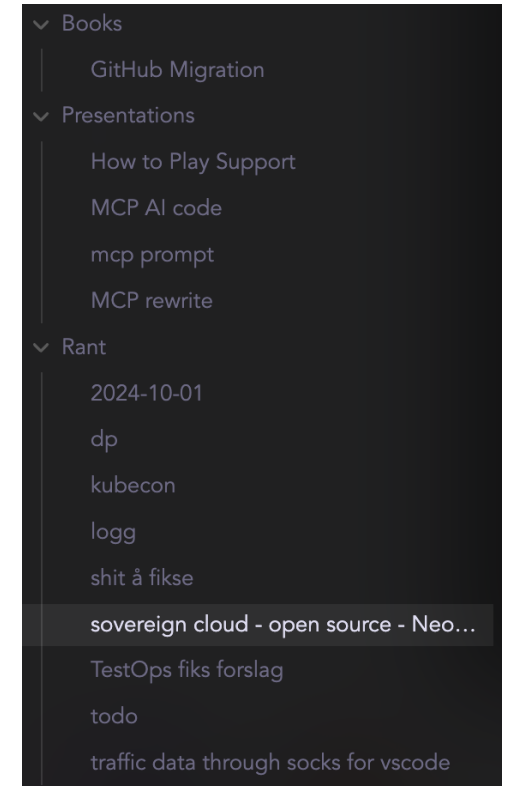
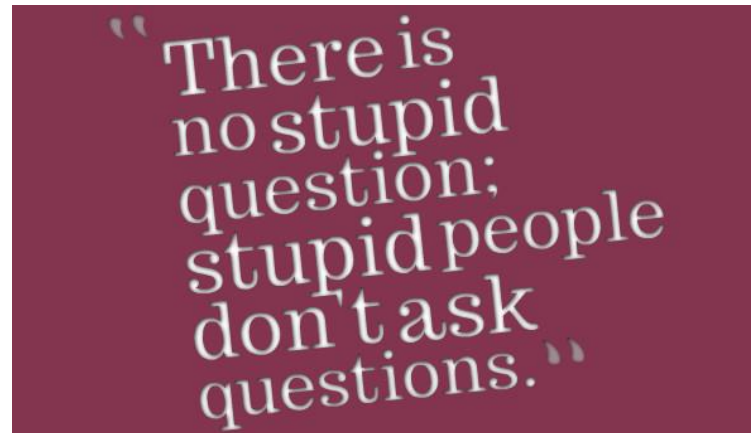
- Anyone who is good at their job has their own way of performing it
- Three examples from my work-life:
 - Person 1
 - Scrum lead
 - Based the processes highly on what the team wanted (switched to kanban)
 - Grounded everything in theory
 - Person 2
 - Made everything hands of for me
 - Used RACI matrixes, team contracts and planned far into the future
 - Kept up team morale, “people” person
 - Person 3
 - Automated everything – trying to make themselves obsolete
 - Represented the team – took meetings on our behalf
 - Made sure to understand the technical aspect as well



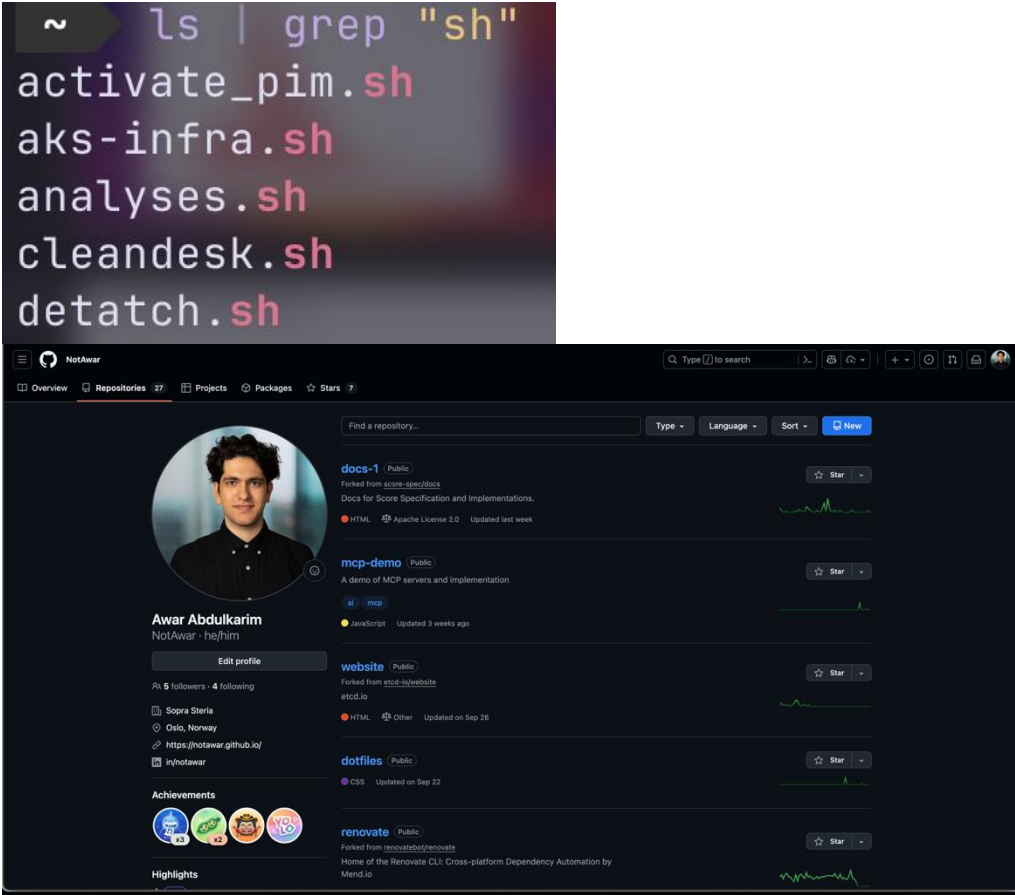
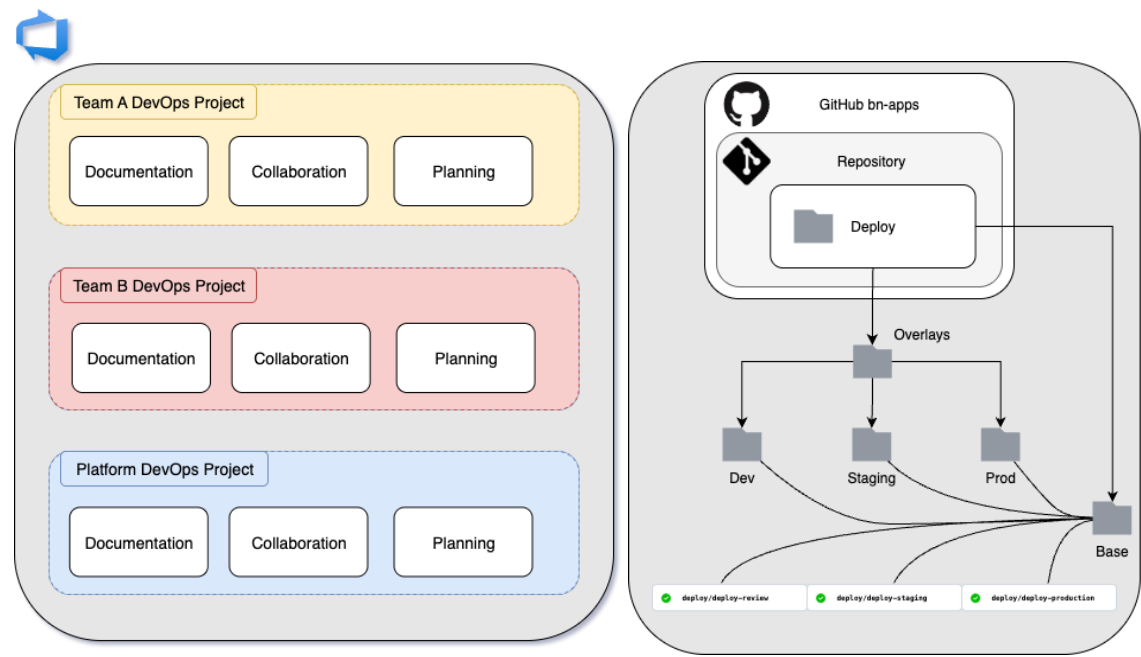
Learnings & takeaways

What I learned

- Writes notes – ideas, remember, log, audit, reason
 - In general, you want to be organized where possible
- Explain your thought process – always difficult
- Ask questions, because:
- Communicate!
 - «I think we should do it this way, because..»
- Be dependable and clear
 - Set clear boundaries early – frameworks help
 - Agree on terms
 - Don't be unapproachable
- Culture accounts for a lot!
- Do what works for you

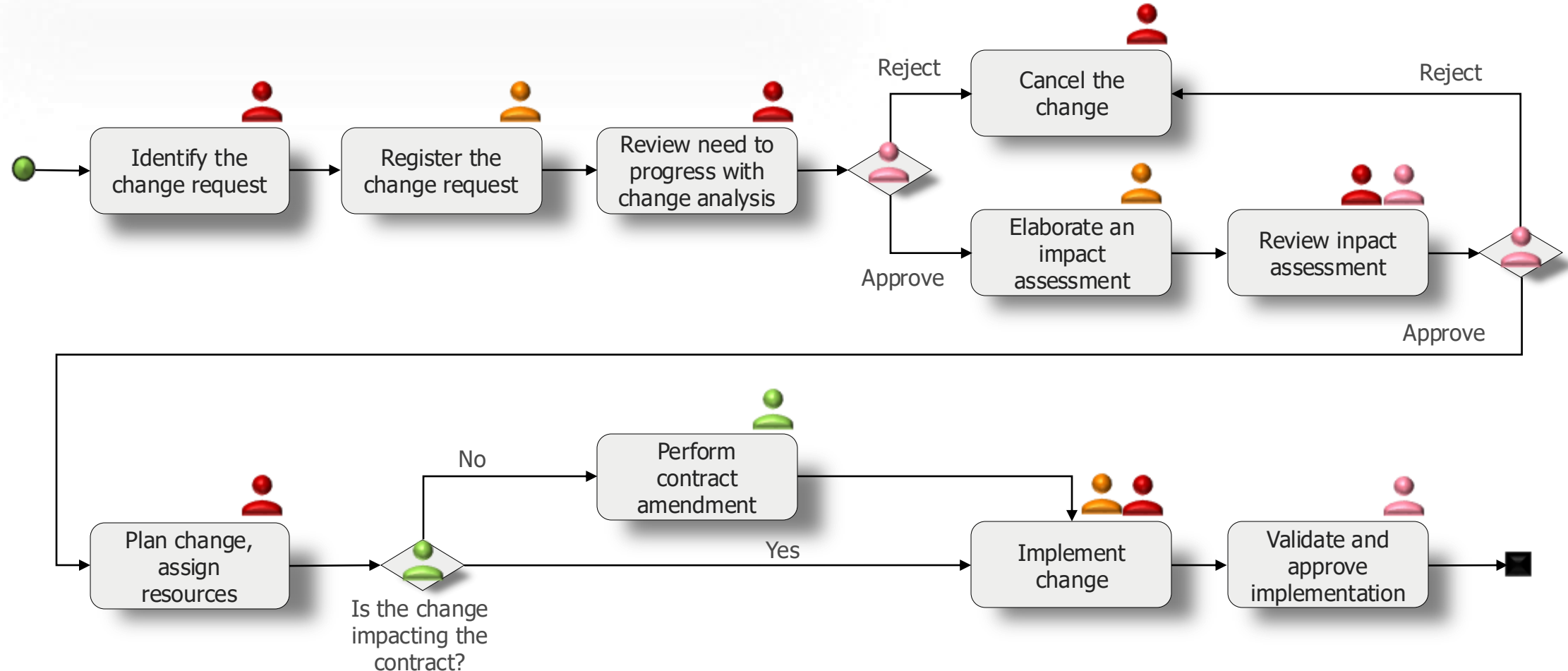
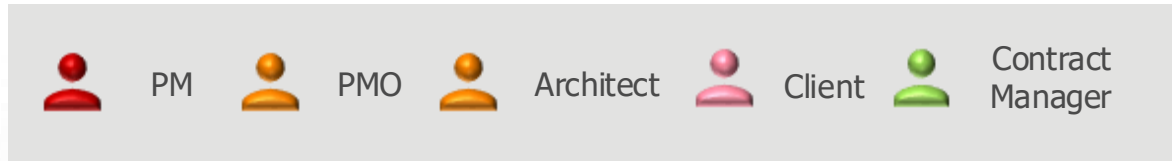


Some other ways

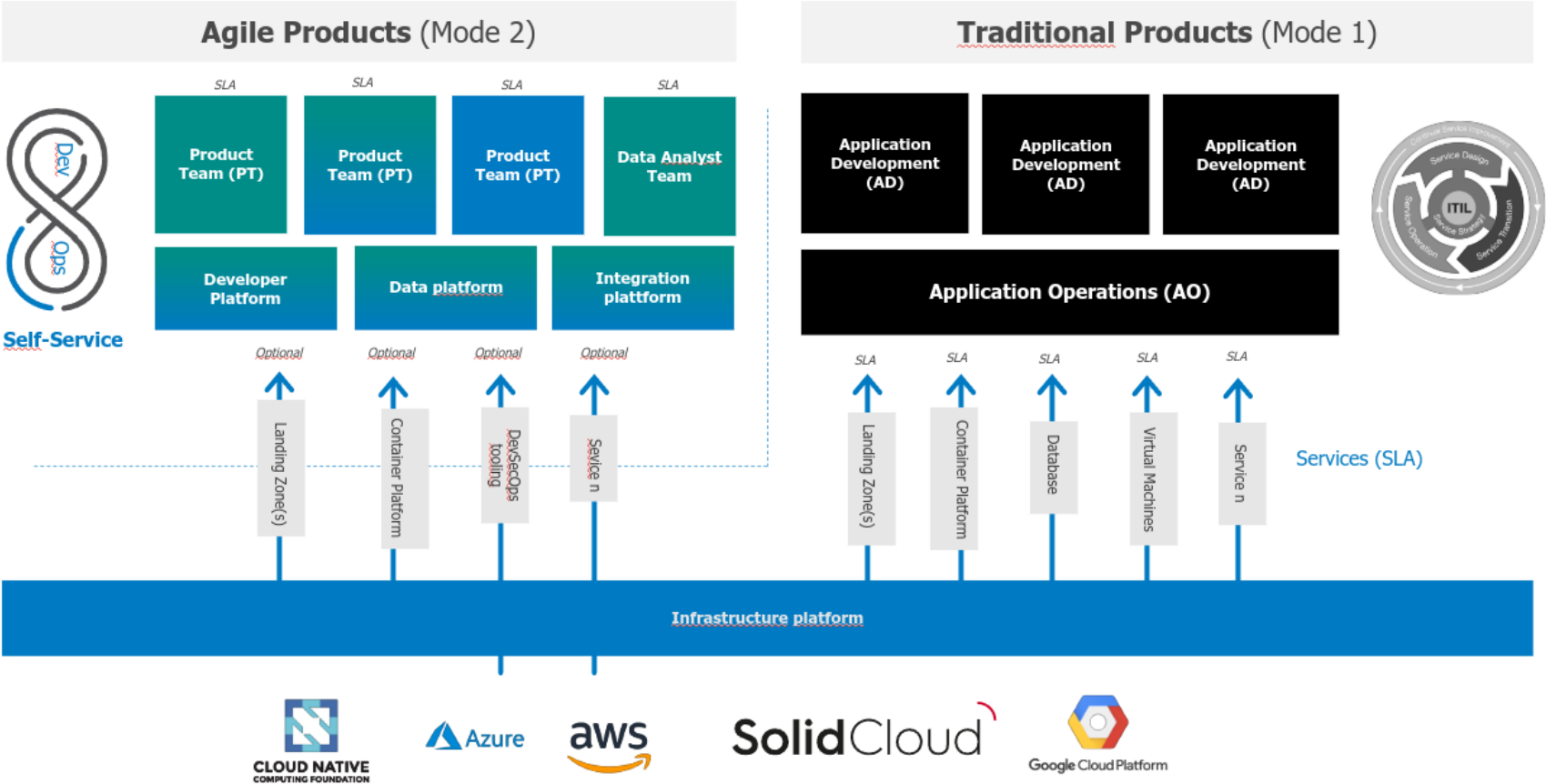


Change Management Process

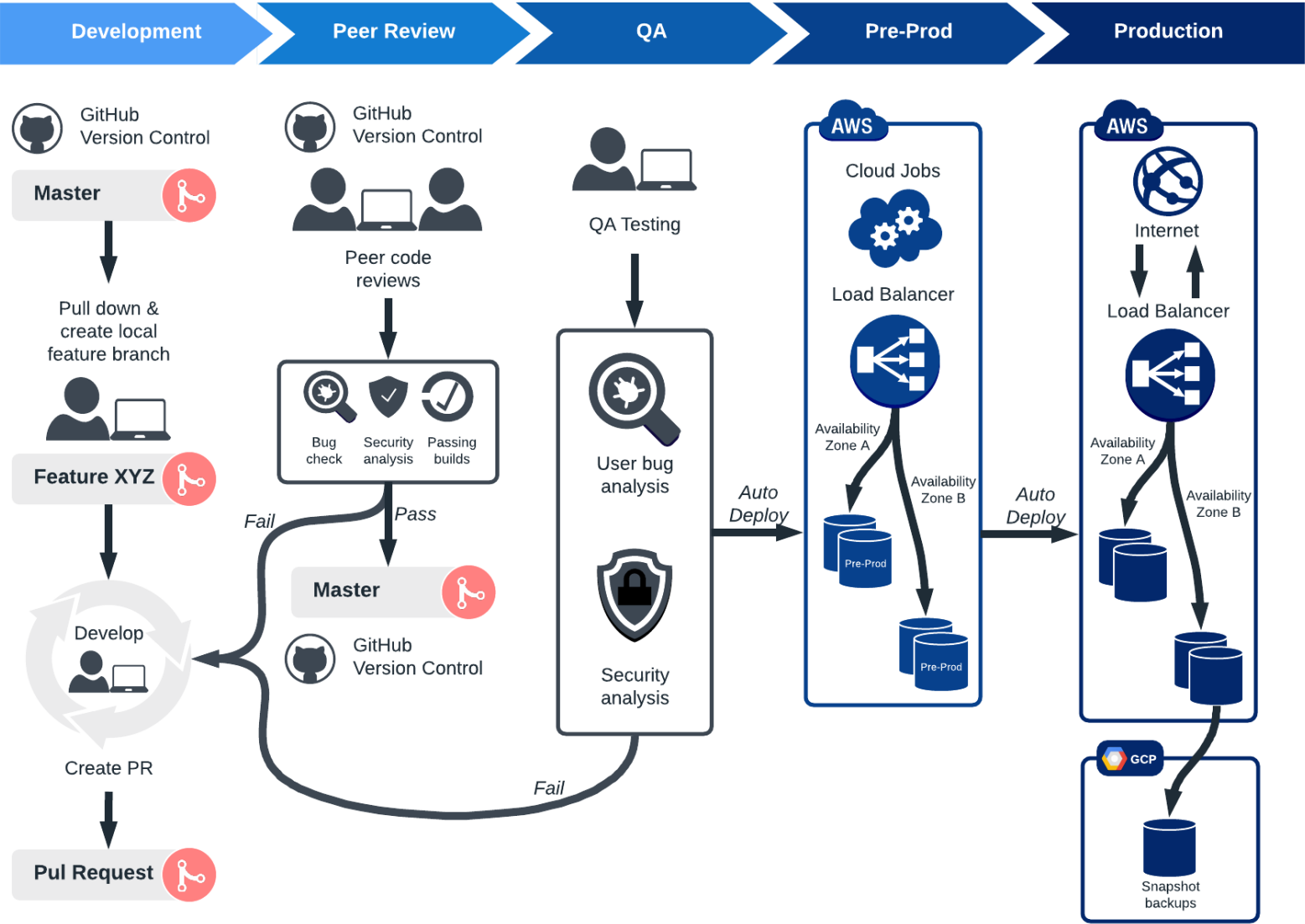
Organise the
Project



Traditional IT



DevOps flow



Bane NOR as a case study



- Bane NOR operates and develops the railway in Norway
- They also build and support the platforms
- AND their IT department(s) builds and supports all the tools associated

Some examples:

- The bus for train system
- The screens in the trains and on the platforms
- The voice over on the platform which informs you a train is late

Teams process

In essence there are three types of teams

- Projects – A new solution or an improvement of an old one
- Service teams – typically deliver a service (an application, website, etc.)
- Operational teams – Keeps everything running

They have very different ways of working, ideally they should all have a process and a way to reflect that process.

The What and The Why

Tools and decisions made

Tool choices

- Azure DevOps
- GitHub(?)
- (Almost) A single organization
- Different processes for each team

Issue

- We need a tool to manage tasks and our process
- We need better CI/CD tools
- We need to work better across teams
- Different types of teams have different needs

Examples

- Nav NAIS - <https://github.com/nais>
- Bane NOR - <https://github.com/bane-nor>
- Schibsted - <https://github.com/schibsted>
- HelseNorge - <https://github.com/helsenorge>





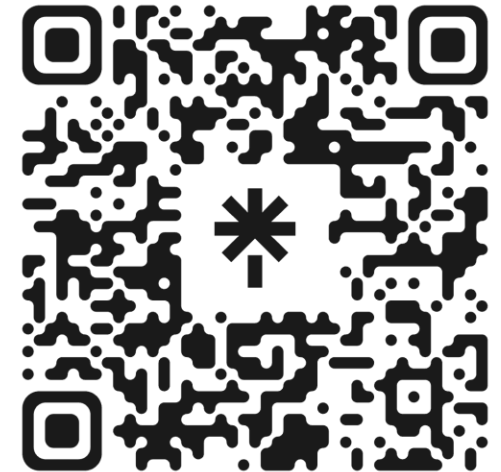
Awar Abdulkarim

Senior Cloud Engineer

Shameless plug

Hvis du vil vite mer:

- <https://www.linkedin.com/in/notawar/>
- <https://github.com/notawar>
- <https://notawar.github.io/>



Q&A