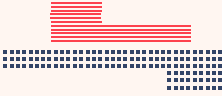


Organizing software teams and software engineering

Raymond Sollie
Malin Aandahl

2. november 2022

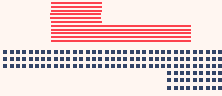




Agenda

The Agile Framework
Teams





Agenda - The Agile Framework

Cynefin

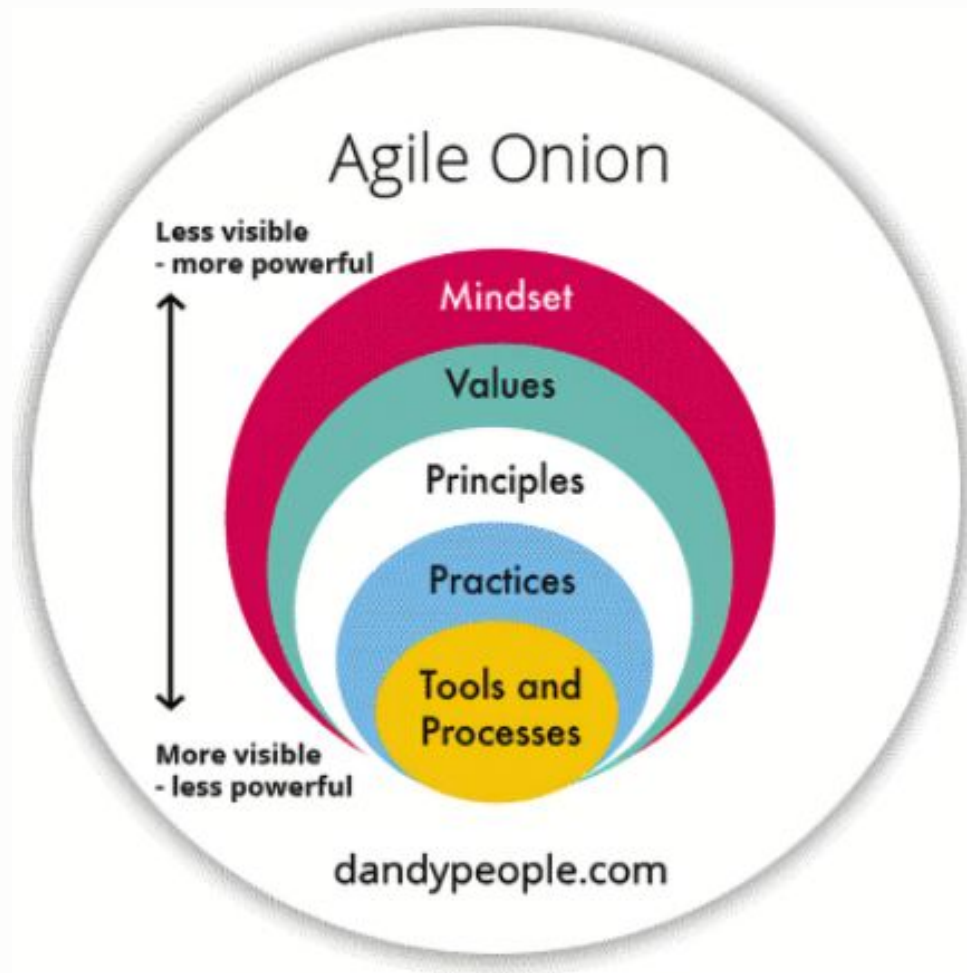
Agile Onion

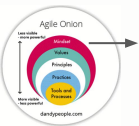
Agile Onion compared with Team Agile Framework



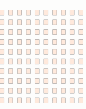
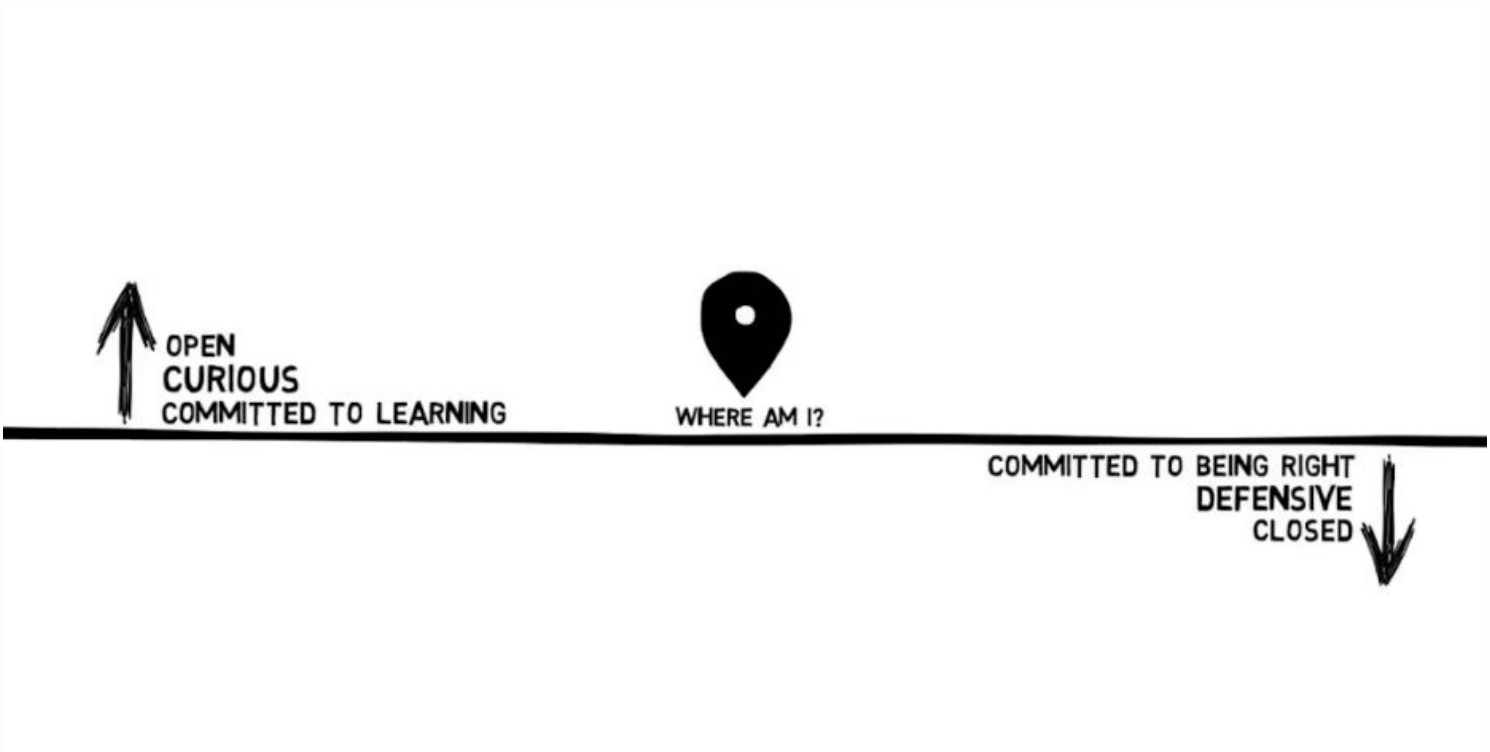
Cynefin - when to use Agile

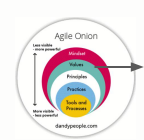




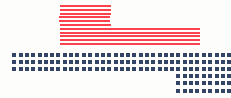


Mindset by The Conscious Leadership Group





Values



Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

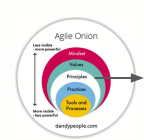
- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Adventures With Agile
Respect, inclusion, safety,
equal voice, emotional
self-management

House Of Lean
Respect for people and
culture, flow, innovation,
relentless improvement



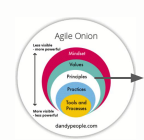


Principles (#1)



“Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.”



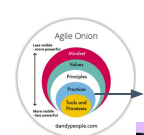


Principles (#2)



“Build projects/teams around motivated individuals. Give them the environment and support they need, and trust them to get the job done.”





Practices (example) - Designed Team Alliance

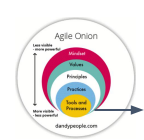


Examples of good DTAs include things like:

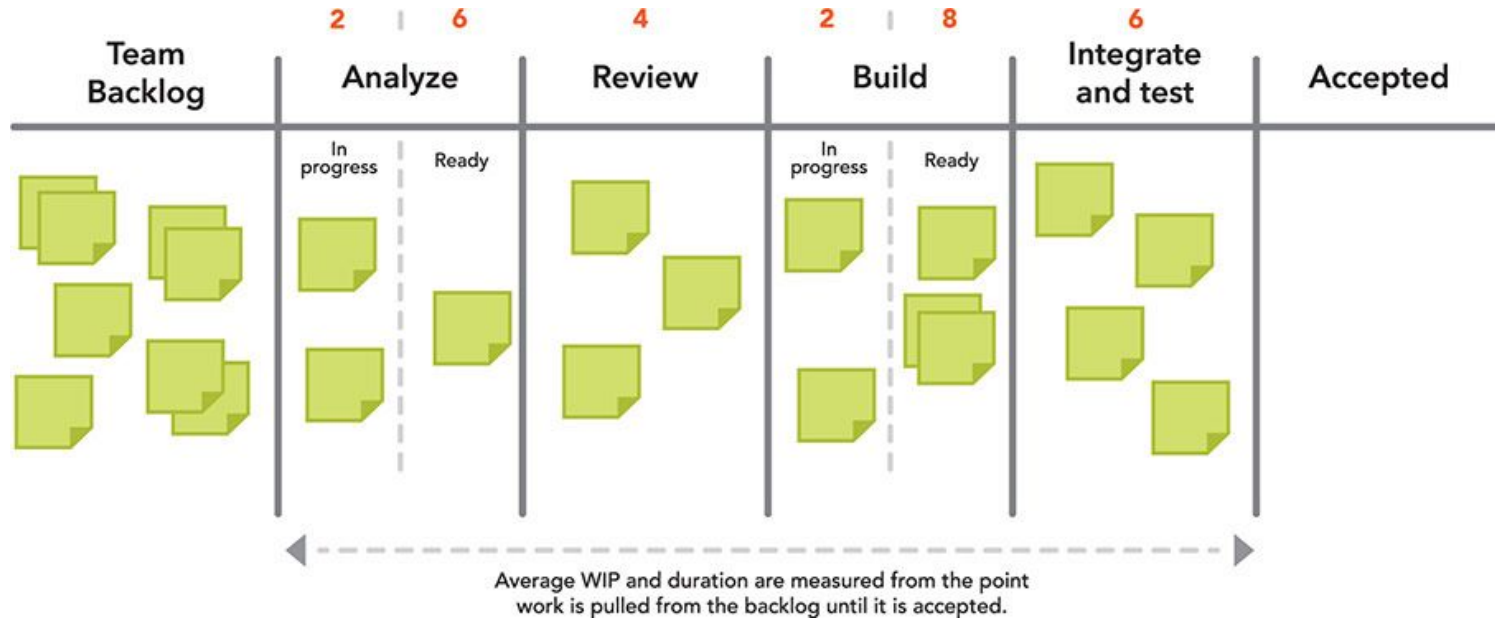
- Respect and a discussion of what this looks like when it is present and when it is not
- How people like to be spoken to or engaged
- What culture or feeling do people want to have in the normal day to day, when problems arise, and when the pressure is on.

The most important aspect of the DTA, is that it belongs to everyone as a collective document and as such must be agreed to by consensus and not majority

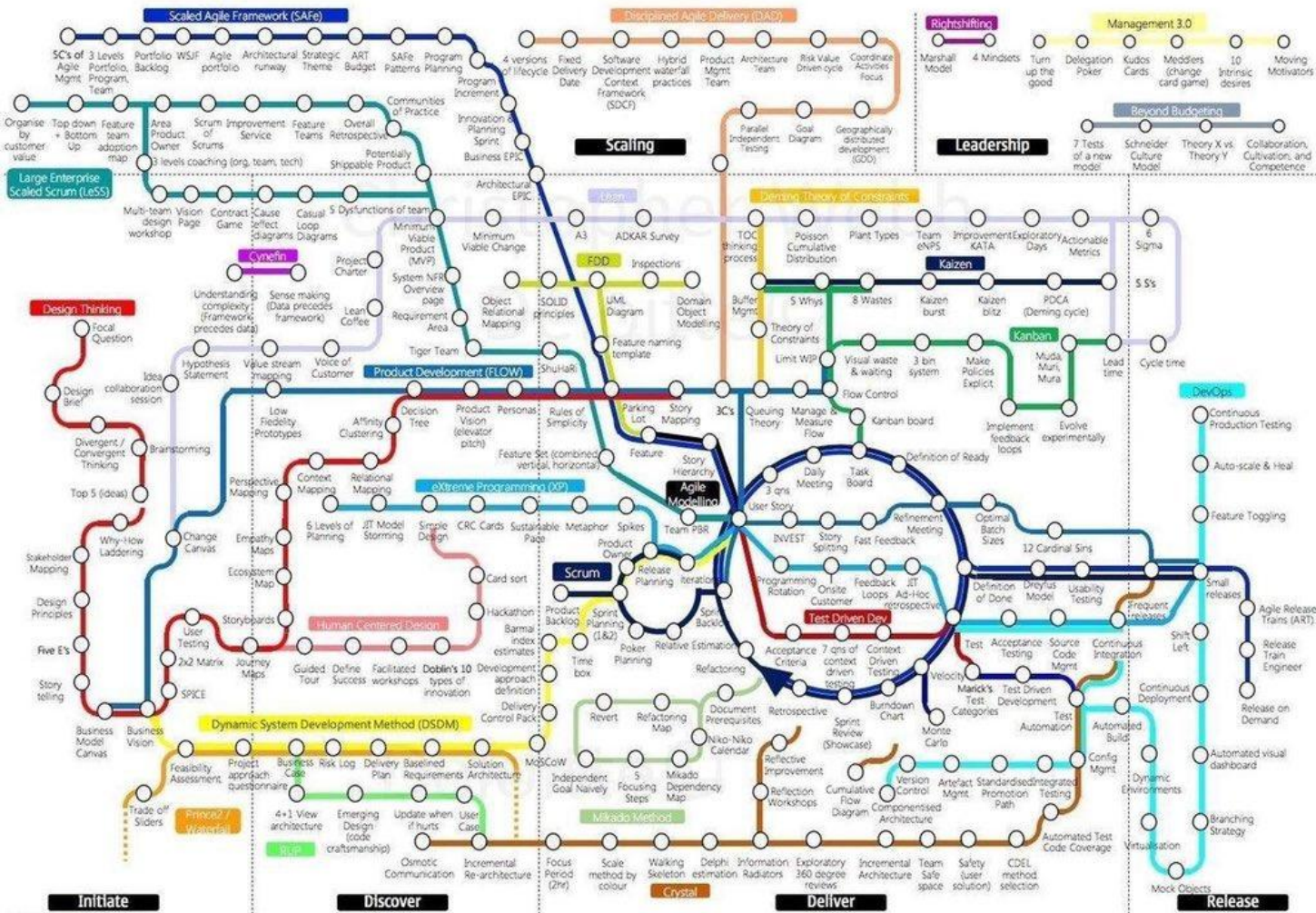
The DTA is a tool to build Psychological Safety



Tools and processes(example) - Kanban board

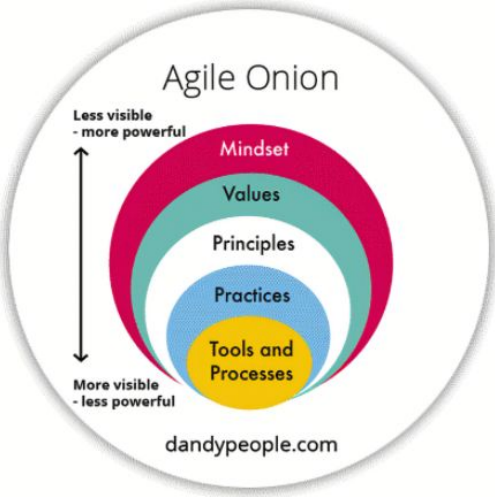
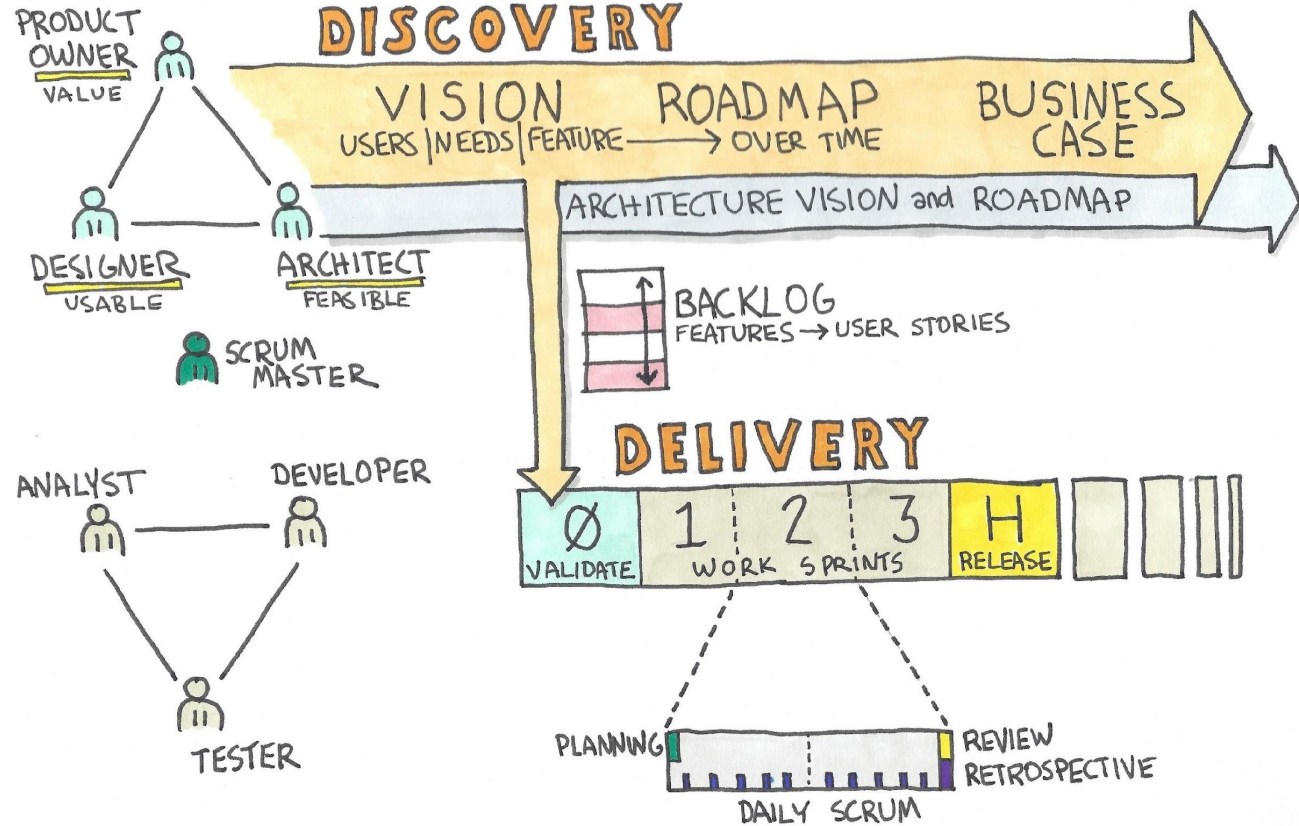


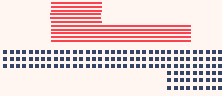
Still not the full picture of practises, processes and frameworks!



TEAM

AGILE FRAMEWORK





Agenda - Teams

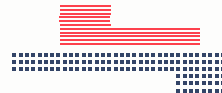
How to design a team

Types of teams

Five dysfunctions of a team

Metrics for high performing teams





TEAM

TOPOLOGIES

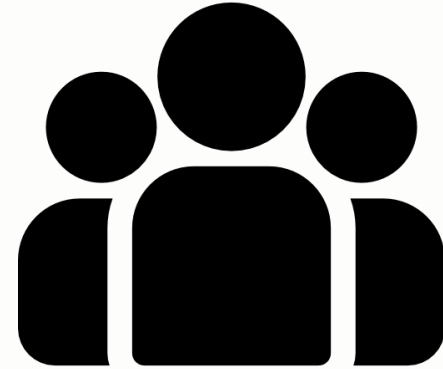
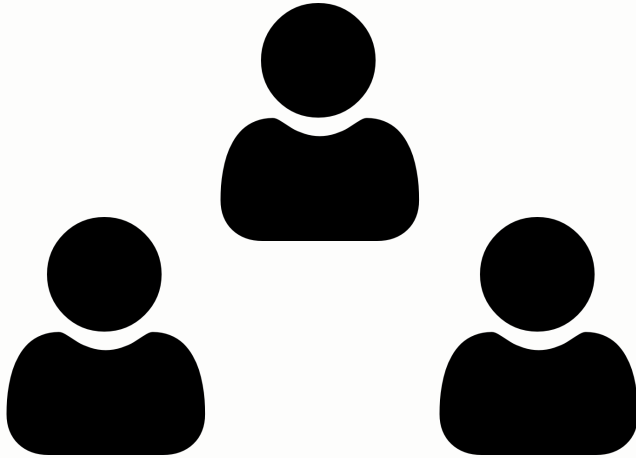
ORGANIZING
BUSINESS AND
TECHNOLOGY
TEAMS FOR FAST
FLOW

Foreword by
RUTH



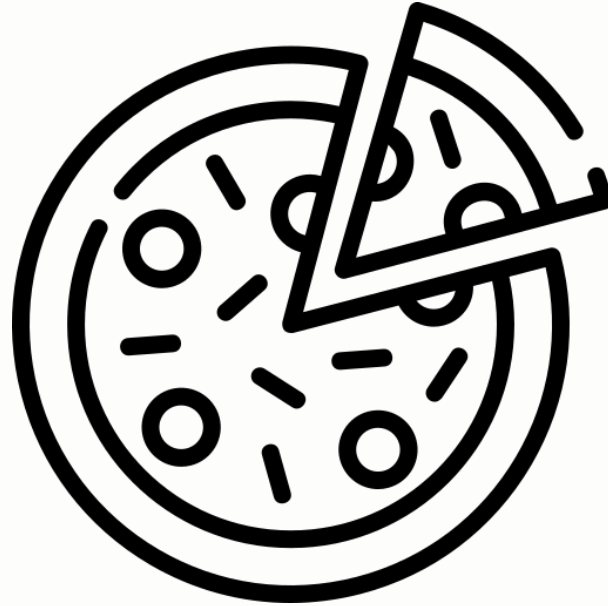
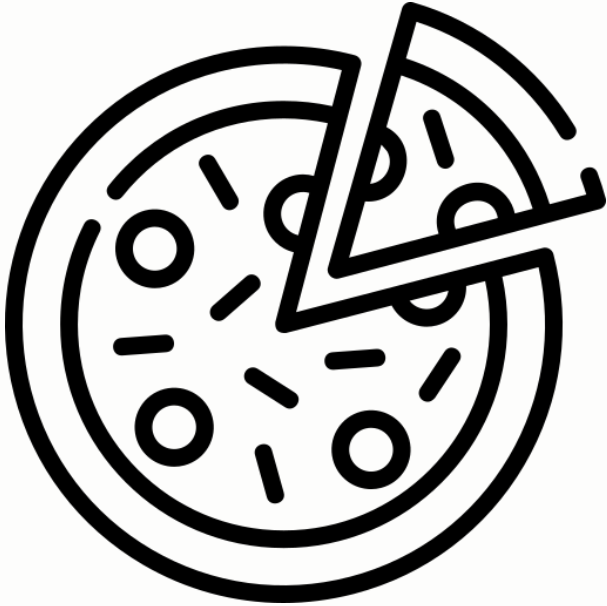


How to design a team?



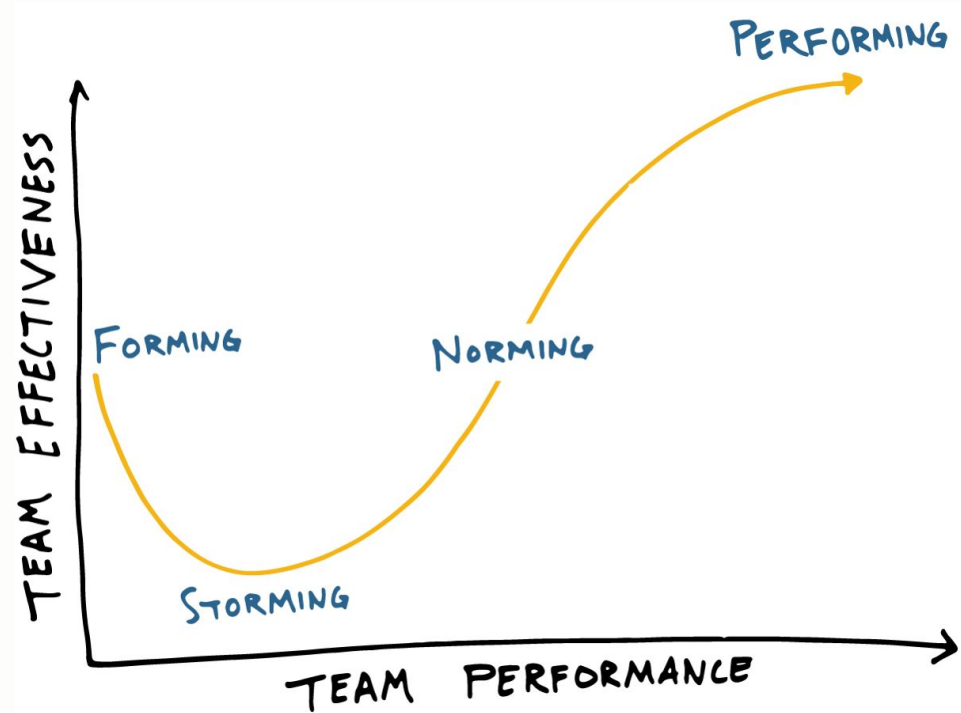
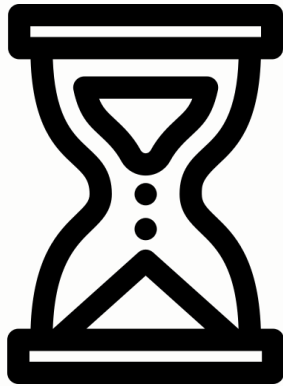


How to design a team?



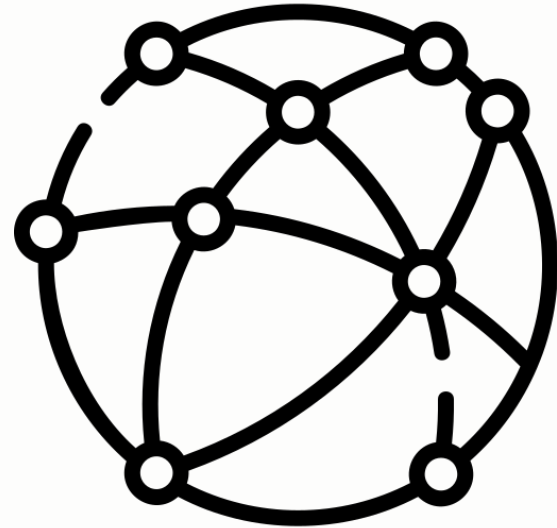


How to design a team?





How to design a team?





How to design a team?



Team first, not individuals



Preferably 5 - 9 persons



Stable to obtain trust and the Tuckmann-model:
forming, storming, norming and performing



Limit cognitive load





Types of teams



Stream-aligned team

The primary team type - all other teams work to support a team like this. Work with the value stream from the start to the end.



Platform team

A team that provides an internal product to stream-aligned teams. The purpose is to reduce the cognitive load to stream-aligned teams.



Enabling team

Consists of specialists. Helps stream-aligned team to overcome challenges by new knowledge or increased capacity (in a limited period).



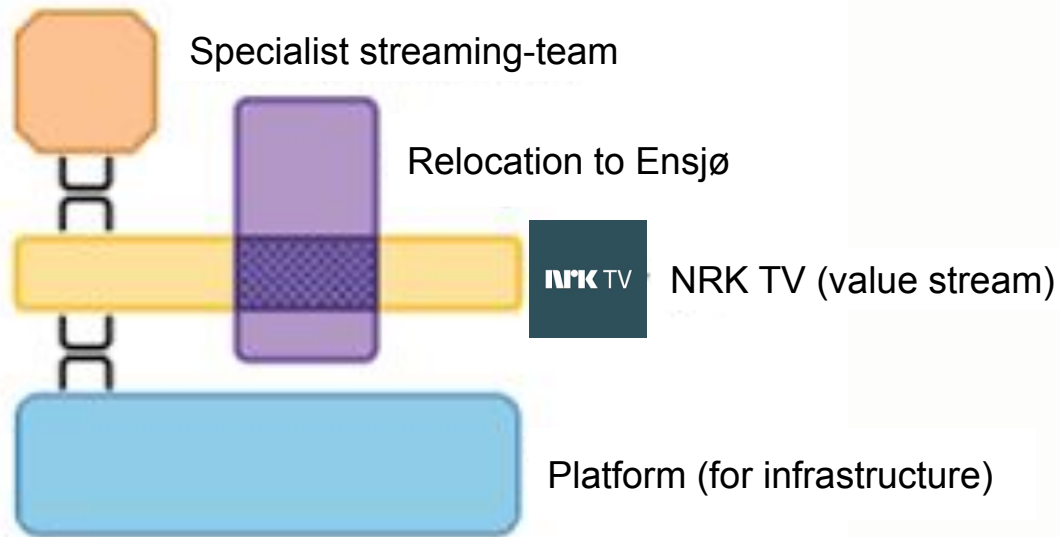
Complicated- subsystem team

Build and run a part of a system that is so complicated you need special expertise.





Types of teams - Example

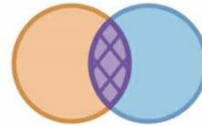


Interaction between teams



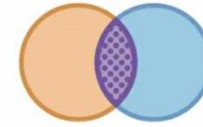
X-as-a-Service

One team provides and one team consumes something “as a Service”. For example through an API.



Collaboration

Working together for a defined period of time to discover new things (APIs, practices, technologies, etc.). Most suitable in an early phase where you need quick clarifications.



Facilitating

One team helps and mentors another team. Must be suitable when a team needs help, input or training to solve a problem.



NEW YORK TIMES BEST-SELLER

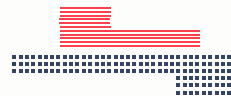
The **FIVE**
DYSFUNCTIONS
of a **TEAM**

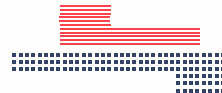
A LEADERSHIP FABLE



PATRICK LENCIONI

AUTHOR OF THE NATIONAL BEST-SELLER *THE ADVANTAGE*





High Performance Team

Dysfunctional Team





Dysfunction #1 : Absence of Trust

When team members are unwilling to:

- Be vulnerable with one another.
- Admit their mistakes.
- Ask for help.

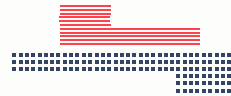




Dysfunction #2: Fear of Conflict

- A lack of trust leads to fear of conflict.
- A fear of conflict are members not able to engage in debates or openly air their opinions.
- Can lead to back channel comments.
- This leads in inferior results.





Dysfunction #3: Lack of Commitment

- With fear of conflict, it is difficult for team members to commit to decision.
- Leads to lack of direction for a team and ambiguity.
- Slows progress down





Dysfunction #4: Avoidance of Team Accountability

- Lack of commitment results in team members not making each other accountable.
- Team members don't call each other out when they do other things that what they planned or do things that are not in the team's interest.





Dysfunction #5: Inattention to results

- If the team members don't feel accountable, they put their own needs(ego, recognition, career development etc.).
- This results in team losing sight and the company suffers.
- A team where each member fights for their own interest, not for the best of the team.





High Performance Team

Dysfunctional Team

- Outstanding and recurring team results
- Highly motivated and engaged team

Inattention
to **Results**

- Poor performance and results
- High team turnover

- Poor performers are managed and held accountable
- Same standard apply to everyone

Avoidance of
Accountability

- Missed deadlines and key deliverables
- Poor performance is tolerated and creates environment of resentment

- Buy in and alignment on common objectives
- Clear direction and priorities
- Highly engaged team members

Lack of
Commitment

- Ambiguous direction and priorities
- Revisit discussion again and again
- Absenteeism

- Confront problems and issues quickly
- Develop practical solutions
- Get input from team members, minimal politics

Fear of
Conflict

- Go around problems
- Do not confront tough issues or behaviours
- Lack of transparency drives confusion

- Safe environment to speak up
- Team members help each other
- Leverage strengths for the team

Lack of
Trust

- Hesitate to ask for help
- Conceal weakness
- Dread meetings and avoid team members





Questions to ask to understand the level of dysfunction

1. Do team members openly and readily disclose their opinions?
2. Are team meetings compelling and productive?
3. Does the team come to decisions quickly and avoid getting bogged down by consensus?
4. Do team members confront one another about their shortcomings?
5. Do team members sacrifice their own interests for the good of the team?



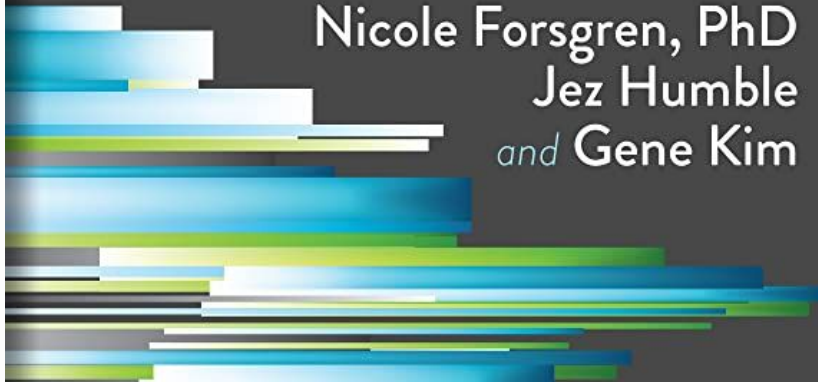


THE SCIENCE OF LEAN SOFTWARE AND DEVOPS

ACCELERATE

Building and Scaling High Performing
Technology Organizations

Nicole Forsgren, PhD
Jez Humble
and Gene Kim





Metrics for high performing teams and organizations

Deployment Frequency

How frequently new code (new features, bug fixes or improvements) are in production.

Lead Time for changes

The time from an idea to code running in production.

Mean Time To Restore (MTTR)

How quickly can teams restore from failures or downtime.

Change Fail Rate

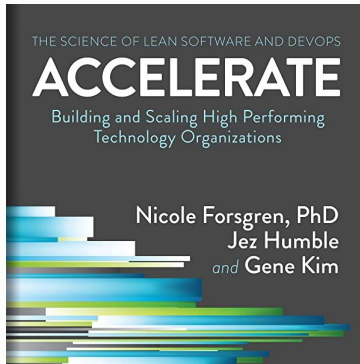
How often you introduce failures (versus not).

High performing organizations have:

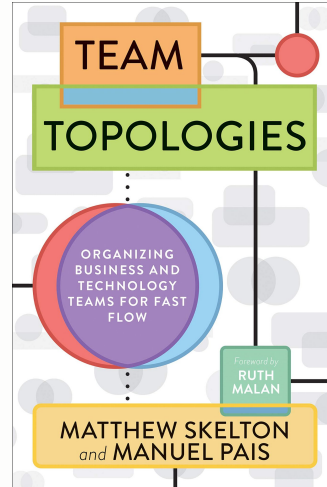
1. 46 times more frequent deployment of code.
2. 440 times less lead time from commitment to deploy
3. 170 times more fast mean time after failure and downtime.
4. 5 times less change/failure rate



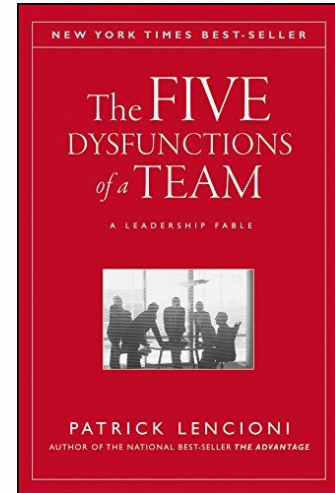
Want to read more?



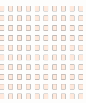
Accelerate



Team Topologies



The Five Dysfunctions of a Team



Questions?

