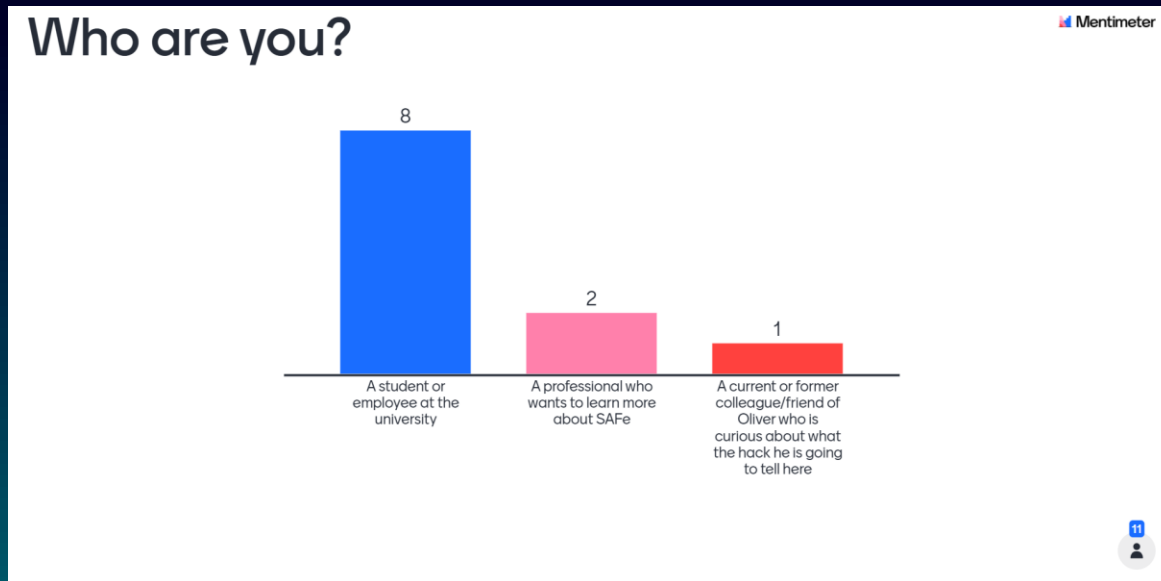


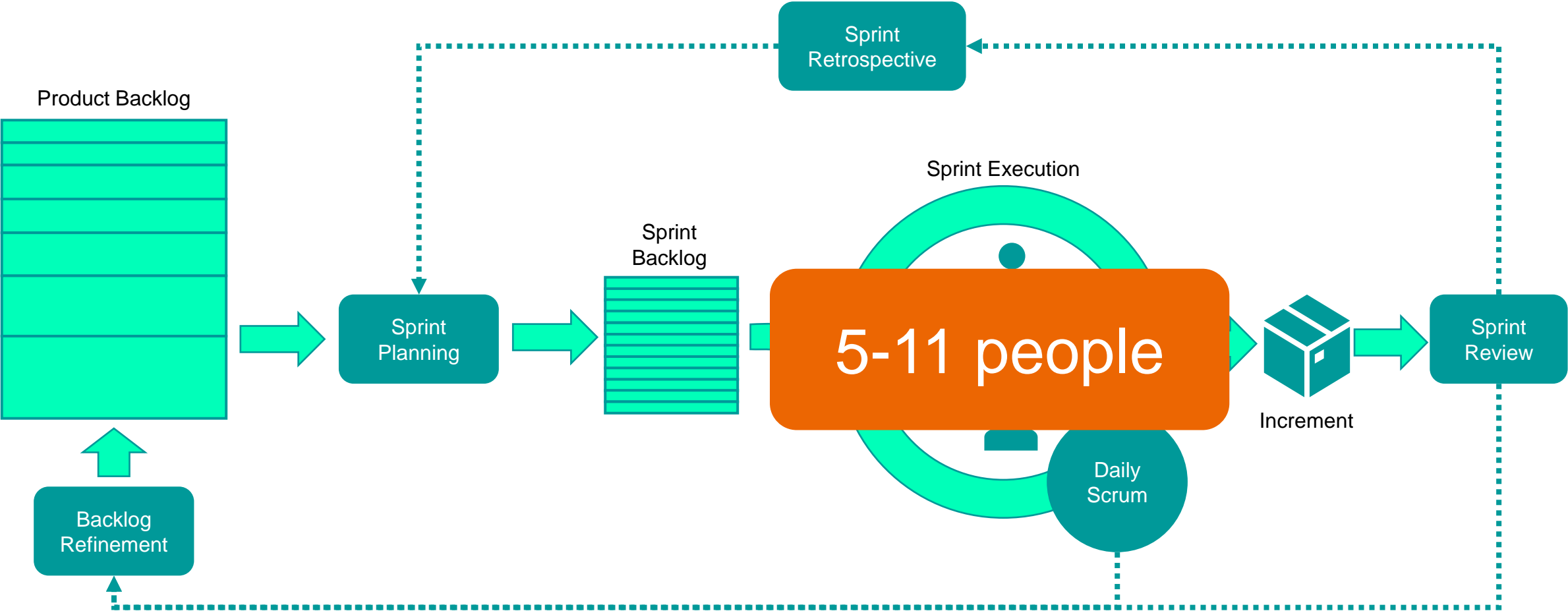
Scaling Agile with SAFe®

How to work agile in an enterprise environment
AMOS course – January 2022

Welcome to today's talk.



SCRUM is widely used in the industry for agile teams



Sources and further reads:
• <https://www.scaledagileframework.com/agile-teams/>
• <https://scrumguides.org/scrum-guide.html>

Smaller Team Size Fosters Trust: The rule of 5, 15 & 150

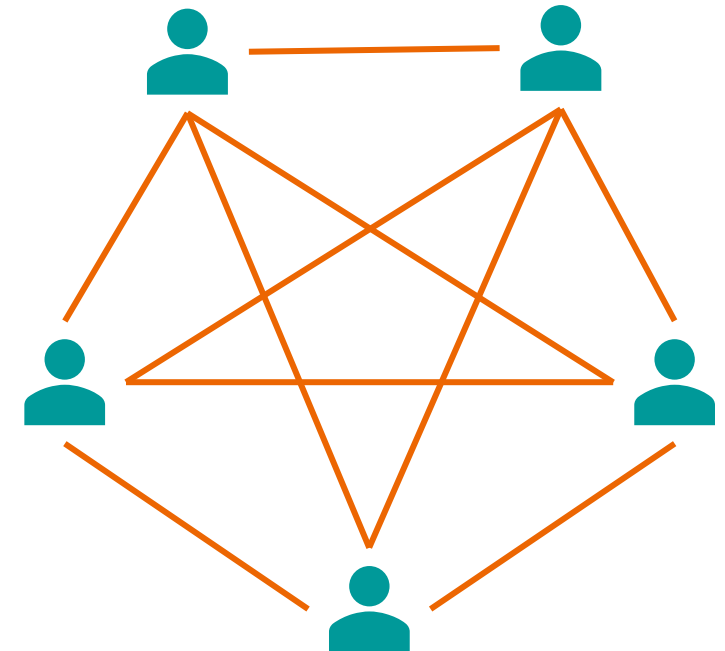
5

Around **five** is the limit of people with whom we can hold close personal relationship and working memory

Sources and further reads:

- <https://www.cognitive-edge.com/logn-0-093-3-389-logcr-1-r20-764-t3410-35-p0-001/>
- Team topologies, Matthew Skelton and Manuel Pais, p. 33 et seq.
- <https://agilepainrelief.com/blog/scrum-team-size.html>

Relationships to maintain:



Smaller Team Size Fosters Trust: The rule of 5, 15 & 150

5

Around **five** is the limit of people with whom we can hold close personal relationship and working memory

15

Around **fifteen** is the limit of people with whom we can experience deep trust



Sources and further reads:

- <https://www.cognitive-edge.com/logn-0-093-3-389-logcr-1-r20-764-t3410-35-p0-001/>
- Team topologies, Matthew Skelton and Manuel Pais, p. 33 et seq.
- <https://agilepainrelief.com/blog/scrum-team-size.html>

Smaller Team Size Fosters Trust: The rule of 5, 15 & 150

5

Commitment,
Focus,
Openness,
Respect, and
Courage

15

150

Dunbar's number

Around **five** is the limit of people with whom we can hold close personal relationship and working memory

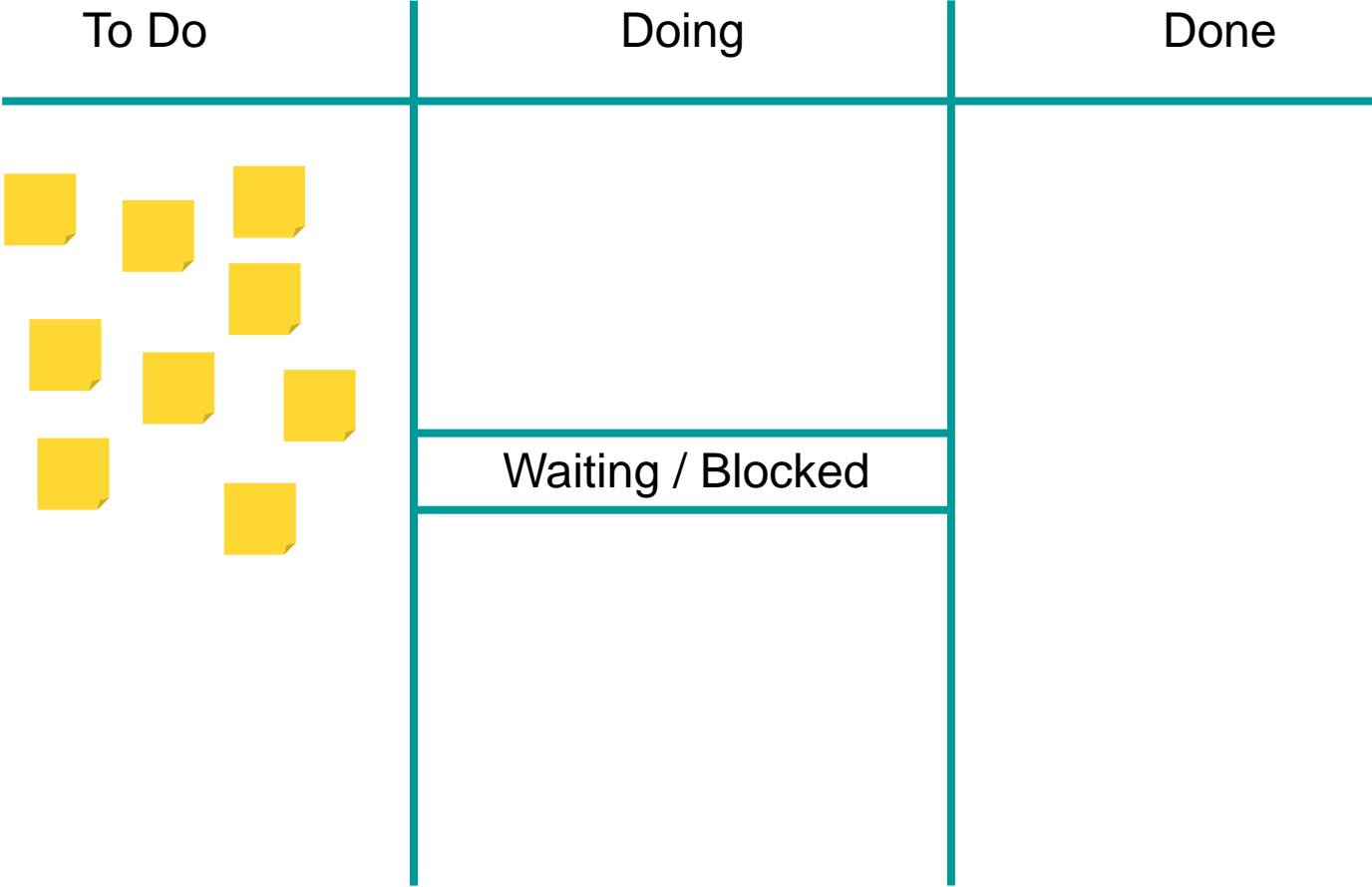
Around **fifteen** is the limit of people with whom we can experience deep trust

Around **150** is the limit of people whose capabilities we can remember

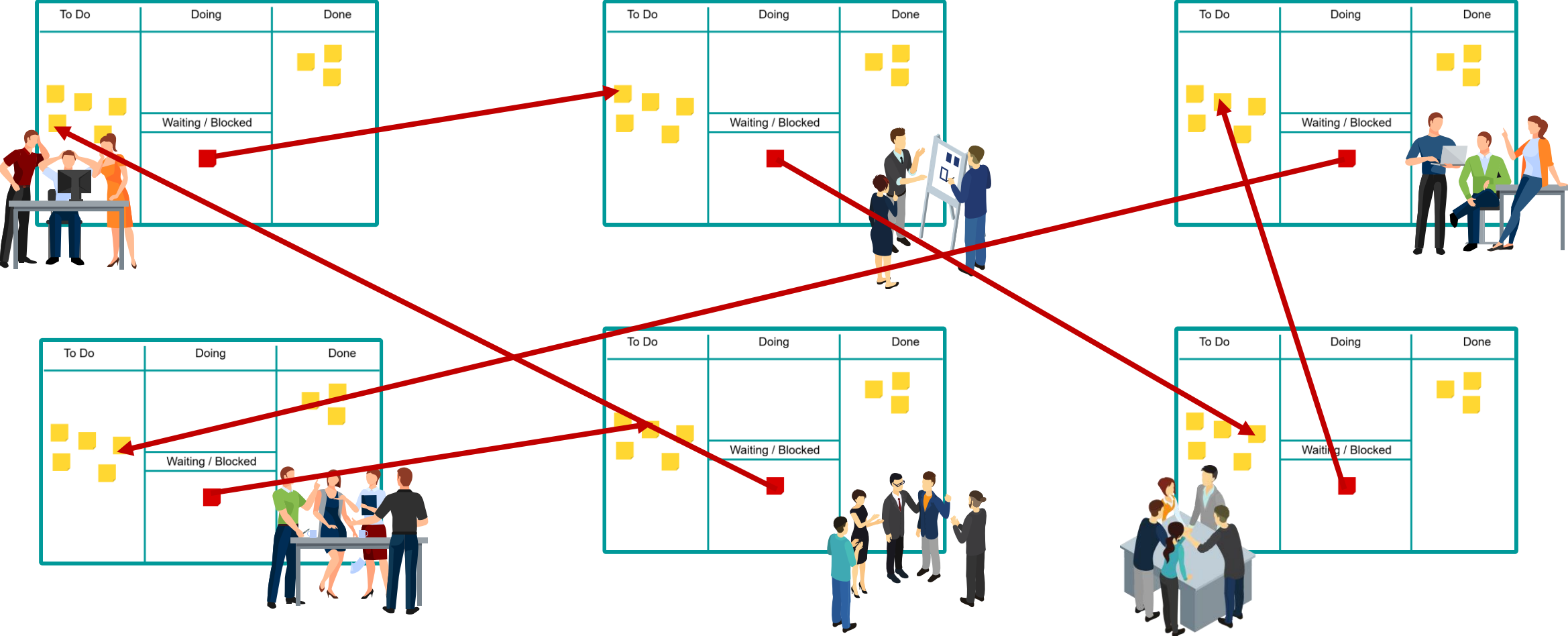
Sources and further reads:

- <https://www.cognitive-edge.com/logn-0-093-3-389-logcr-1-r20-764-t3410-35-p0-001/>
- Team topologies, Matthew Skelton and Manuel Pais, p. 33 et seq.
- <https://agilepainrelief.com/blog/scrum-team-size.html>

Inter-team dependencies slow down value delivery



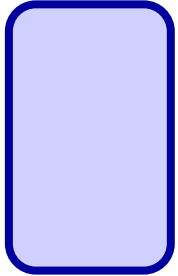
Inter-team dependencies slow down value delivery



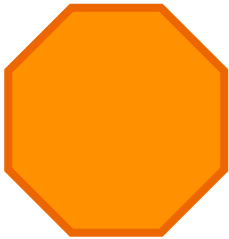
Team Topologies and interaction modes



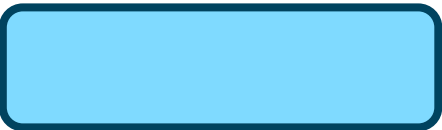
Stream aligned teams
(preferred for fast flow)



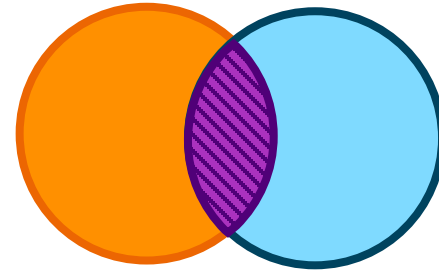
Enabling Team
(supporting stream aligned Teams to become more autonomous)



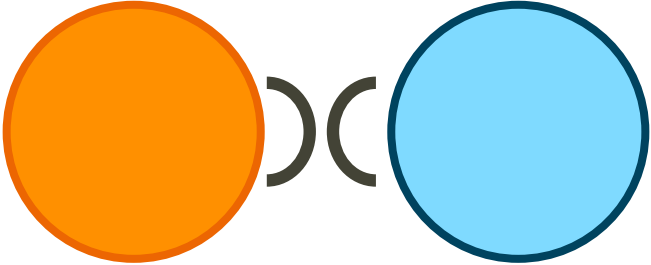
Complicated-subsystem team
(when deep specialty skills and expertise needed)



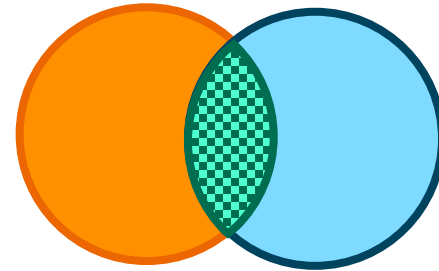
Platform team
(providing platforms and services to stream aligned teams)



Collaboration
(working closely Together)



X-as-a-Service
(providing/consuming results with minimal collaboration)

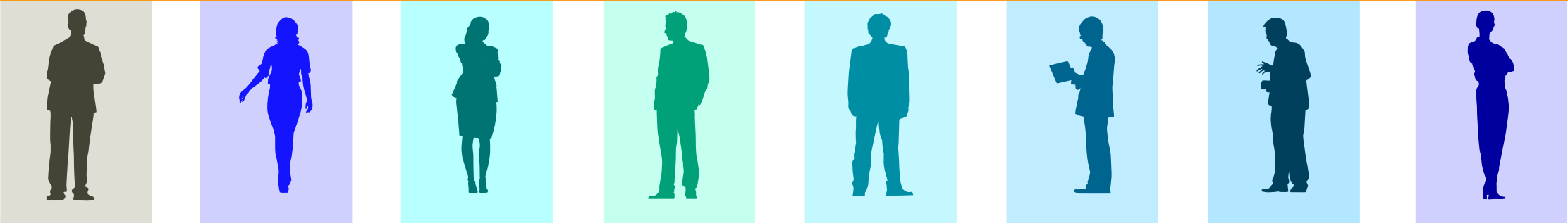
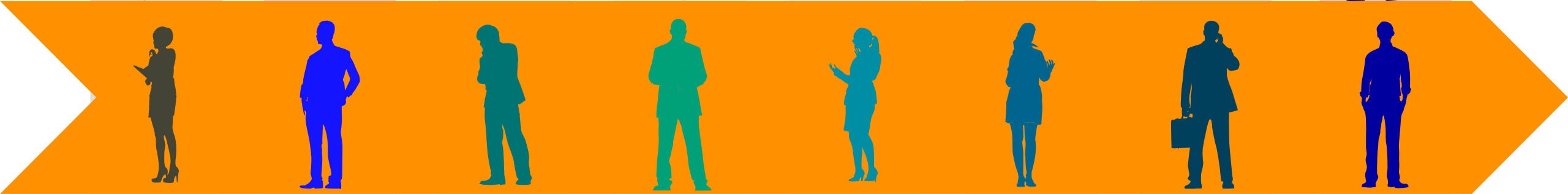


Facilitating
(helping/being helped to clear impediments)

Sources and further reads:

- Team topologies, Matthew Skelton and Manuel Pais, p. xx, p. 79 et seq., p. 131 et seq.
- <https://www.scaledagileframework.com/organizing-agile-teams-and-arts-team-topologies-at-scale/>

Form “Stream-aligned teams” which a cross functional and have an end-to-end responsibility



Business Analysts

System Architects

Database Engineers

Backend Developer

UX Designer

Frontend Developer

Test and QA

Operations

Form “Stream-aligned teams” which a cross functional and have an end-to-end responsibility along their development value stream



Business Analysts

System Architects

Database Engineers

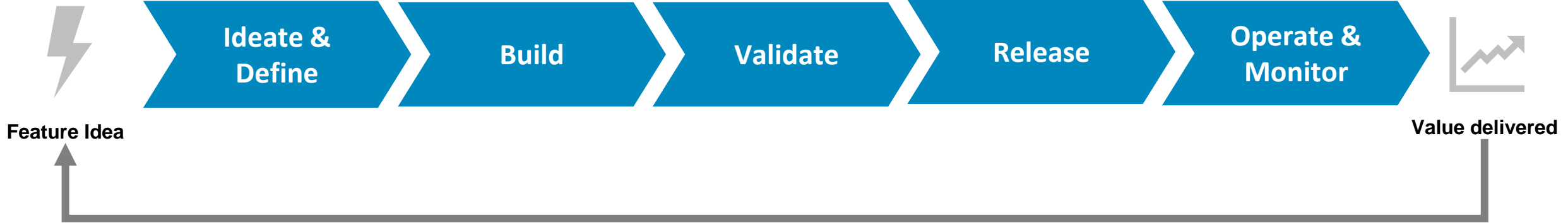
Backend Developer

UX Designer

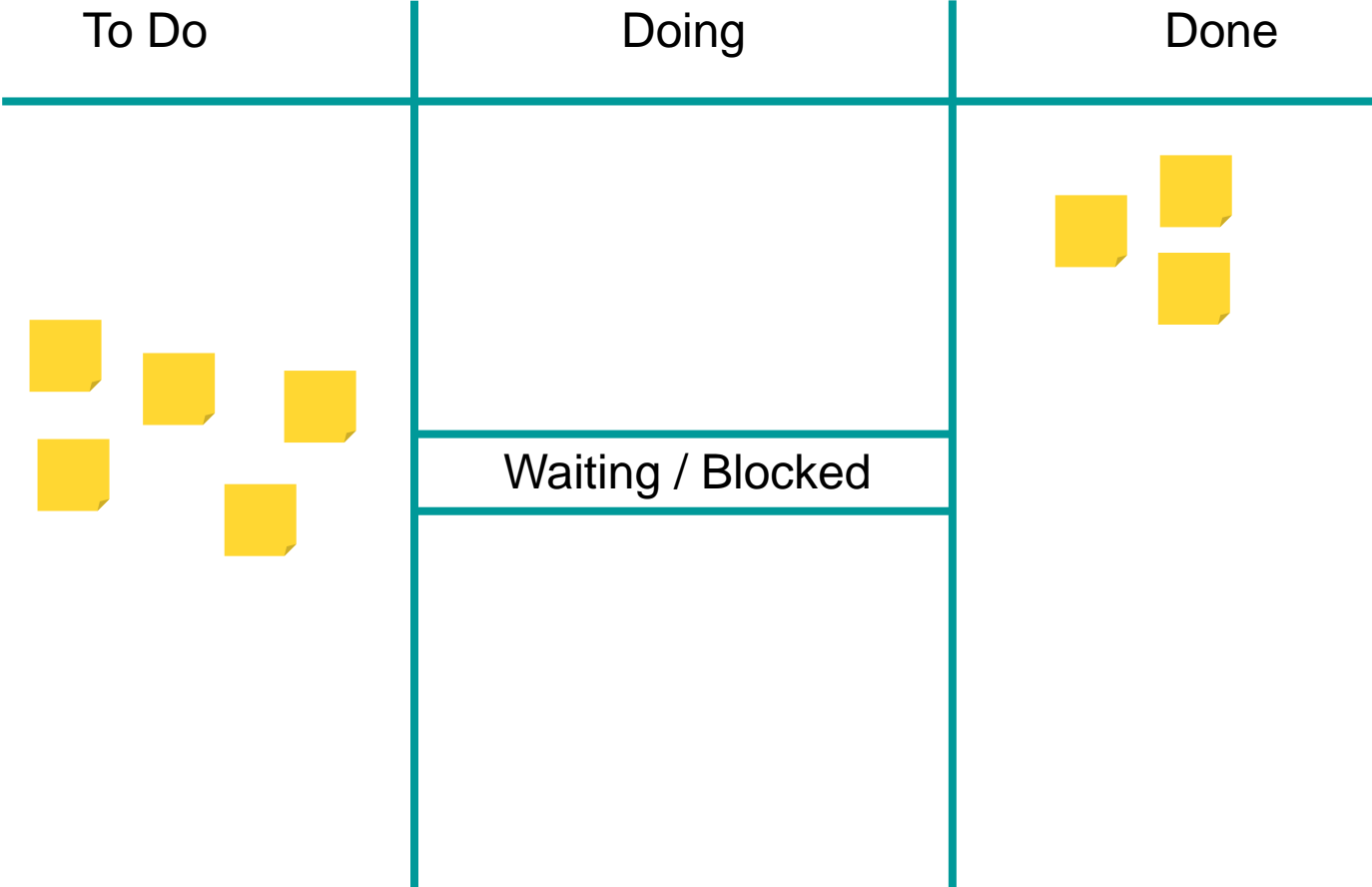
Frontend Developer

Test and QA

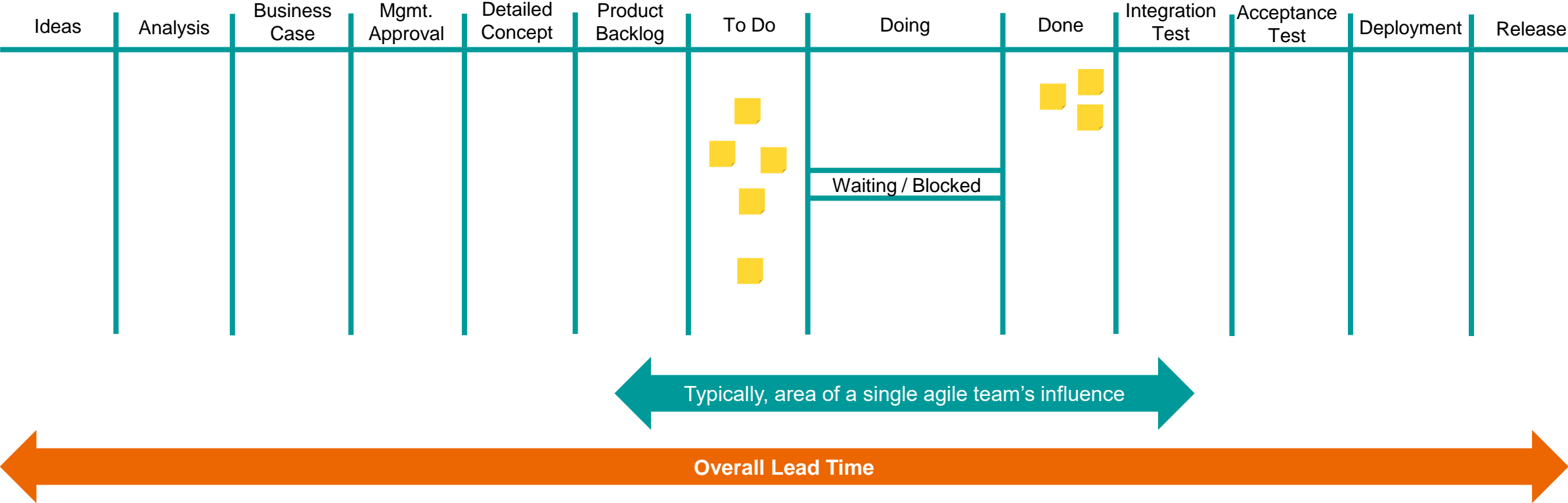
Operations



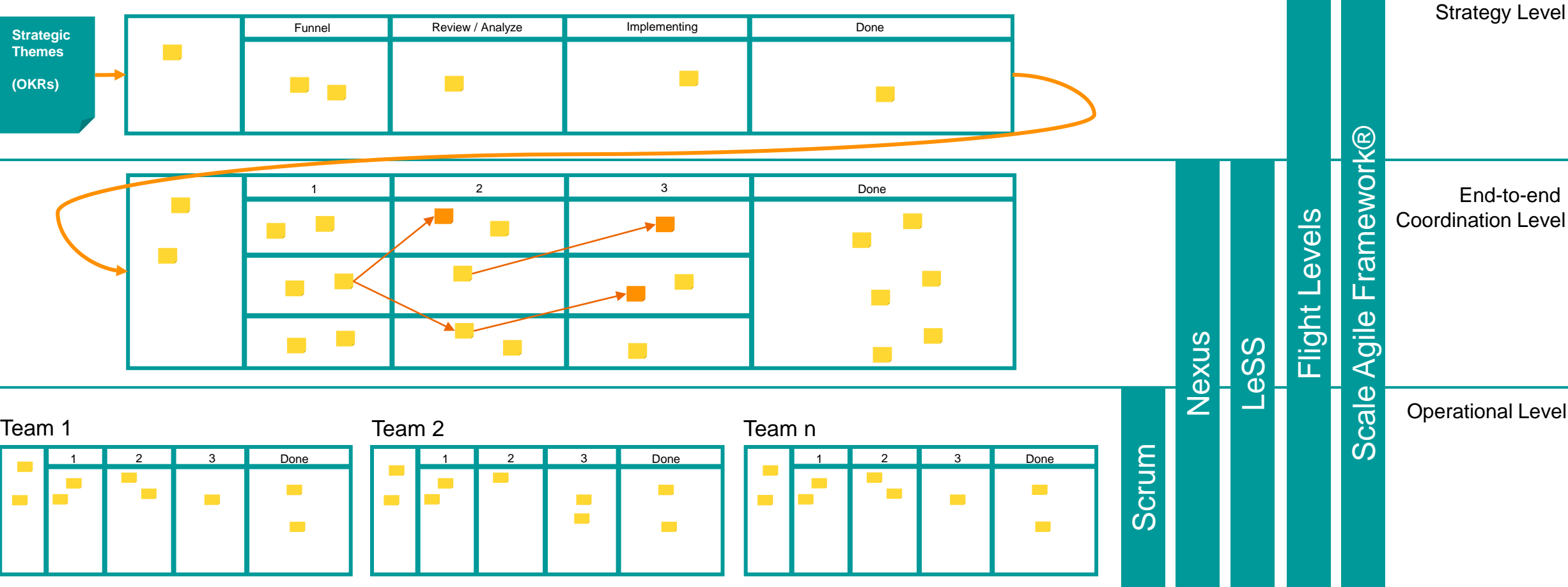
Consider the End-2-End Development Value Stream



Consider the End-2-End Development Value Stream



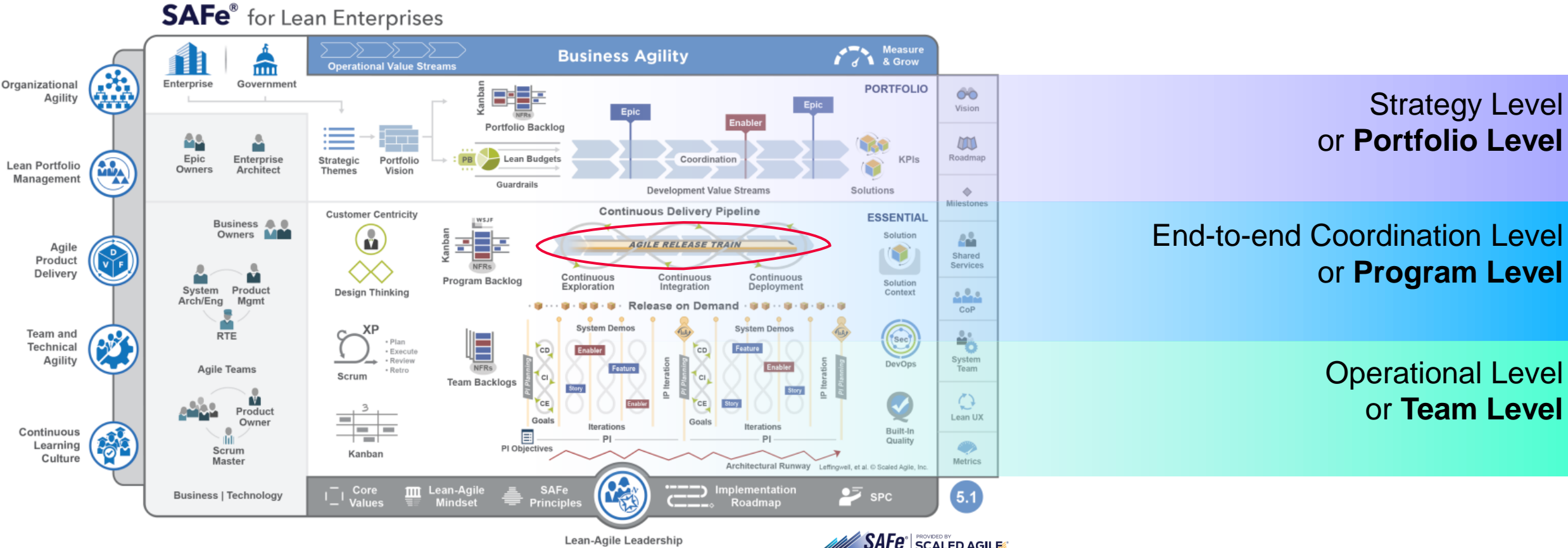
Consider the End-2-End Development Value Stream and manage Inter Team Dependencies



Sources and further reads:

- Rethink Agile - Why agile Teams have nothing to do with Business Agility, Klaus Leopold
- <https://www.scaledagileframework.com/>

The Scaled Agile Framework® has all these layers combined with a set of well proven tools and techniques

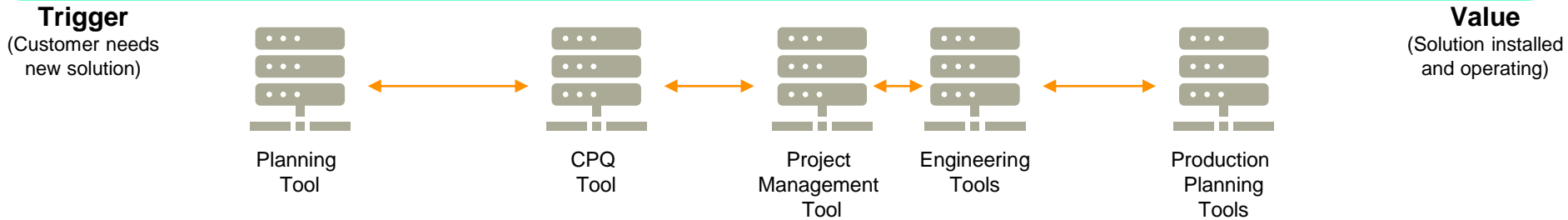


Sources and further reads:
 • <https://www.scaledagileframework.com/>

Agile Release Trains (ARTs): Organized around business value

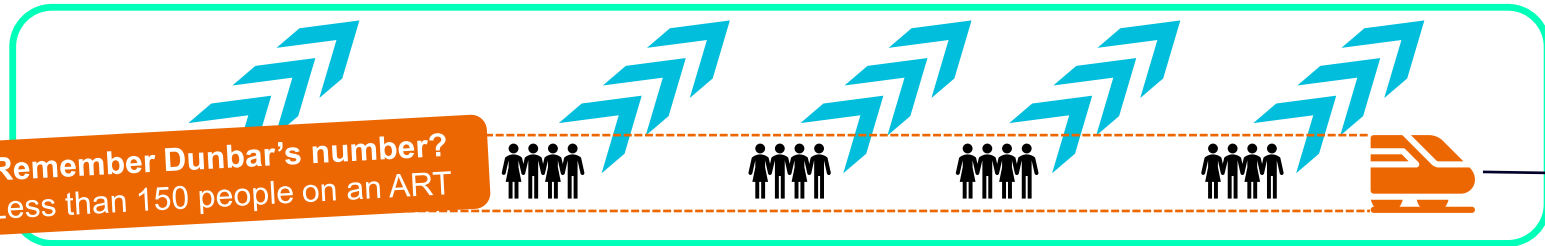


Operational Value Streams describe how value flows through our organization to generate value for us and our end customers.



Trigger
(Customer needs new solution)

Value
(Solution installed and operating)

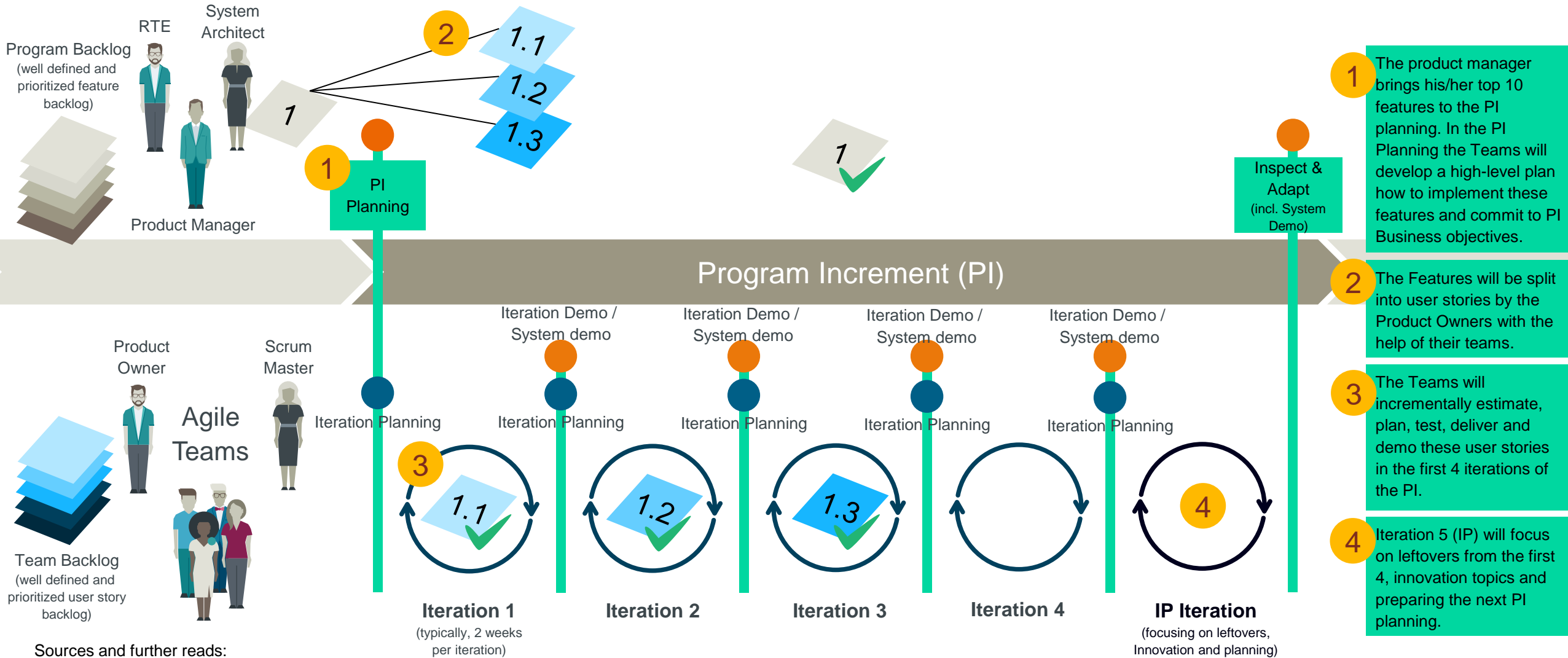


Development value streams develop the business solutions used by operational value streams

Agile Release trains group dependent development value streams and ensure **interoperability between solutions of an operational value stream**

An Agile Release Train (ART) is a long-lived team of Agile teams, which incrementally develops, delivers, and operates one or more solutions along an end-to-end operational value stream.

Agile Release Trains (ARTs): How they deliver value

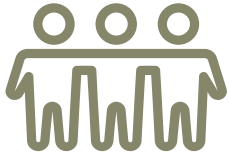


Sources and further reads:

- <https://www.scaledagileframework.com/>

Scrum Roles: Roles of the Scaled Agile Framework® (SAFe®)

Team level



Team

Scrum Master

Product Owner

Drives the Iteration

- Create and refine user stories and acceptance criteria
- Define, build, test and deliver stories that are “done”
- Develop and commit to PI and iteration (sprint) plans
- 5-11 members
- Owns estimation

- Coaches the agile team and facilitates team meetings
- Removes impediments and protects team from outside influence

- Owns and prioritizes the team backlog
- Defines and accepts stories
- Acts as the customer for developer questions
- Works with the product management to plan program increments (PI)

Roles of the Scaled Agile Framework® (SAFe®) Program level



System Architect

- Provides architectural guidance and technical enablement to the teams on the train
- Defines the architectural runway of the overall system

Release Train Engineer (RTE)

- Acts as the chief Scrum Master for the train
- Facilitates optimizing the flow of value through the ART
- Manages dependencies
- Risk ROAMing

Product Manager Drives the PI and the Product

- Owns and prioritizes the program backlog
- Defines features, PIs and releases
- Owns the vision, roadmap and ROI of the product
- Collaborates on enablers

Business Owners

- Key stakeholders on the agile release train
- Typically steering committee members in traditional setups
- Subject matter experts

SAFe® as a dual operating system



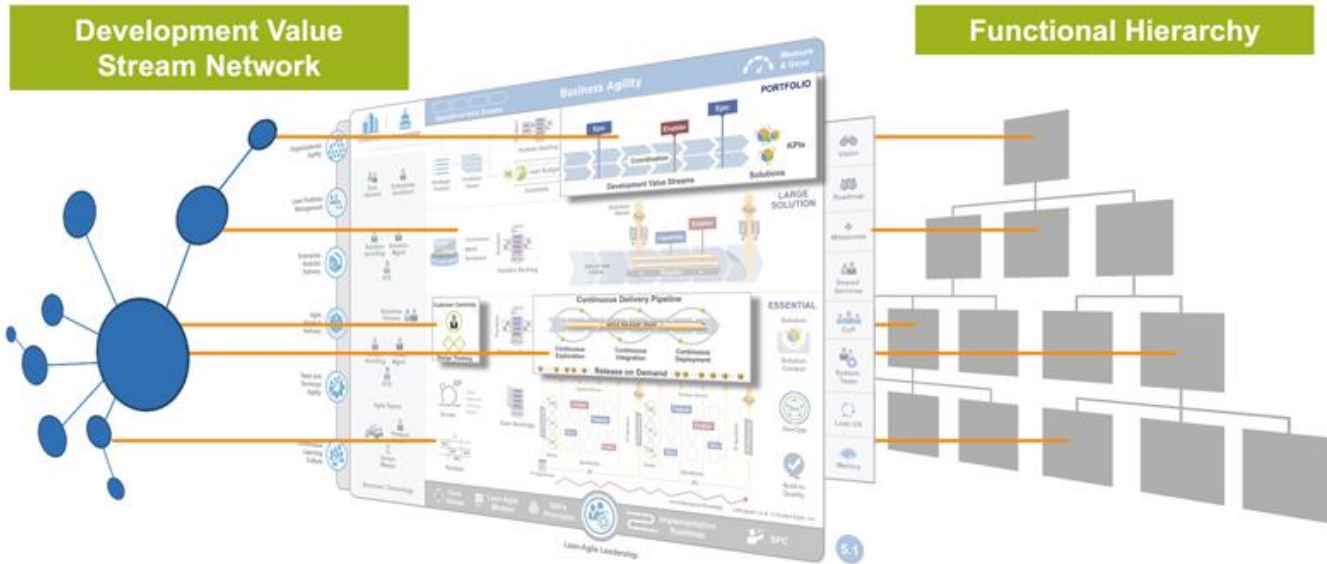
Development Value Streams

Responsibilities:

- Product research, development, delivery, support and evolution

Purpose: *Speed of Innovation*

- Self organizing
- Constantly evolving
- Fast and furious
- Innovative / Experimental
- Fail fast
- Short-Term memory
- Exploit variability



Shared Responsibilities:

- Strategy
- Customer Engagement
- Support
- Culture



Operational Value Streams

Responsibilities:

- Revenues & Costs
- Finance & Accounting
- Sales & Marketing
- Legal & Governance
- People & careers
- Production of goods and services
- Facilities

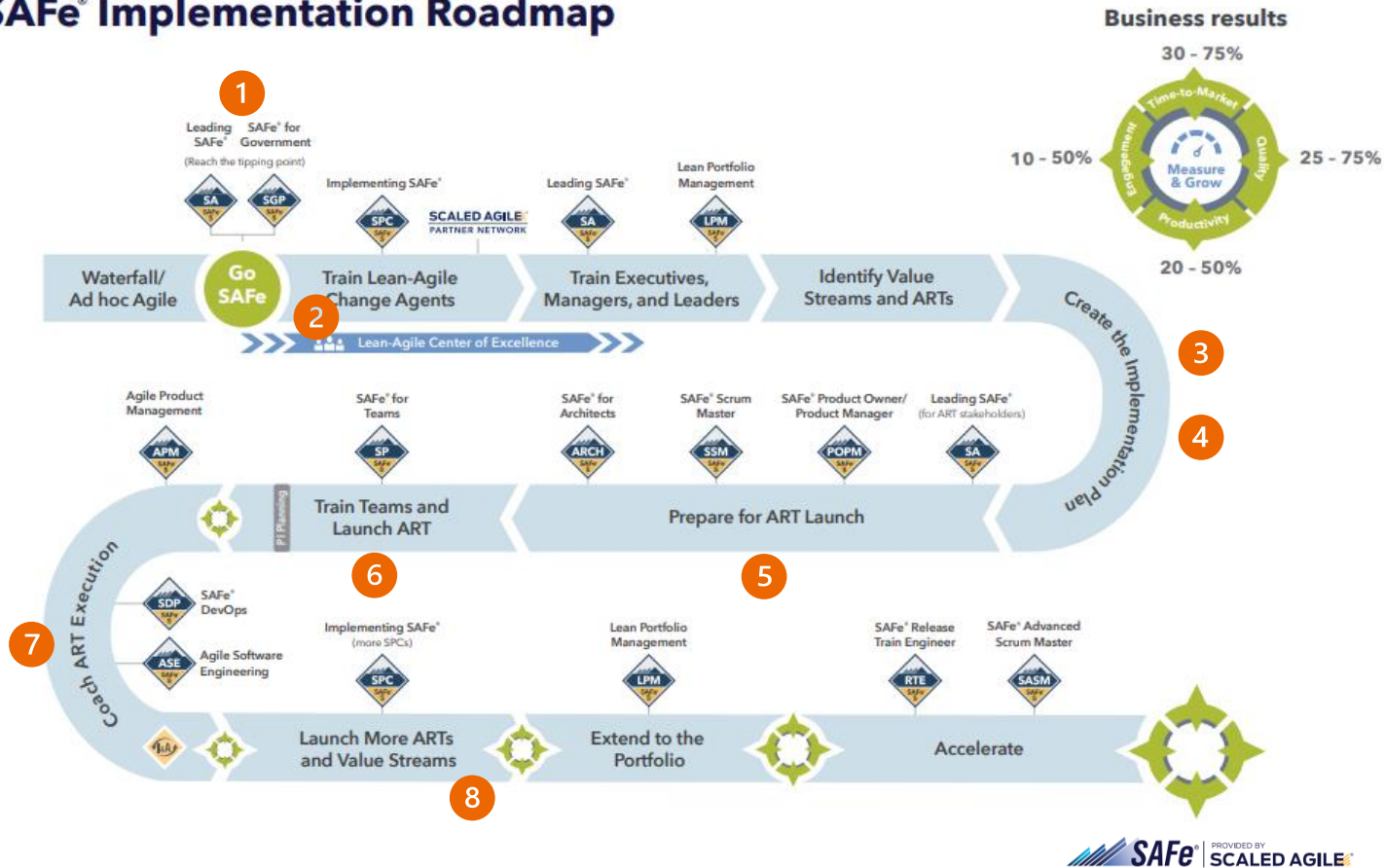
Purpose: *Efficiency and sustainability*

- Standing organization
- Evolves as needed
- Steady
- Predictable/Reliable
- Don't fail
- Long-term memory
- Reduce variability

Source: <https://www.scaledagileframework.com/advanced-topic-balancing-the-dual-operating-system/>

The SAFe® Implementation Roadmap

SAFe® Implementation Roadmap



Based on Kotter's Eight Step Process of Successful Change

1. Create the Sense of Urgency
2. Pull Together the Guiding Team
3. Develop a Change Vision and Strategy
4. Communicate for Understanding and Buy-In
5. Empower other to act
6. Produce Short-Term Wins
7. Don't let up
8. Create a New Culture

Sources and further reads:

- <https://www.scaledagileframework.com/implementation-roadmap/>
- Our Iceberg is Melting, John Kotter

Why SAFe®? Pros & Cons

Cons

- Rather prescriptive
- Focus on managing dependencies instead of removing them
- Introduces new roles and causes overhead to a certain degree
- Top heavy which might result in a lack of self management and waterfall-minded approaches
- Might be overwhelming in the beginning and cause people to focus too much on processes and framework adherence instead of the actual change of their behavior

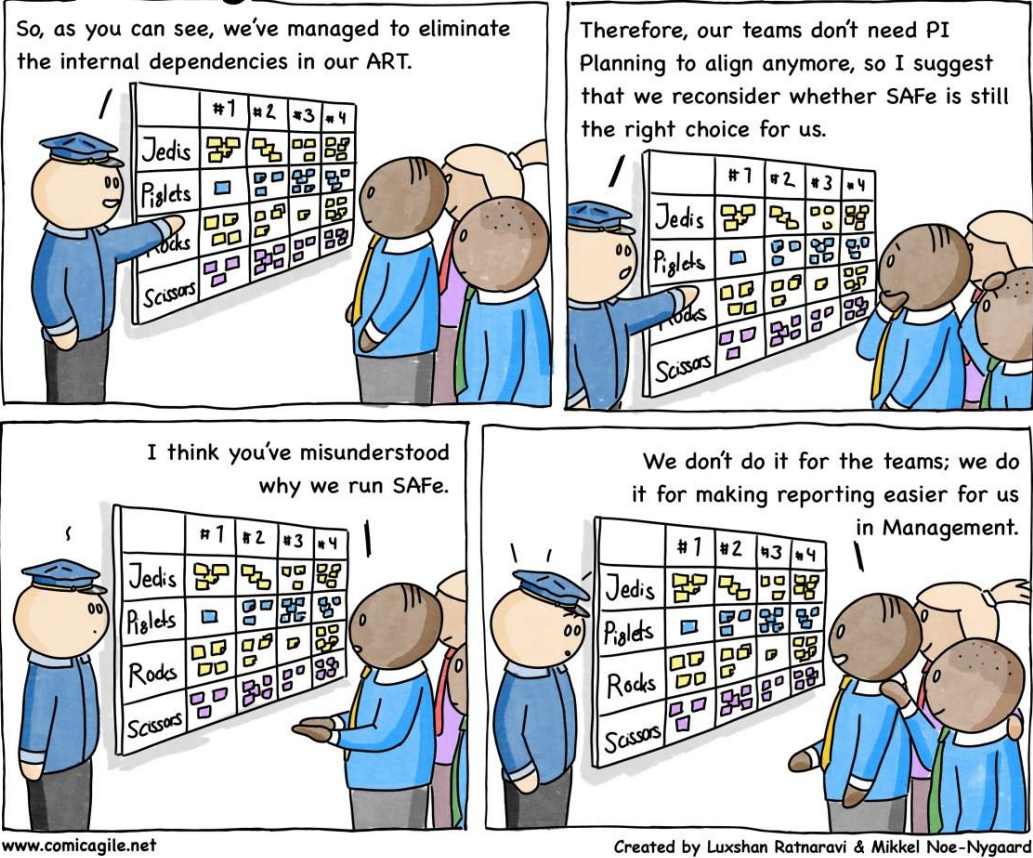
Pros

- Rather prescriptive
- Widely spread and adapted in different markets
- Comprehensive role-based training and certification program
- Comprehensive set of tools and best practices from the world of lean and agile
- Goes beyond the team level and fosters business agility
- Fosters a common language and approach while still giving teams a certain degree of freedom

Some tips for introducing SAFe®: Start with the why!

- Be clear on your motivation to introduce SAFe® and communicate it

Comic Agilé

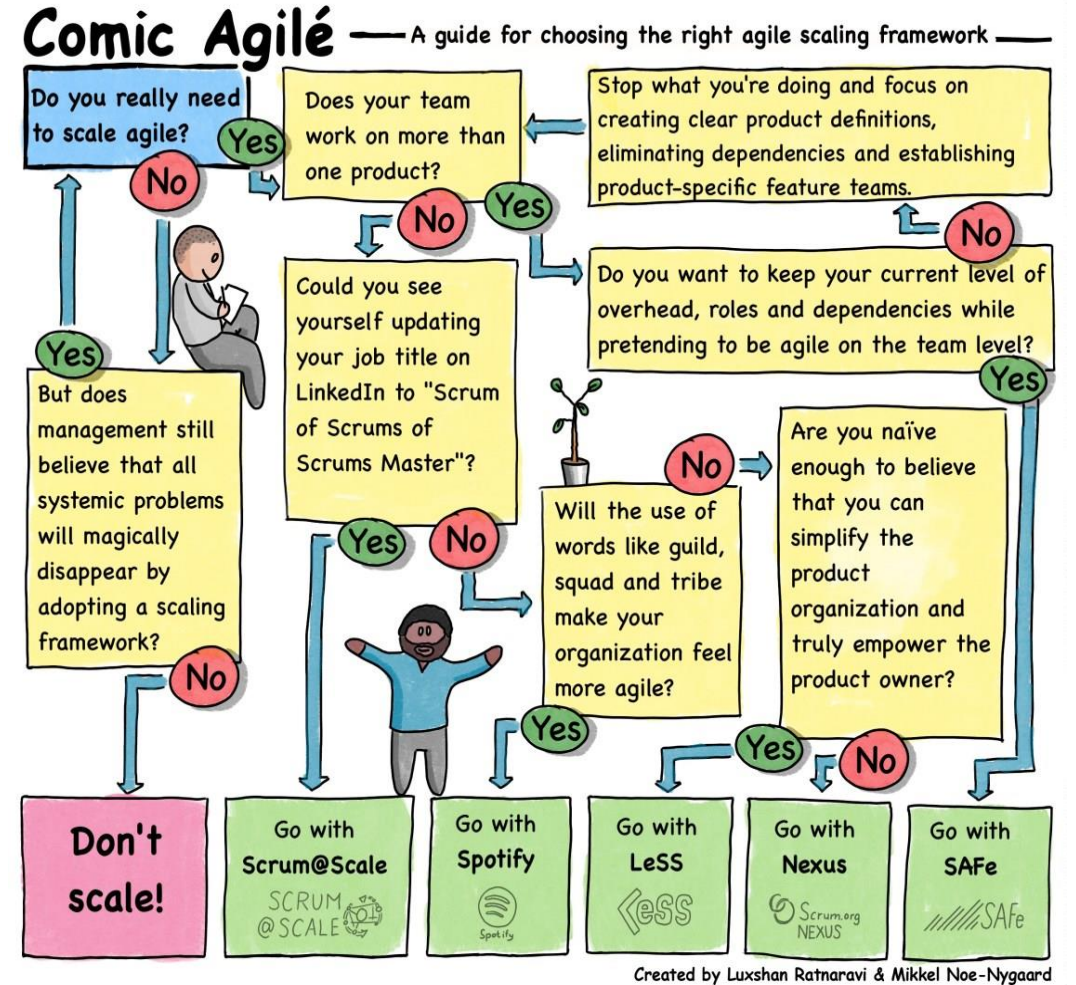


Sources and further reads:

- <https://www.comicagile.net/comic/why-we-run-safe/>

Some tips for introducing SAFe®: If it's over the top, don't do it!

- If SAFe® is over the top don't use it and look for other solutions (e.g., Team Topologies, Flight Levels, Nexus, LeSS or simply a Scrum of Scrums)



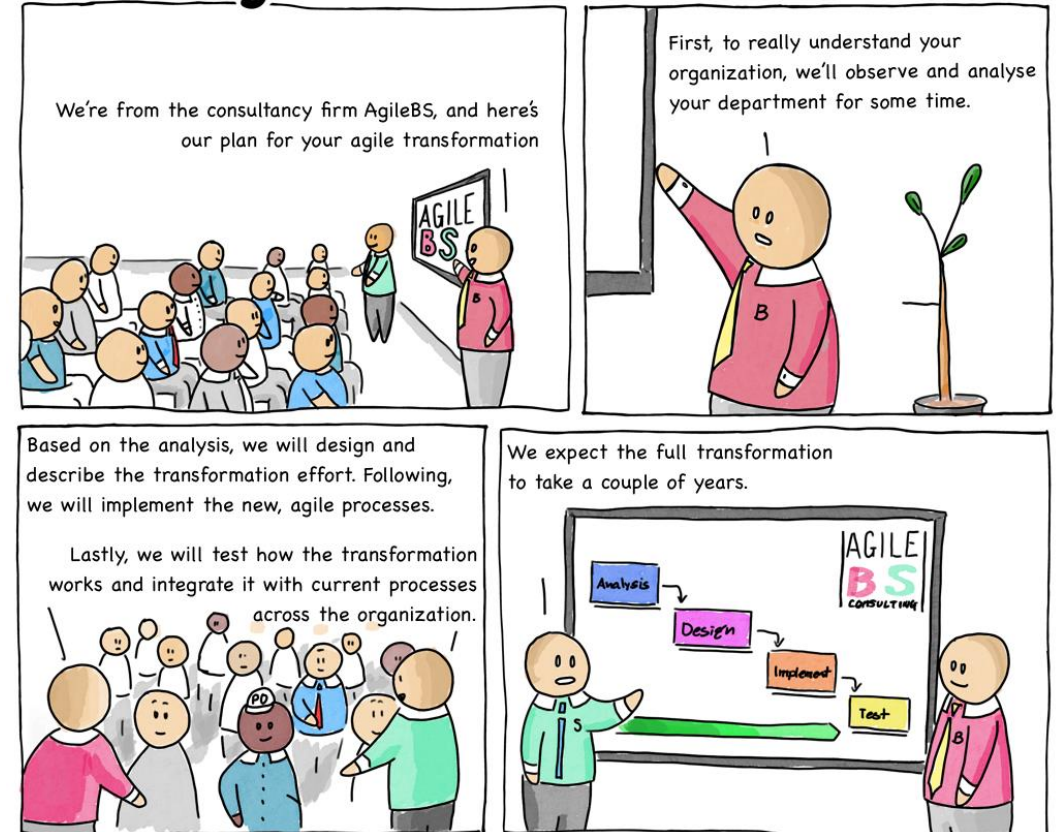
Sources and further reads:

- <https://www.comicagile.net/comic/guide-for-choosing-the-right-agile-scaling-framework/>

Some tips for introducing SAFe®: Take an agile implementation approach

- You cannot know the result of your transformation upfront, so where is the point in having a big upfront planning of it!

Comic Agilé



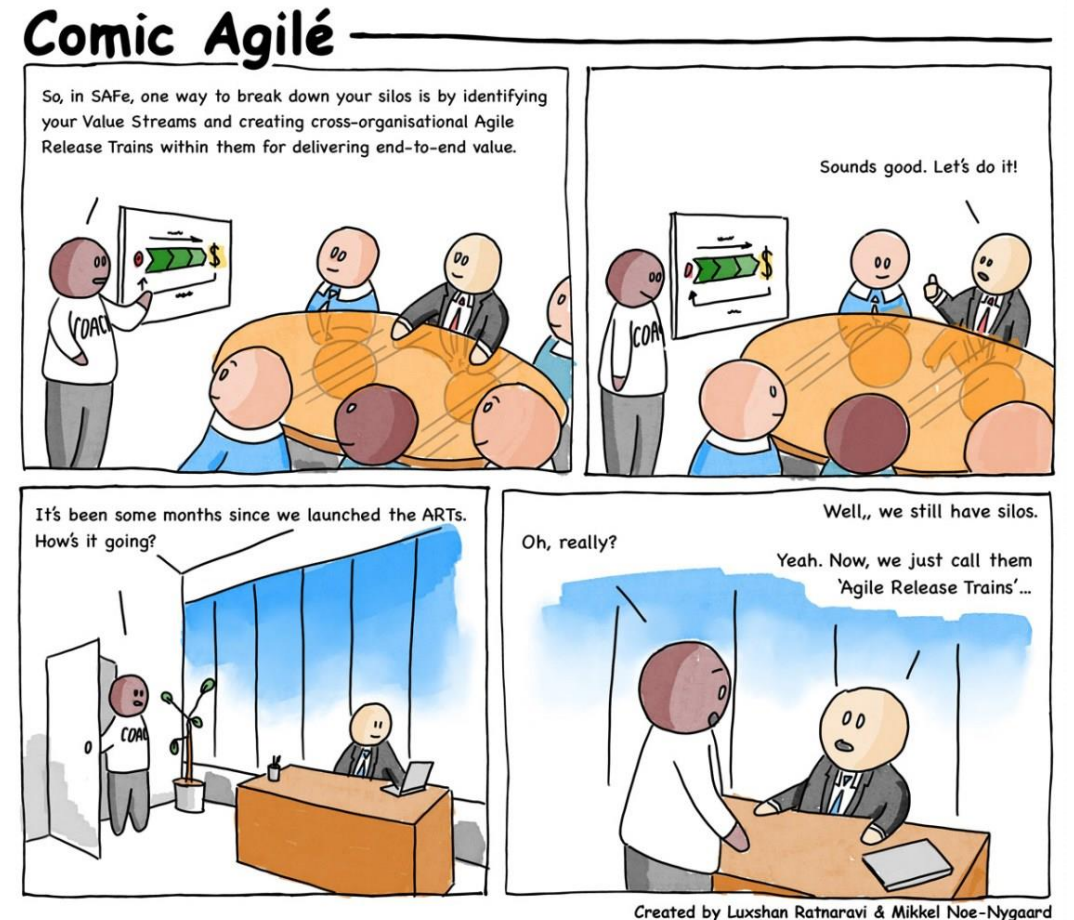
Created by Luxshan Ratnaravi & Mikkel Noe-Nygaard

Sources and further reads:

- <https://www.comicagile.net/comic/the-agile-transformation-plan/>

Some tips for introducing SAFe®: Identify your value streams!

- Identify your operational value streams before creating ARTs to avoid creating new Silos and dependencies in your organization



Sources and further reads:

- <https://www.comicagile.net/comic/silos/>

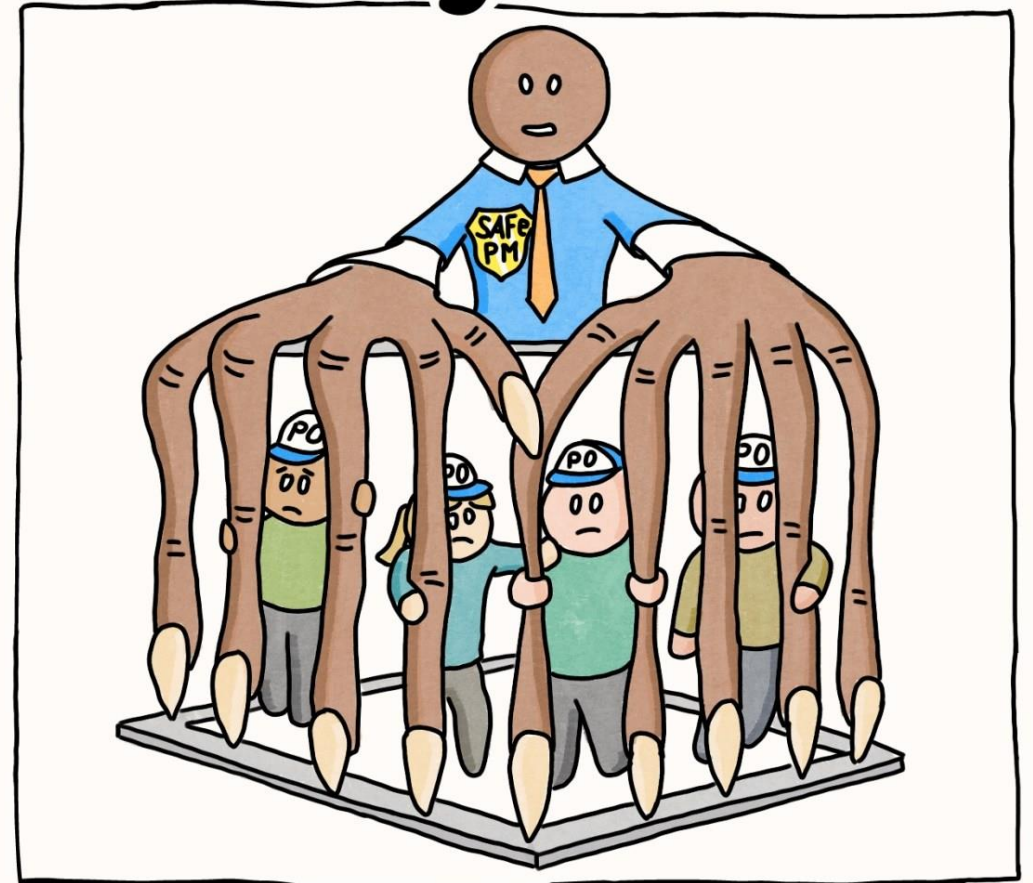
Some tips for introducing SAFe®: Start with the why!

- Be careful in just picking parts of the Framework unless you really know what to do: This might end in unwanted behaviors and results. (E.g., just implementing a Product Management on top of your Product Owners might limit empowerment of the POs without really gaining any benefits)

Sources and further reads:

- <https://www.comicagile.net/comic/agile-pm/>

Comic Agilé www.comicagile.net



Created by Luxshan Ratnaravi & Mikkel Noe-Nygaard

Some tips for introducing SAFe®: Form one guiding coalition!

- Form **one** guiding coalition which oversees and drives the transition. (Lean Agile Center of Excellence)

Sources and further reads:

- <https://www.comicagile.net/comic/lace/>



Some tips for introducing SAFe®: SAFe® is not the holy grail!

- Relentless improvement might also mean moving away from SAFe® and descale once your organization reached a certain maturity and you eliminated enough dependencies.

Comic Agilé



Sources and further reads:

- <https://www.comicagile.net/comic/motivation-for-descaling/>

Thank you for your attention!

Oliver Diller

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Smart Infrastructure - IT Excellence

Mobile: +49 (173) 2505708

E-mail: oliver.diller@siemens.com

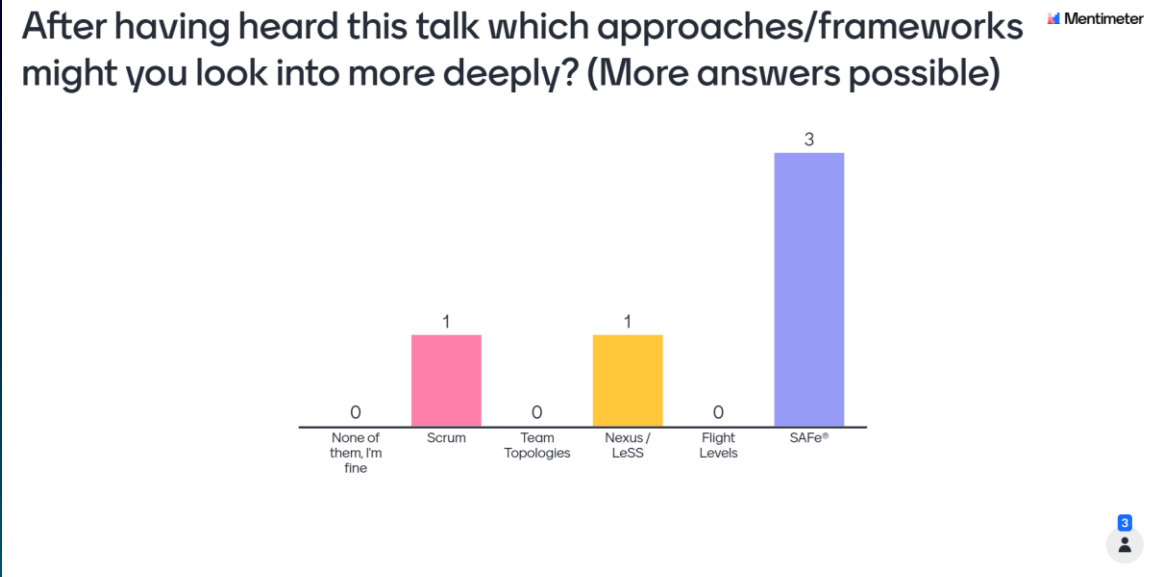
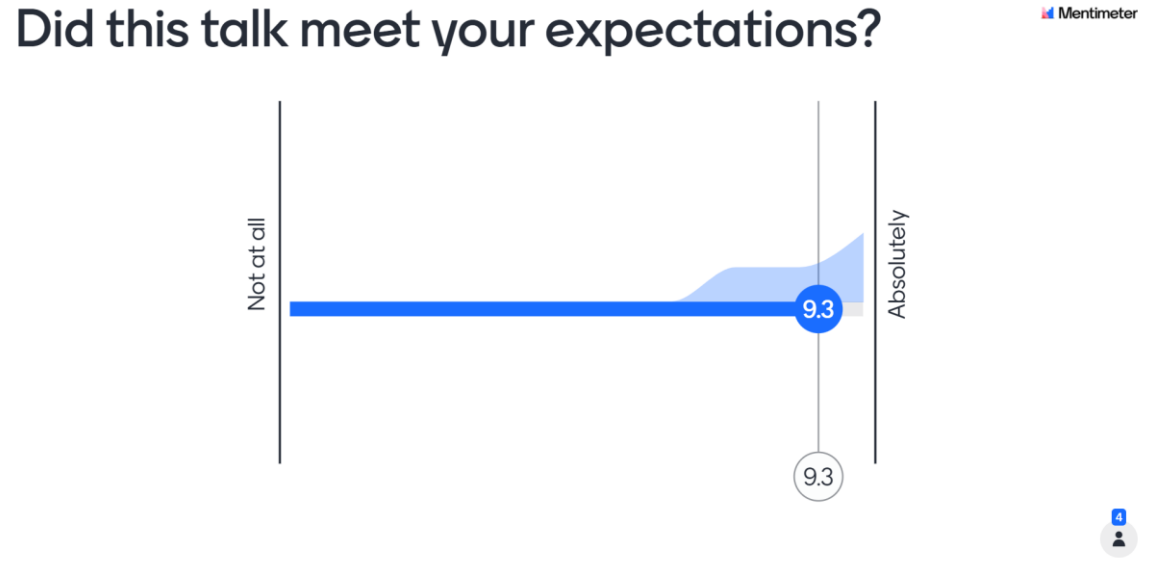
LinkedIn: <https://www.linkedin.com/in/oliver-diller/>

Connect with me to learn more about our
upcoming Agile Conference in March 2022



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How did you like the talk?



Questions and answers

