

Growing More Agile with **LeSS**

A short introduction to Large-Scale Scrum
April 2015

with Rowan Bunning, CST



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Thanks to Craig and Bas for sharing these and other diagrams at less.works

Rowan Bunning

Scrum WithStyle Pty Ltd



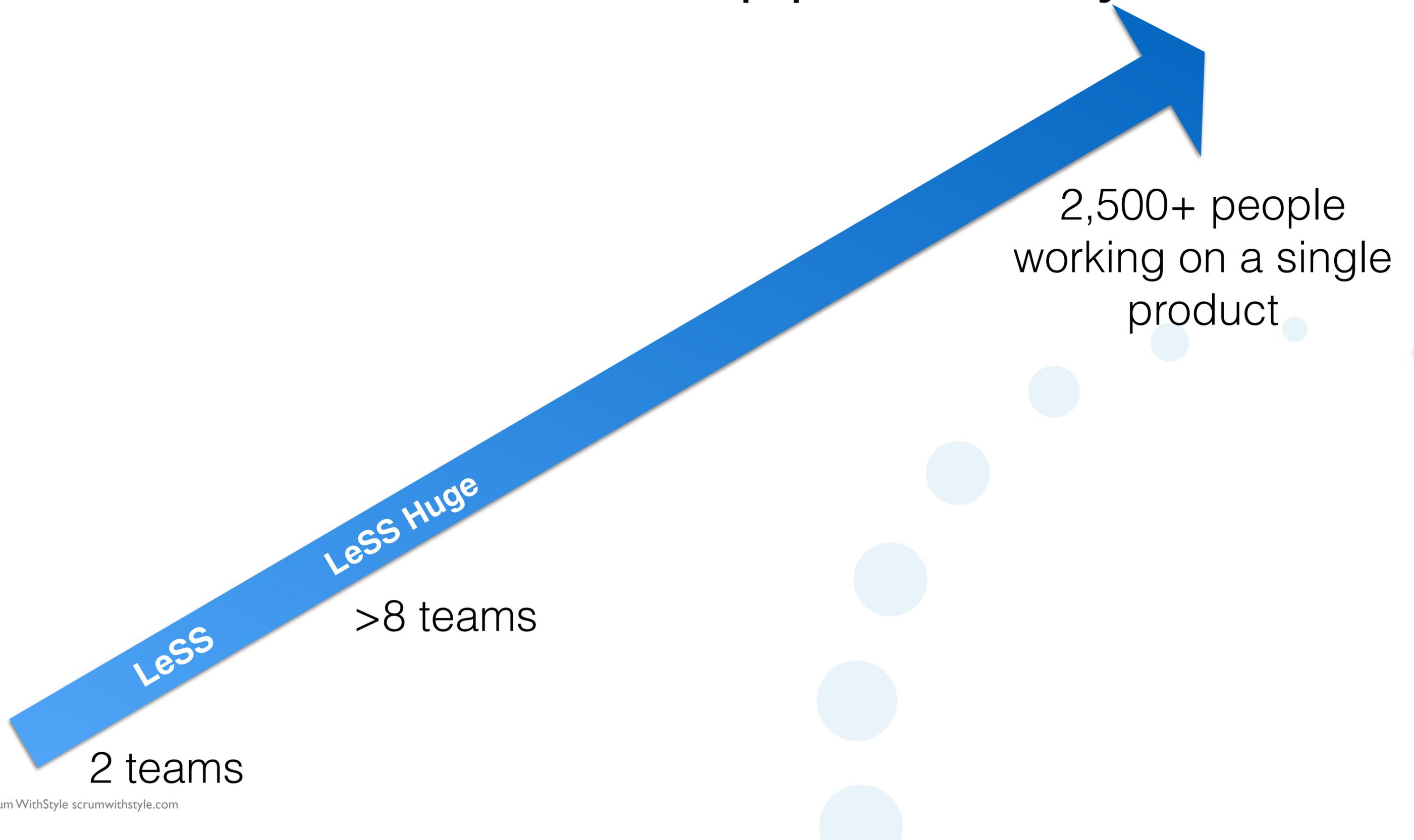
- Background in object oriented & web dev. with vendors, enterprise product development, start-ups & consultancies
- Introduced to Agile via eXtreme Programming in 2001 as: “the way good Smalltalkers develop software”
- Introduced Scrum organisation-wide in 2003-4
- Agile Coach / ScrumMaster at a leading agile consultancy in the U.K.
- Have trained approx. 3,000 people in Scrum & Agile
 - Certified ScrumMaster®
 - Certified Scrum Product Owner®
 - Effective User Stories
 - Agile Estimating and Planning etc.
- Agile Coach in Australia since late 2008
- Organiser of Regional Scrum Gatherings® in Australia





Who has 2 or more teams working on the same product / project / program?

LeSS has broad applicability



Session Outline

- A scaling story
- What is LeSS?
- LeSS in action
- LeSS structure
- Q&A

A scaling story...

London, England 2007-8

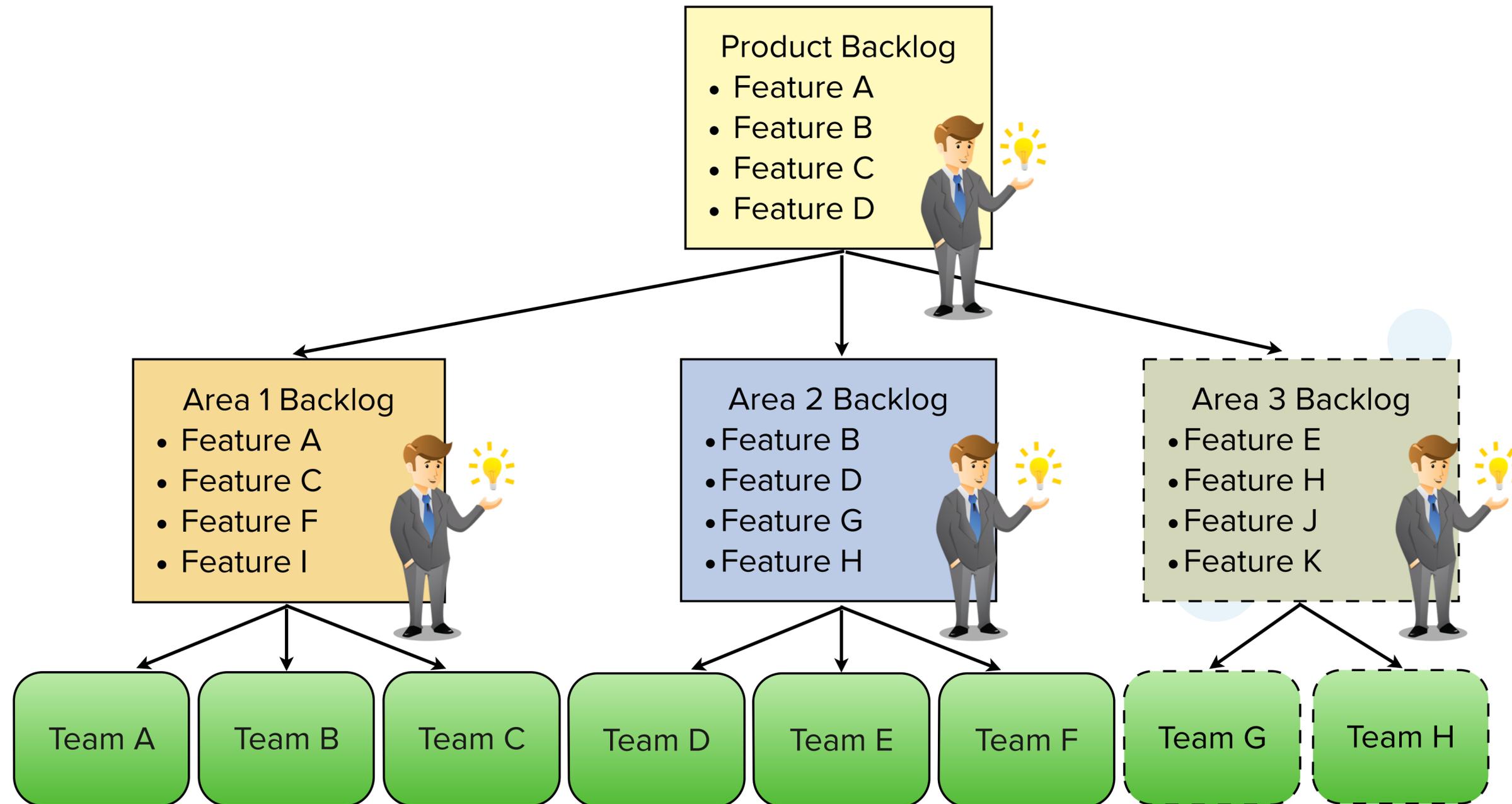
The challenge in 2007-8

- Operating in 43 countries
- Require a globally unified CRM order management system with real time customer data
- Business Process Re-engineering heavy
- Siebel, Oracle Fusion, Mainframe, OLAP and Business objects
- Had spent several years and £_____ Million on failed attempts that delivered nothing of value using waterfall-style predictive processes

We succeeded using scaled-up Scrum

- 25,000 hours of development and test effort
- Added 1 new Scrum team per month to...
- 160 people in delivery
- 5 different locations (UK x2 , India x2 and Russia)
- 5 different vendors
- Production release cycle reduced to *7 weeks* (4 of these were in Sprint)
- £20m for two major functional releases and a new middleware layer infrastructure component
- *“the best relationship between a project and the business community I have ever seen”* - senior stakeholder

Scaled-up Scrum



Scaling patterns used in 2007-8

- Single overall Product Backlog
- Areas split down lines of least dependency
- Feature teams
- Single Sprint
- Simultaneous Backlog Refinement
- Big room Sprint Planning
- Common development standards
- Multi-team continuous integration
- Common Definition of Done
- Whole product Sprint Review
- Offshore-onshore rotation

Q: What makes scaling-up Agile difficult?

A: Organisational design flaws (in comparison to Agile and Lean principles)

The organisation was not designed with Agile and Lean principles in mind.

Traditional organisations become more complicated over time.

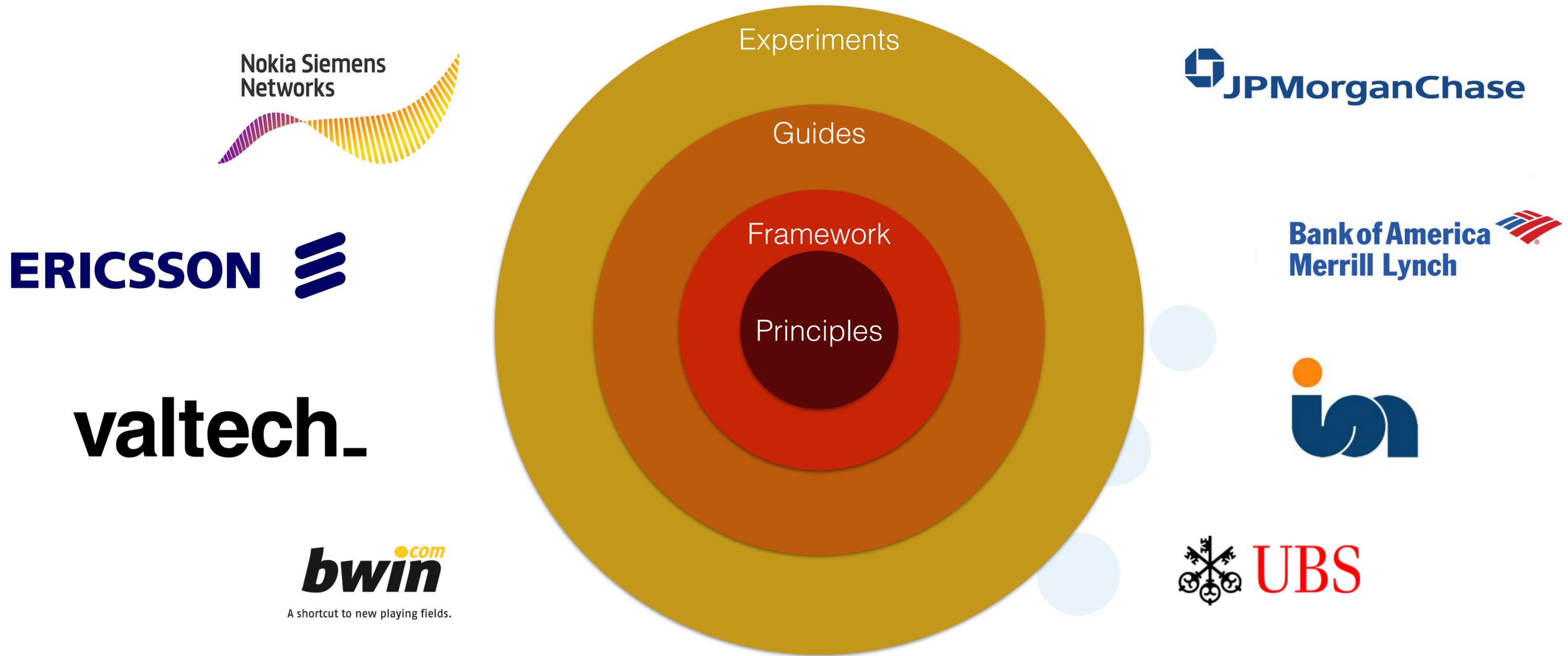
Large product development groups typically feature...

- Functional groups
- Big batches
- Sequential processes
- Weak feedback loops
- Lots of handoffs

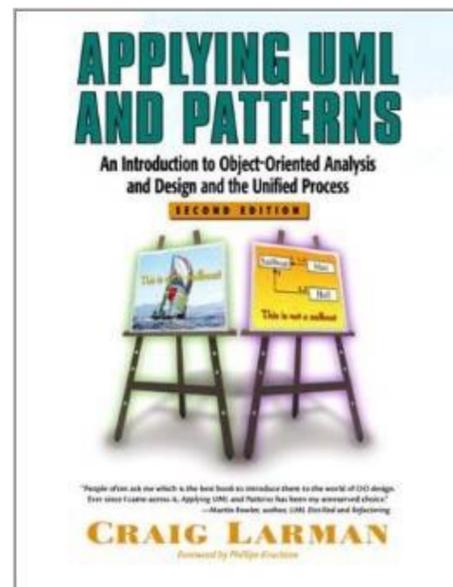
What is LeSS?

Large-Scale Scrum

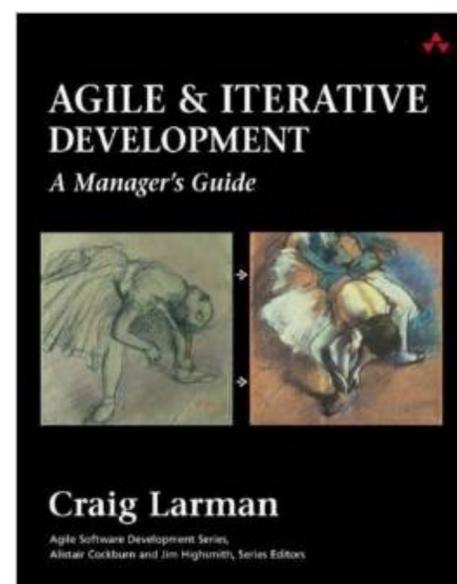
LeSS is based on 10+ years of real-world experiments



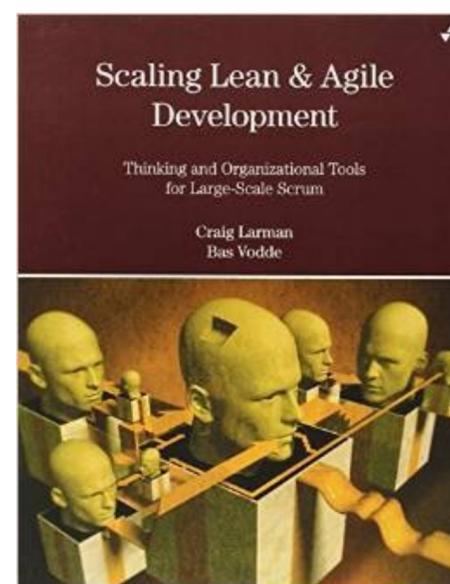
Books



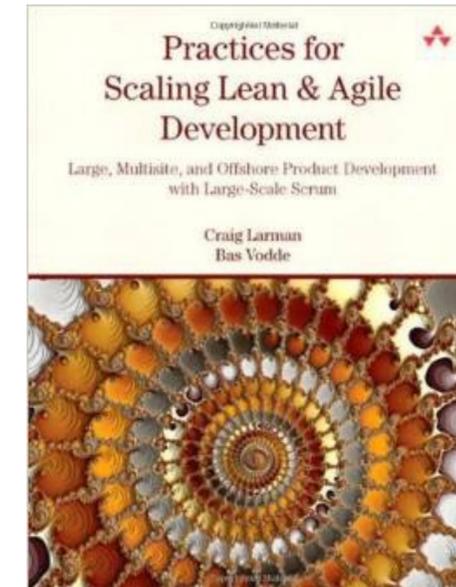
1995



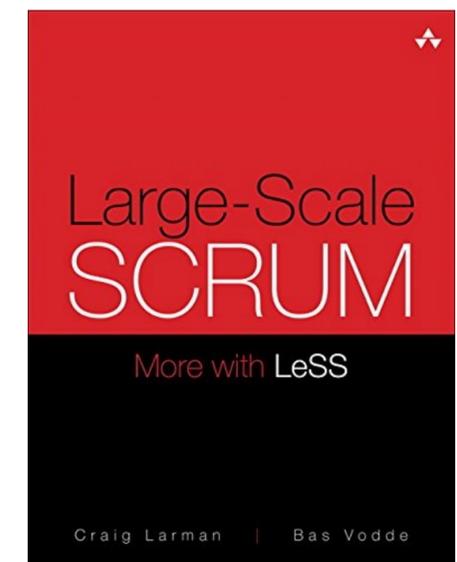
2003



2008



2010



Sept 2015

First LeSS course in Australia

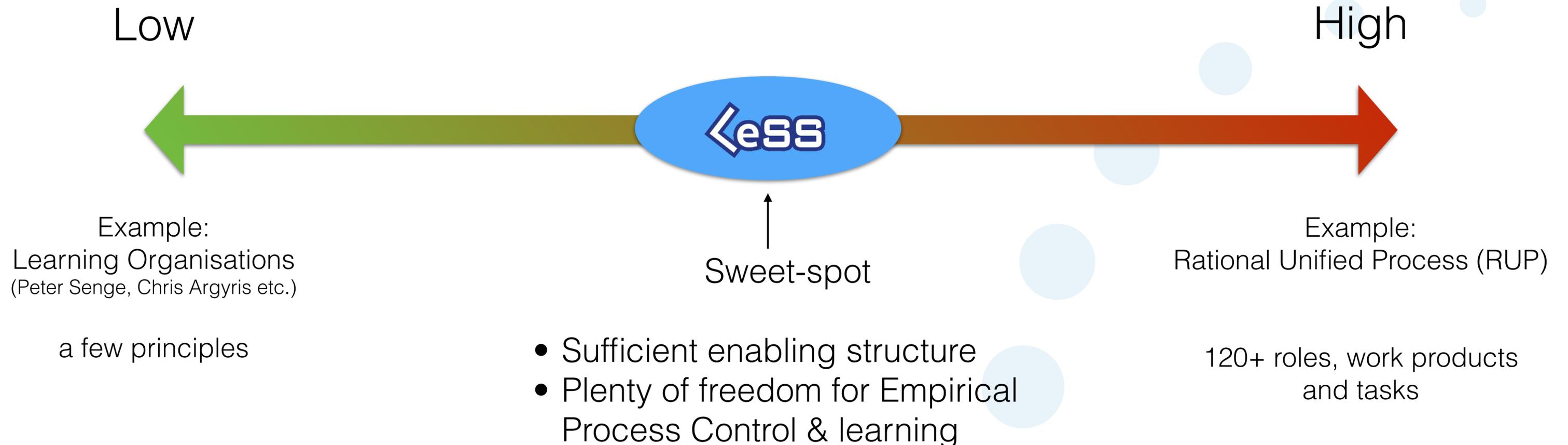


Prescriptiveness

How detailed, complicated and fully-defined a framework is

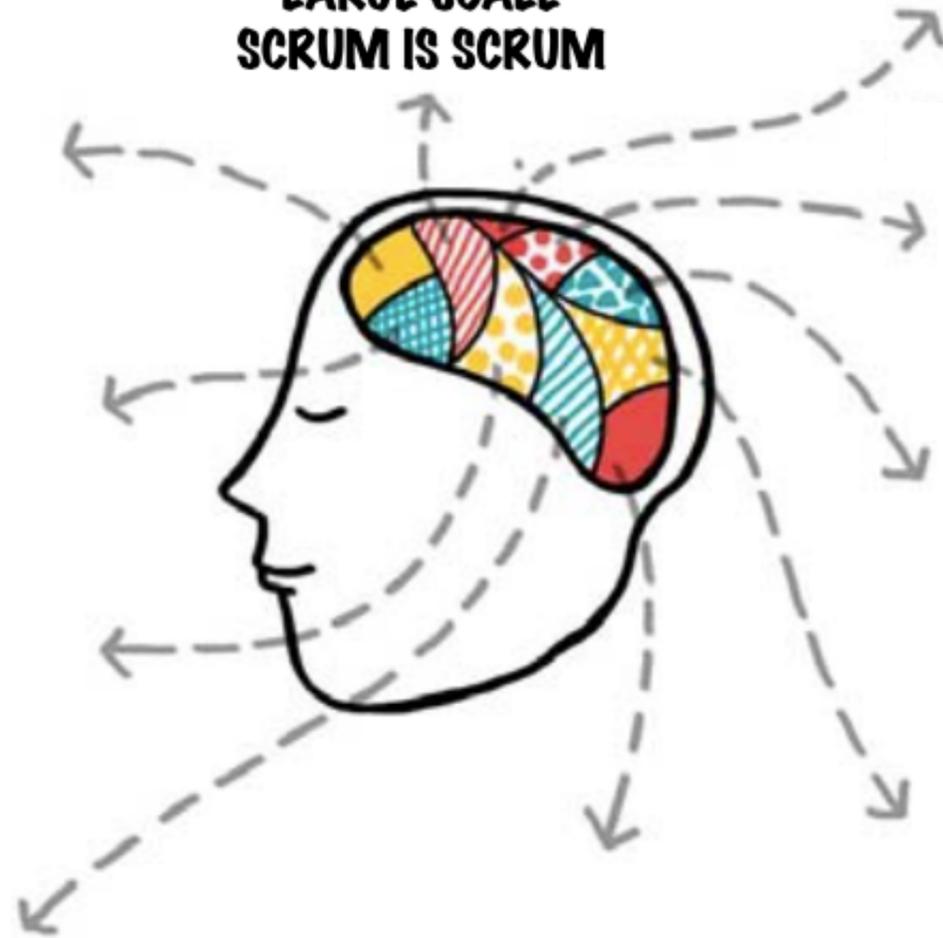
- Not enough that is concrete to know what to do
- Easy to 'fake-it'

- Not contextual enough
- Over-specification makes it difficult for org. learning
- In practice, leads to method bloat

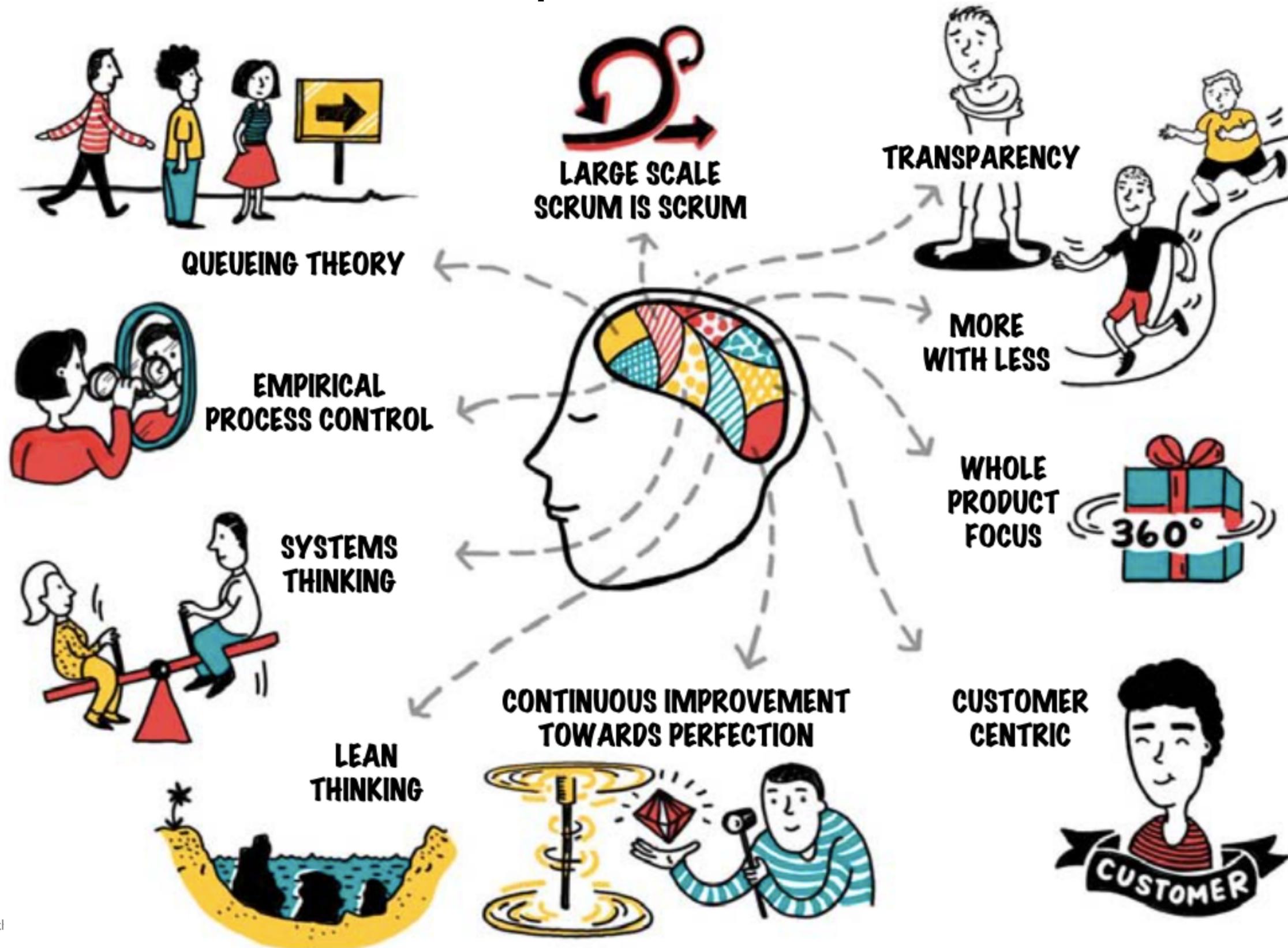




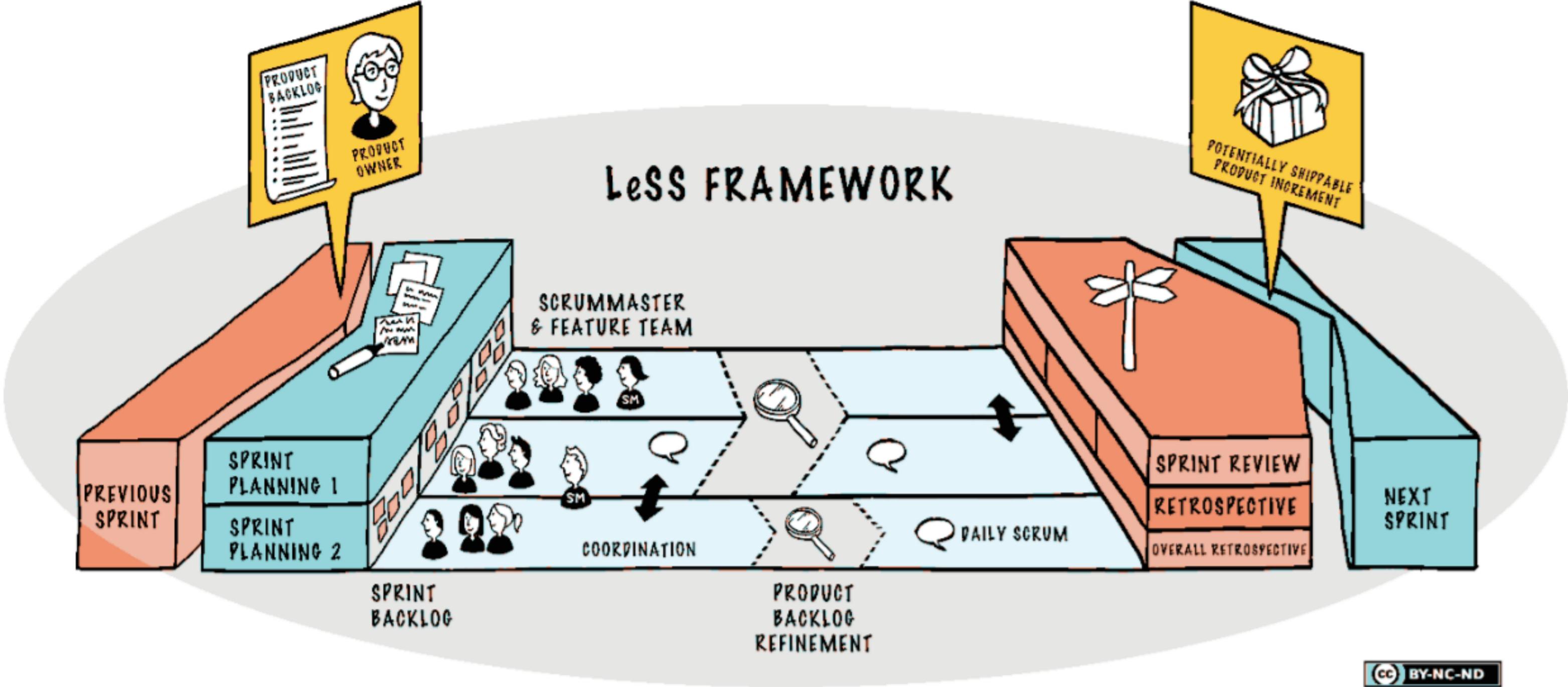
**LARGE SCALE
SCRUM IS SCRUM**



LeSS Principles and Themes



One Product, One Sprint, One 'Done', Many Teams



LeSS in Action

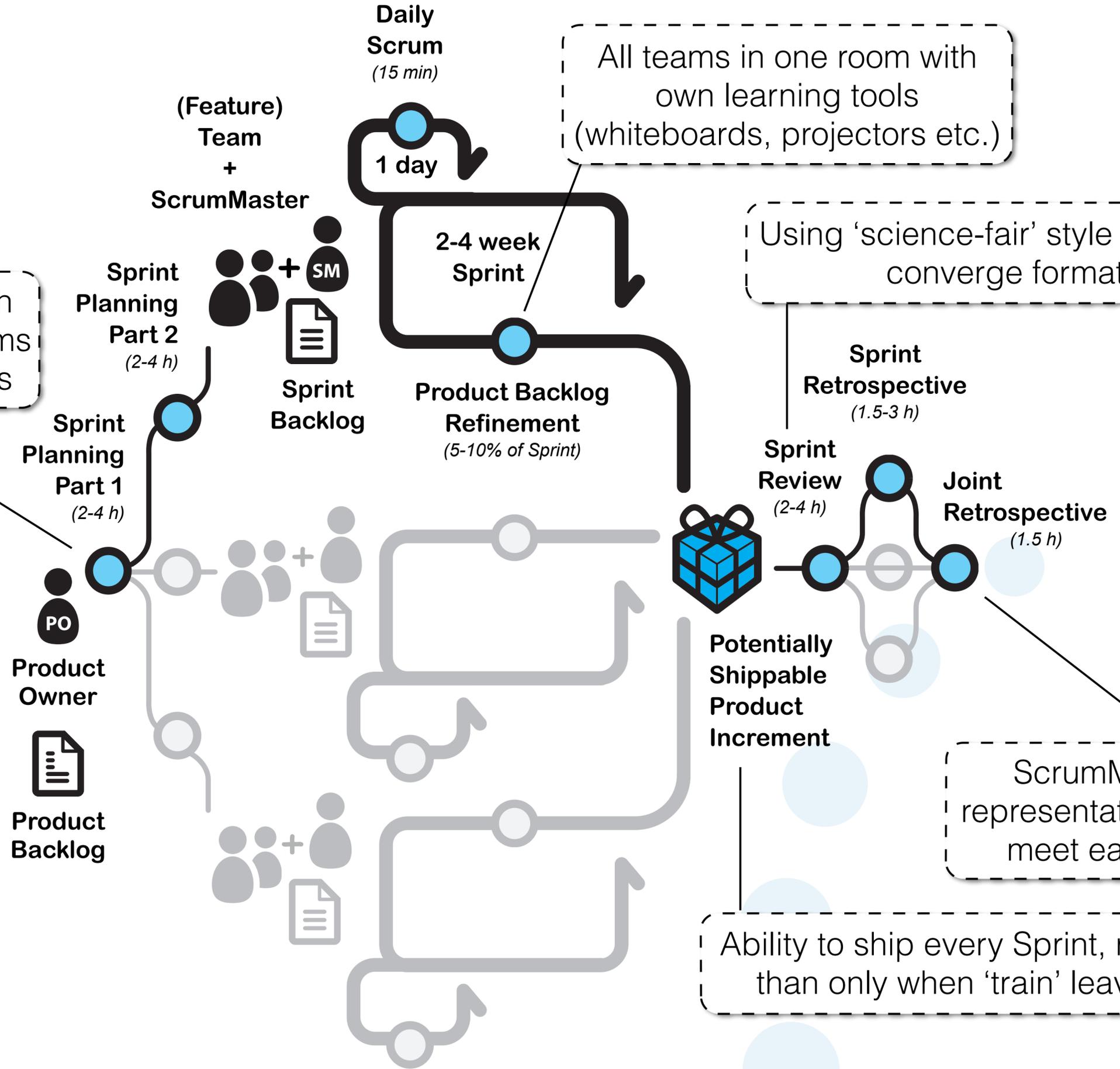
Representatives from each team decide division of Items and identify dependencies

All teams in one room with own learning tools (whiteboards, projectors etc.)

Using 'science-fair' style diverge - converge format

ScrumMasters and one representative from each team meet early in next Sprint

Ability to ship every Sprint, rather than only when 'train' leaves



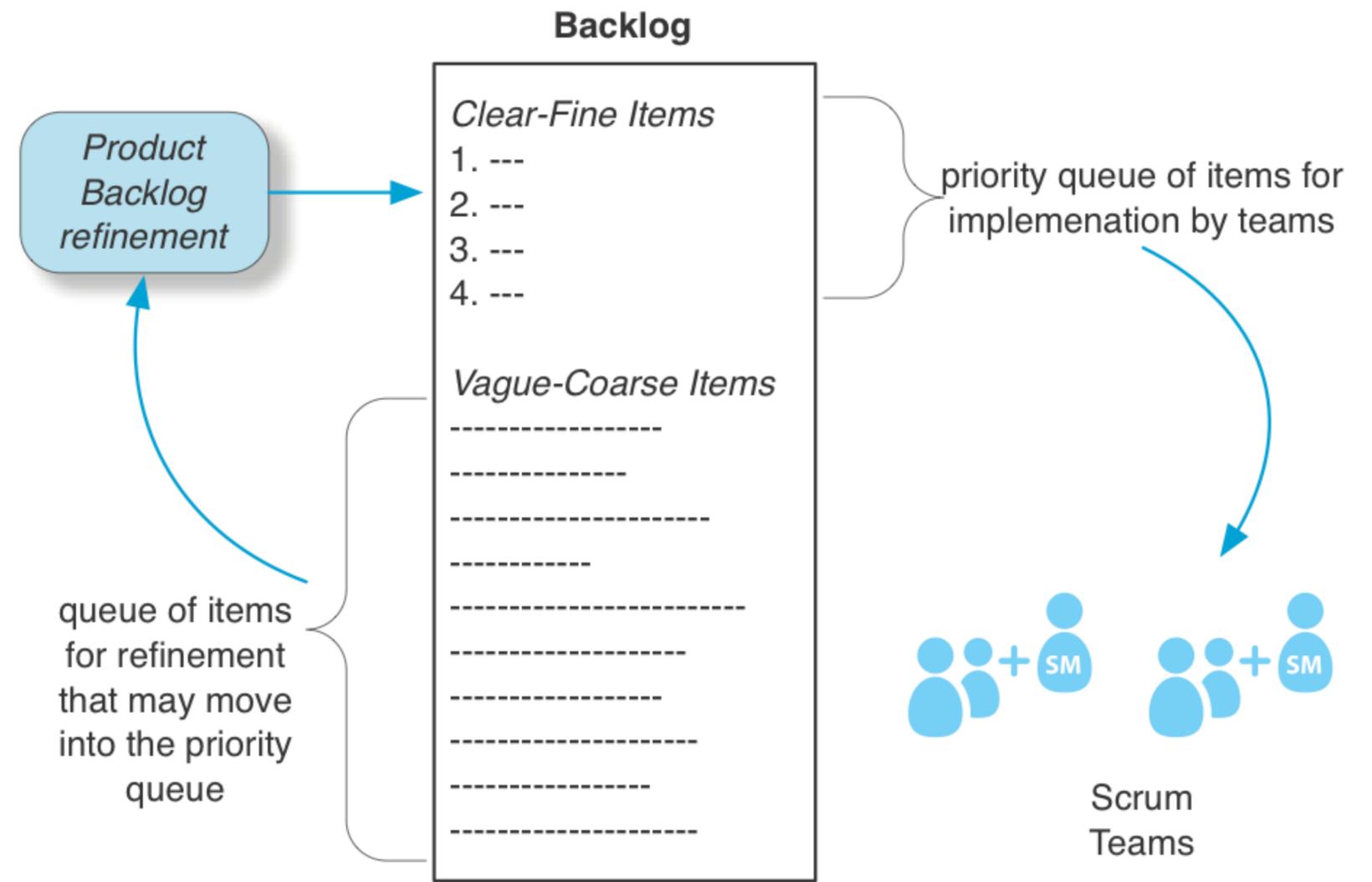
LeSS Structure

Real Teams, Feature Teams

The 8 team tipping point

Why up to 8 teams?

$$\frac{100 \text{ Ready Backlog Items}}{4 \text{ per Sprint} \times 3 \text{ Sprints}} \approx 8 \text{ teams}$$



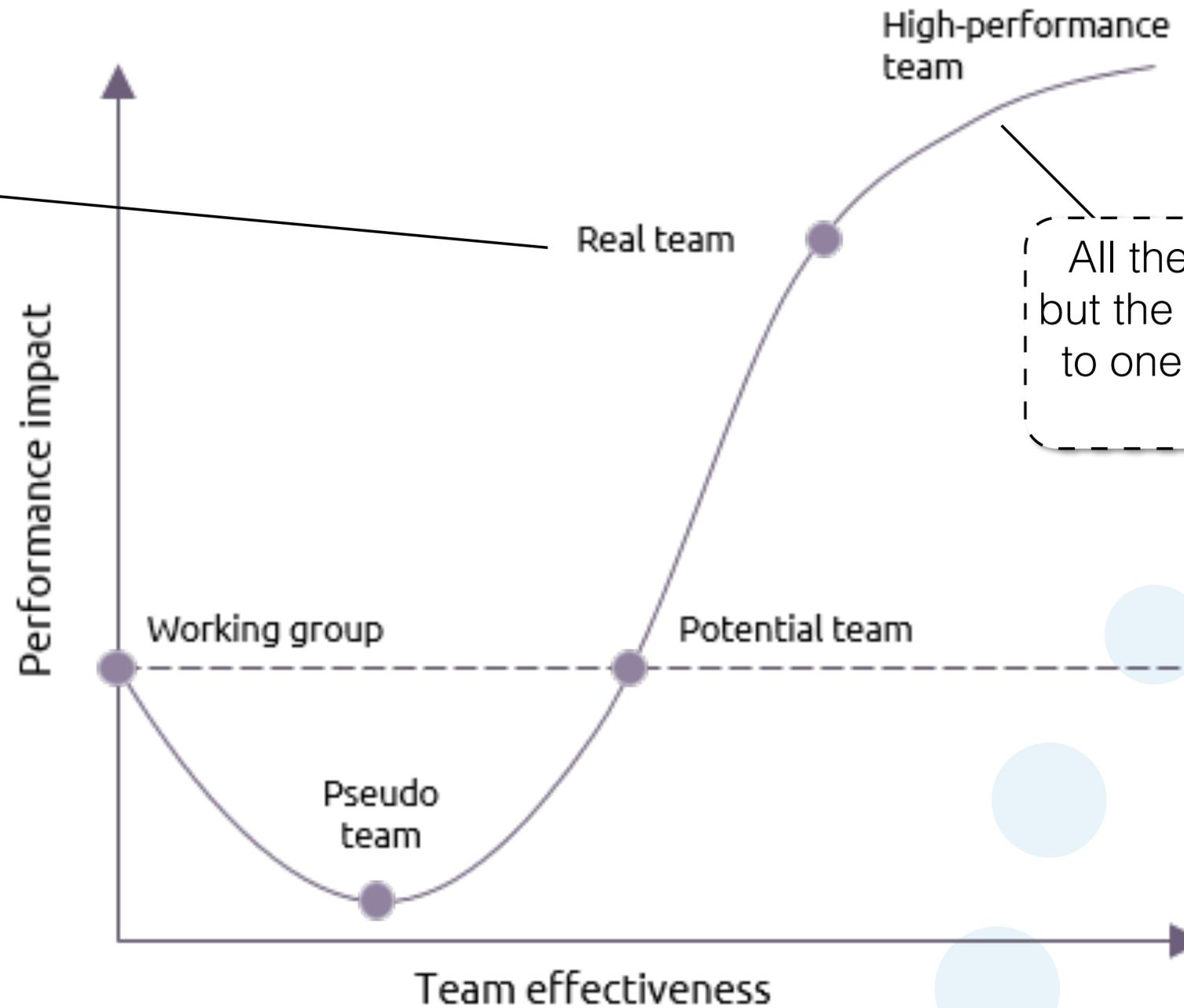
Types of teams

Setting overall direction					
Designing the team and its organizational context	Management Responsibility				
Monitoring and managing work process and progress		Team's Own Responsibility			
Executing the team task					
	Manager-led teams	Self-Managing teams	Self-Designing teams	Self-Governing teams	

Reference: J. Richard Hackman (2002) *Leading Teams: Setting the Stage for Great Performances*

Real teams

Equally committed to a common purpose, goals, and working approach for which they hold themselves mutually accountable.



All the characteristics of a real team, but the members are deeply committed to one another's personal growth and development

Reference: Katzenbach, J. R. and Smith, D.K. (1993), *The Wisdom of Teams: Creating the High-performance Organisation*, Harvard Business School, Boston.

- Teams Have**
- shared work product
 - interdependent work
 - shared responsibility
 - set of working agreements
 - responsibility for managing the outside-the-team relationships
 - distributed leadership

- Feature Teams Are**
- long-lived—the team stays together so they can ‘jell’ for higher performance; they take on new features over time
 - cross-functional and cross-component
 - co-located
 - working on a complete customer-centric feature, across all components and disciplines
 - composed of generalizing specialists
 - in Scrum, typically composed of 7 ± 2 people

Large-scale Scrum Teams

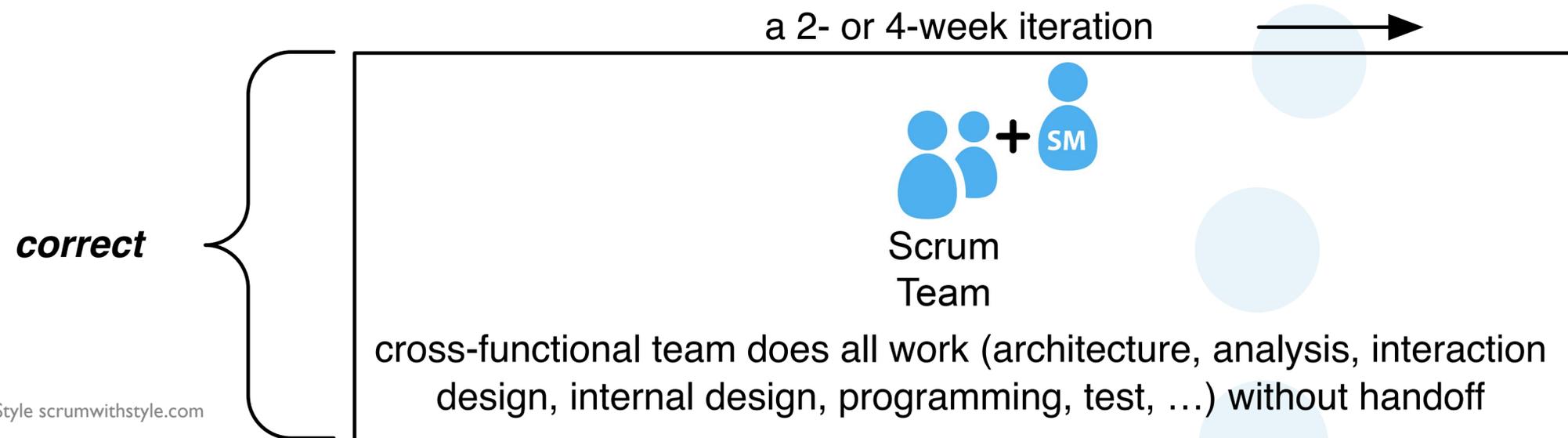
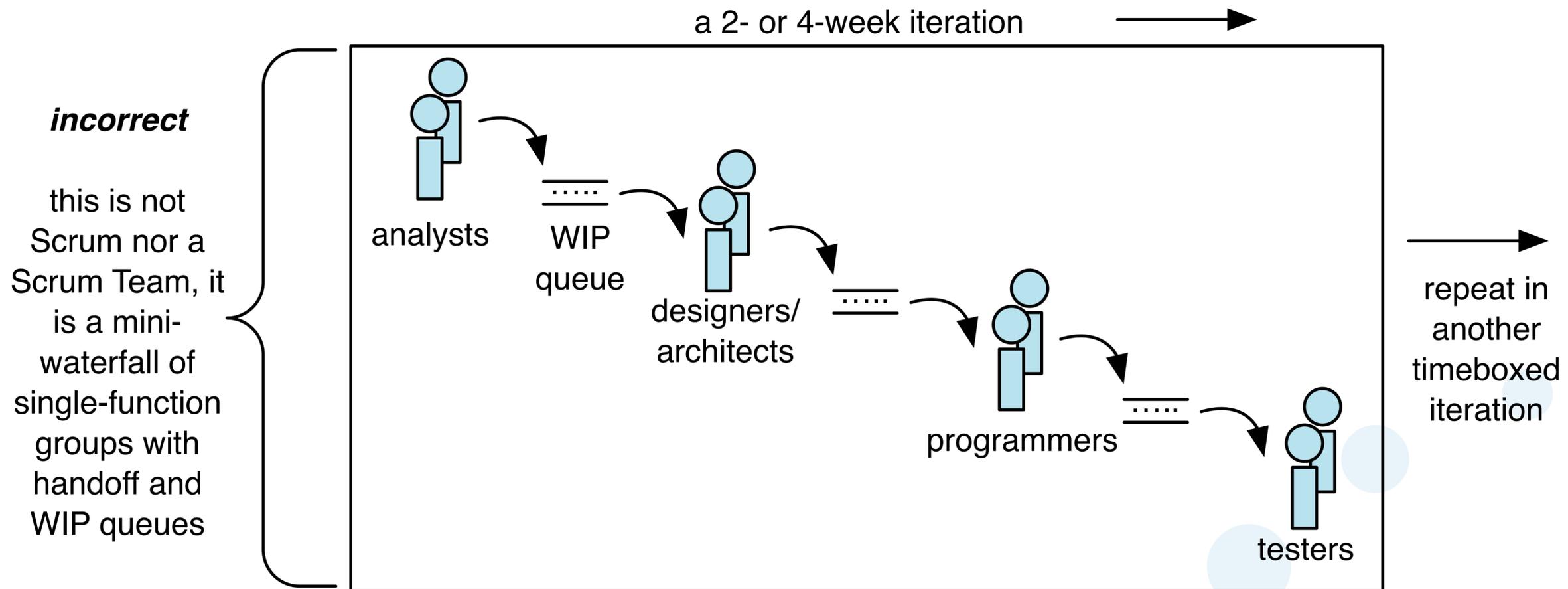
- Cross-functional**
- variety of skills and functions
 - cross-functional learning
 - multi-skilled workers
 - responsibility for the whole – no handoff

- Self-organizing**
- make own decisions
 - have the authority to execute their task and to monitor and manage their work process and progress - autonomy
 - are cross-functional
 - need a challenging performance goal

- Long-lived and Dedicated**
- long-term team commitment of members and organization
 - full-time members

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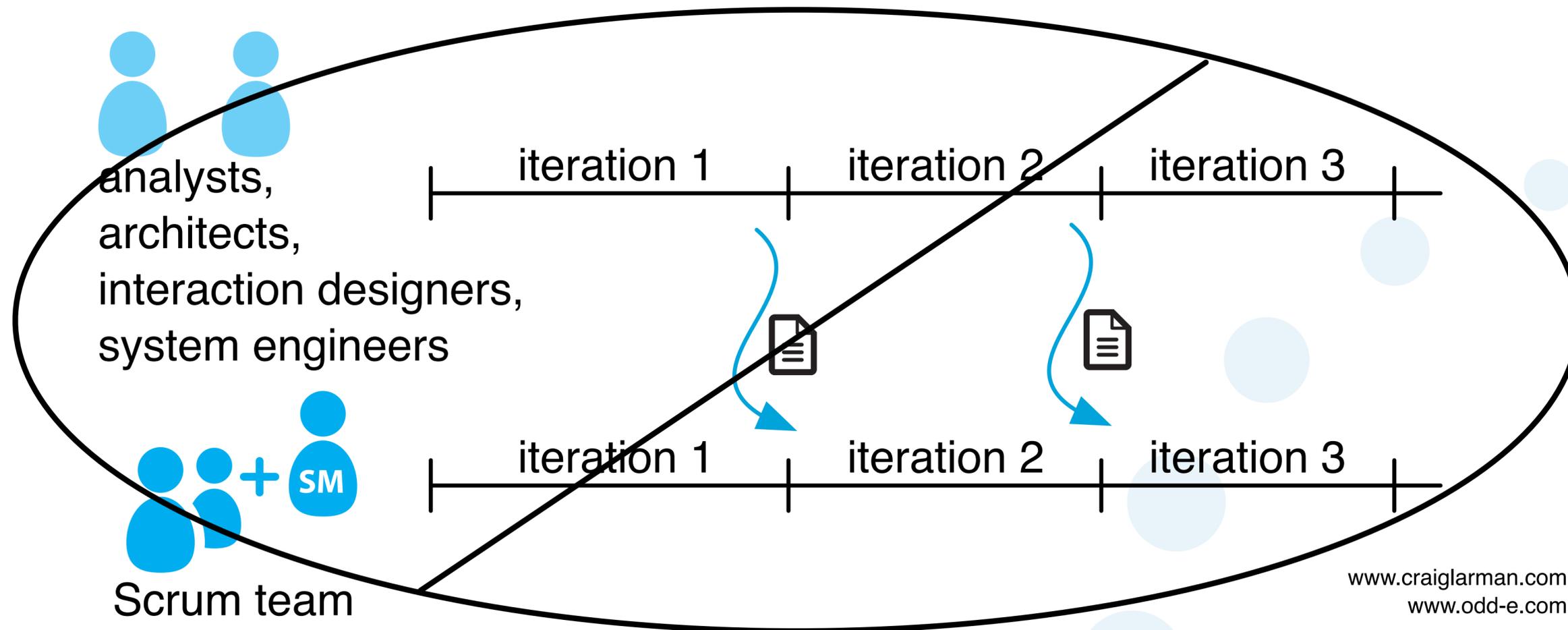
Avoid single-function groups



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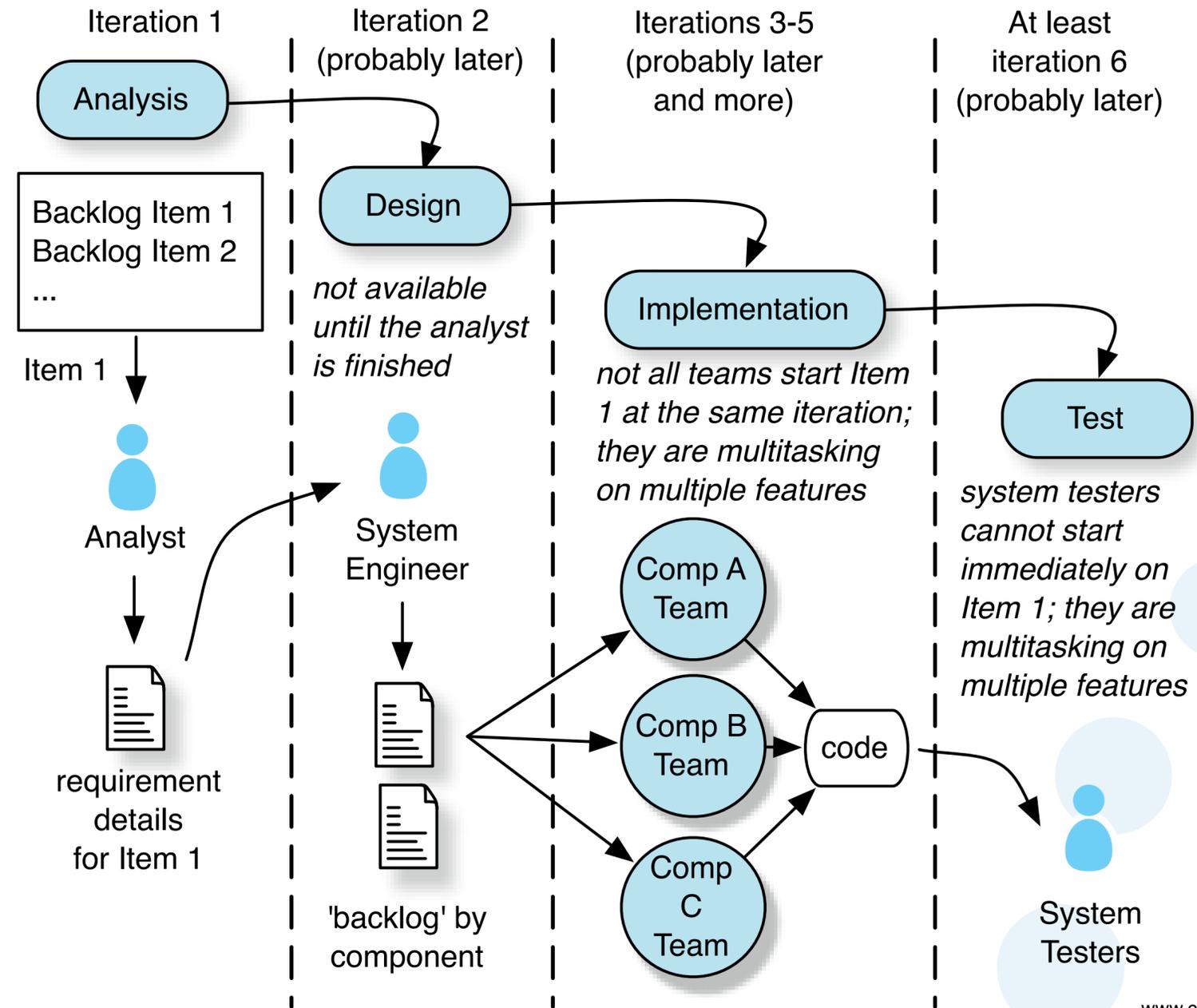
Avoid specifiers working separately ahead of the team



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Component teams lead to waterfall

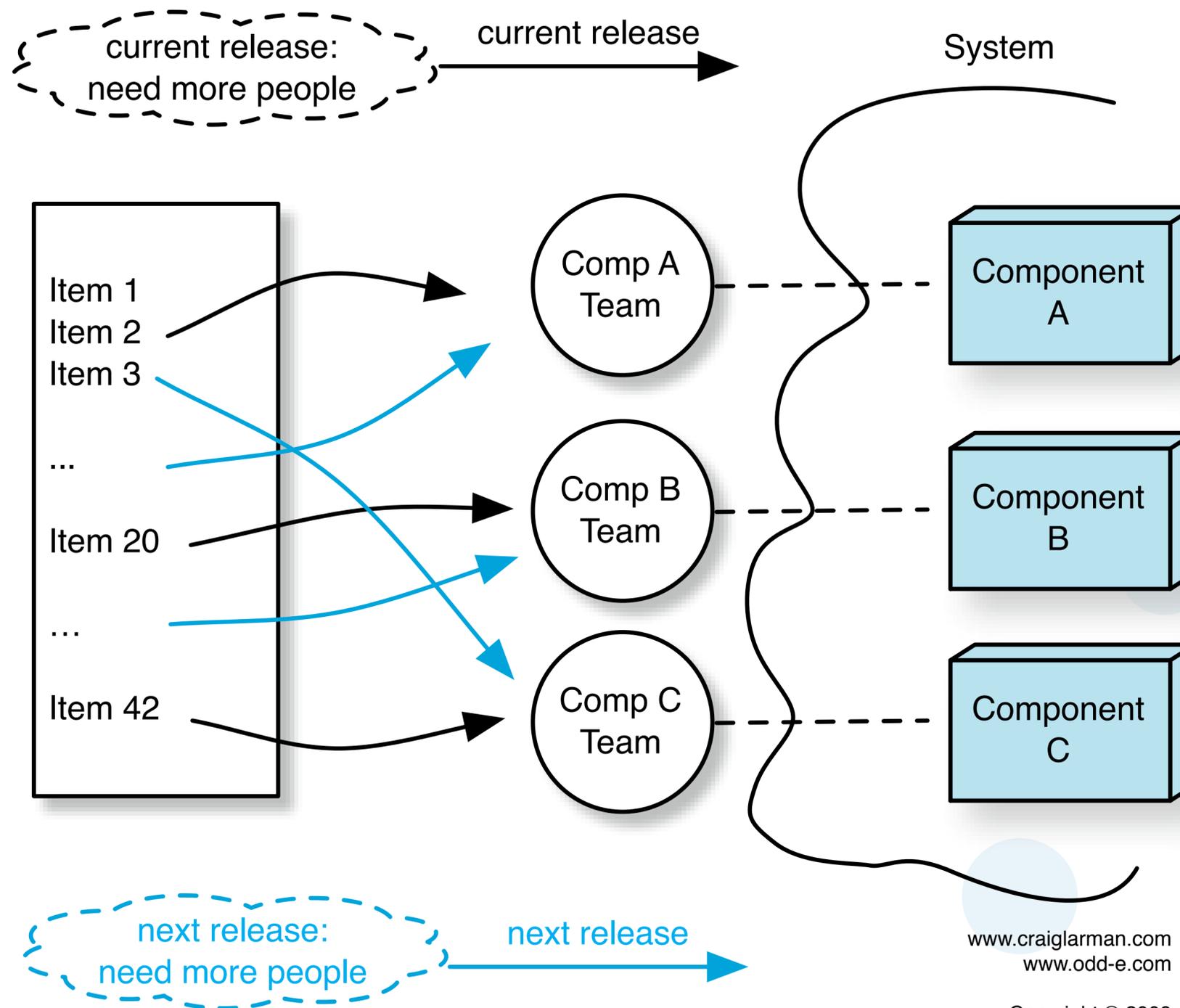


Component teams lead to a sequential life cycle with handoff, queues, and single-specialist groups and not true cross-functional teams without handoff.

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Component teams lead to planning complexity



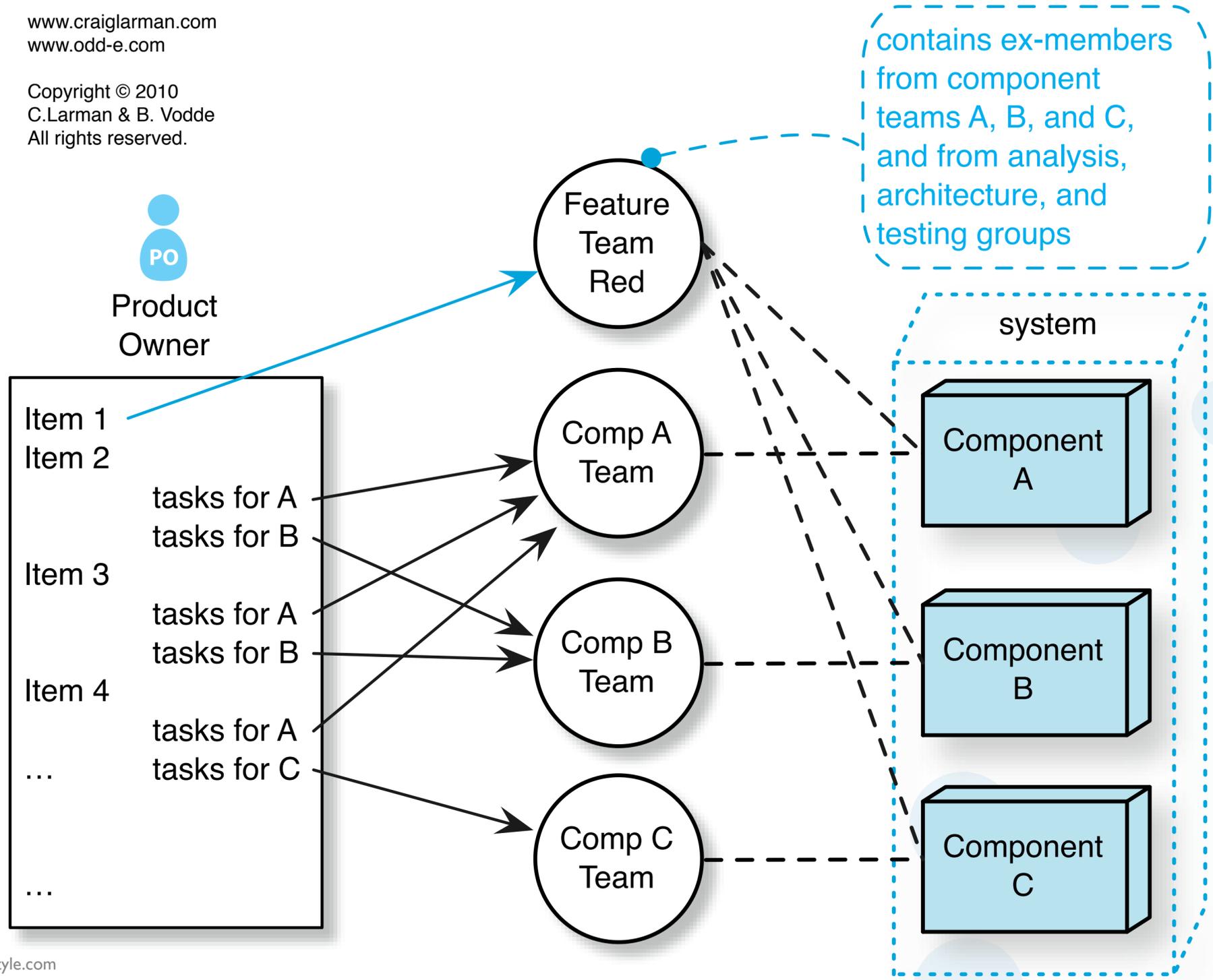
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Feature-teams are multi-component

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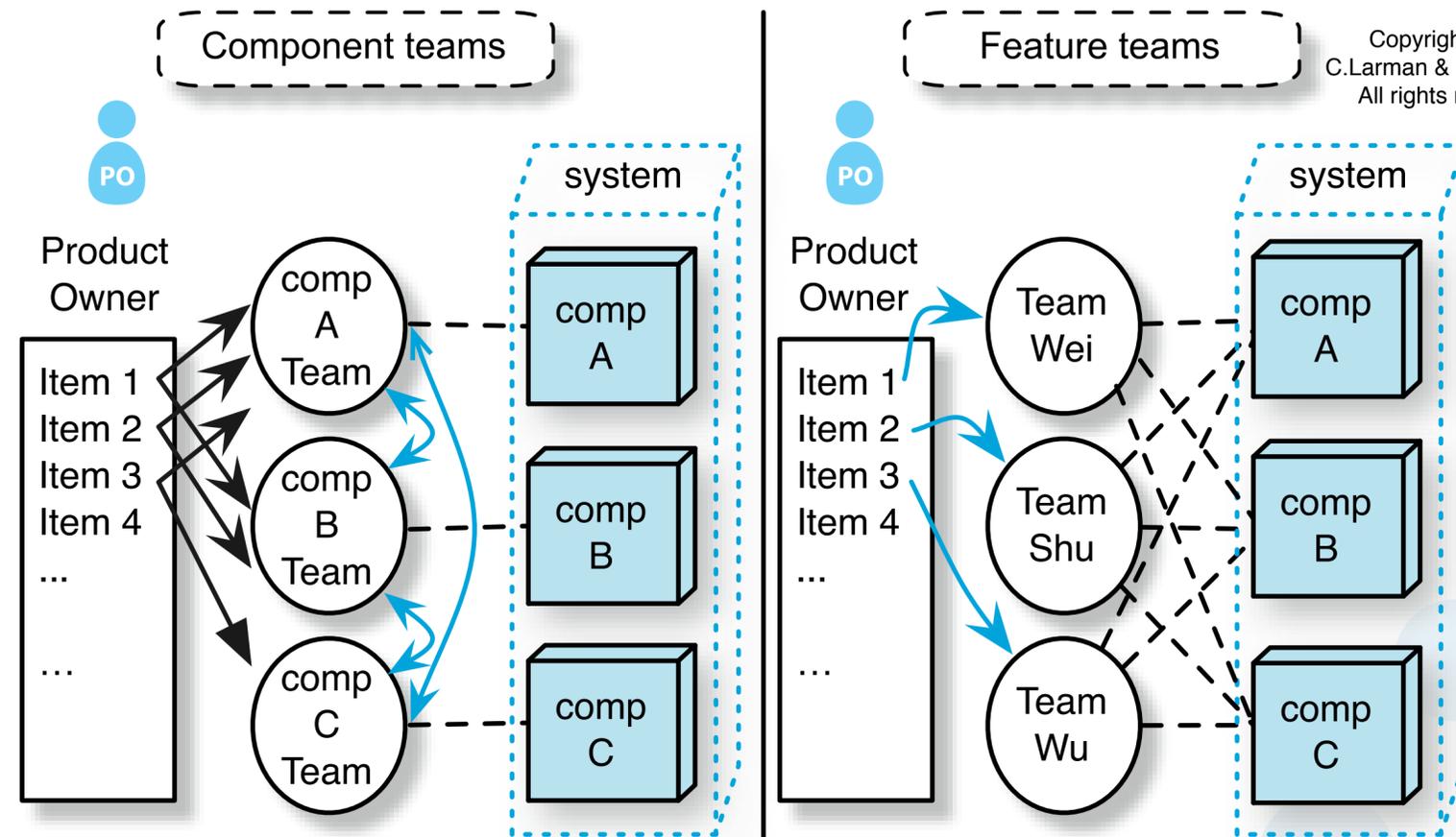
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Dependencies are pushed from planning to integration

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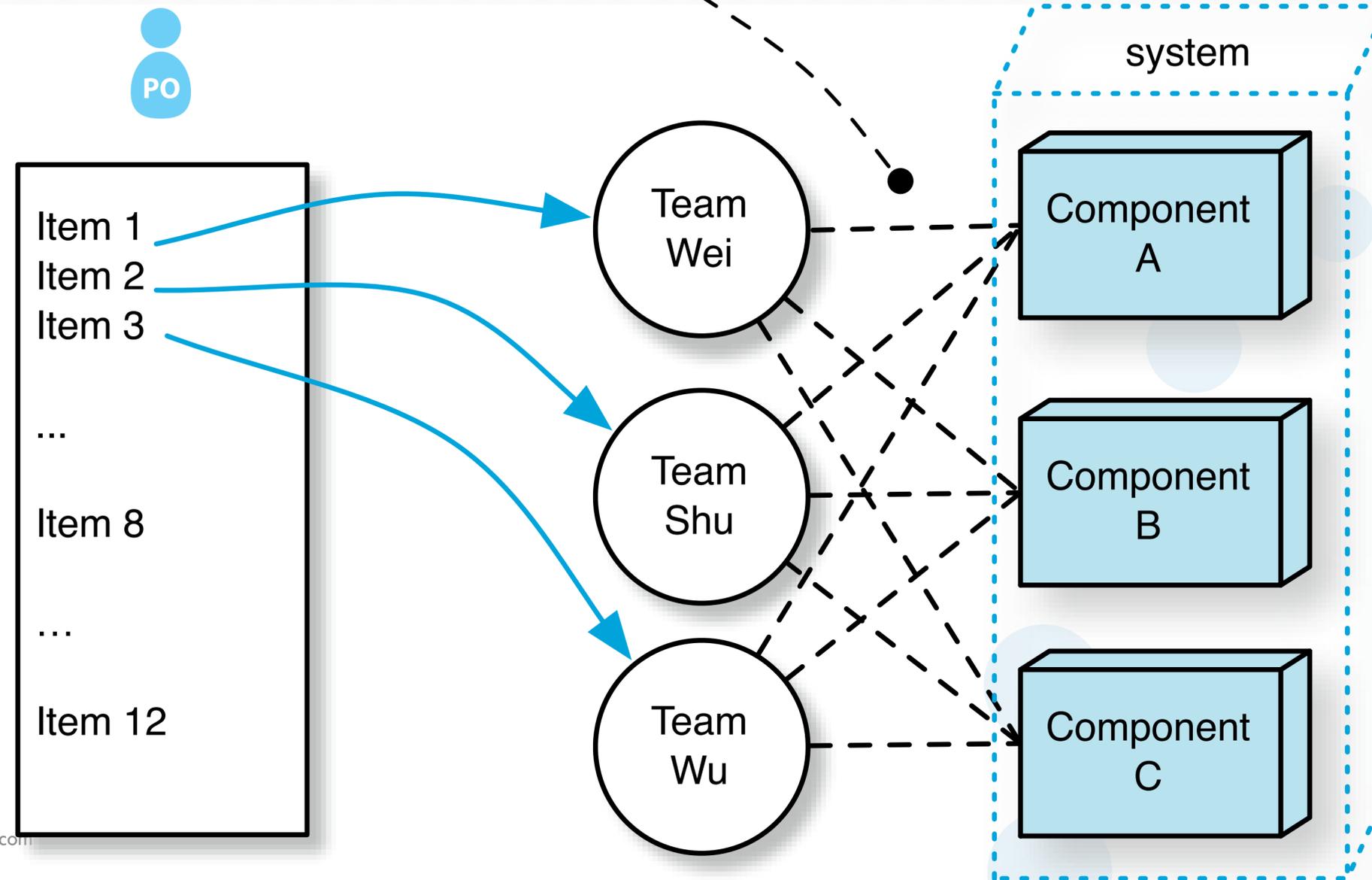


Work from multiple teams is required to finish a customer-centric feature. These dependencies cause waste such as additional planning and coordination work, hand-offs between teams, and delivery of low-value items. Work scope is narrow.

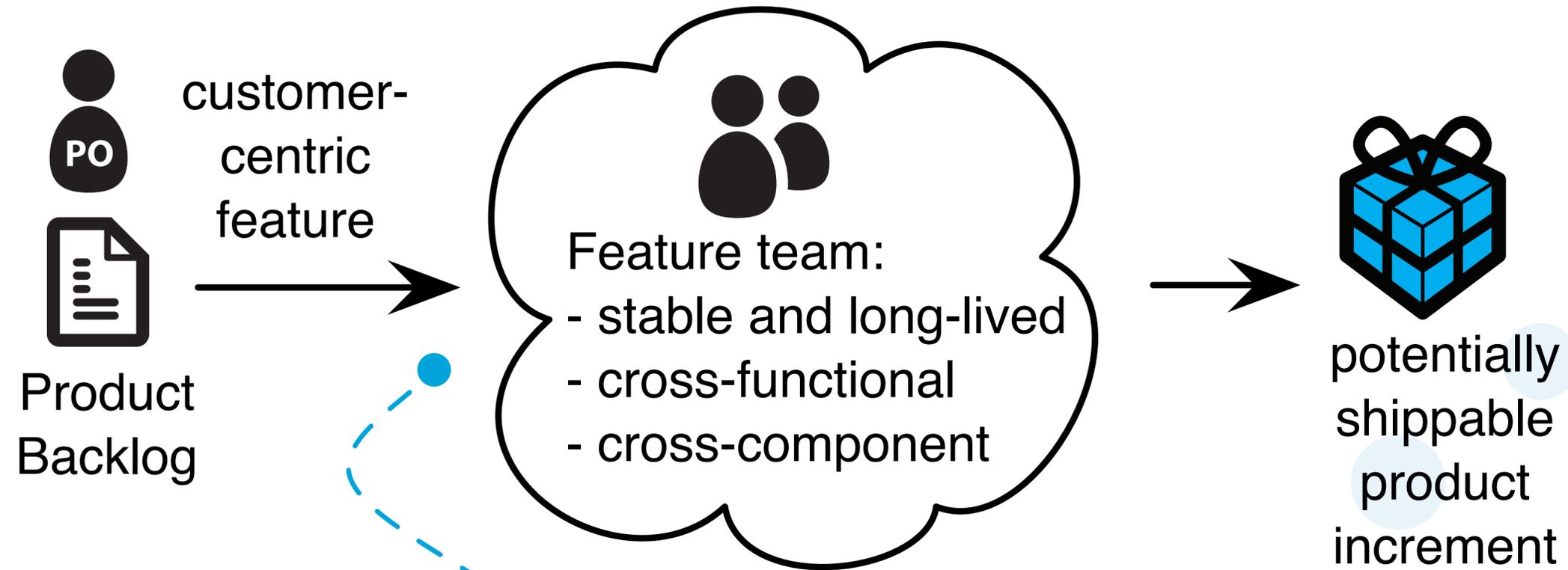
Every team completes customer-centric items. The dependencies between teams are related to shared code. This simplifies planning but causes a need for frequent integration, modern engineering practices, and additional learning. Work scope is broad.

Co-ordination is in shared code

With feature teams, teams can always work on the highest-value features, there is less delay for delivering value, and coordination issues shift toward the shared code rather than coordination through upfront planning, delayed work, and handoff. In the 1960s and 70s this code coordination was awkward due to weak tools and practices. Modern open-source tools and practices such as TDD and continuous integration make this coordination relatively simple.



Feature teams are customer-centric



Team has the necessary knowledge and skills to complete an end-to-end customer-centric feature. If not, the team is expected to learn or acquire the needed knowledge and skill.

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What LeSS is not

- A heavy method that needs to be 'tailored down' to smaller groups
- Scrum being 'contained' within something else
- Requiring big batch Release Train planning and release
- Temporary Project and/or Program centric
- Disallowing developers and key stakeholders from collaborating at the same review
- Recommending part-time, temporary ScrumMasters
- Prioritisation by committee
- Product Owners from IT who are specifiers and are not empowered to make commercial decisions
- Many roles and intermediated communication up and down hierarchies

To learn more about LeSS...

See the less.works website

