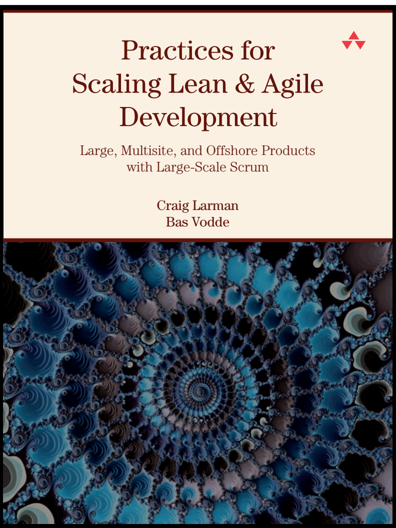
The Trouble with “Component Teams” and and alternative: “Feature Teams”

or “Scaling Scrum”

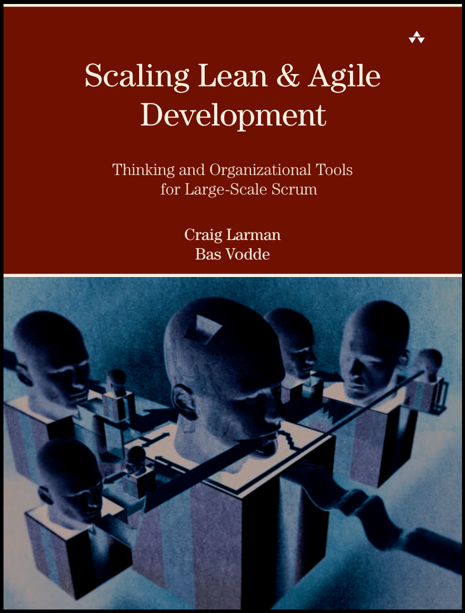
バスはどれでしょう？

or 八斯是谁？


Practices for
Scaling Lean & Agile
Development

Large, Multisite, and Offshore Products
with Large-Scale Scrum

Craig Larman
Bas Vodde


Scaling Lean & Agile
Development

Thinking and Organizational Tools
for Large-Scale Scrum

Craig Larman
Bas Vodde

Conway's law

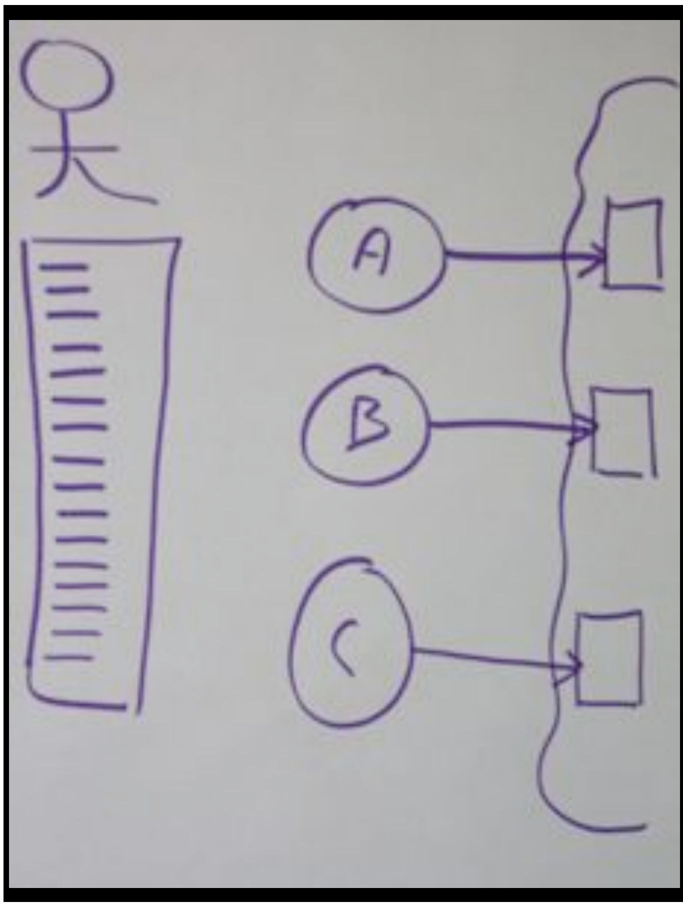
Any organization that designs a system (defined more broadly here than just information systems) will inevitably produce a design whose structure is a copy of the organization's communication structure.

Odd-e

And...

Because the design that occurs first is almost never the best possible, the prevailing system concept may need to change. Therefore, flexibility of organization is important to effective design.

- Mel Conway

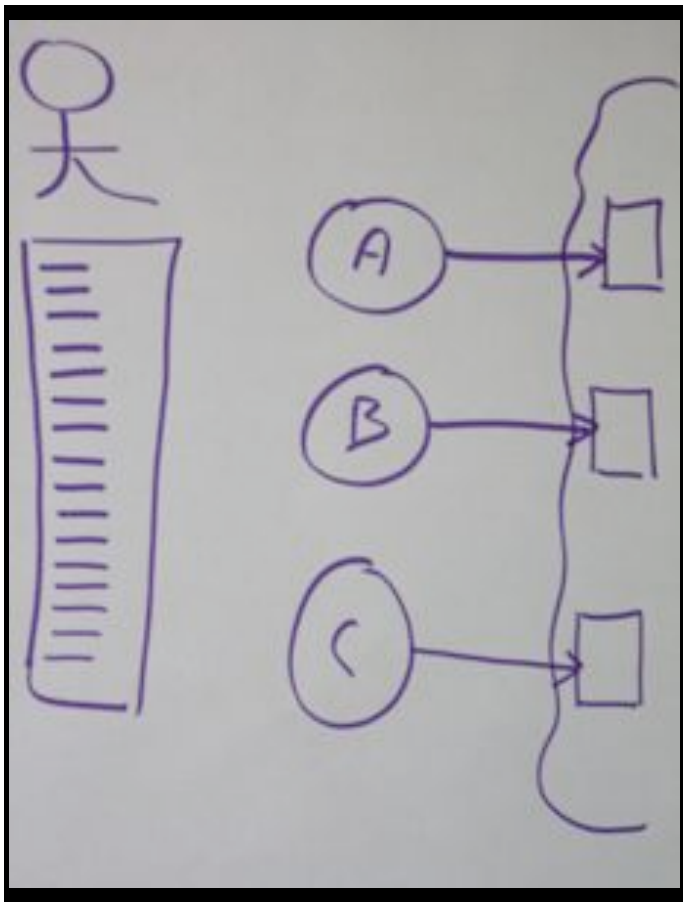


One ProductOwner

Multiple Teams

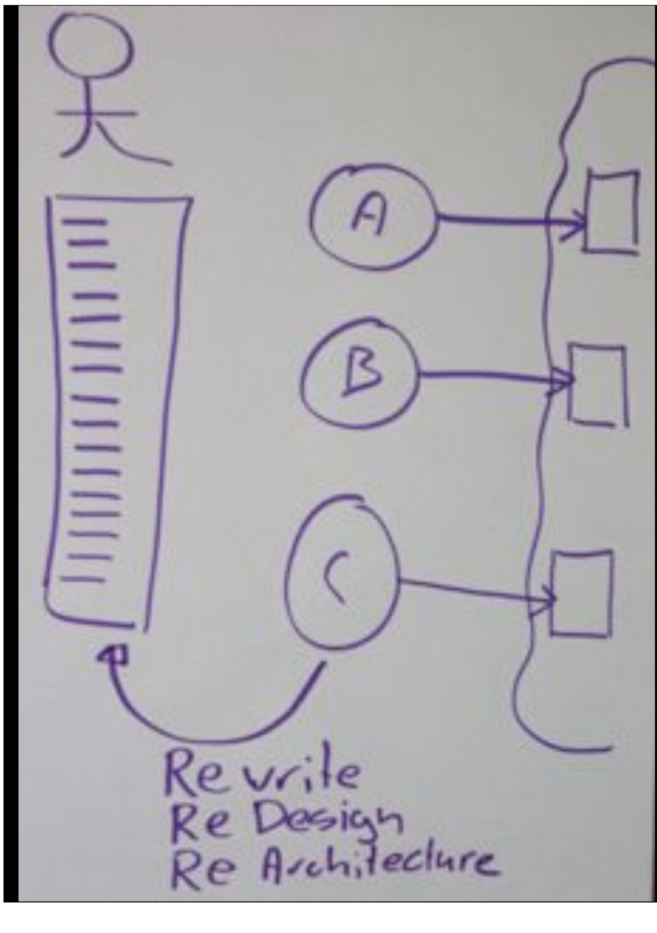
Teams own a part of the system:

“Component teams”



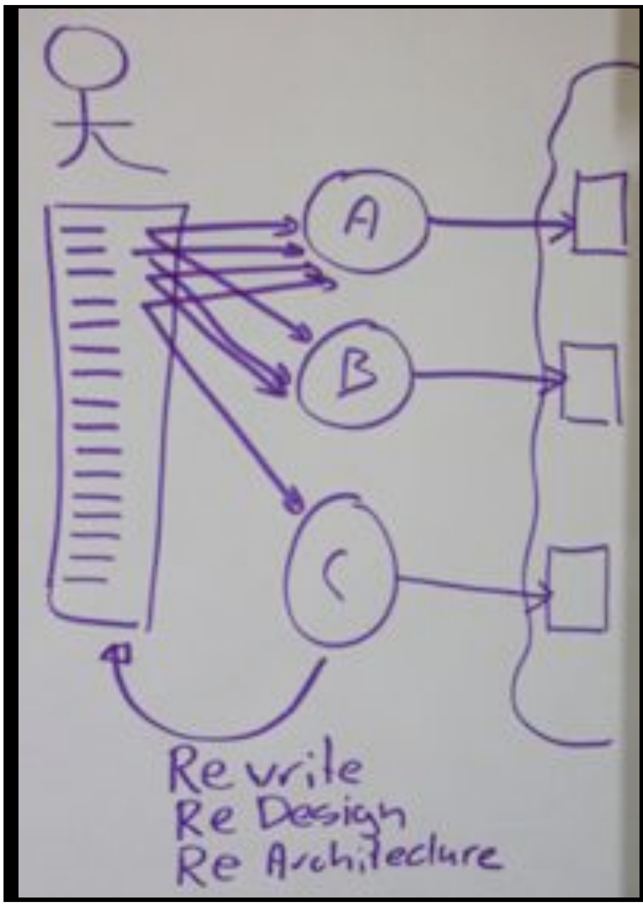
Low value work is implemented

Everybody always busy?



"Work gets created"

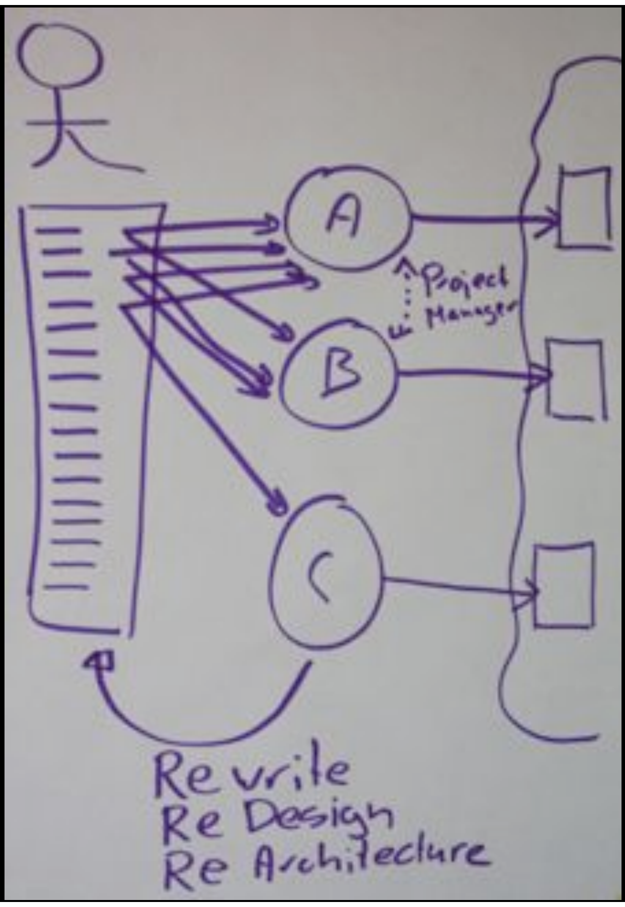
Large systems... grow larger by default



One requirement does not map to one team

Dependencies never balance out

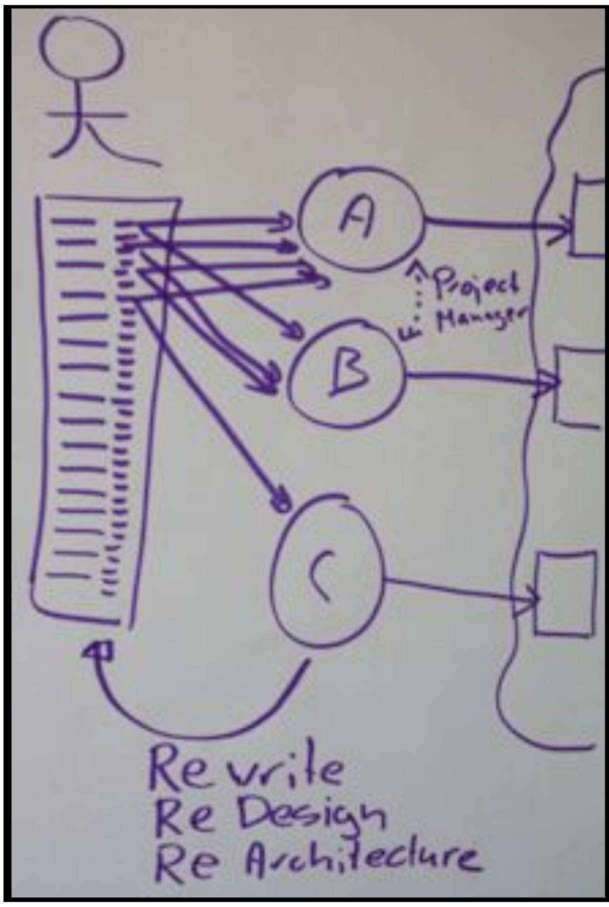
Result: Not complete requirements integrated



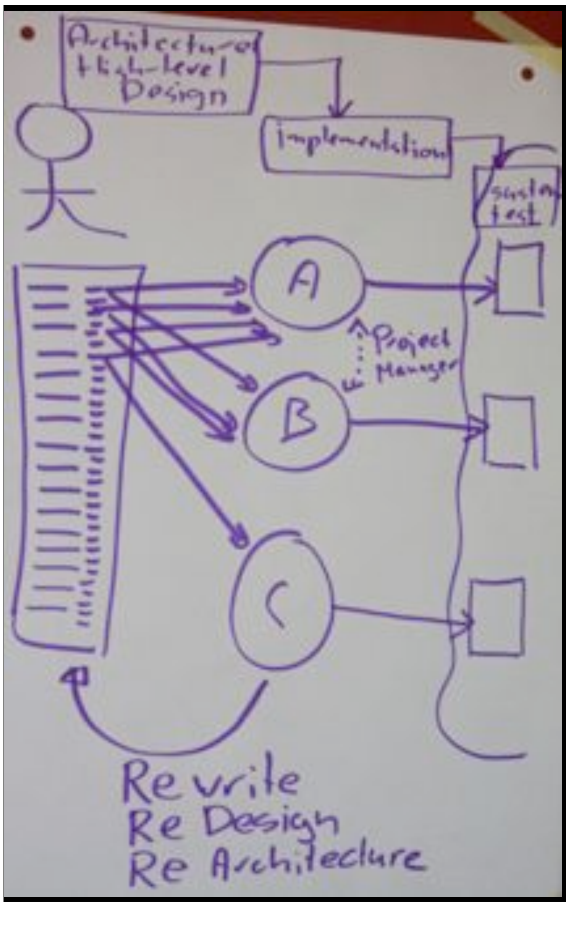
Assign a problem to a role

Impossible job, requirements never balance out.

Result: priority and resource fights

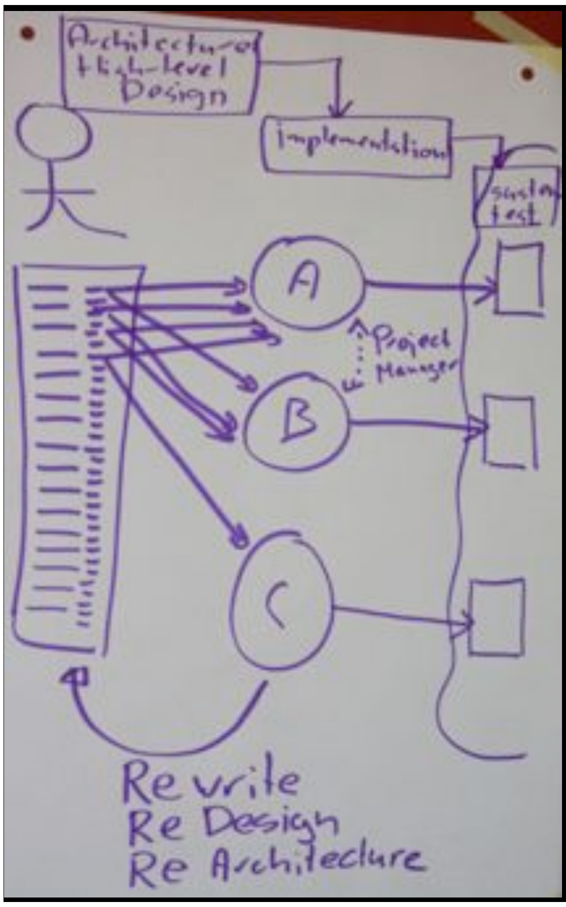


Large backlog items must be split in "less customer-centric backlog items"

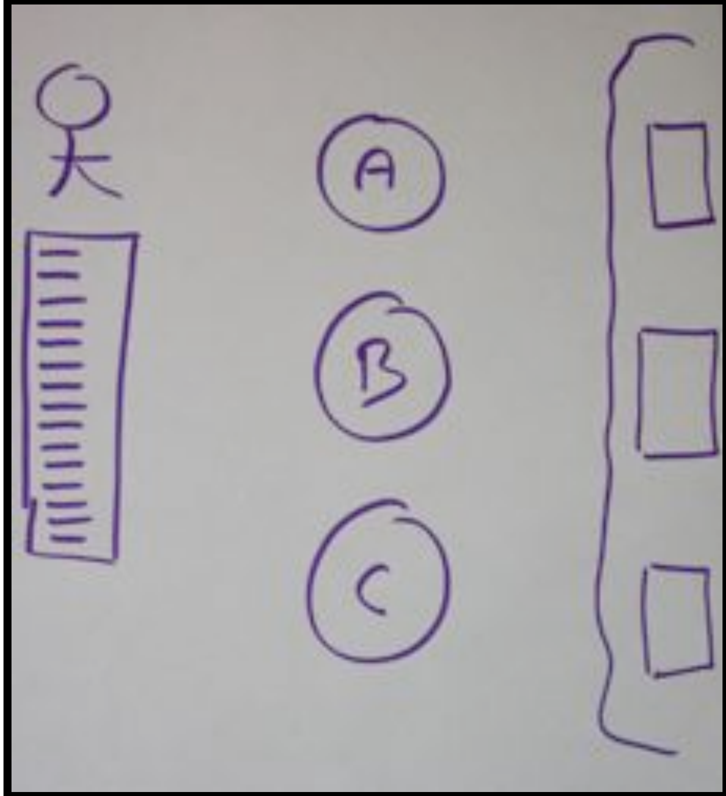


Splitting before the iteration starts: "Architecture"

Testing after the iterations ends: "System test"

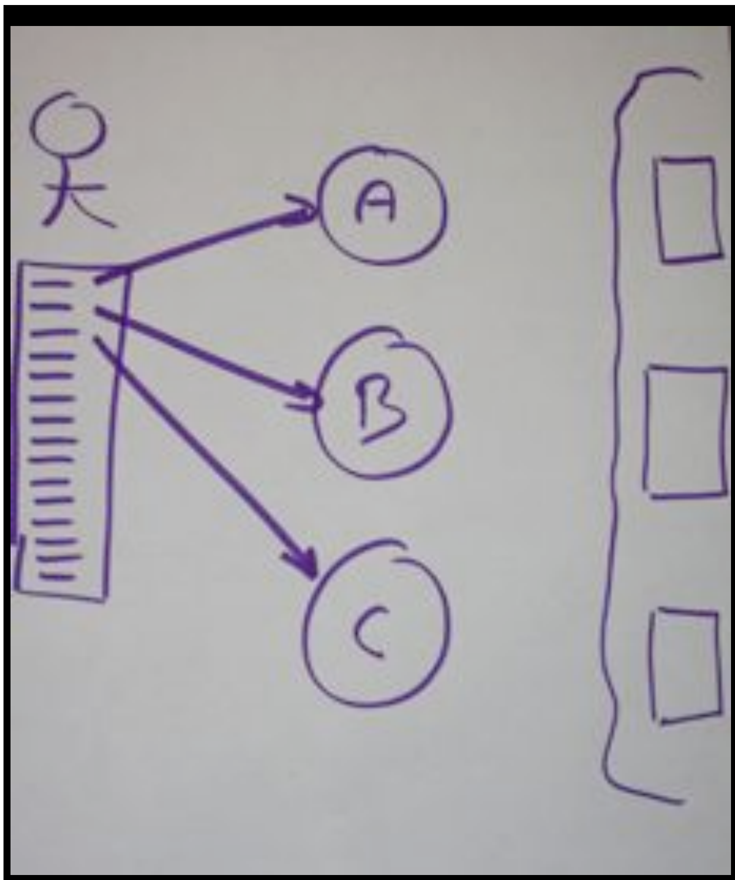


How to become good? ...



One ProductOwner

3 Teams

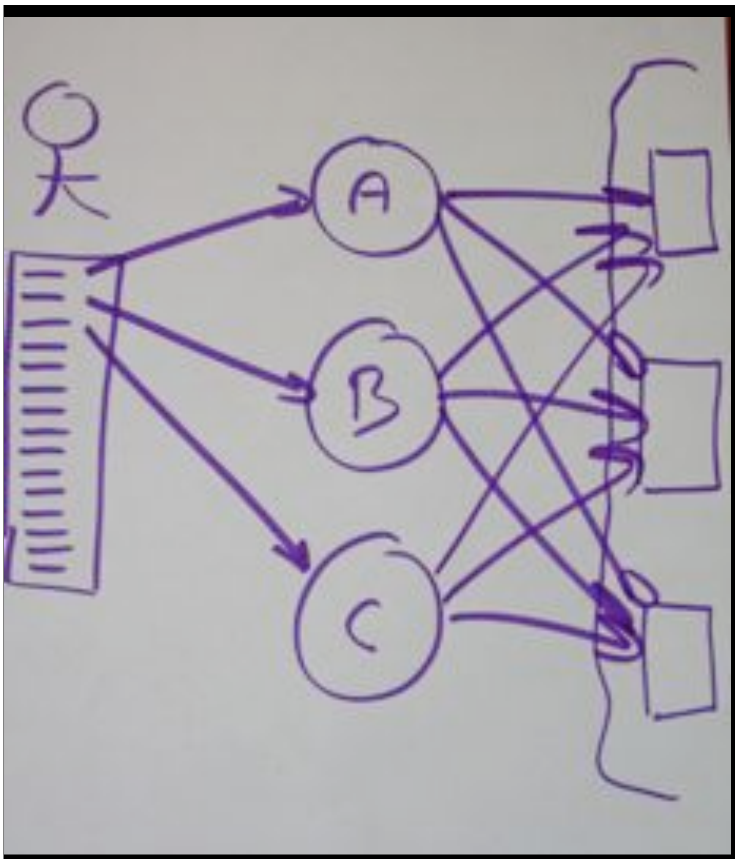


Give complete requirements to teams: “Feature teams”

All dependencies within the team

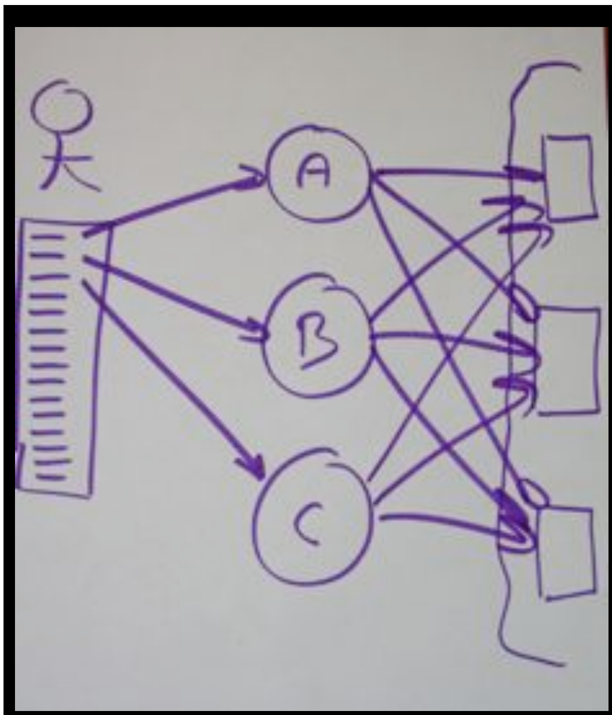
Feature Teams

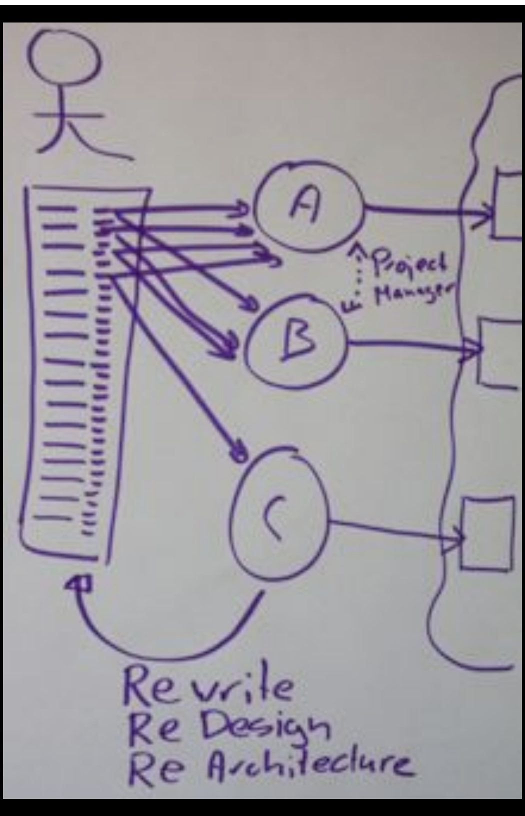
- long-lived—the team stays together so they can ‘jell’ for higher performance; they take on new features over time
- cross-functional and co-located
- work on a complete customer-centric feature, across all components and disciplines
- composed of generalizing specialists

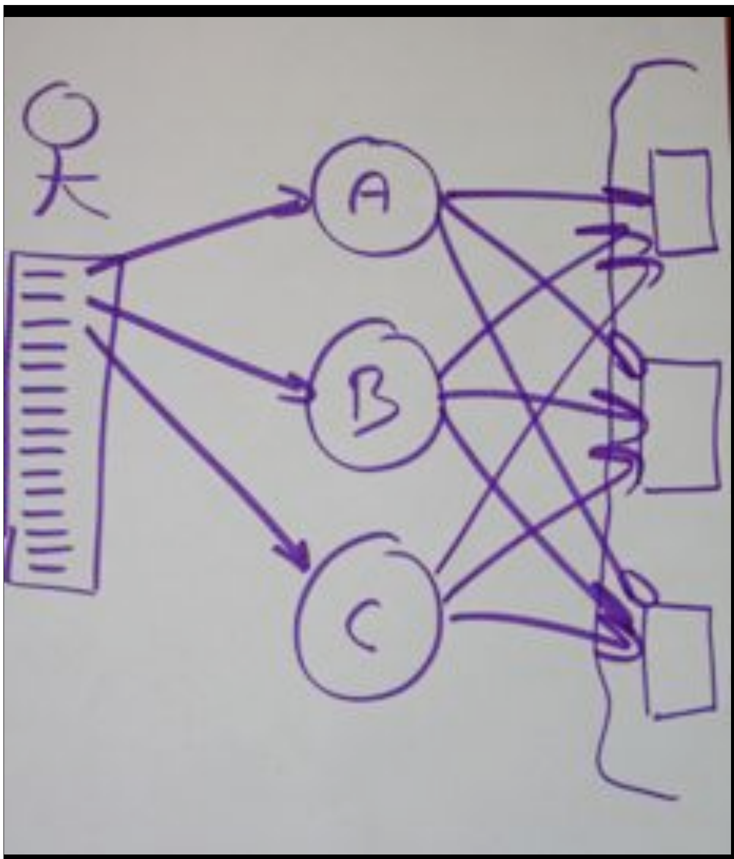


New problem:

Dependency moved



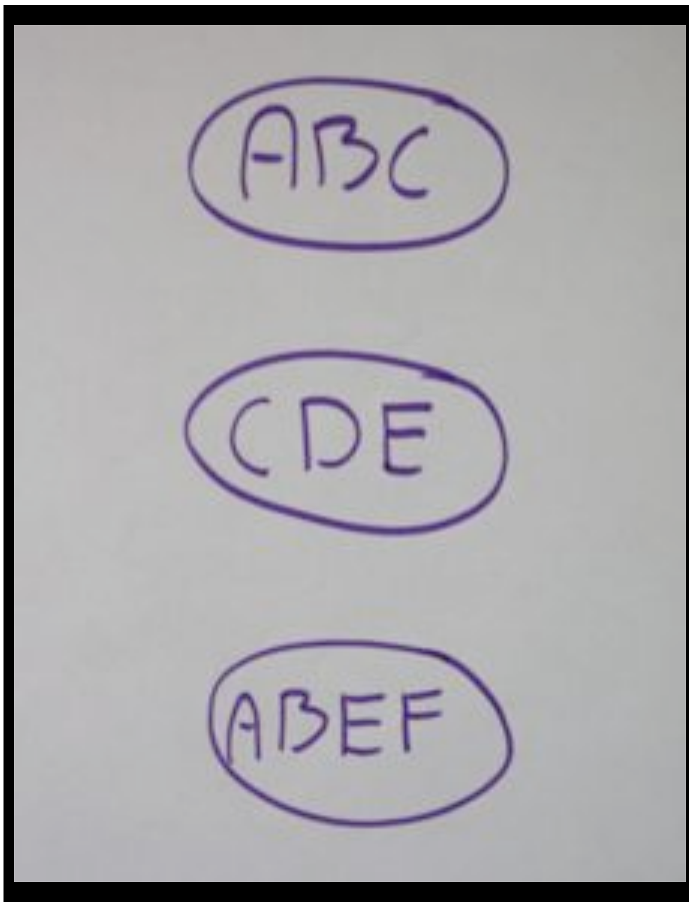




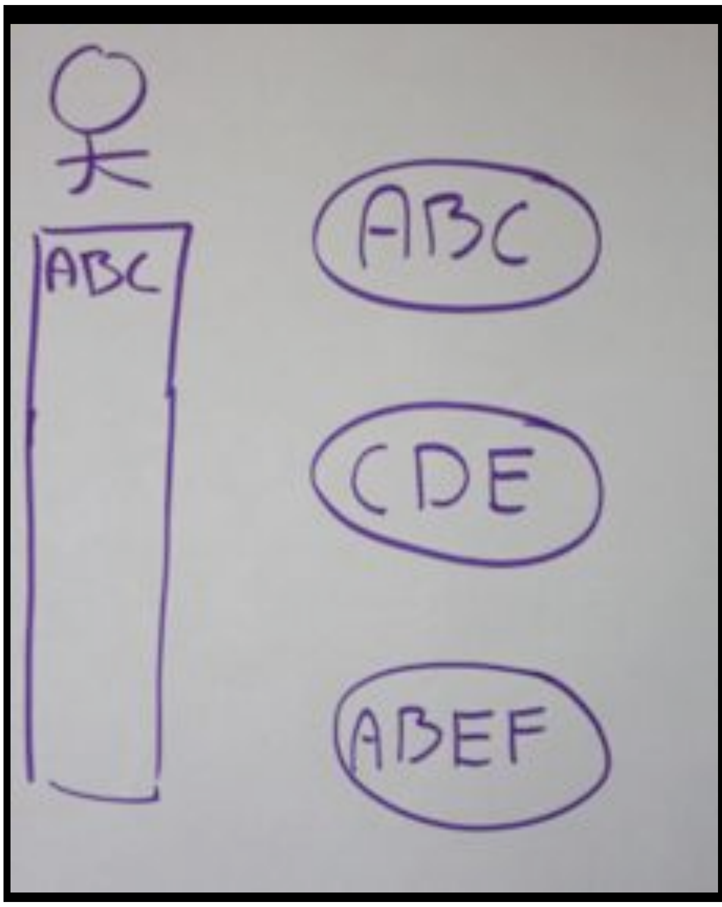
Modern version control (e.g. svn)

Continuous integration development practice

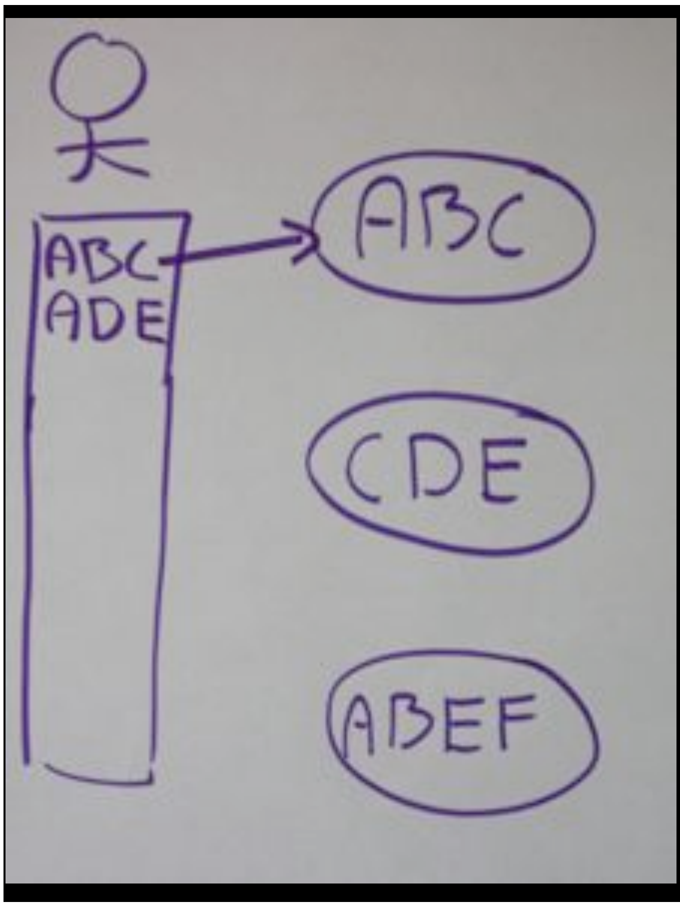
Automated build and test



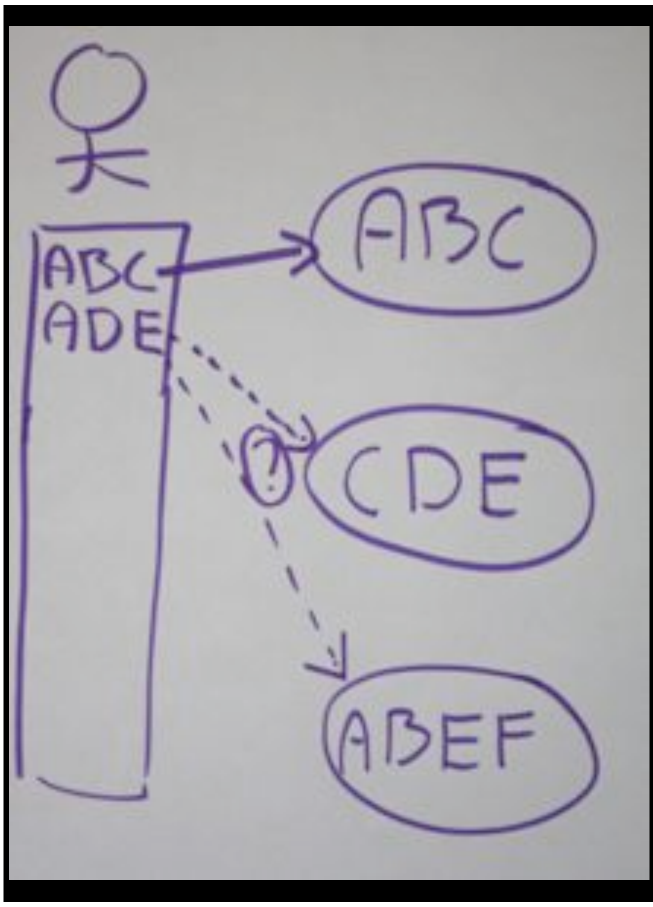
Person specialization



Team specialization



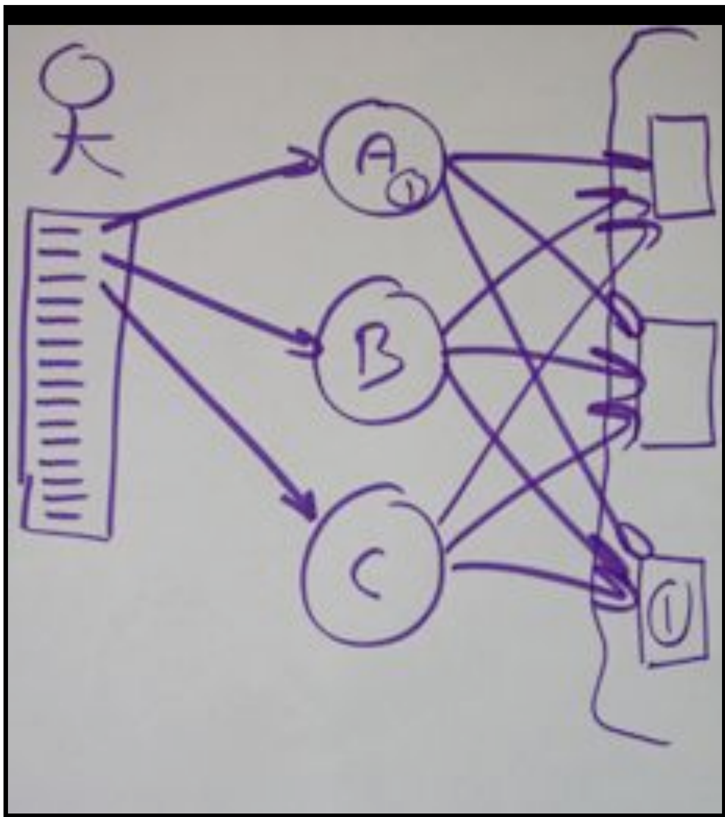
Team specialization



Specialization good

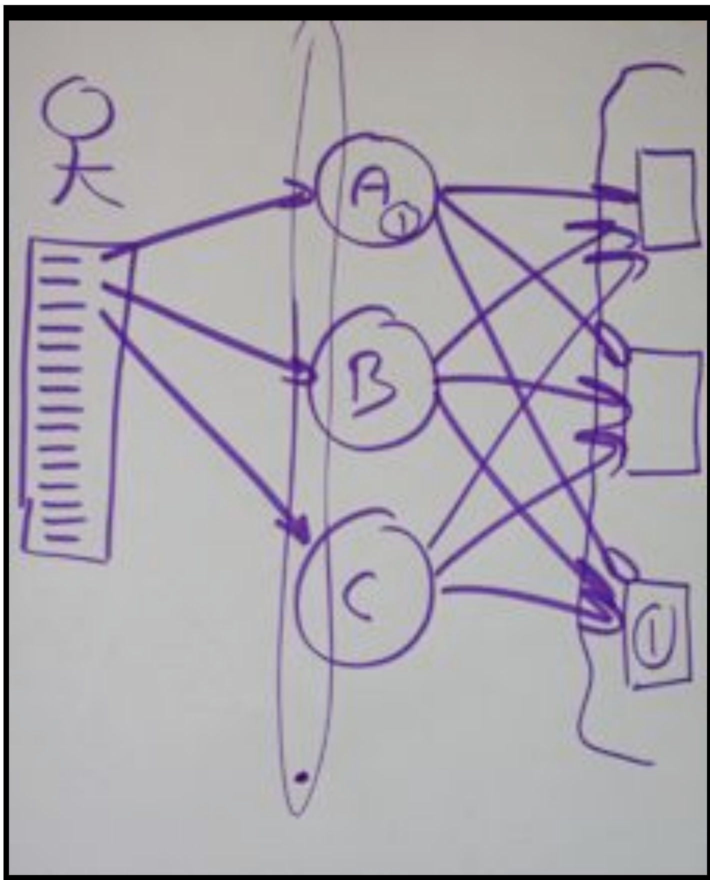
Don't let specialization constrain you

Learn new specializations



Emergent design

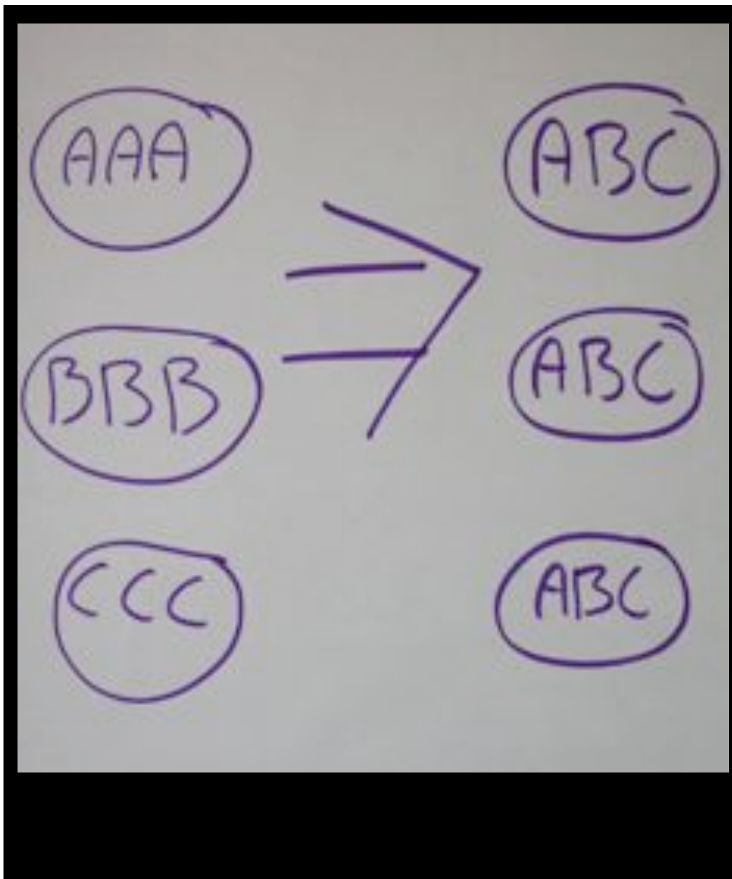
Component guardians



Community of Practice

Architect Facilitator

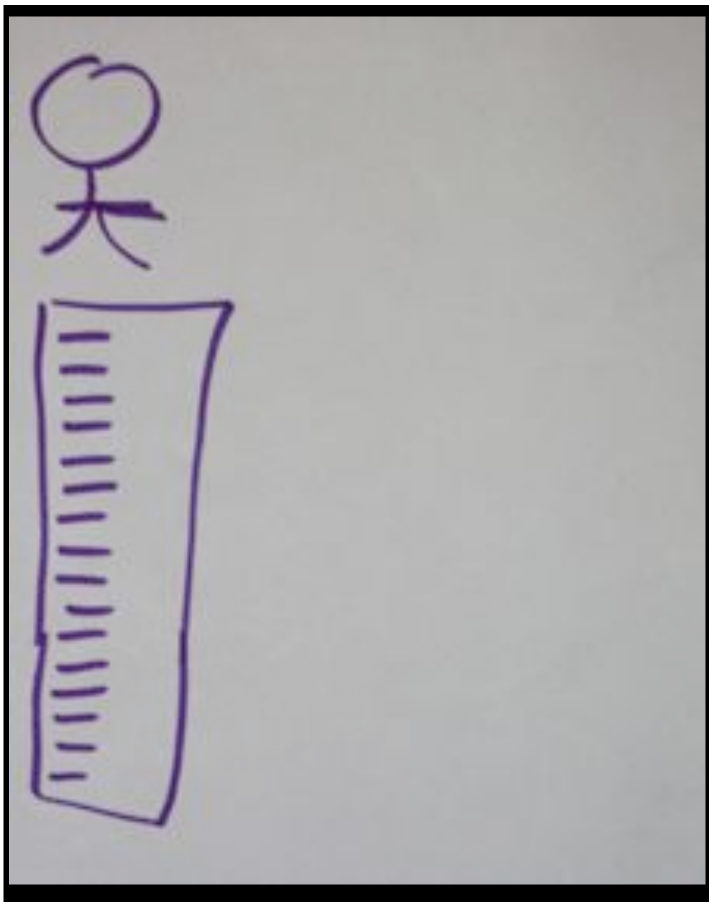
Same for e.g. test, ScrumMasters



Transition can often be done by reforming teams

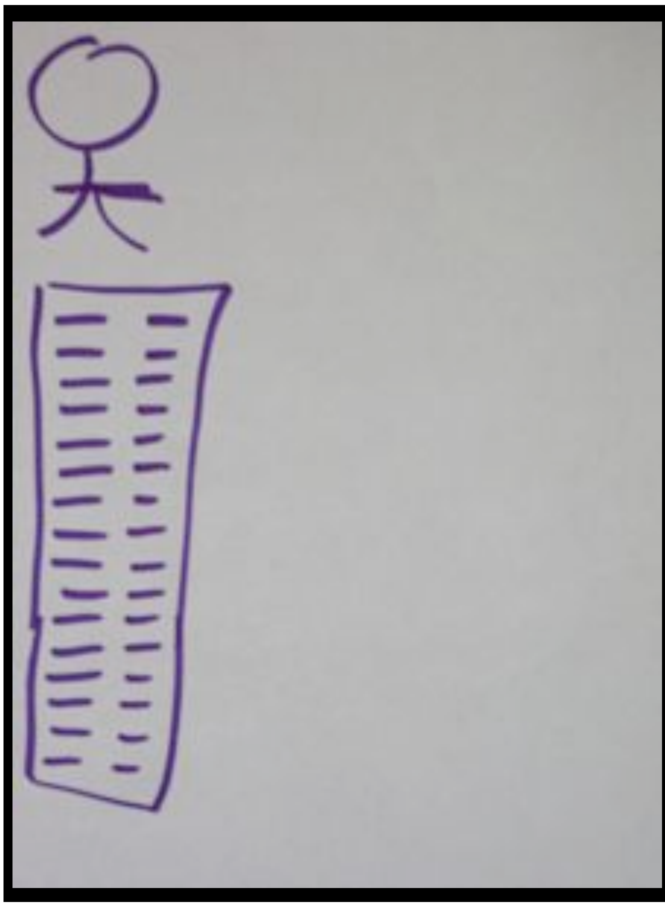
Odd-e

What about large product development?



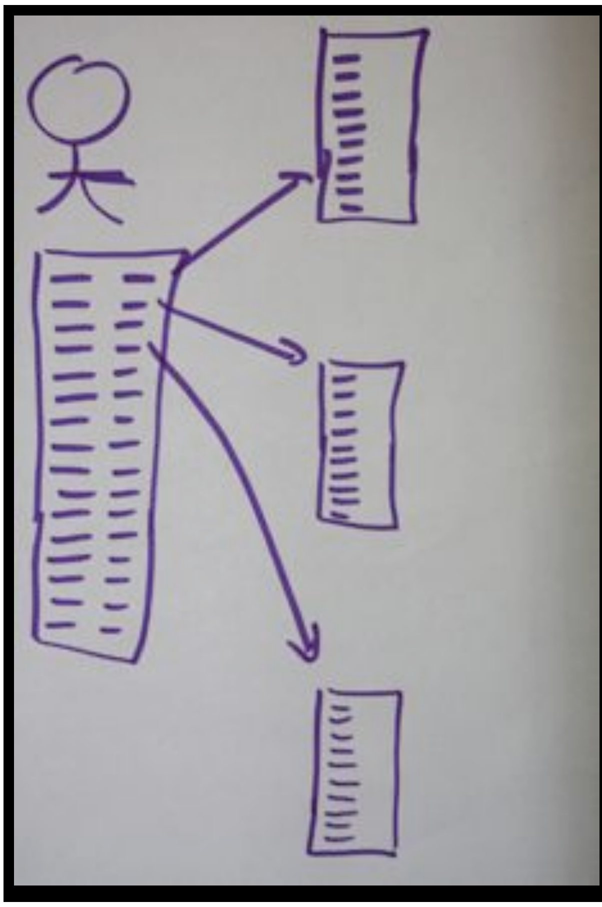
Always have one product owner and one product backlog per product

Or... a group of products...



Group requirements into “categories” called: “Requirement areas”

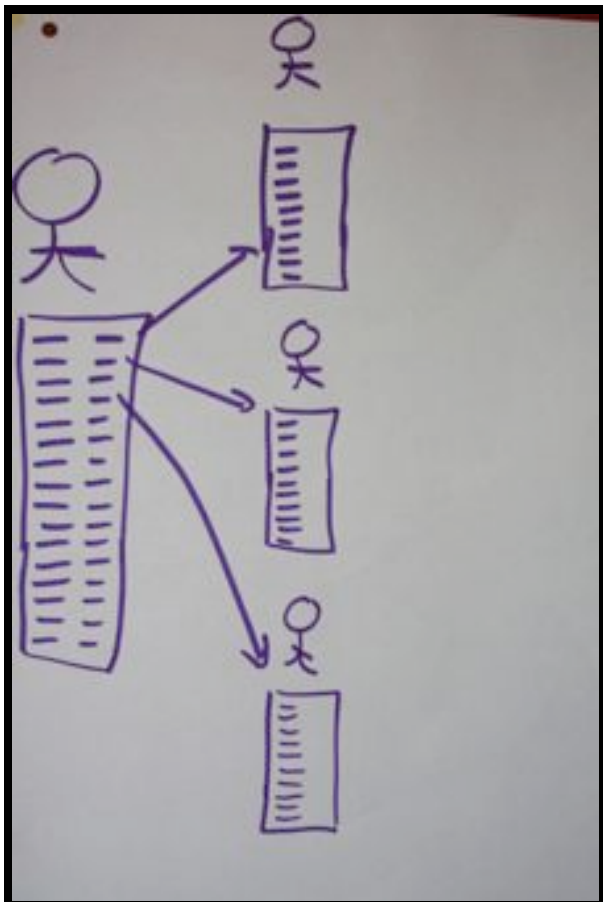
Grouping based on customer, NOT on architecture



Create “requirement area backlogs”

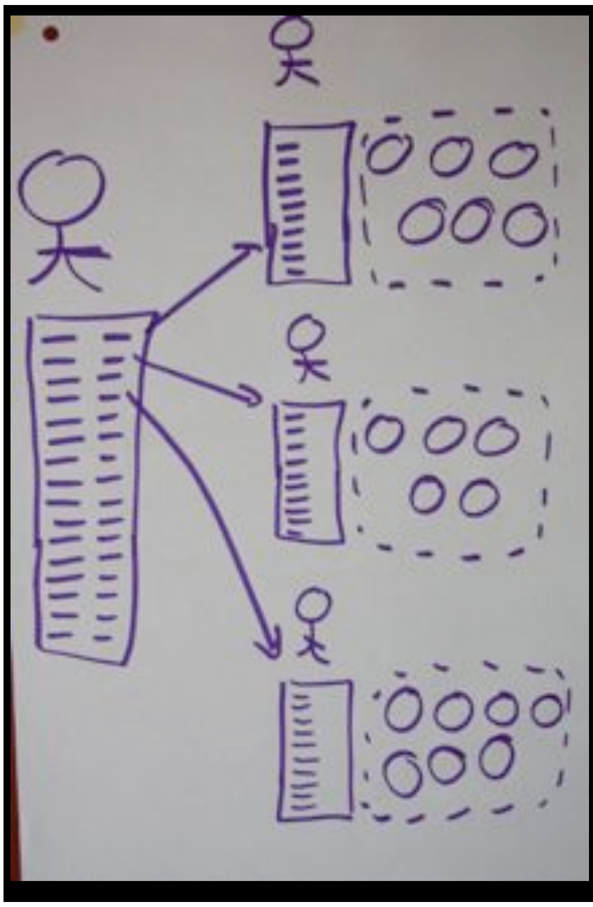
RA backlog is a view on the product backlog

Every PBI maps always to exactly one RA backlog



Every RA has their own “area product owner”

RA product owner specializes in “customer-centric domain”

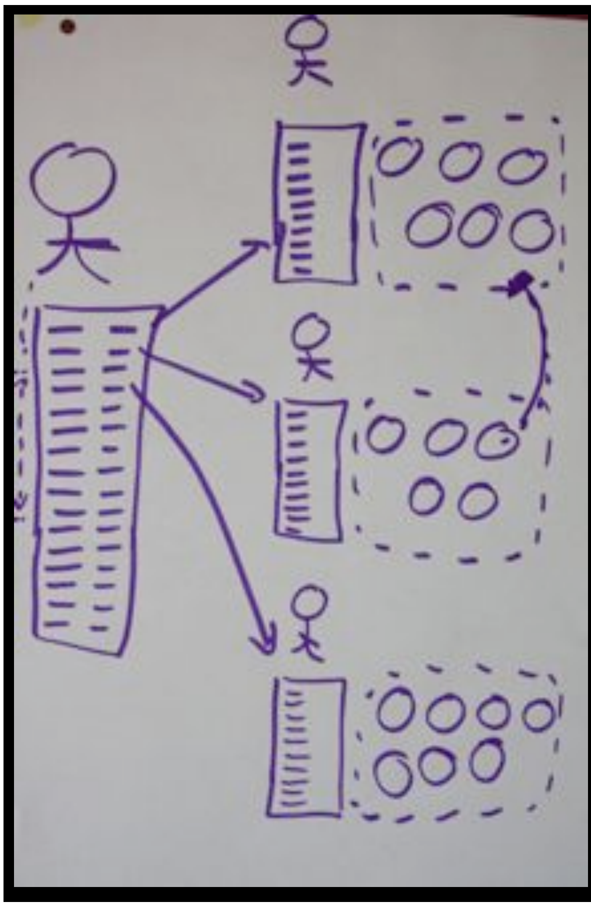


Every RA has a set of feature teams

From 5-10 per RA

Teams specialize in that area

Areas are dynamic over time

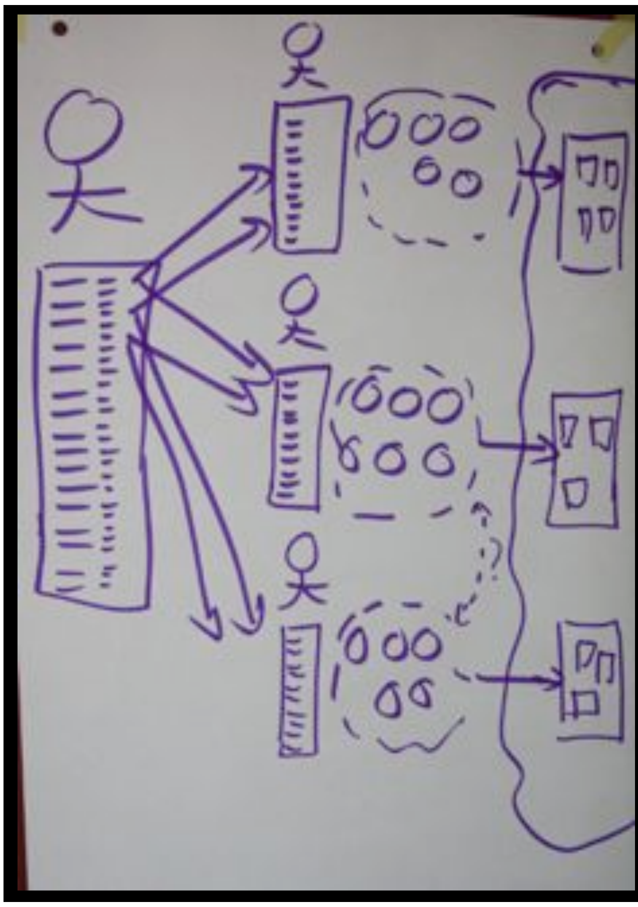


Overall PO decides on moving teams between areas

Value vs velocity

Odd-e

Transition strategy



"Development areas" are groupings based on architecture

Helps transition, has all drawbacks of component teams

Questions?