

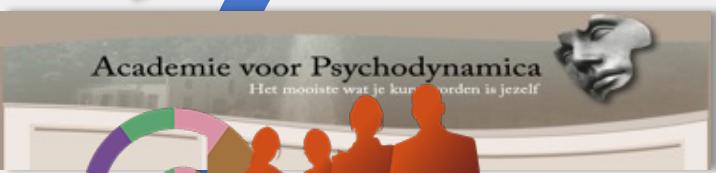
# Feature Teams vs Component Teams

**Faculdade de Engenharia da  
Universidade do Porto**

December 2, 2021

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# Cesario Ramos



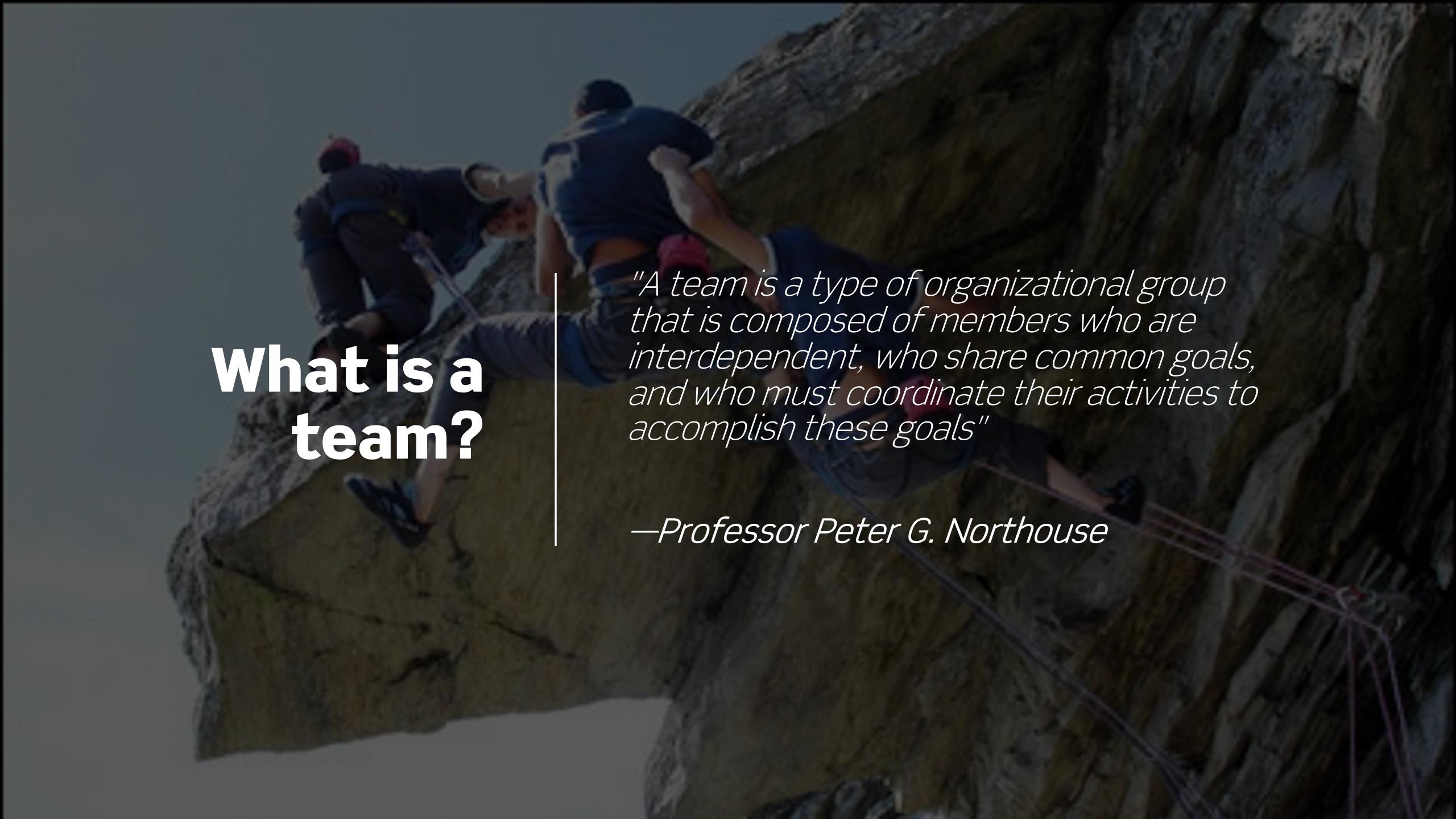
1974



CTO



# What is a Team?

A photograph of several climbers on a steep, rocky mountain face. One climber in a blue shirt is in the foreground, reaching up towards a ledge. Another climber in a dark jacket is visible behind them. The mountain has patches of snow and ice. The sky is clear and blue.

# What is a team?

*"A team is a type of organizational group that is composed of members who are interdependent, who share common goals, and who must coordinate their activities to accomplish these goals"*

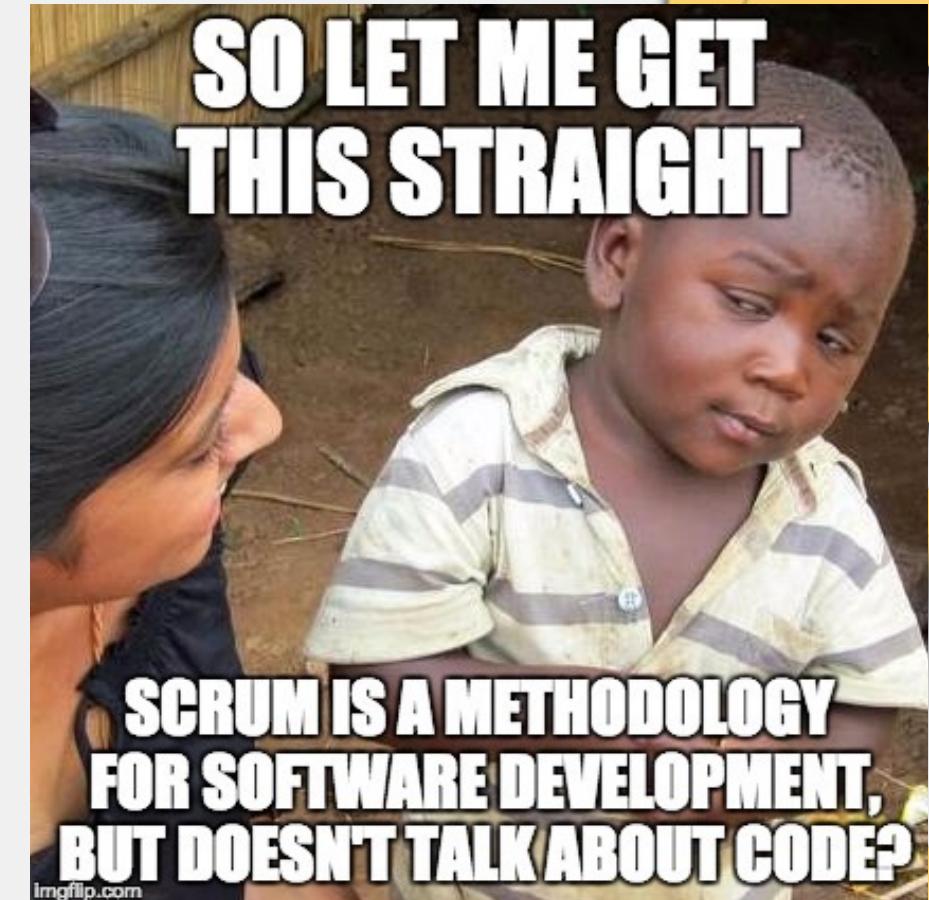
*—Professor Peter G. Northouse*



# XX What is a Scrum Team?

Scrum Teams...

- Are Cross Functional
- Take ownership for solving a customer problem.
- Are Self managing

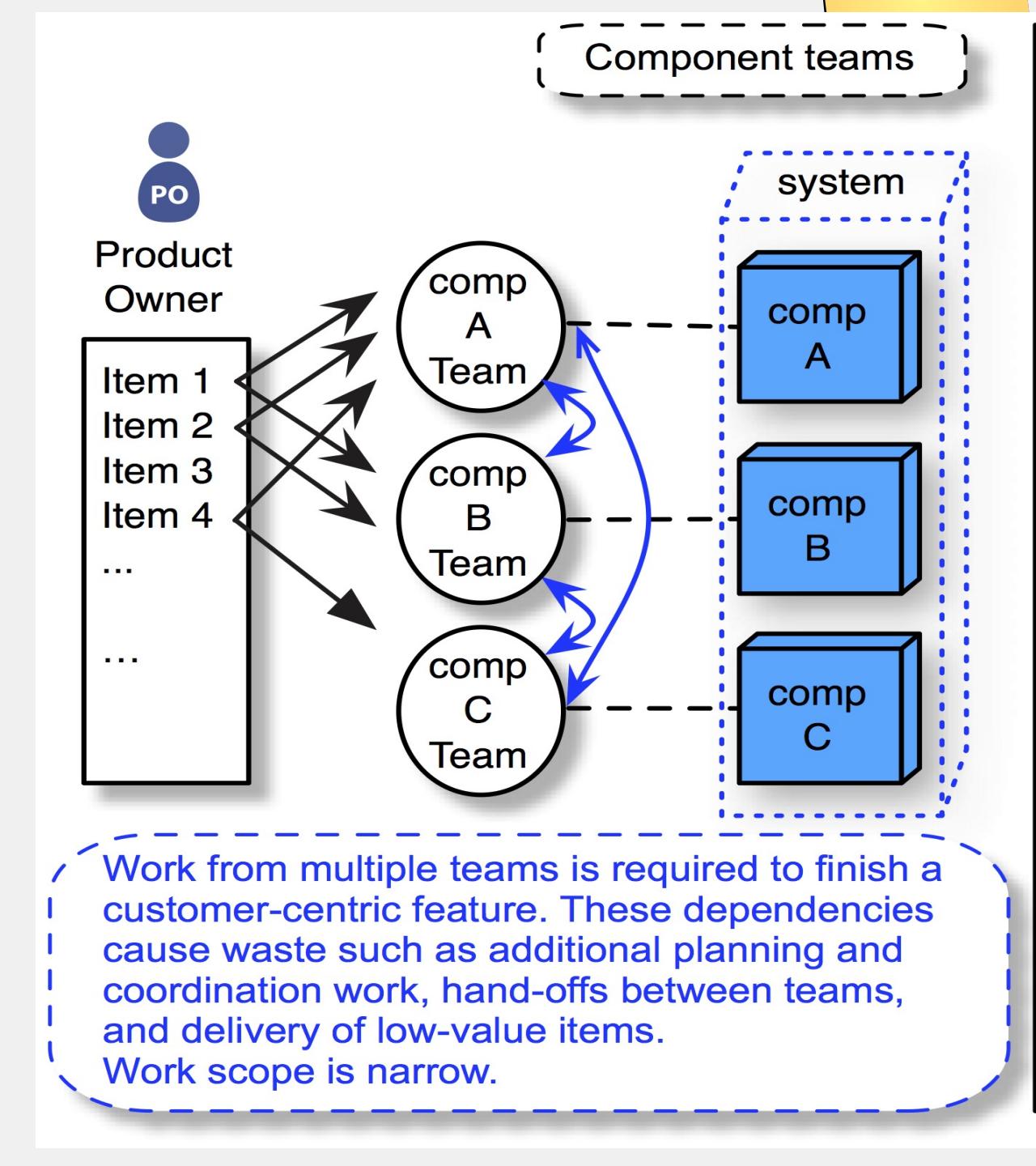


**As the scope of work gets larger and  
1 team is not sufficient, how do you  
scale?**

# Implications at Scale

- Leads to Sequential Development Cycle.
- Focus on lines of code
- Responsible for component
- Additional teams for
  - Analyses, Testing, Architecture, Integration, Coordination
  - ...
- Often leads to Low quality code

Dependencies are Asynchronous



# Code Quality

Software has three functions

1. Provide the functionality it is intended to
2. The ability to be changed efficiently
3. To be easily understandable by its readers



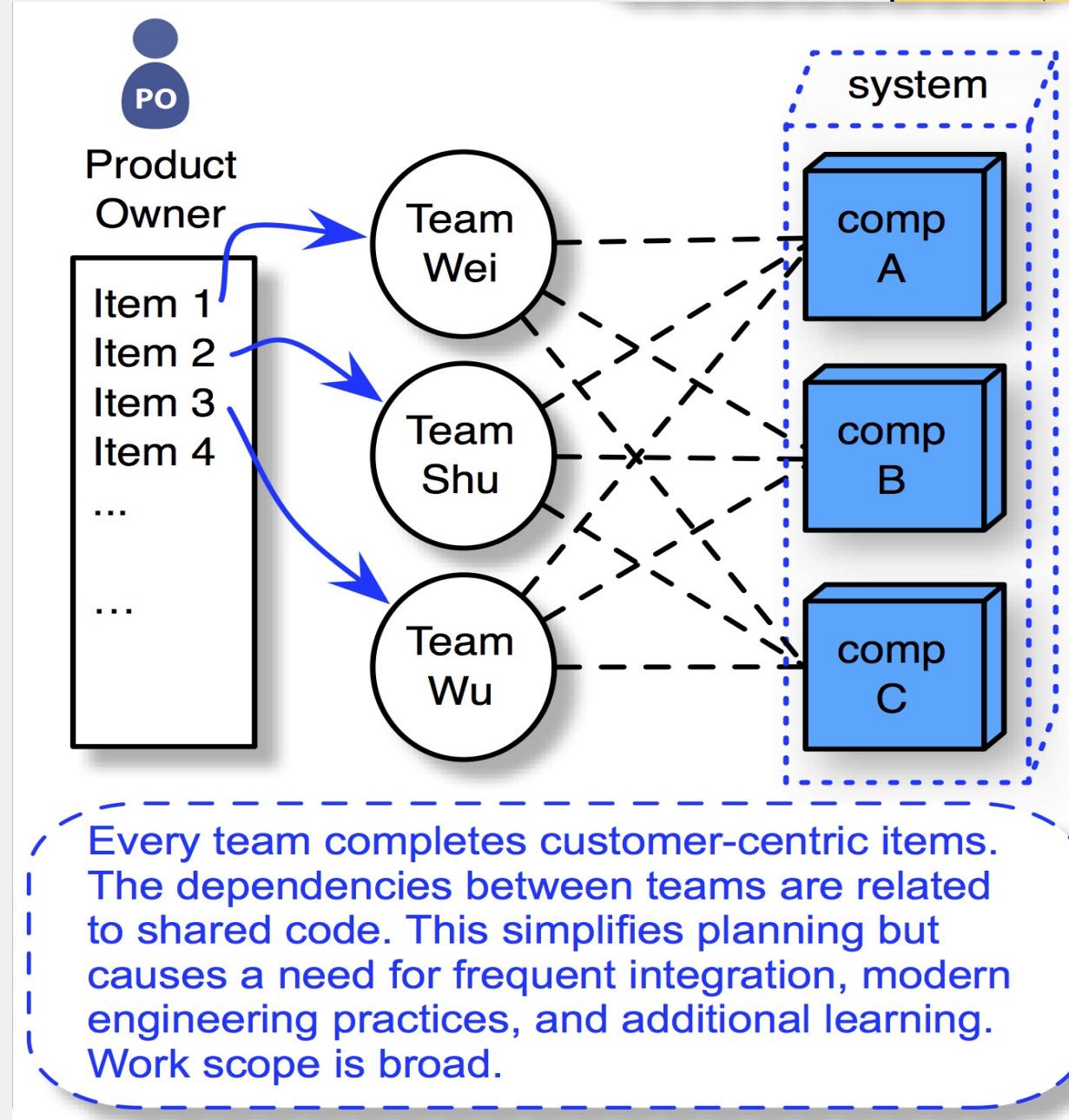
*“Any fool can write code that a computer can understand.  
Good programmers write code that humans can understand.”*

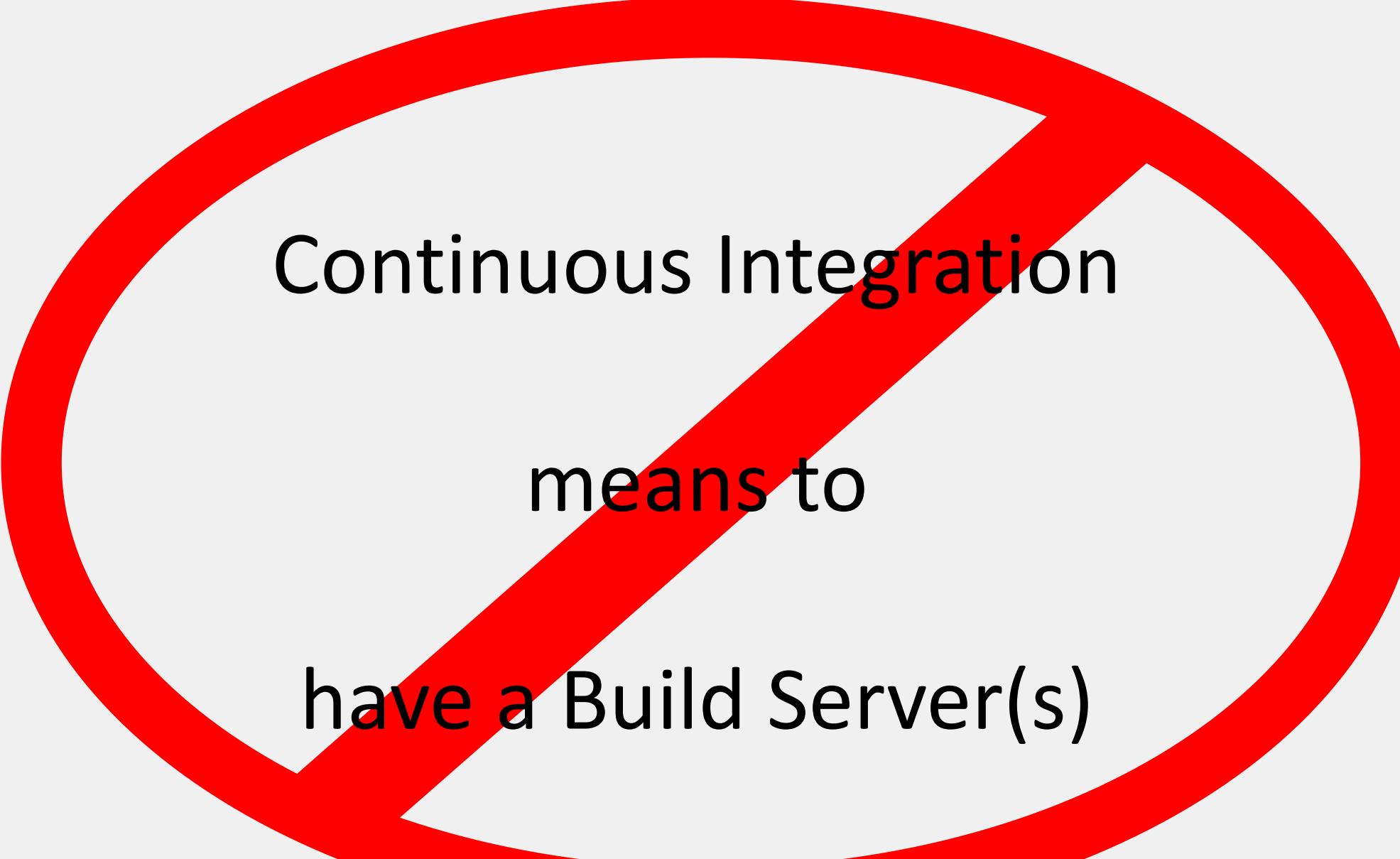
*– Martin Fowler*

# Feature Teams

- Leads to Iterative/Incremental Development
- Focus on customer
- Responsible for customer value
- Promotes Learning
- Motivates to create great code

Dependencies are Synchronous

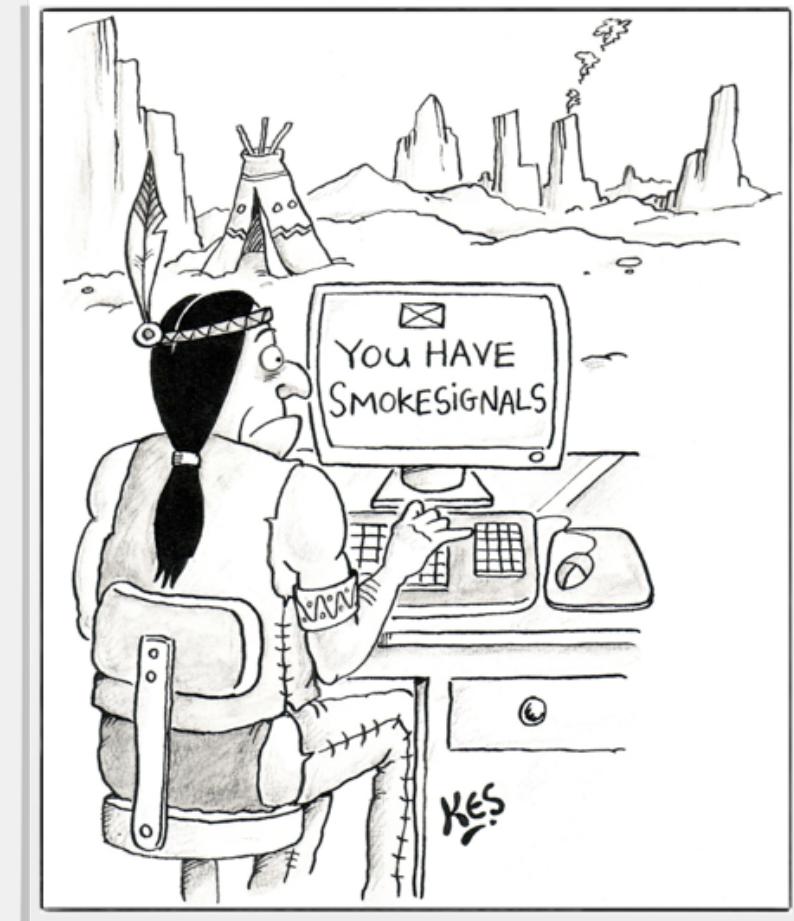




Continuous Integration  
means to  
have a Build Server(s)

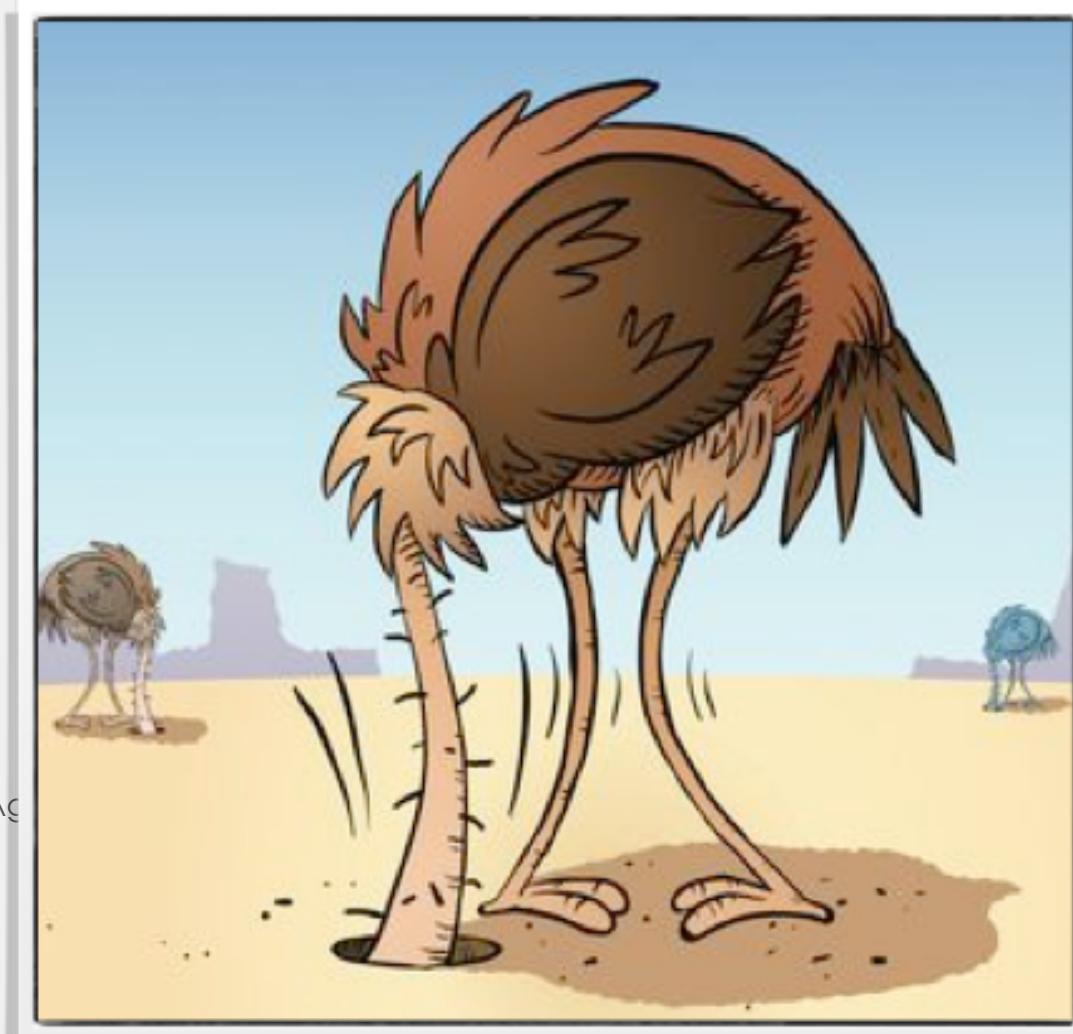
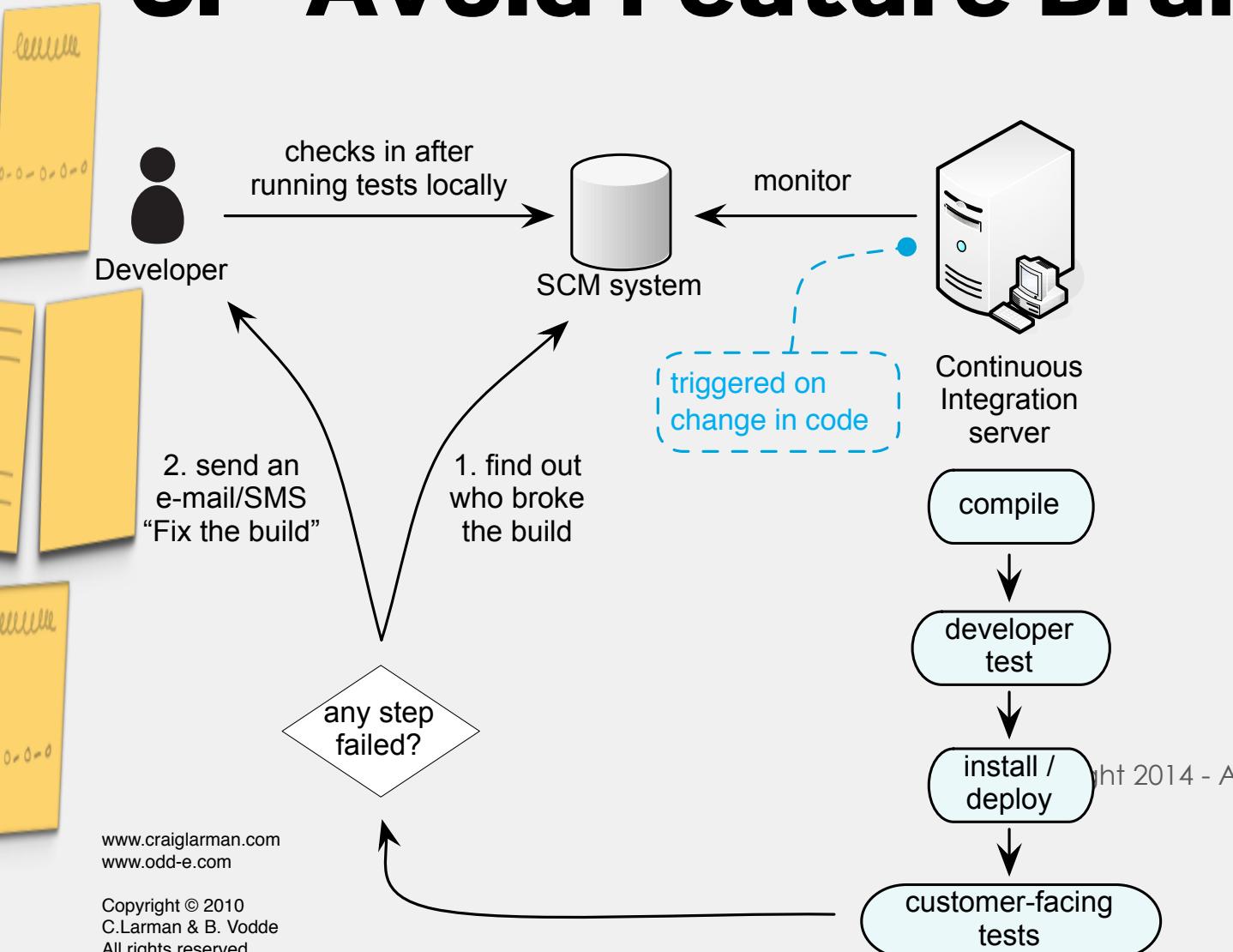
# Communicate in Code

- Coordination matches integration
- Update regularly, check who else works at the same code
- Use social coding tools (github/gitlab)
- Avoid barriers to integration

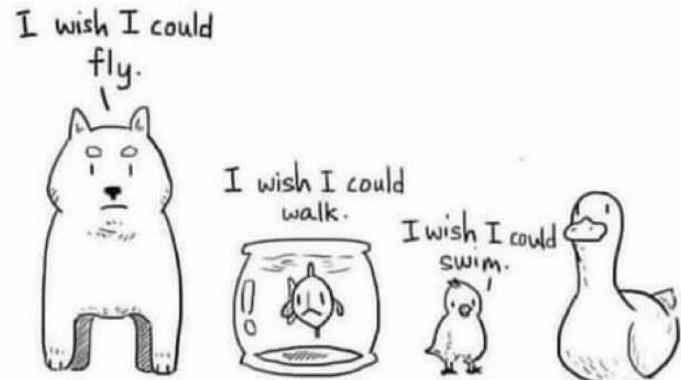


INTEGRATION SUPPORTS COORDINATION

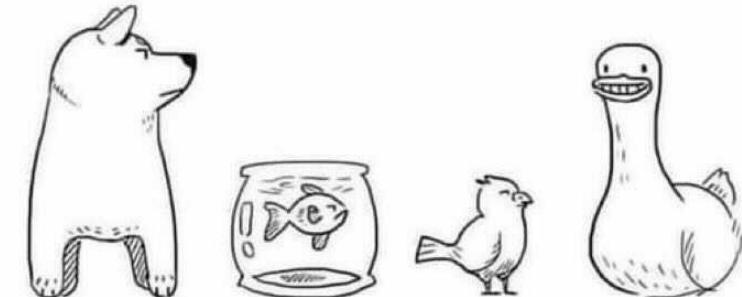
# CI - Avoid Feature Branches

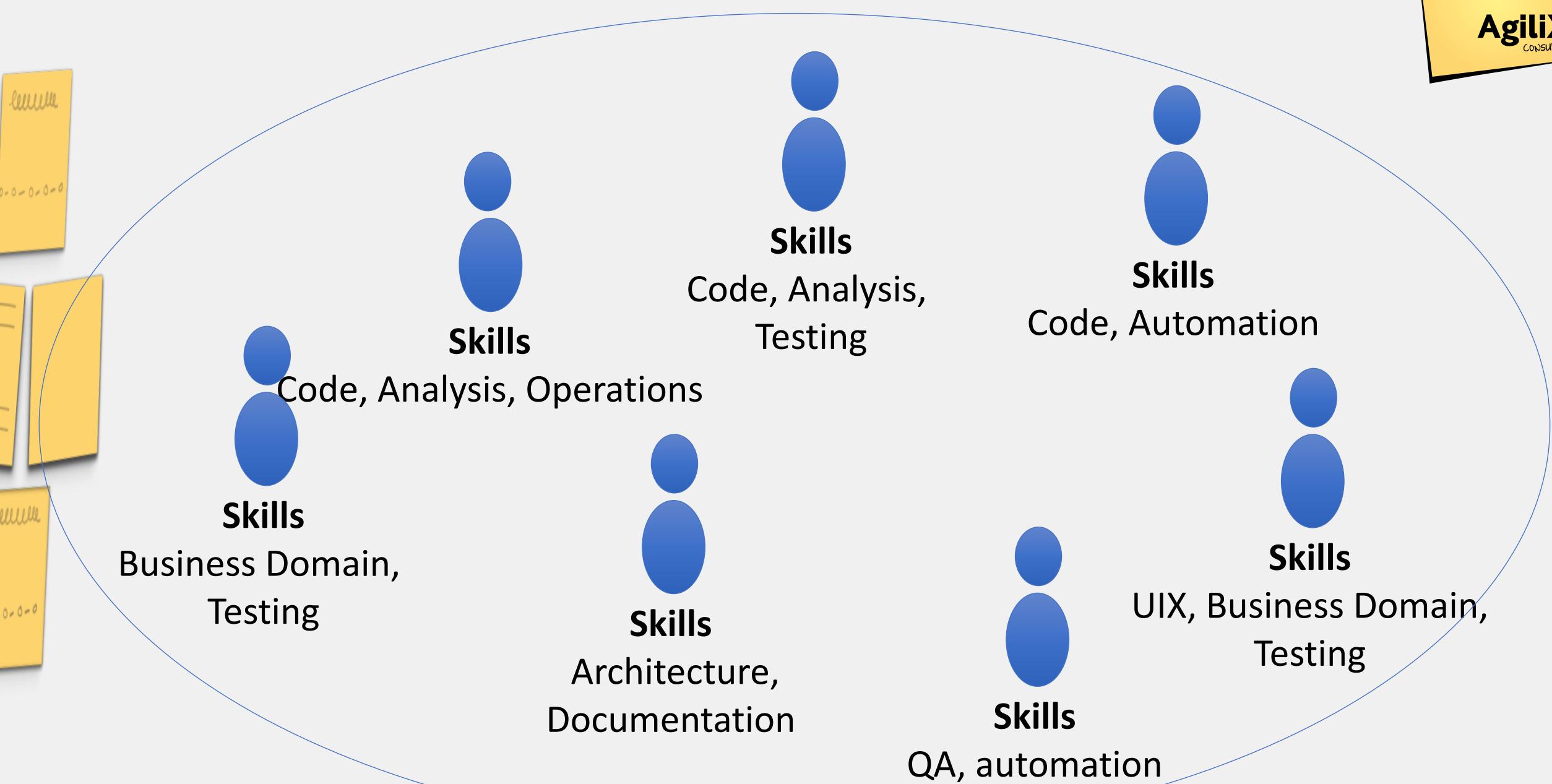


# Full Stack Developers be like..



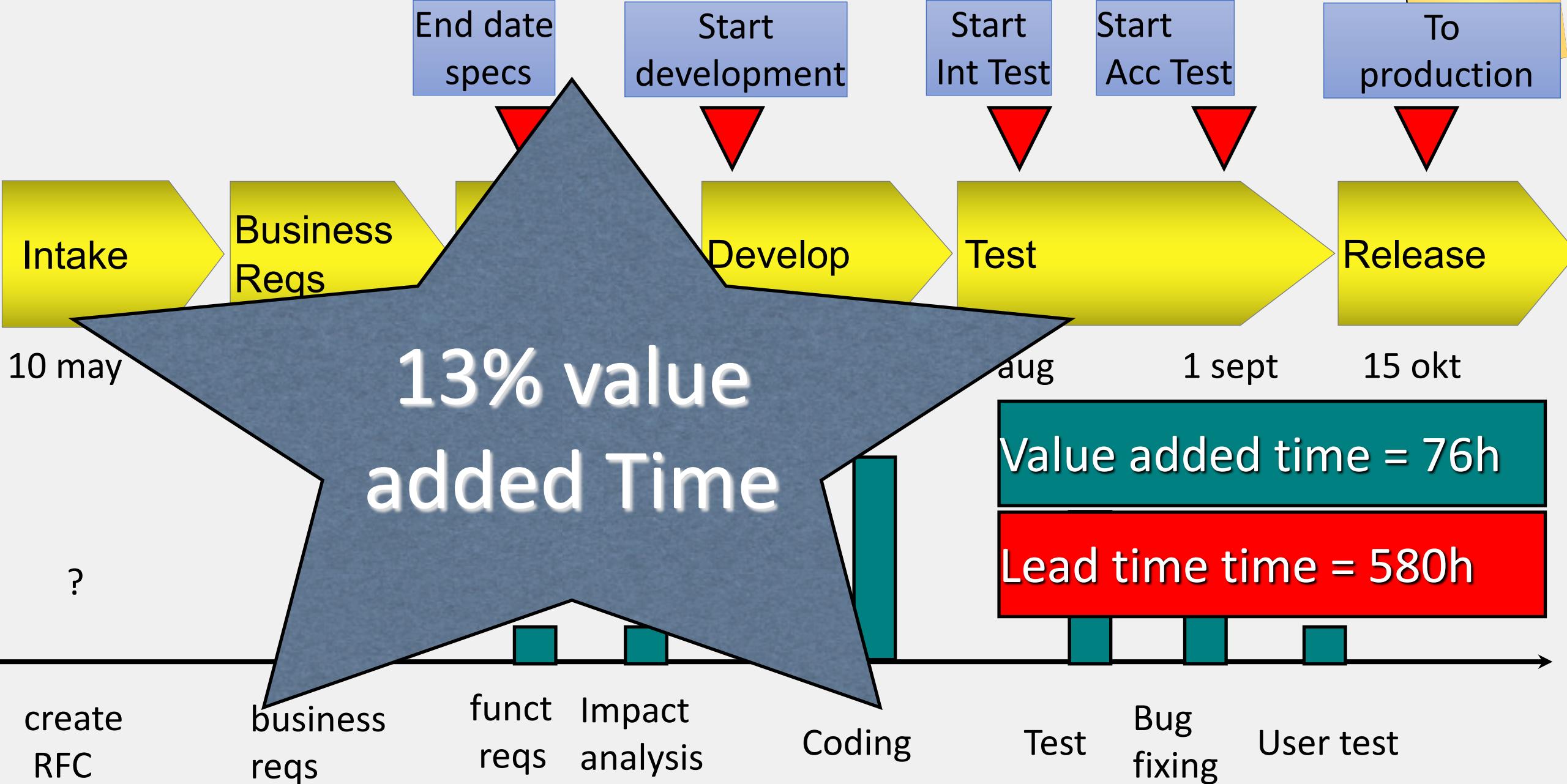
yuvakrishna.memes





# Local Optimization Cognitive Bias

“It’s more efficient or productive when a person/group does one specialization.”



# Irony Of Local Optimisation

Everyone is busy and doing their best on their task, yet the system is delivering slow and not delighting the customer...

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# Systems Optimization

Watch the Ball NOT  
the Players



# Systems Optimization

Deliver the Dish NOT  
the Unions

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# Summary

## Component Teams

- Optimizes For Local Team Efficiency
- Focus on lines of code
- Responsible for a part of a feature
- Need special coordination roles
- Often leads to Low quality code
- Narrow learning of new skills

## Feature Teams

- Optimizes for Agility and Speed of Learning
- Focus on e2e features
- Responsible for solving customer problem
- Self managing team owns coordination
- Motivates to create great code
- Broad learning of new skills

Doubts? Puzzles? Questions?



# Thank you!

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