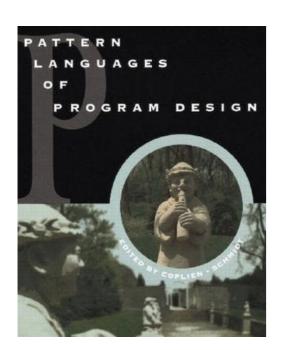
# Using Testing Specialists to Grow Testing Skills in Agile Teams

Steve Berczuk (TBA) **About Me** 



1995



2005





2002

Software Development

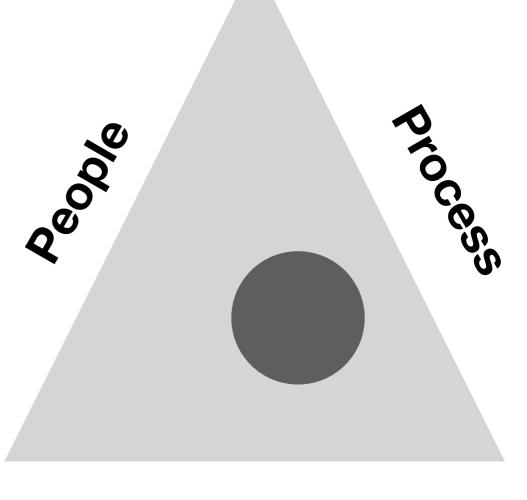
Writing





**Technology** 

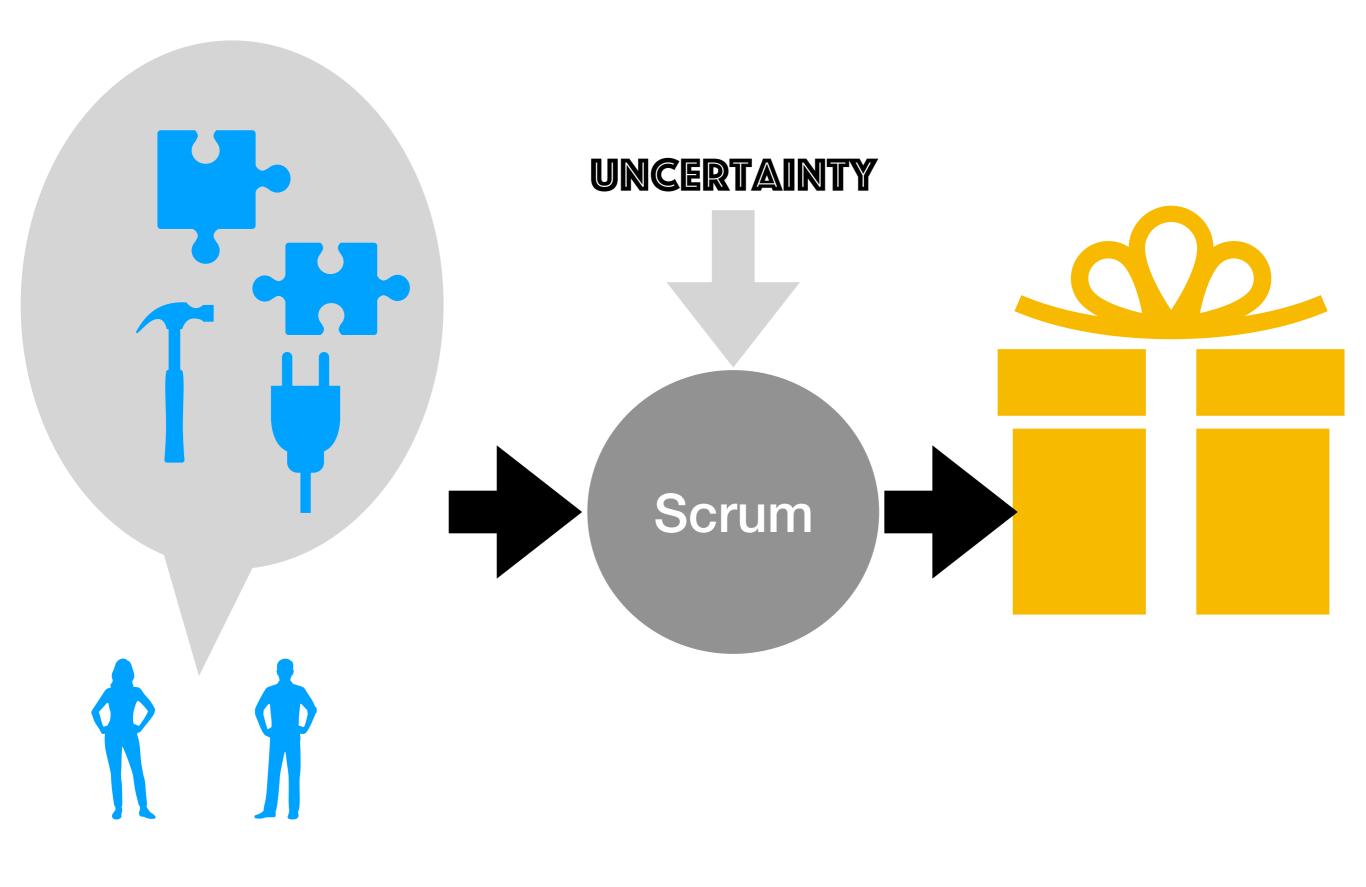




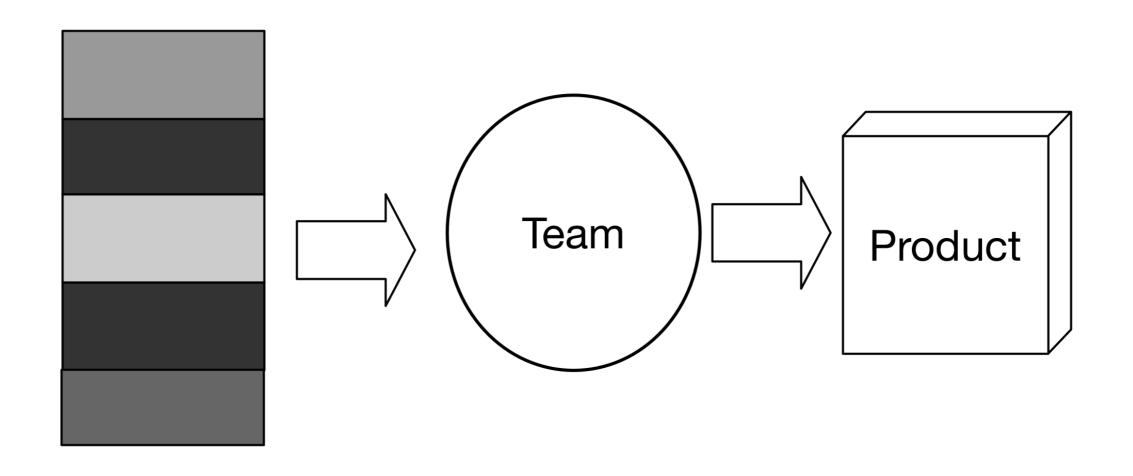
# Agenda

- Scrum Process & Principles
- Scrum and Scrum Teams, and Testing
- Dealing with Growth and Specialization
- Questions/Discussion

# Scrum Process & Principles



#### The Scrum Team



**Product Backlog** 

### Scrum

Team

**Events** 

**Artifacts** 

#### Scrum

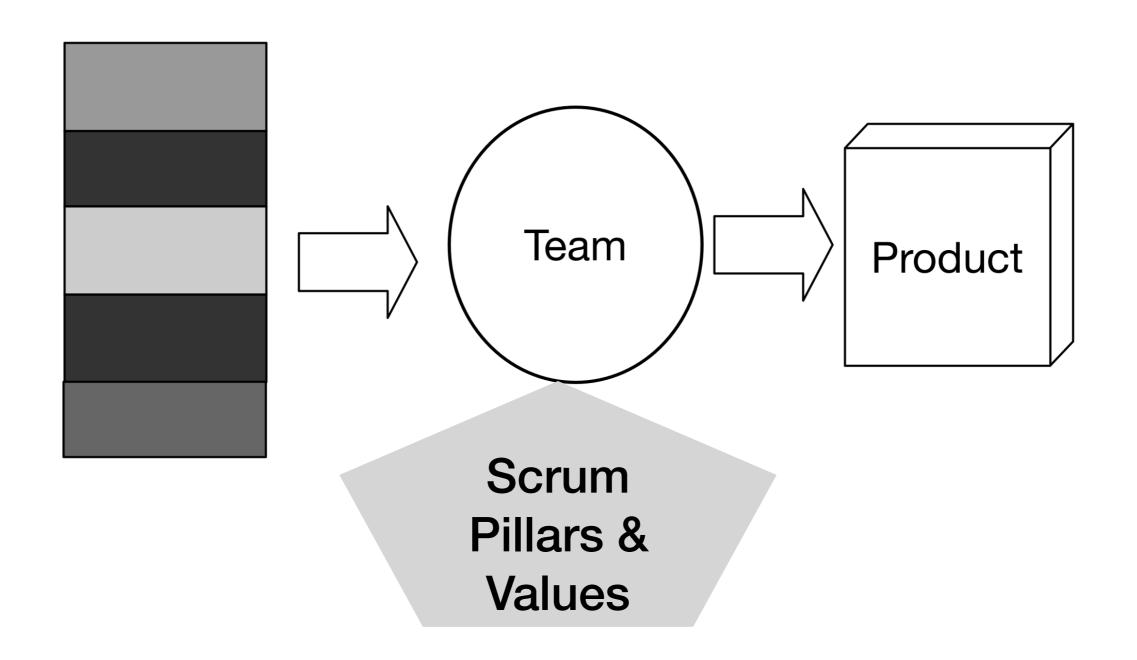
**Team** 

**Events** 

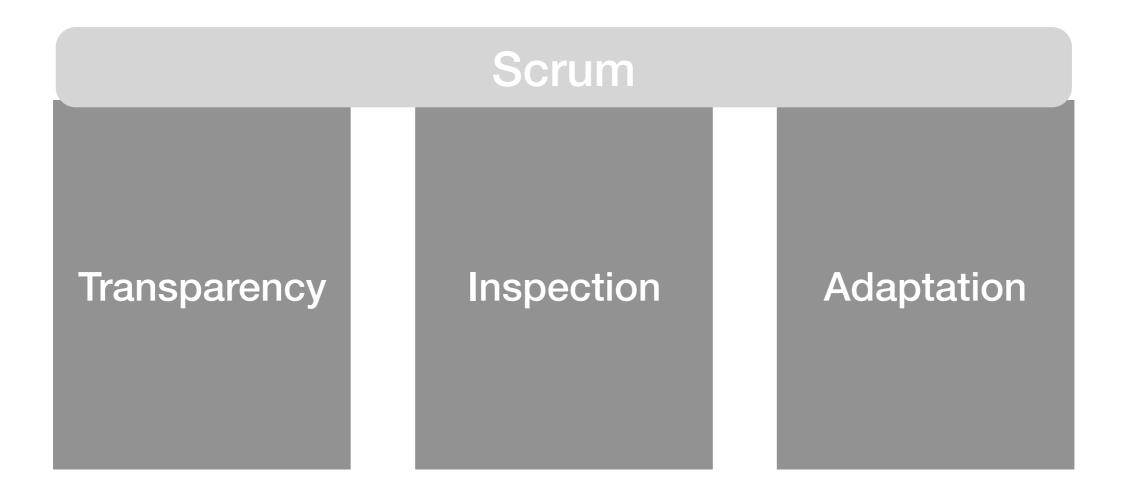
Self Organizing
Self Contained
Accountable

**Artifacts** 

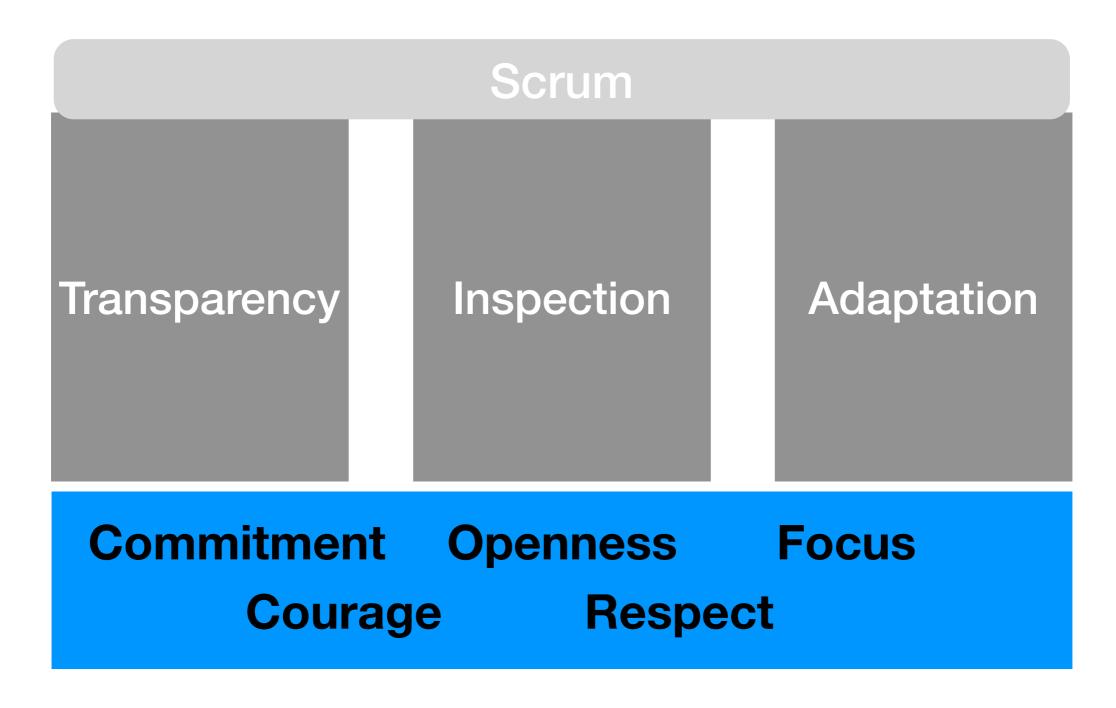
#### The Scrum Team



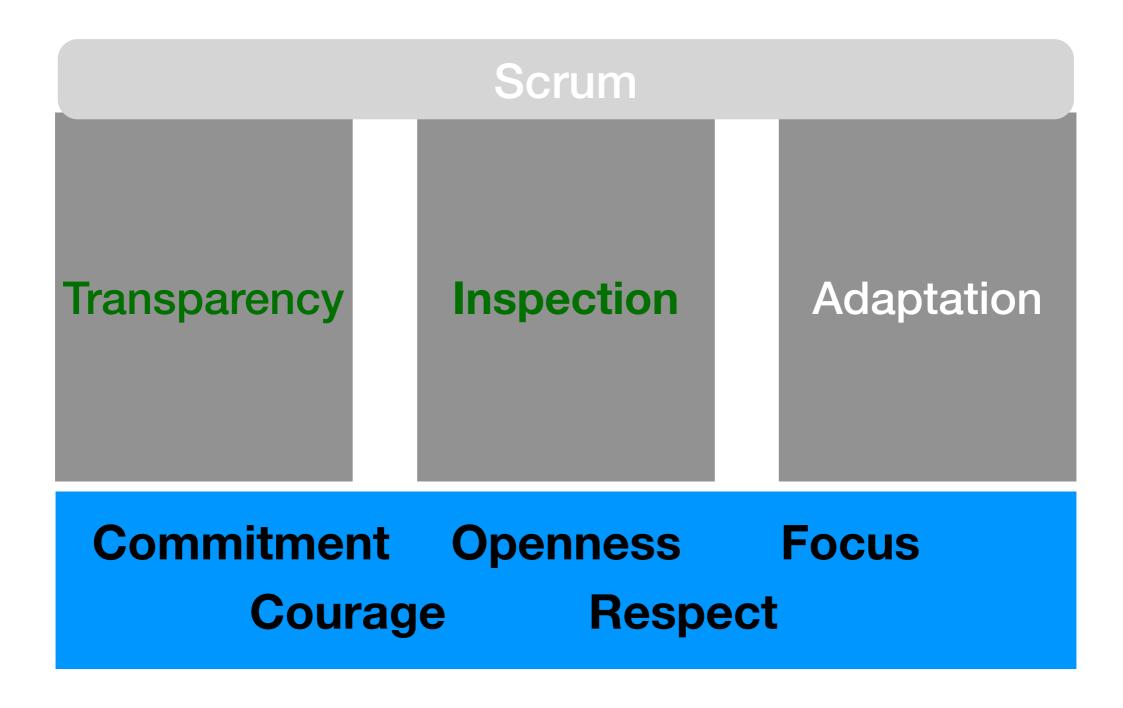
#### Scrum Pillars and Values



#### Scrum Pillars and Values



#### Scrum Pillars and Values



#### Scrum

**Team** 

Self Organizing

**Self Contained** 

Accountable

**Artifacts** 

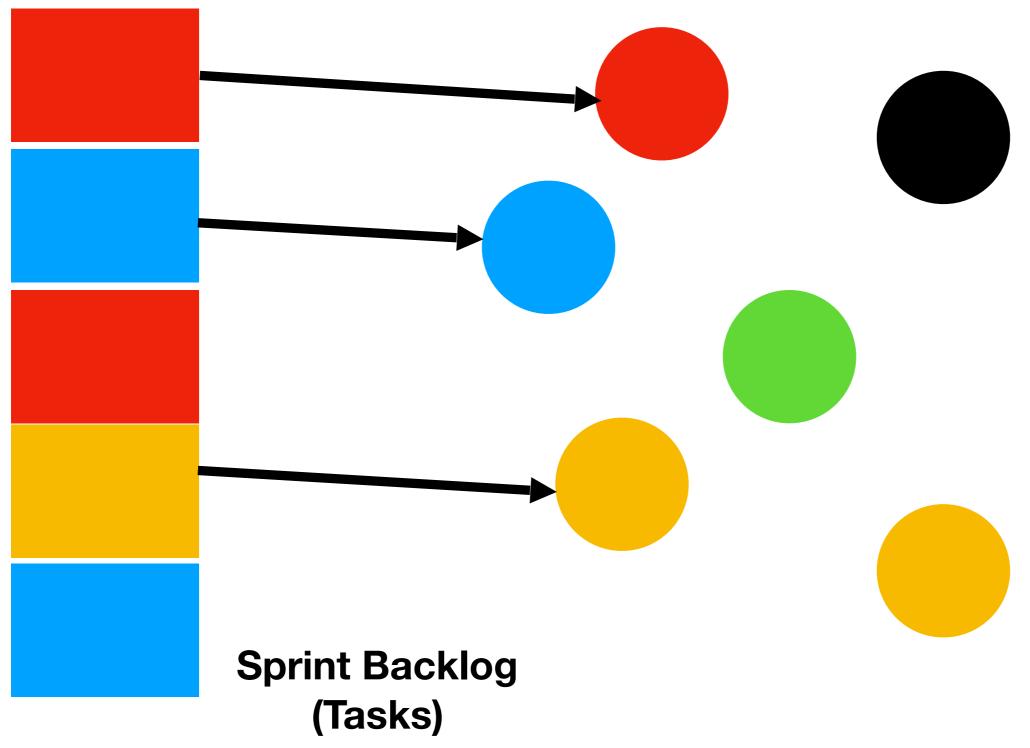
**Events** 

#### Scrum

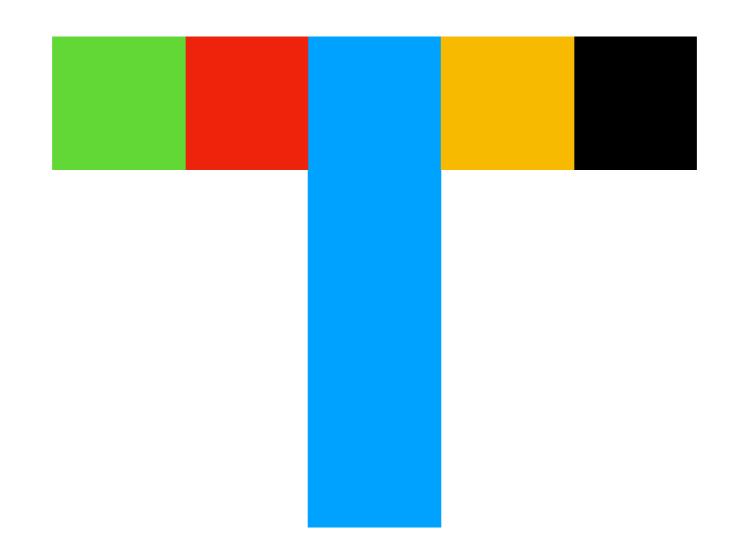
**Team** ctional Self Organizing **Self Contained** sting Accountable ployment

# Why Cross Functional?

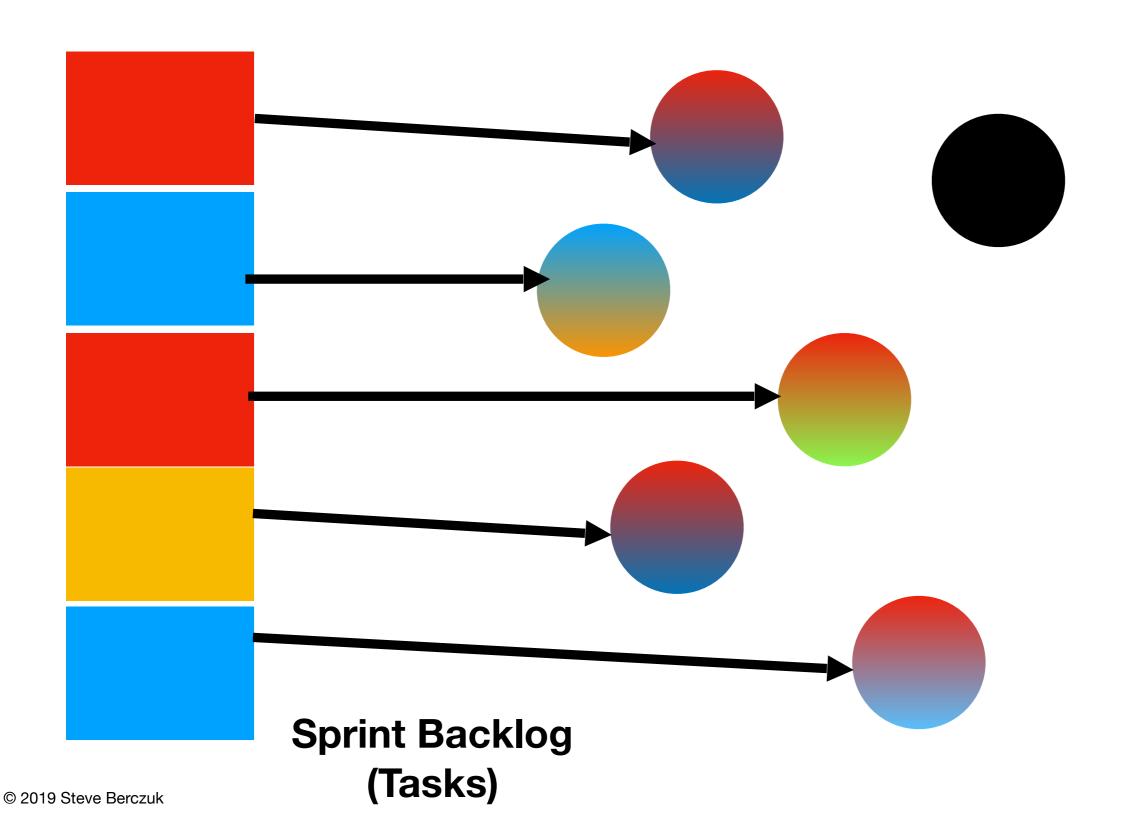
# Experts Only: Blocking



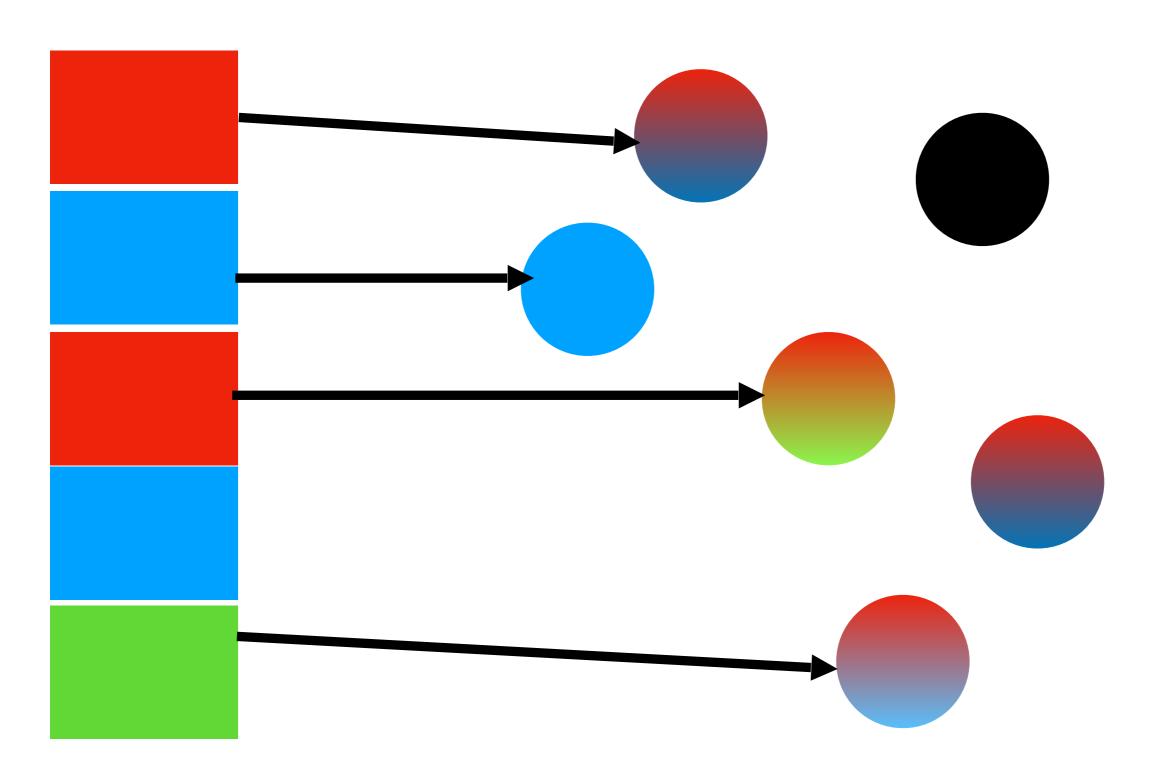
# T Shaped Skills



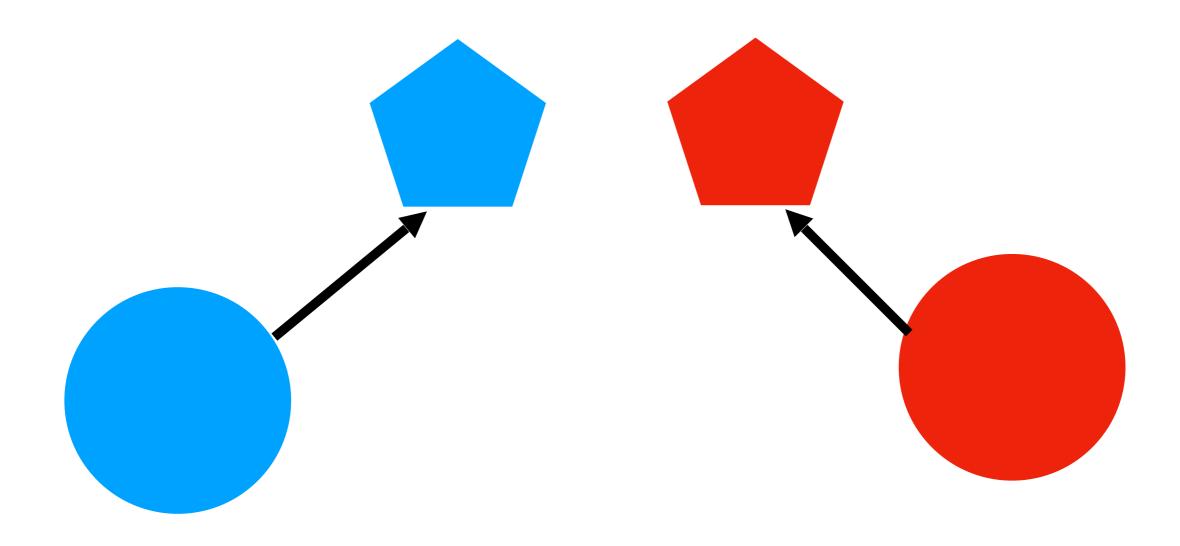
# T-Shaped Skills



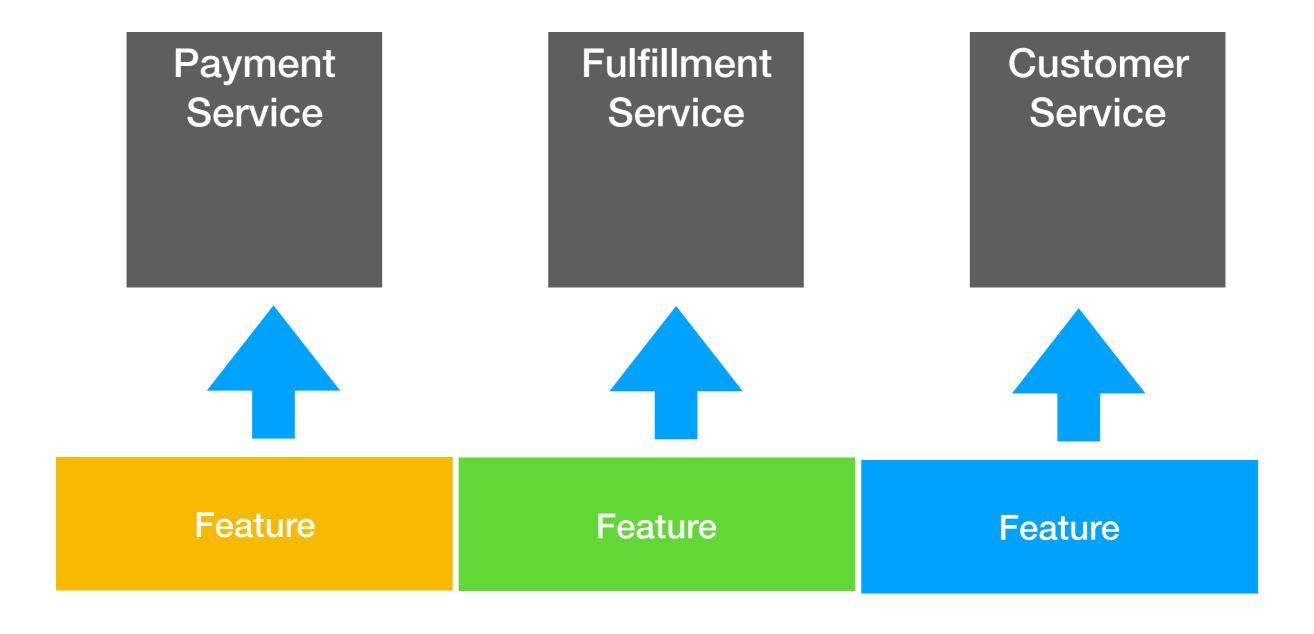
# Reality



#### Teams and Features

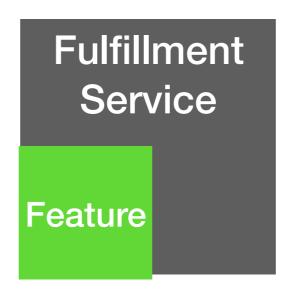


#### Aside: Feature v Application



#### Aside: Feature v Application







# Testing in the Lifecycle





**Build & Test** 

Unit Integration

. . .

# Automated Integration Testing is Different

**DEVOPS** 

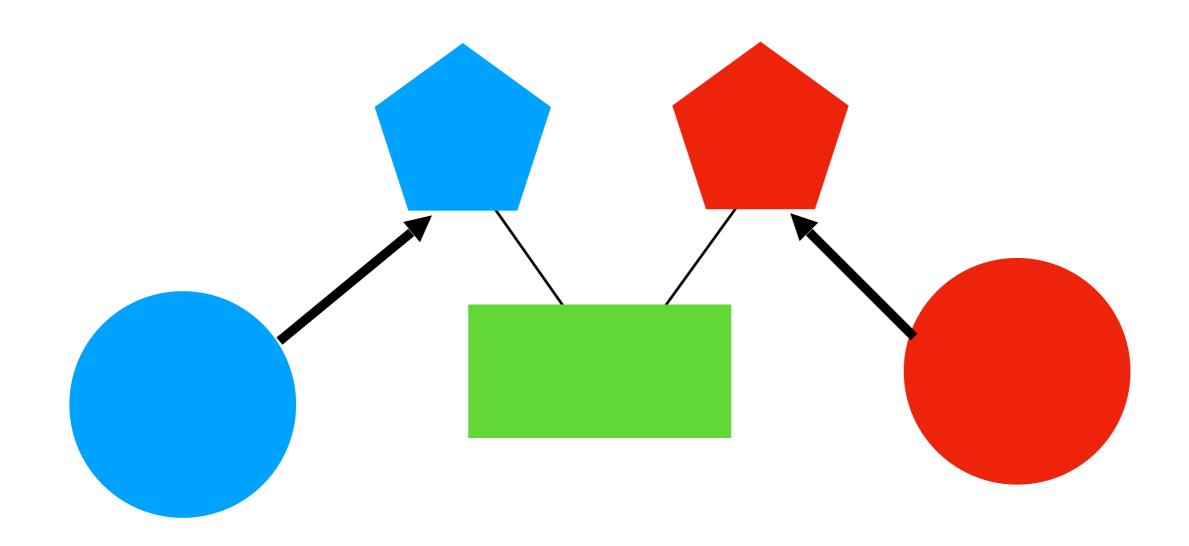
QUALITY

# Automated Integration Testing is Different

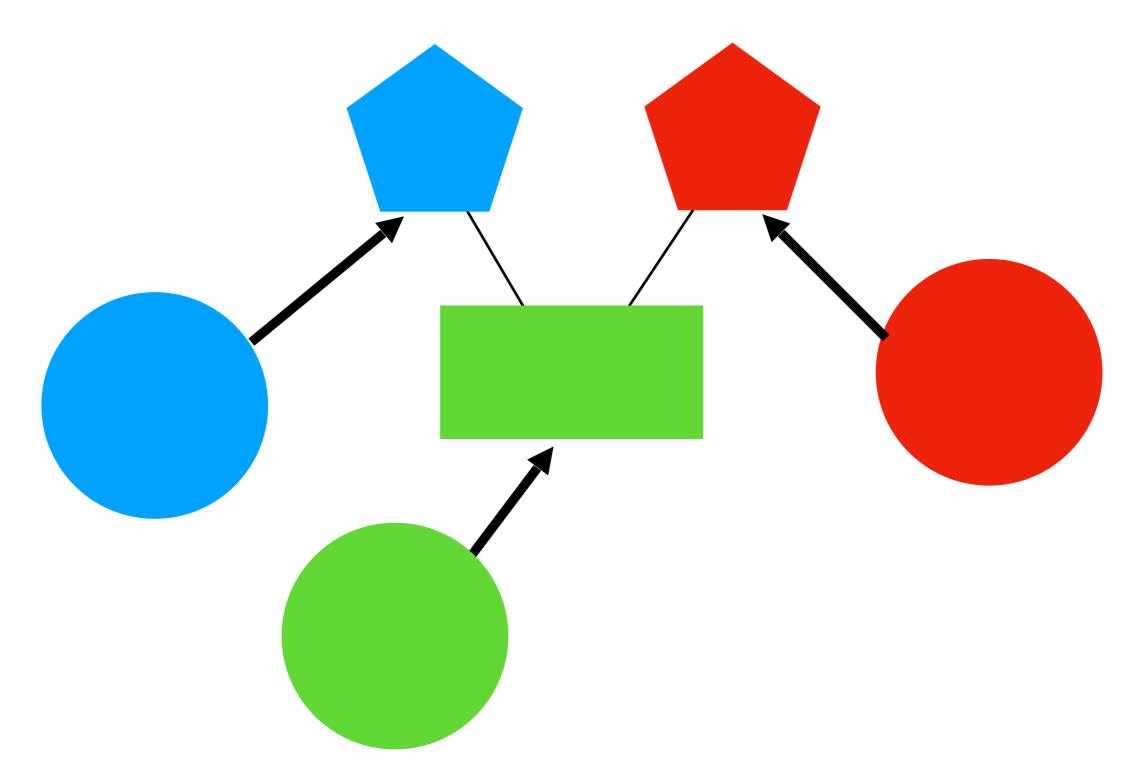
Coding

# Scaling Development

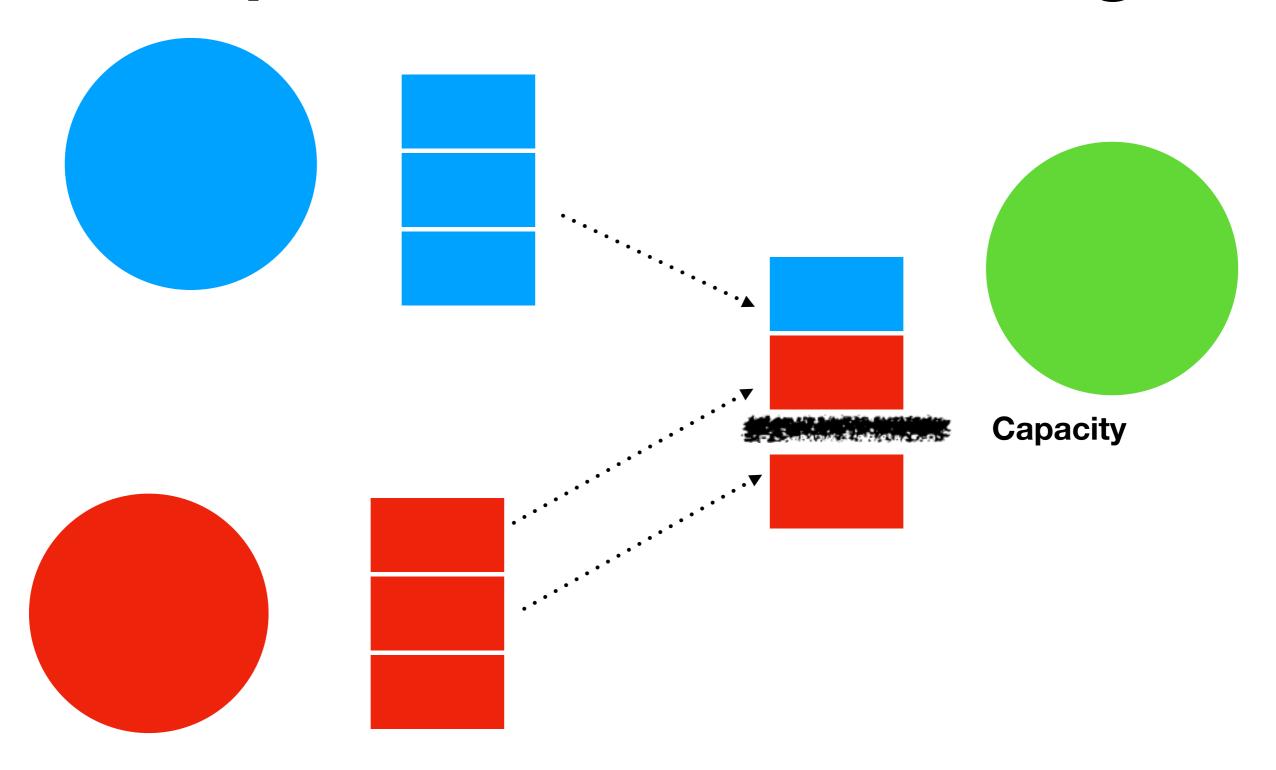
# Teams and Components



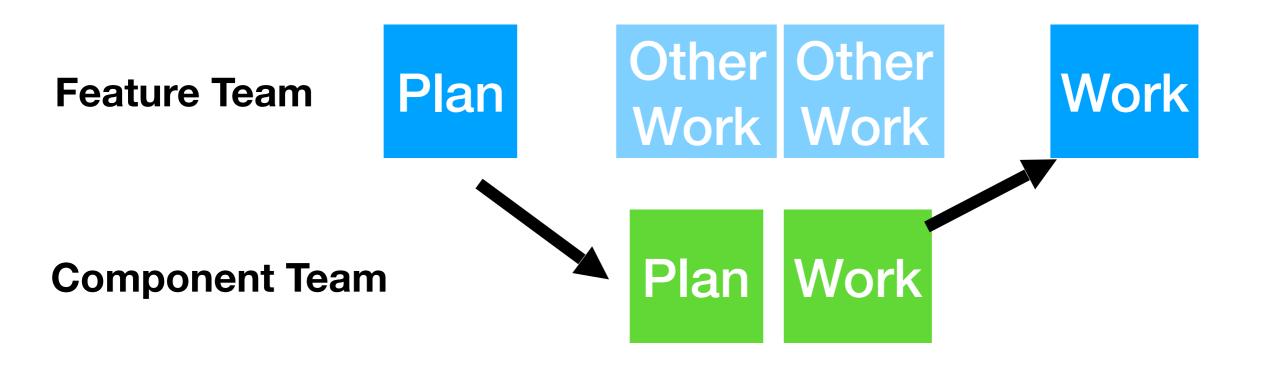
# Components & Features



#### Component Team Backlogs

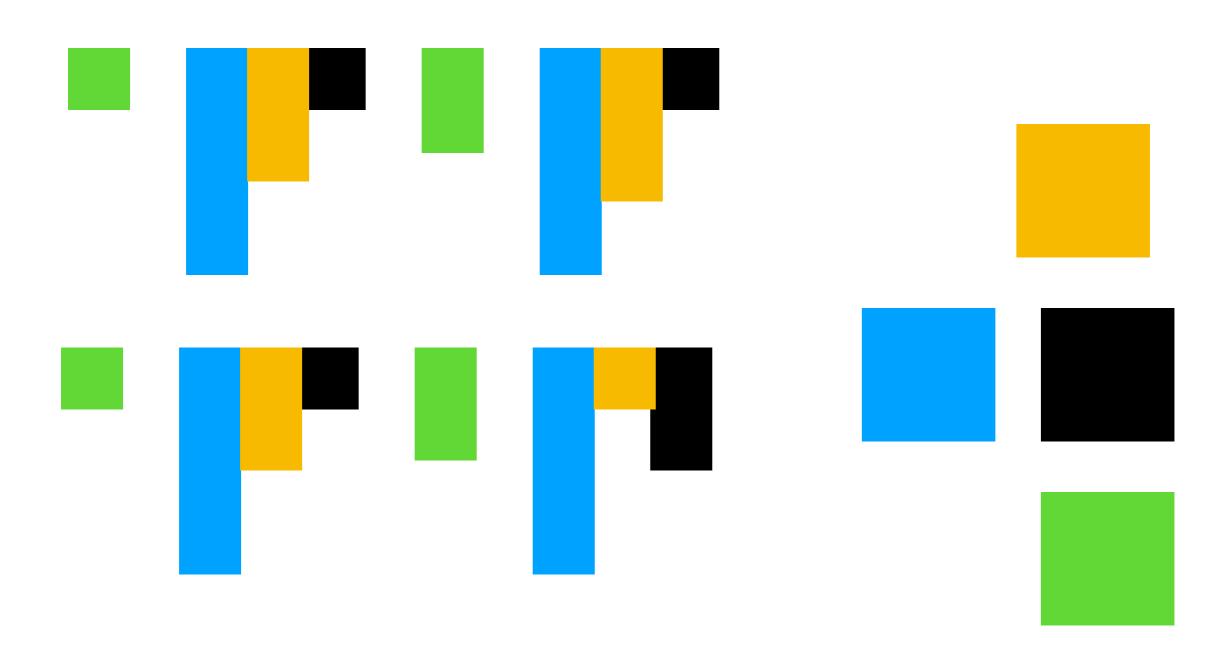


## Dependencies in Time

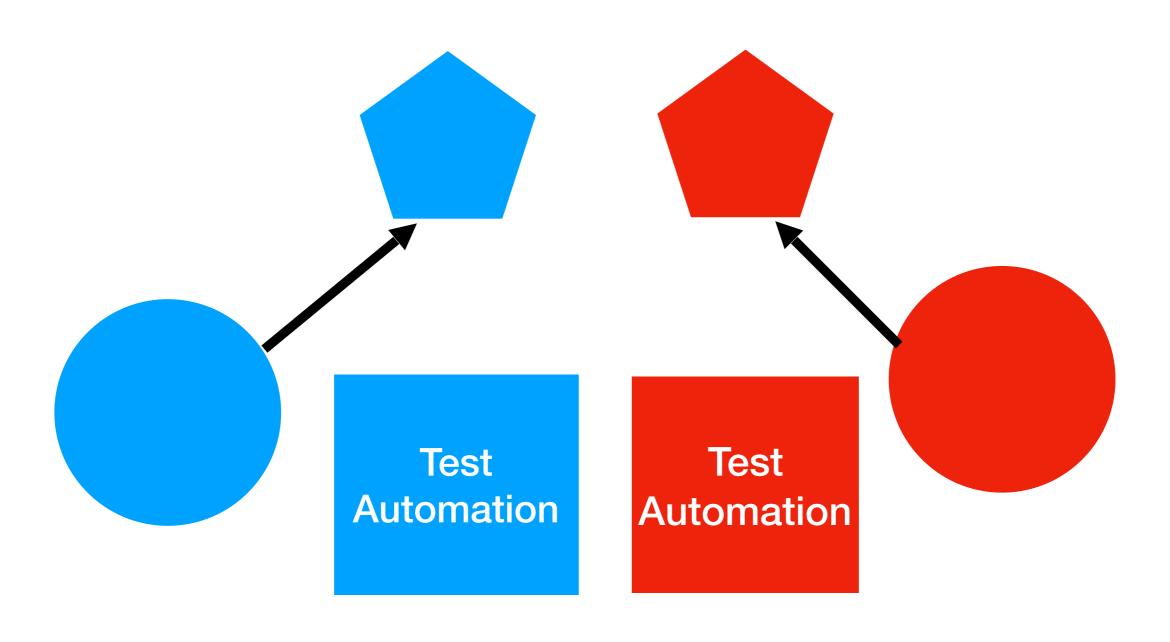


# Single + Self Contained Teams are Better

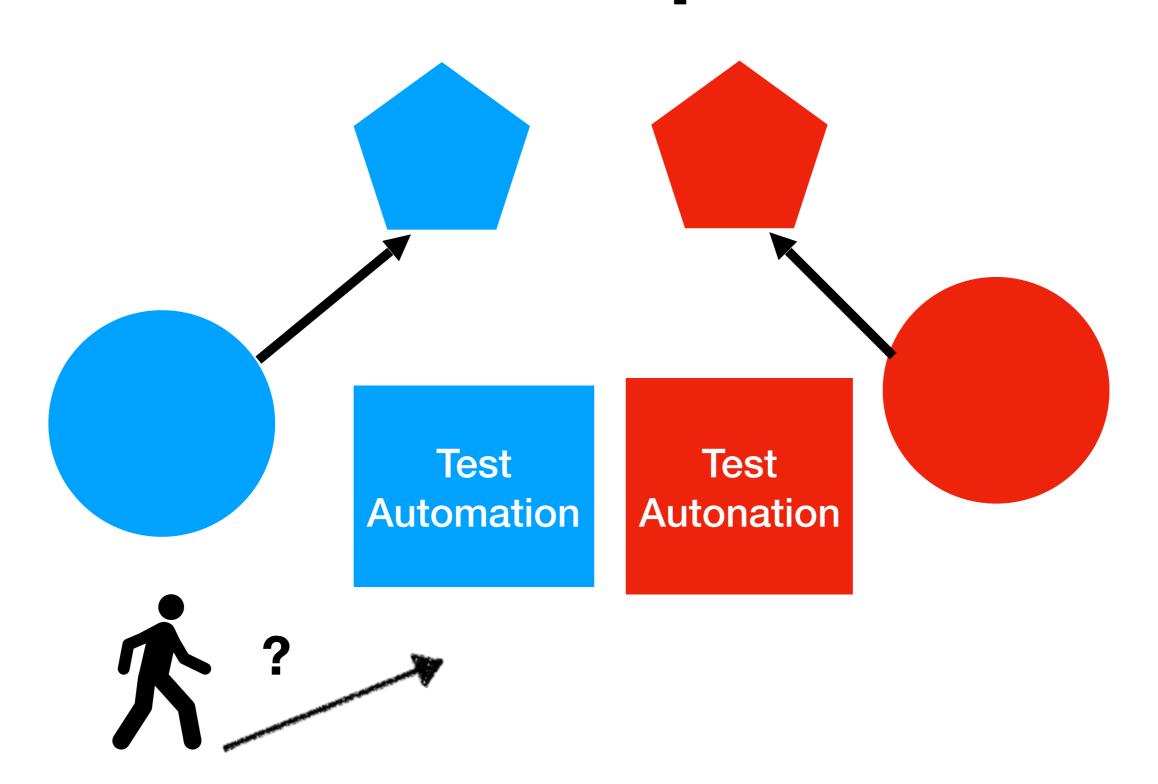
# Missing Skills



# Teams and Specialties

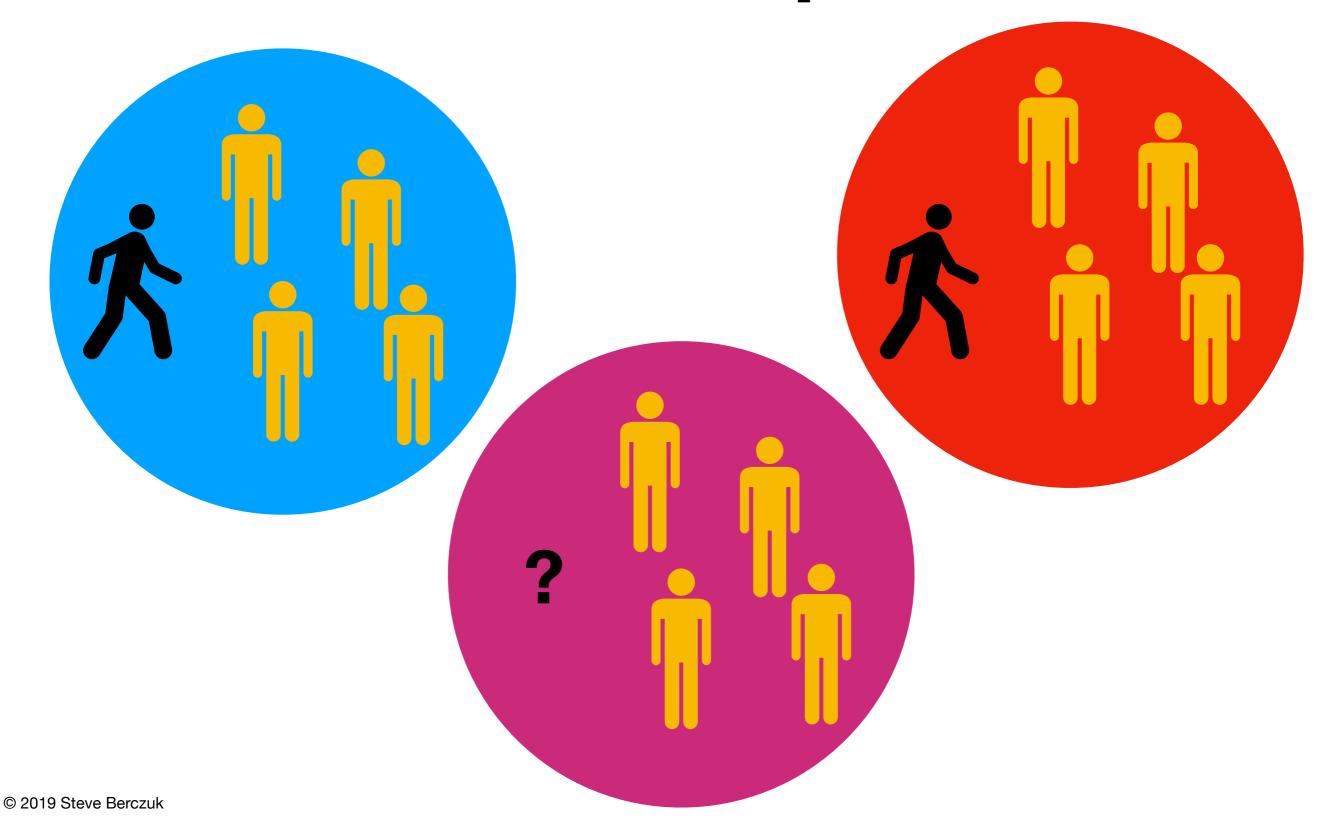


# Teams and Specialties

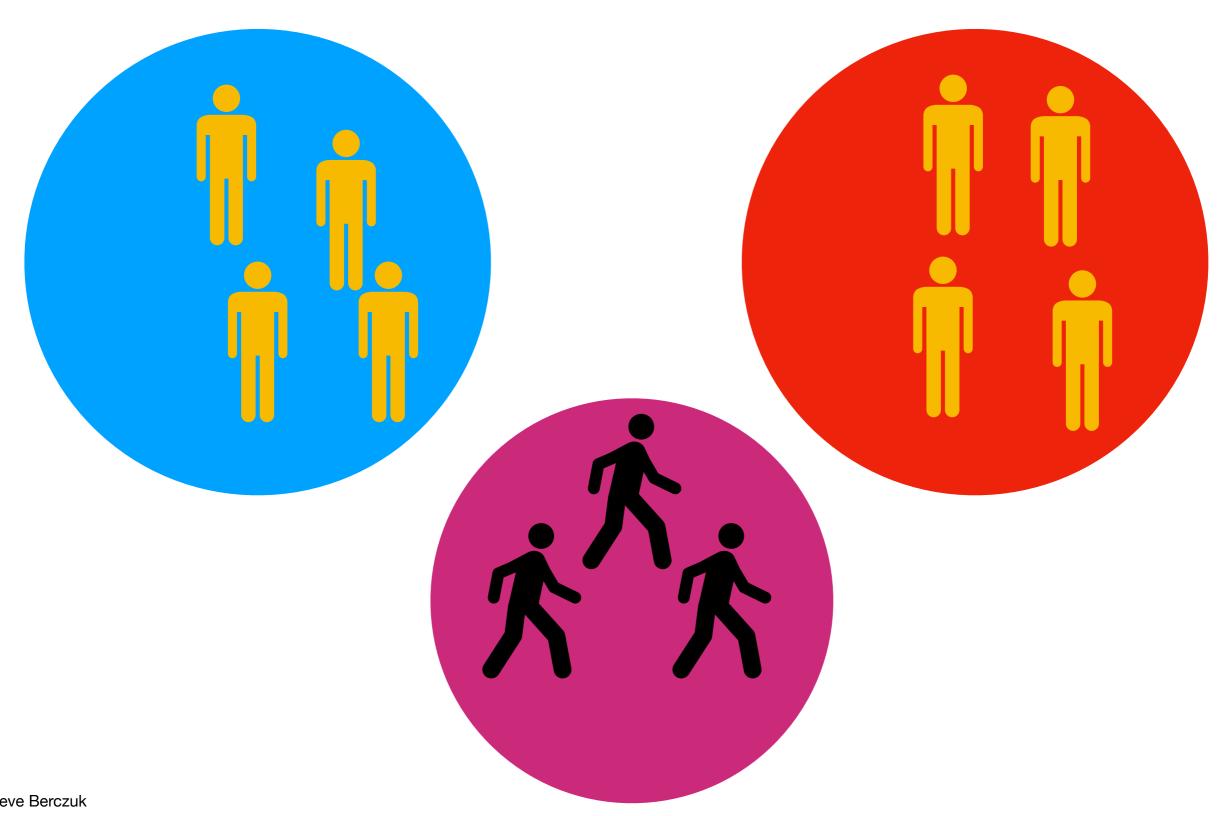


# Specialists: Options

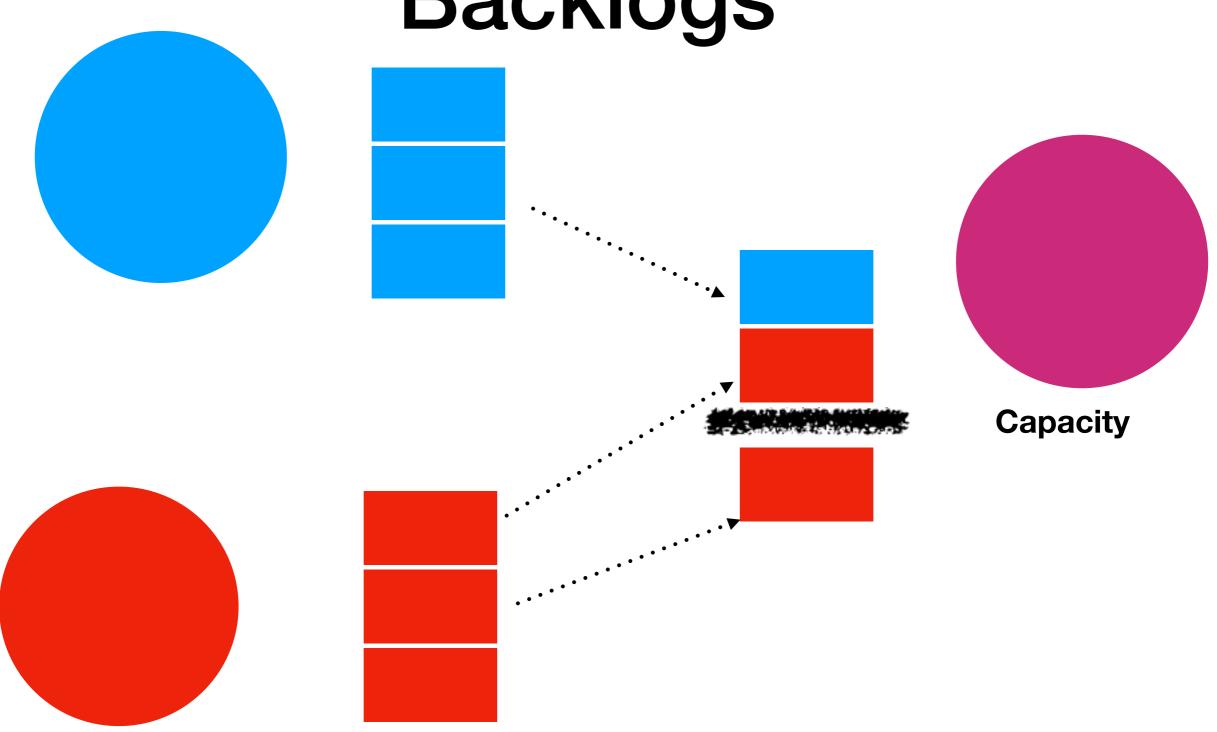
# Embedded Specialist



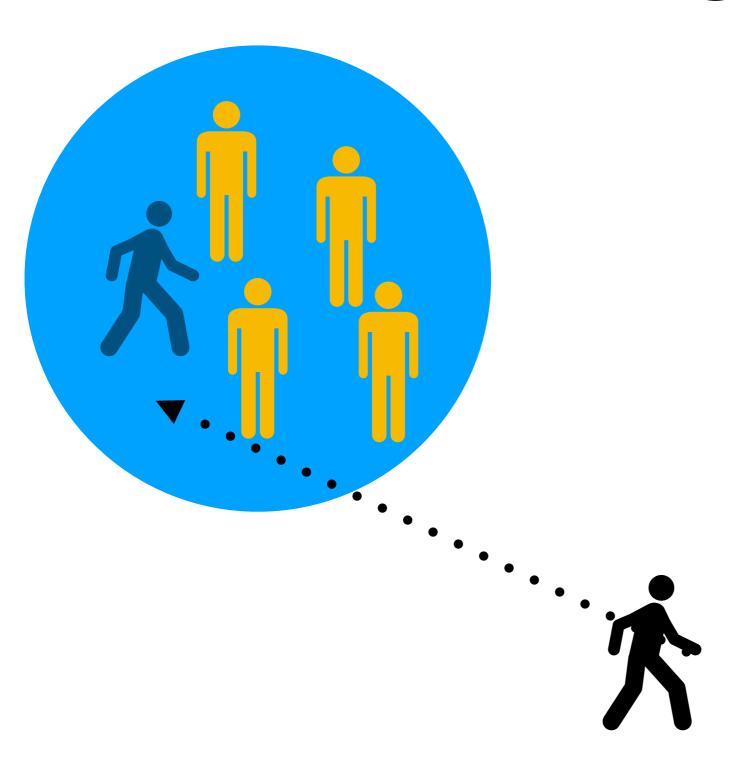
#### Specialist Component Team

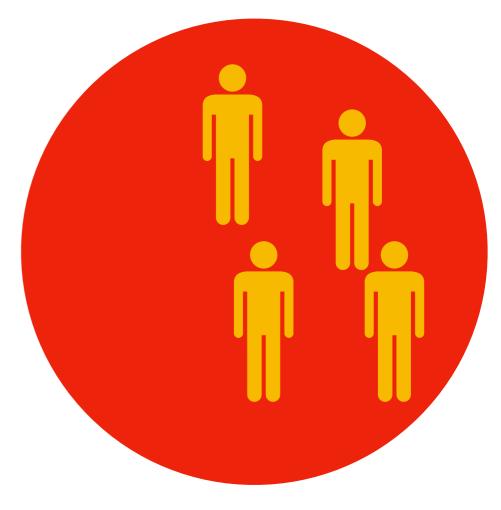


# Specialist Component Team Backlogs

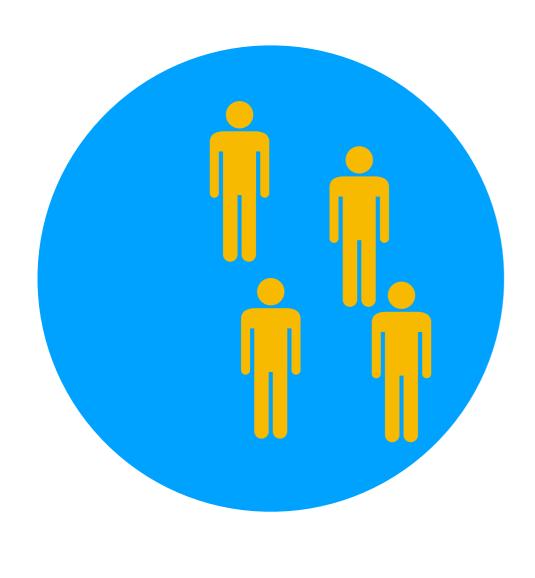


# Consulting Model





# Consulting Model







#### Balance

**Bandwidth** 

Reuse

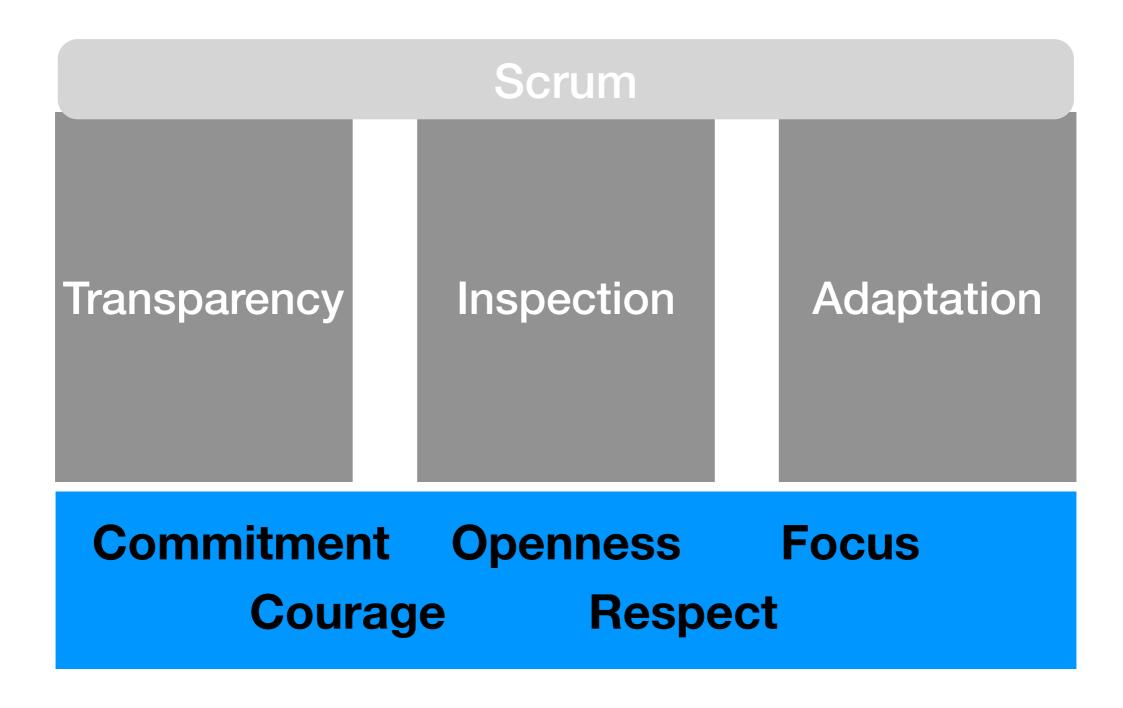
Commitment

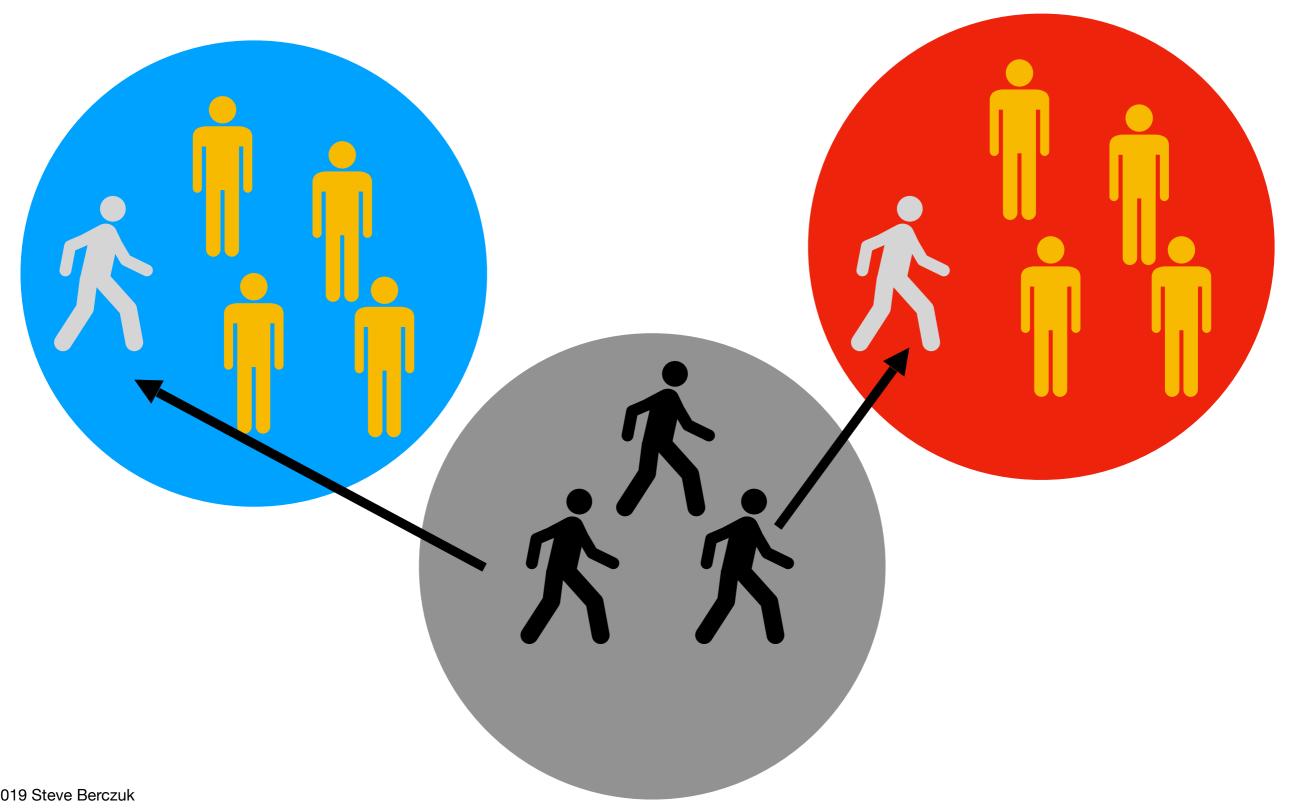
Communication

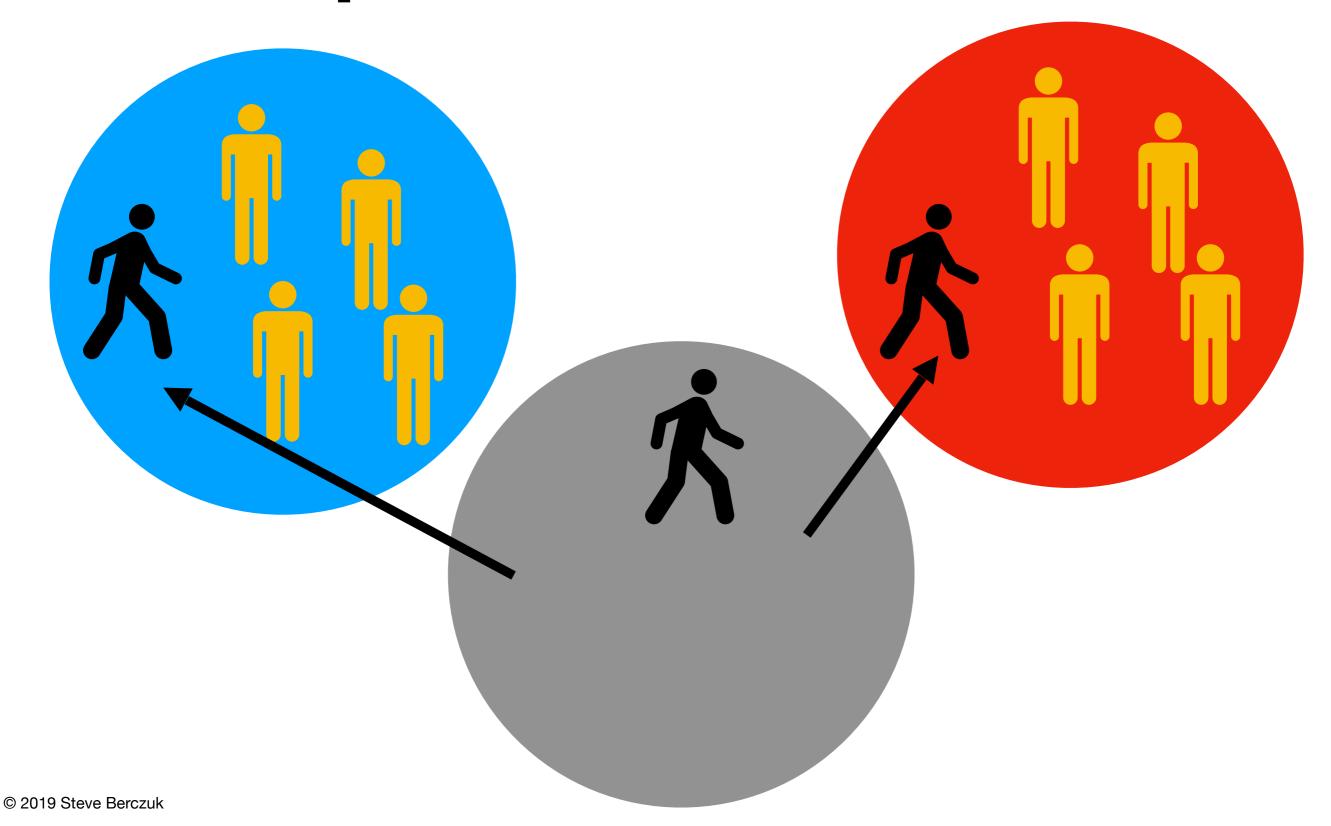
**Efficiency** 

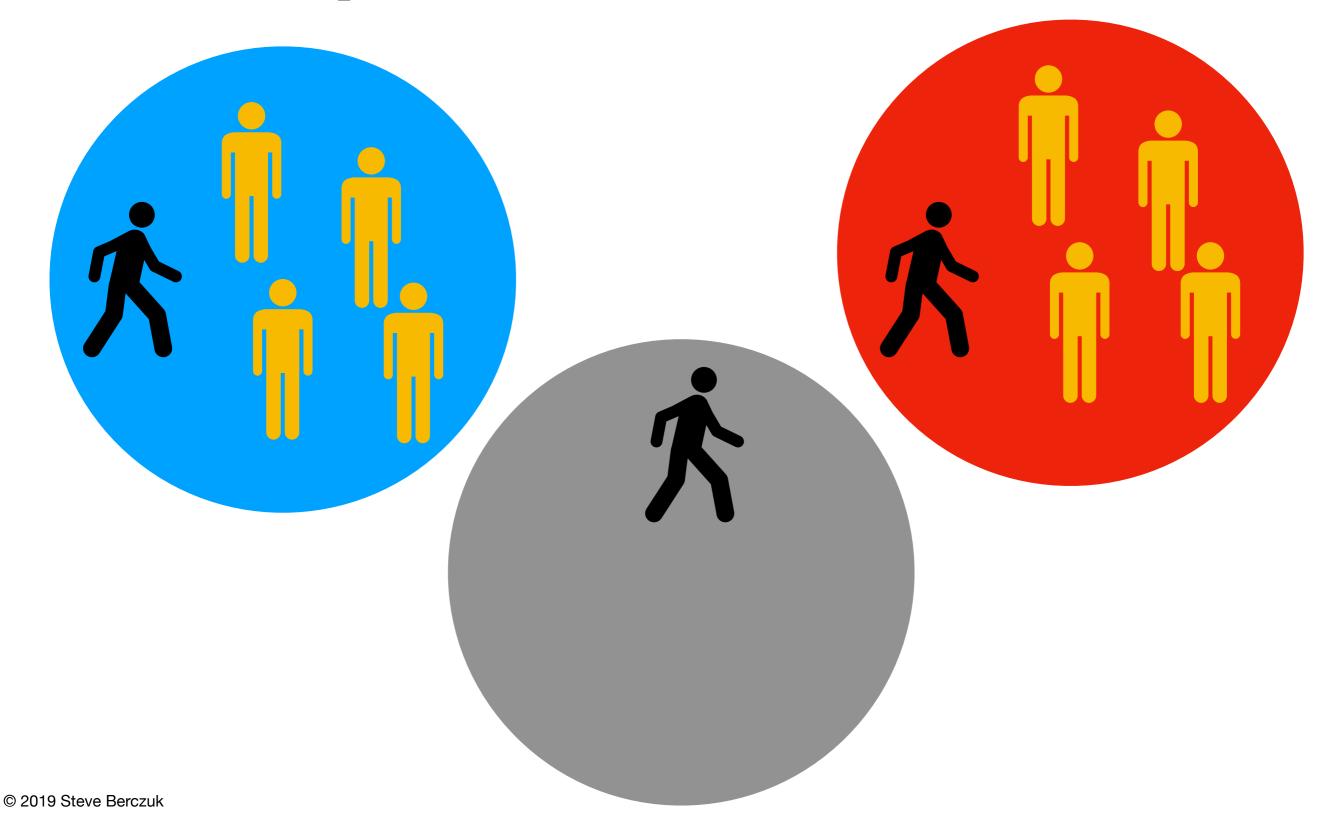
**Team Cohesion** 

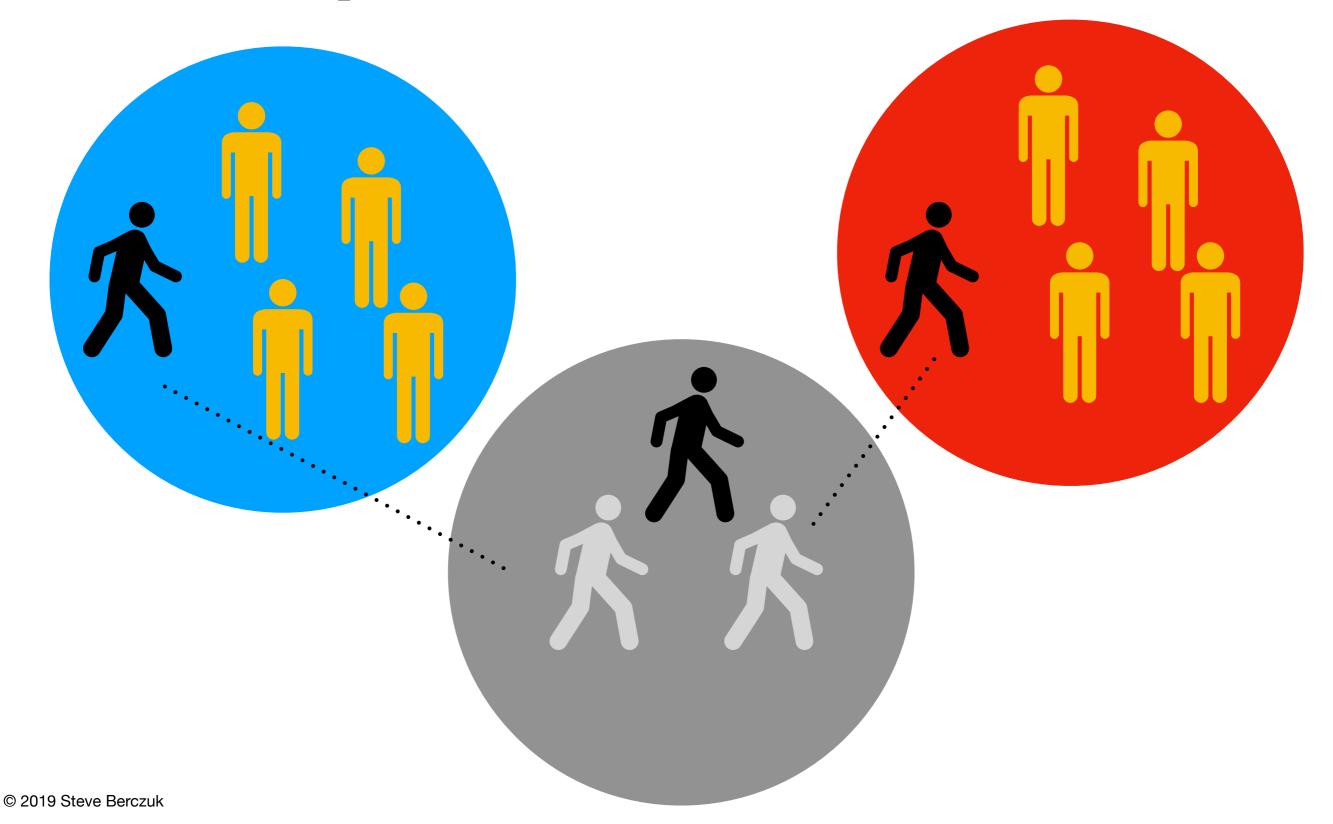
#### Scrum Pillars and Values



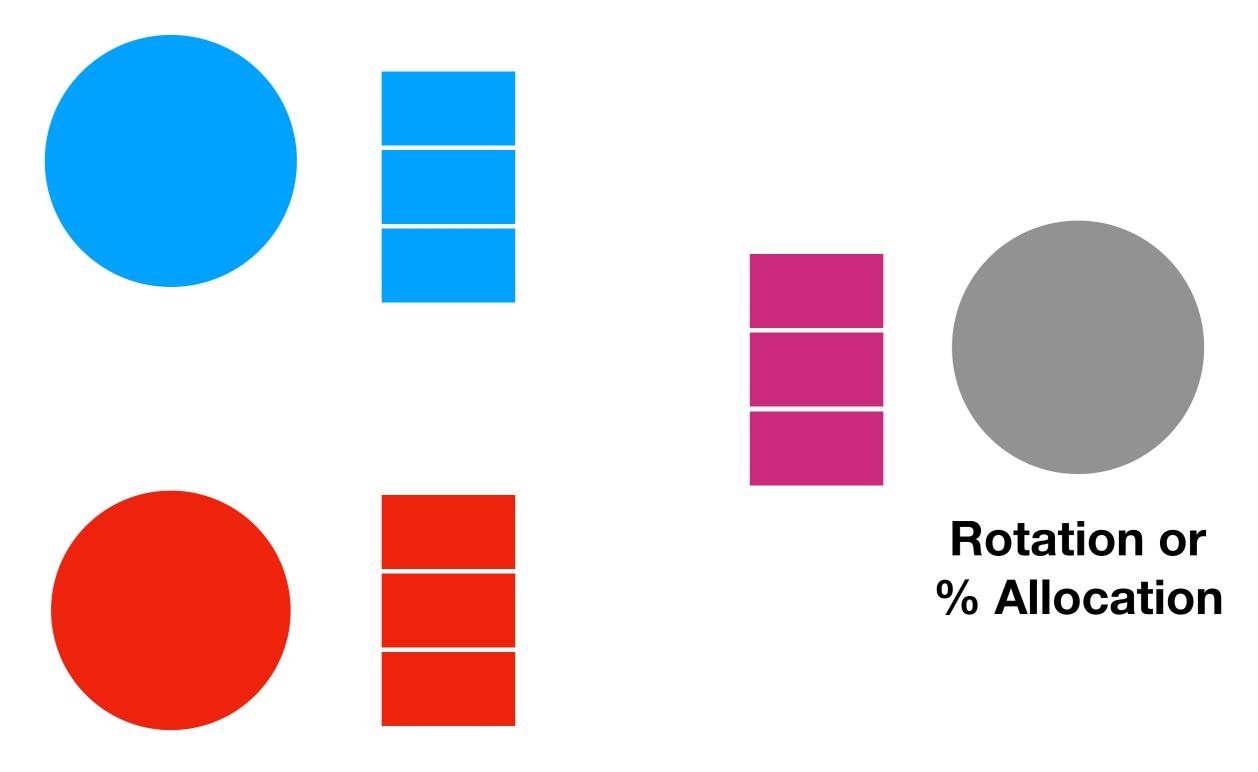






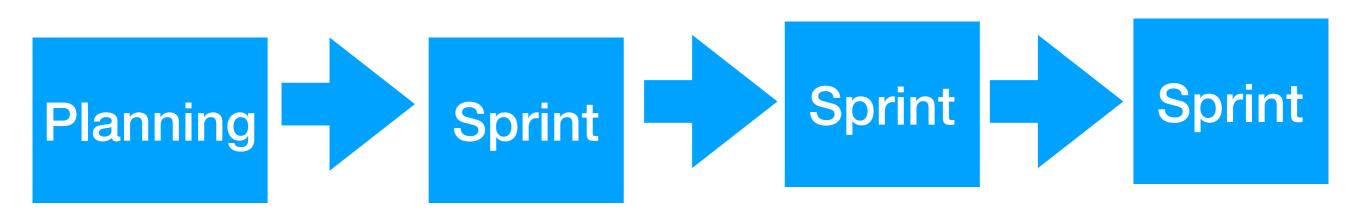


#### Specialist & Team Backlogs



- Embed with Scrum Teams for multiple sprints
- Train, Coach, and Build Infrastructure
- Identify Common Needs Across Teams
- Share Knowledge Across Teams
- Build Shared Tools and Frameworks

#### When?



**Plan** 

Embed Team 1 Embed Team 1

Embed Team 2

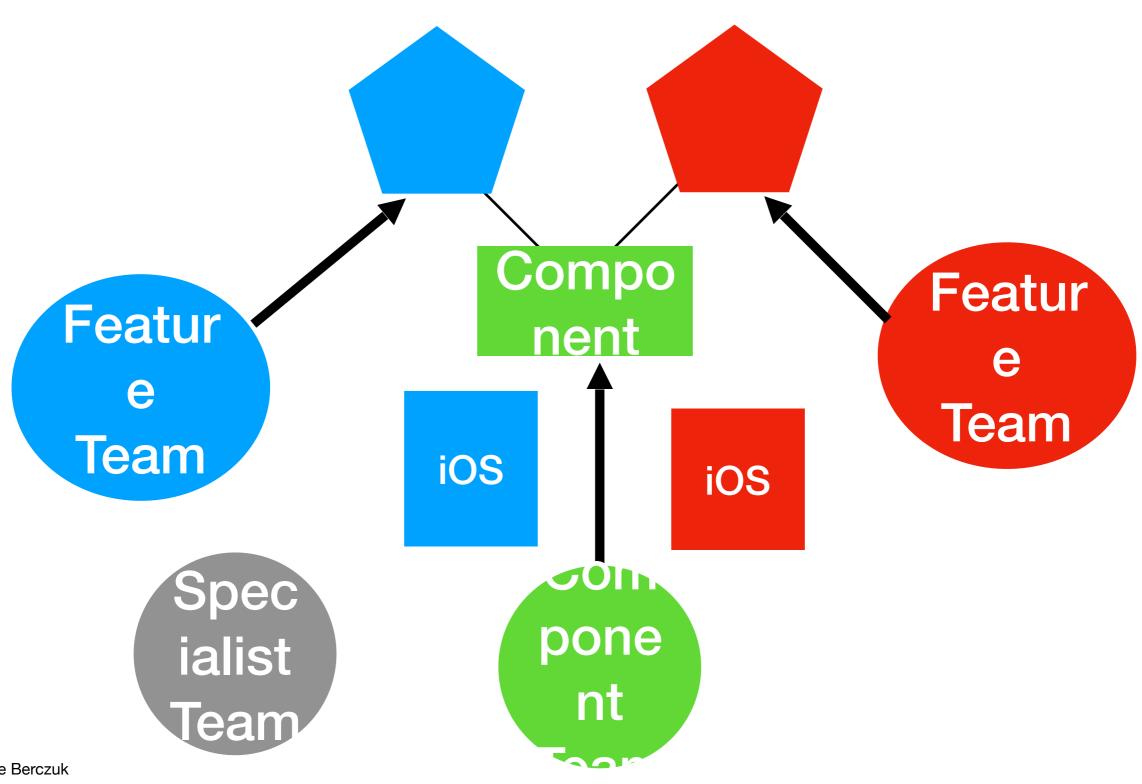
# Benefits: Knowledge Sharing

- Embedding for a period of time -> Commitment
- Sharing of knowledge and techniques
- Creation of communication channels between teams

# Other Approaches to shared Special Tools

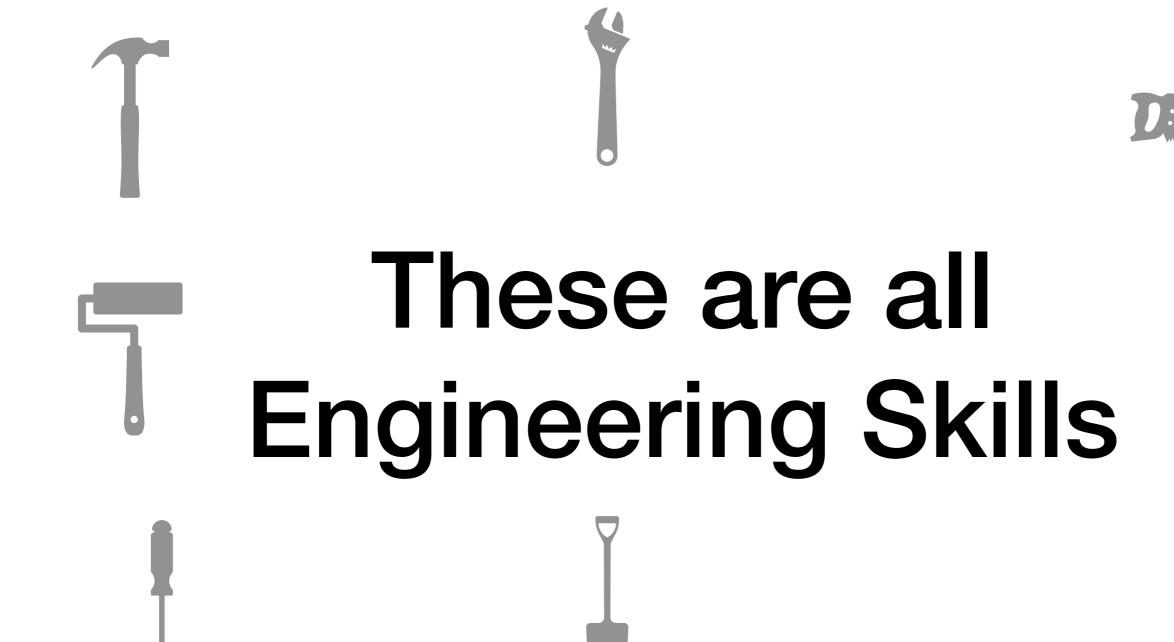
- Collective Code Ownership
  - Teams make changes as needed & Share (versioning)
  - Internal Open Source (Specialists as gatekeepers)
- Component Team
  - Need to stay close to needs/use

#### Types of Teams



### Things to Do

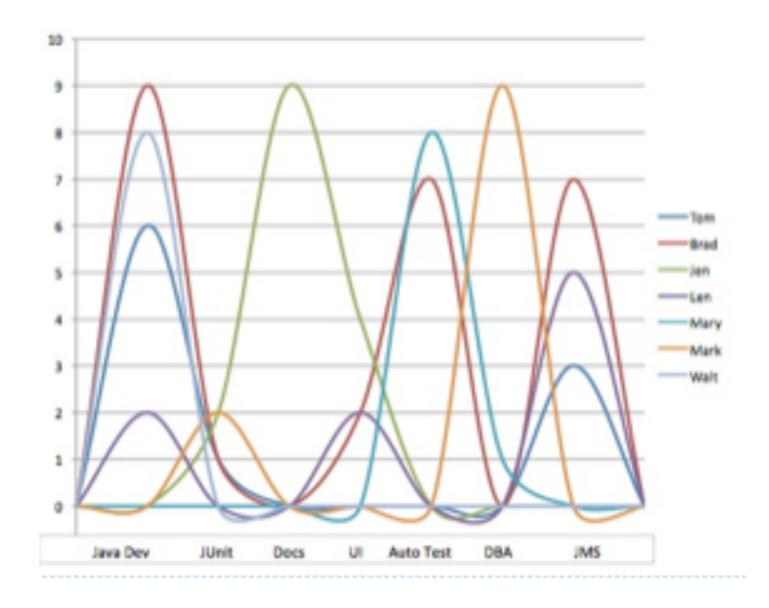
- Visualize your team's skill set
  - Jan Beaver Visualizing Cross Functionality (<a href="https://www.greyrockagile.com/presos/">https://www.greyrockagile.com/presos/</a>
     Visualizing CrossFunctionality Jan Beaver SGATL.pdf
- Identify gaps
- Consider how you organize teams



# Expertise, Training & Learning







### Summary

- Feature Teams
  - Build Features (Customer Visible)
- Component Teams
  - Build Shared Components
- Specialist Teams
  - Embed with Feature and Component Scrum Teams
  - Most members are embedded in other Scrum Teams
  - Enable Teams to forecast more accurately with less overhead

#### Questions?

#### Contact

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- Linked In: steveberczuk
- steve@berczuk.com
- www.berczuk.com