A Whole-Team (Dev+QA) Approach to Creating Your Successful Agile Project

Johanna Rothman
@johannarothman
www.jrothman.com

Everyone's "Doing The Agile"

- We "know" what the words are and we use them
- We "know" the roles
- We "know" the ceremonies
- Cargo cult agile

Where Are You in Your Agile Journey?

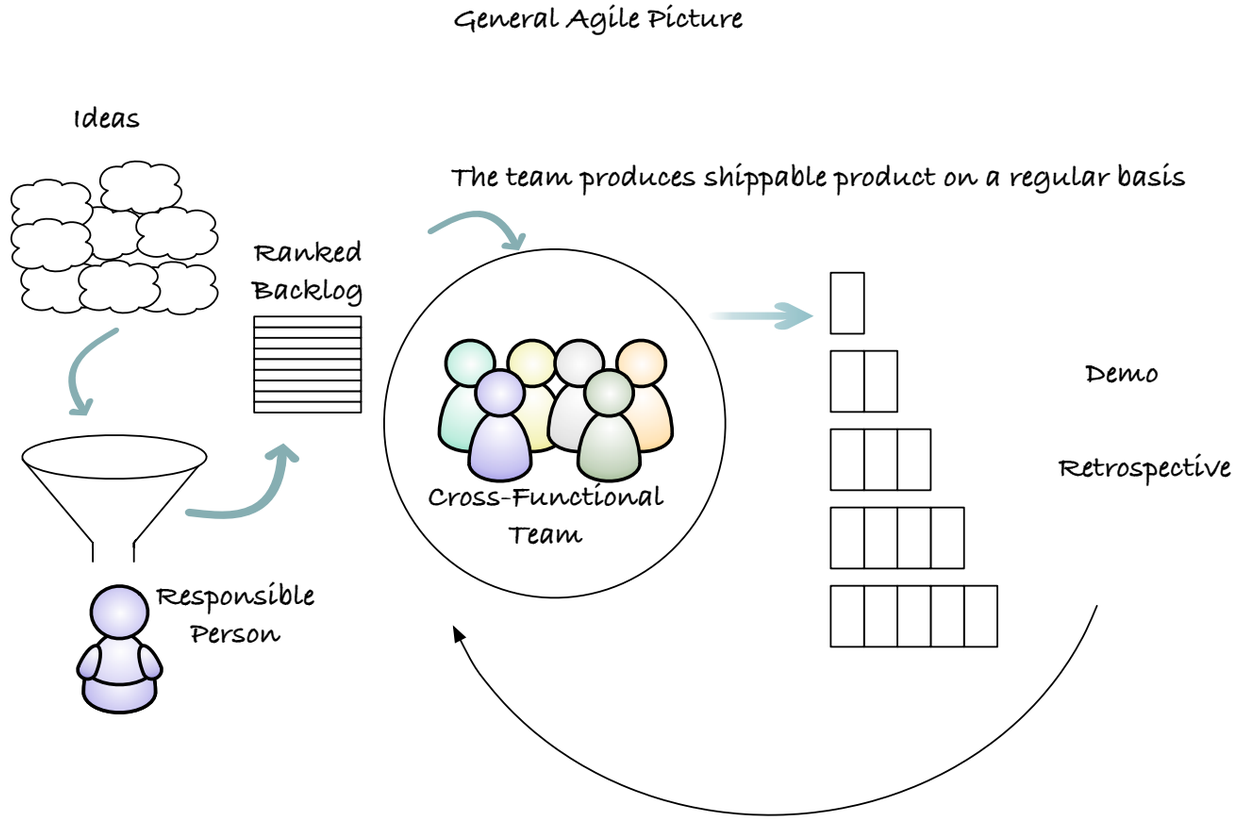
1. We are thinking about an agile approach.

2. We're trying to use an agile approach in silo teams.

3. We have cross-functional teams and we try.

4. We have cross-functional teams who often get to done on our stories.

5. We get to done, pretty reliably



Capitol-A “Agile” or agile approach?

Review the principles behind the manifesto

Common Agile Traps That Kill Quality

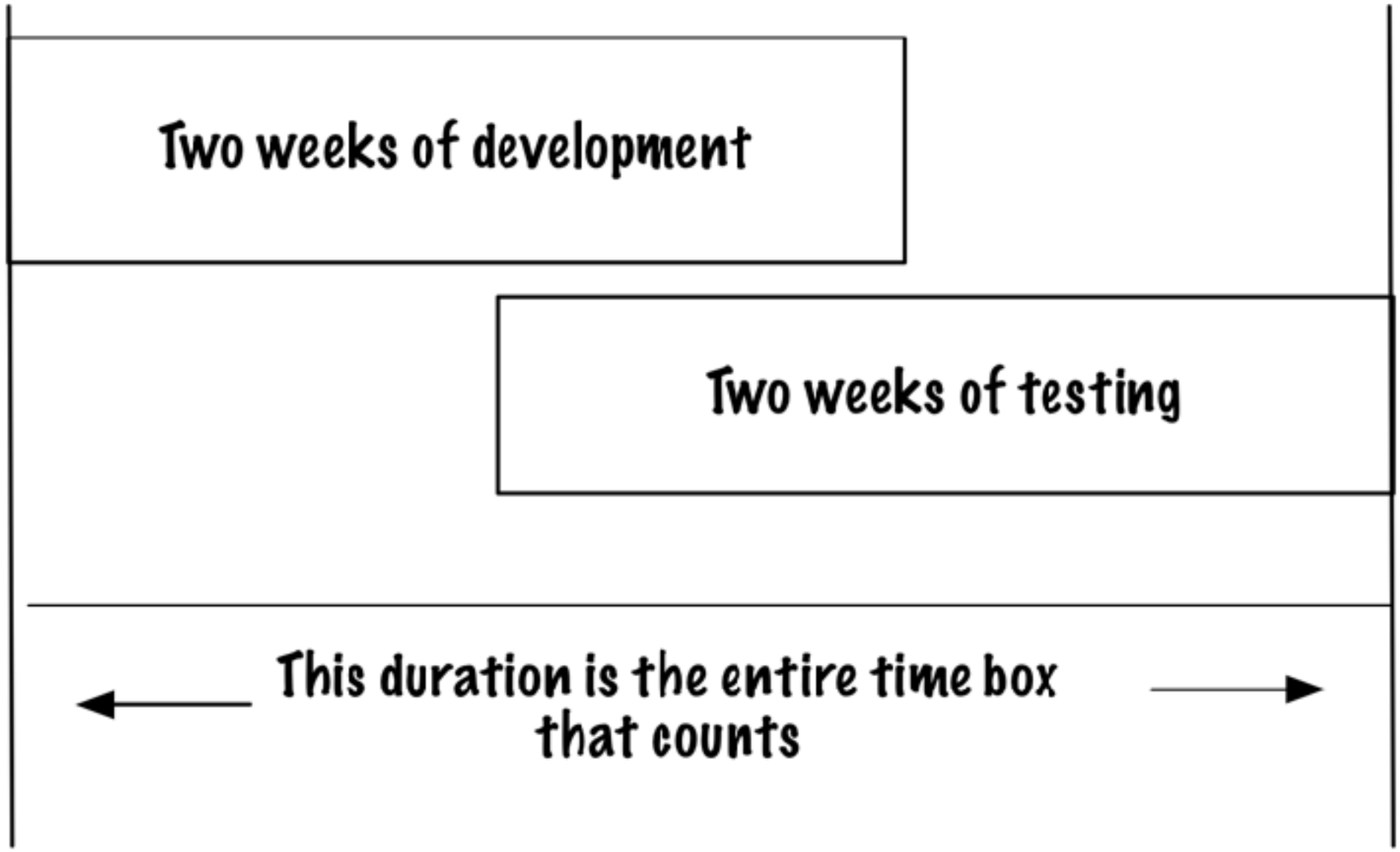
- Small iterations of waterfall
- Staggered iterations
- Thinking that Scrum==Agile

Short Iterations of Waterfall

Waterfall Masquerading as Agile in a Timebox

Phase	Requirements	Analysis	Design	Code	Integration	Test
Duration	Day 1: Define All Requirements	Day 2-4: Analyze and Discuss	Day 4-5: Design	Day 6-8: Code	Day 9-10: Integrate all Requirements	Night of Day 9 and part of Day 10: Test
Notes	If it takes you all day to analyze, can you finish in two weeks?	No code yet	Still no code	Finally!	Oops, doesn't all work	No time! Slip to next iteration

Staggered Iterations



Scrum != Agile

Two Kinds of Agile Approach

Iteration-Based Agile

Requirements Analysis Design Build Test Release Deploy	Requirements Analysis Design Build Test Release Deploy	Requirements Analysis Design Build Test Release Deploy	Requirements Analysis Design Build Test Release Deploy	Repeat as needed ...	Requirements Analysis Design Build Test Release Deploy	Requirements Analysis Design Build Test Release Deploy

Each timebox is the same size. Each timebox results in running tested features.

Flow-Based Agile

Feature: Clarify Req't, Analysis Design Build Test Release Deploy	Feature: Clarify Requirement, Analysis Design Build Test Release Deploy	Feature: Clarify Requirement, Analysis Design Build Test Release Deploy	Repeat as needed ...	Feature: Clarify Requirement, Analysis Design Build Test Release Deploy	Feature: Clarify Requirement, Analysis Design Build Test Release Deploy

In flow, the team limits the number of features active at any time with WIP limits for each team activity.
There is no timeboxing built into flow.

Commonalities

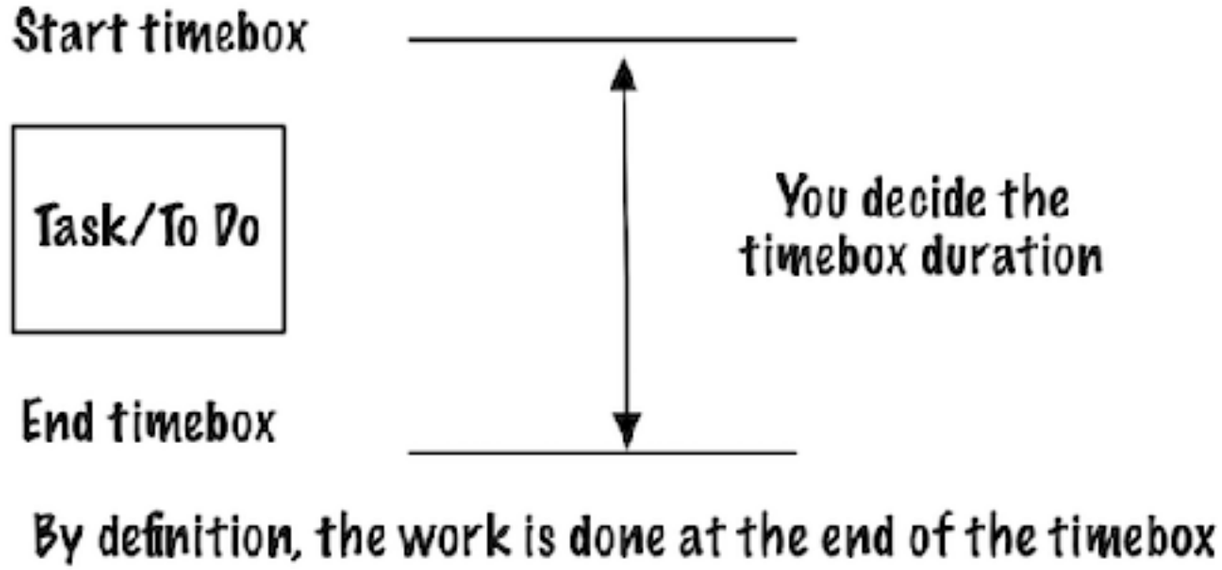
- Limit WIP
  - Timeboxes limit scope
  - Flow limits team's WIP
- Based on collaboration
- Focused on throughput
- Result in running, tested features

When to Use Each?

- Iterations work when the team can predict the work
- Flow works when the team has interruptions

Iterations, Flow and Cadence

- Iterations are a timebox that the team uses to define the work they commit to and deliver
- Flow is seeing how work flows through your team
- Cadence provides your project a rhythm for specific activities such as retros



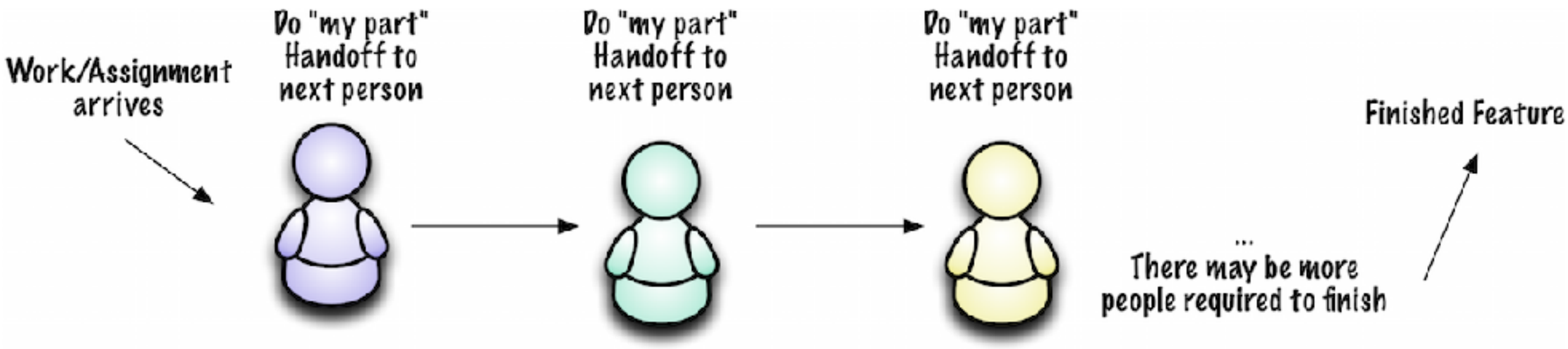
Principles Over Practices

How Agile Approaches Change the Culture

Culture Changes From	Culture Changes To
Individual work	Collaborative work
Work assigned by someone else	Team members select work
Resource efficiency thinking and metrics	Flow efficiency thinking and measures
Management-planned details	Facilitated conversations and decisions
Gantt Charts and other documents as plans	Working product and empirical measures (and documents) to guide further work
Single-loop planning	Responding to and encouraging change with double-loop planning
Only understanding product quality at the end of the project	Continual learning and improvement of product quality as the team proceeds

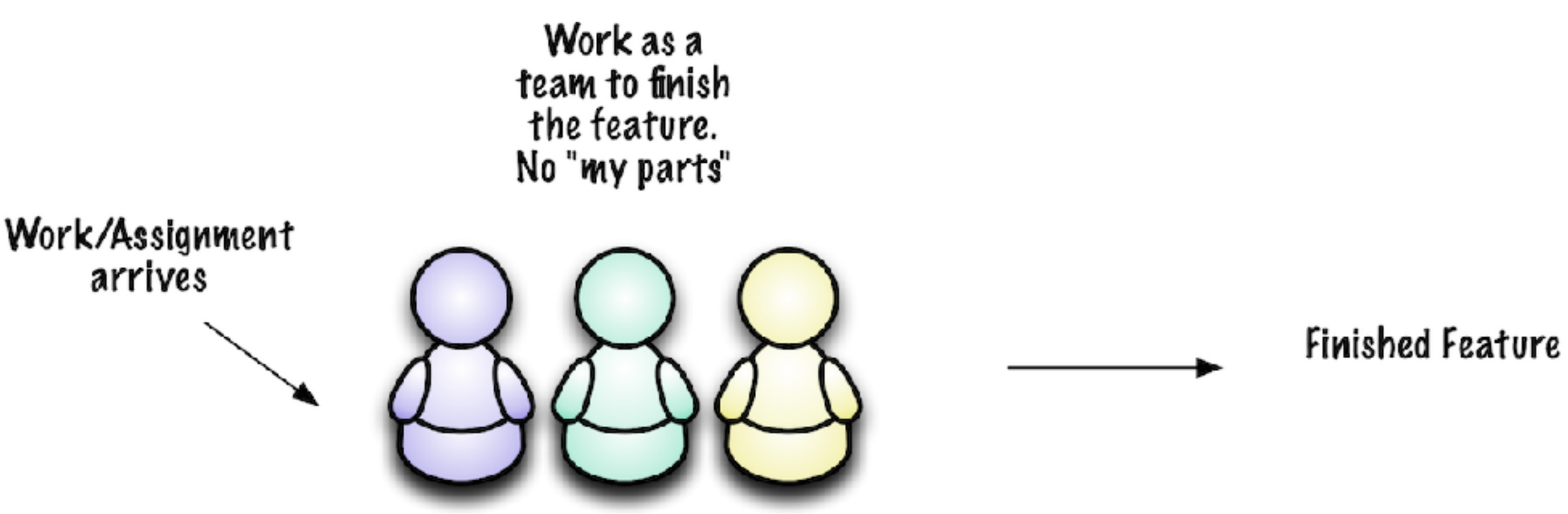
Resource Efficiency

- Utilization and calling people "resources"
- Focuses on each individual's contribution



Flow Efficiency

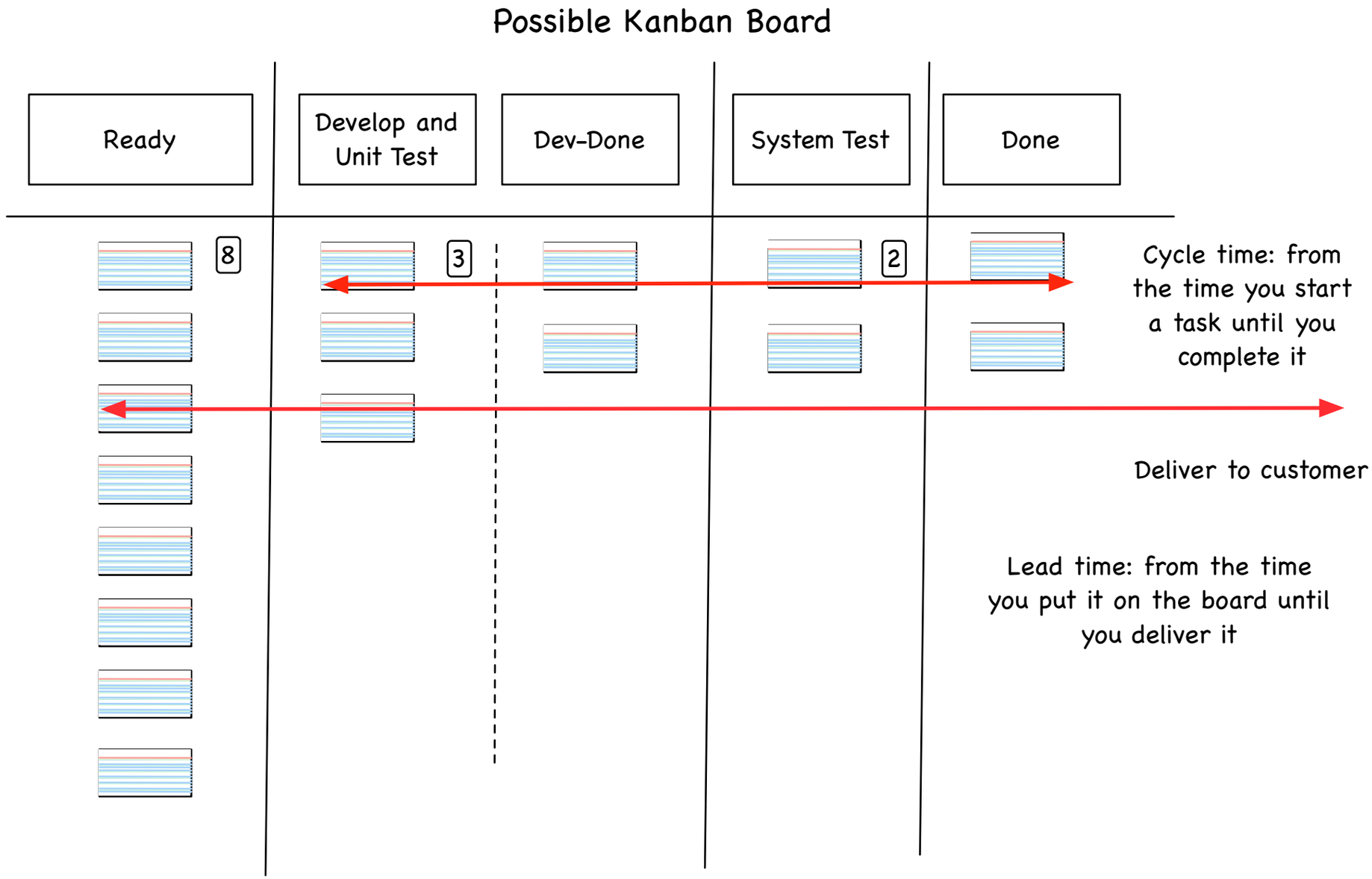
- Focus on team's throughput (outcomes, not outputs)
- Optimize "up" at the level of the team



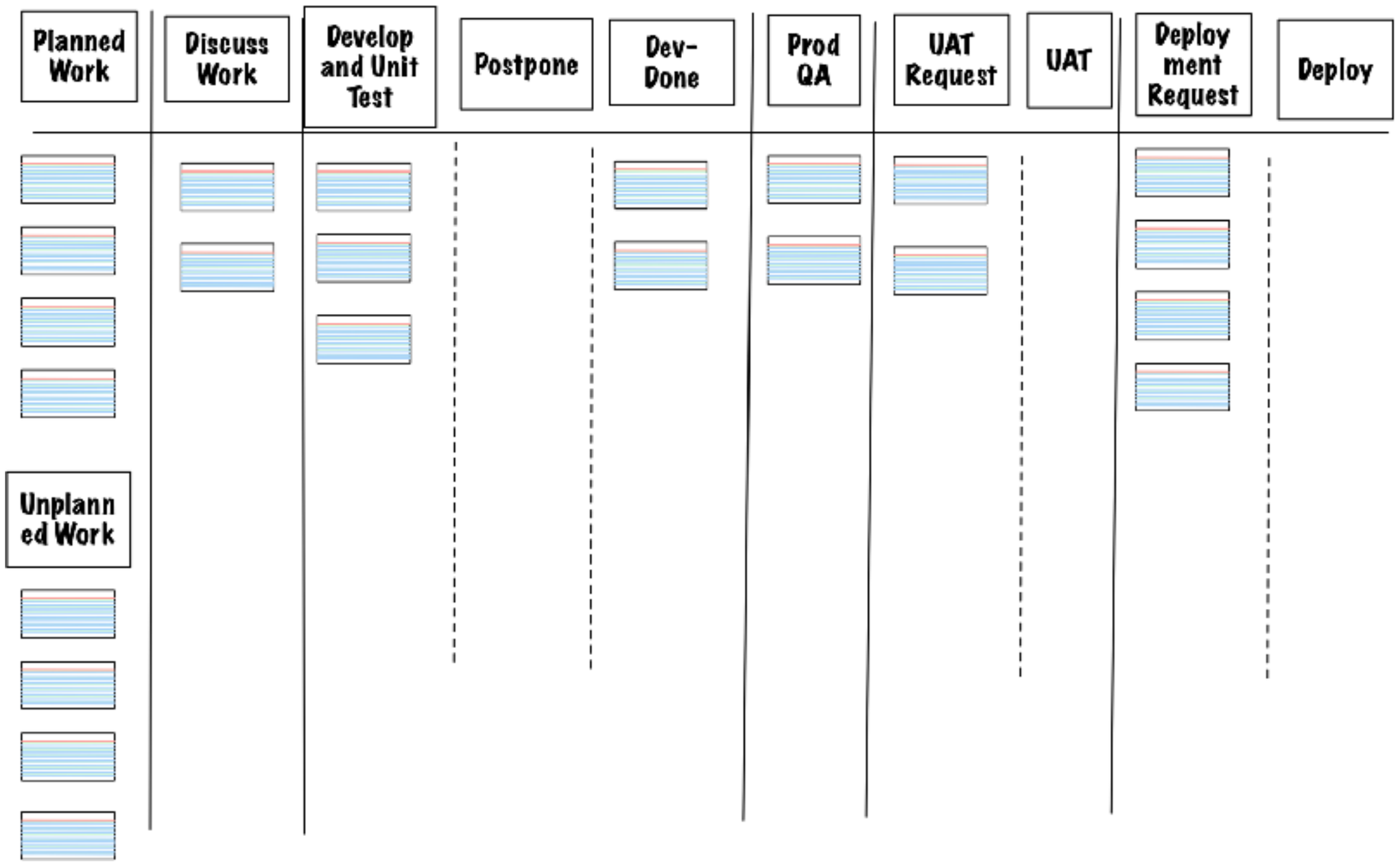
Possible Changes to Use Agile Approach

- Visualize your work (and your team's)
- Limit your WIP
- Managers: allow every team member to focus on that person's work
- Reflect to inspect and adapt

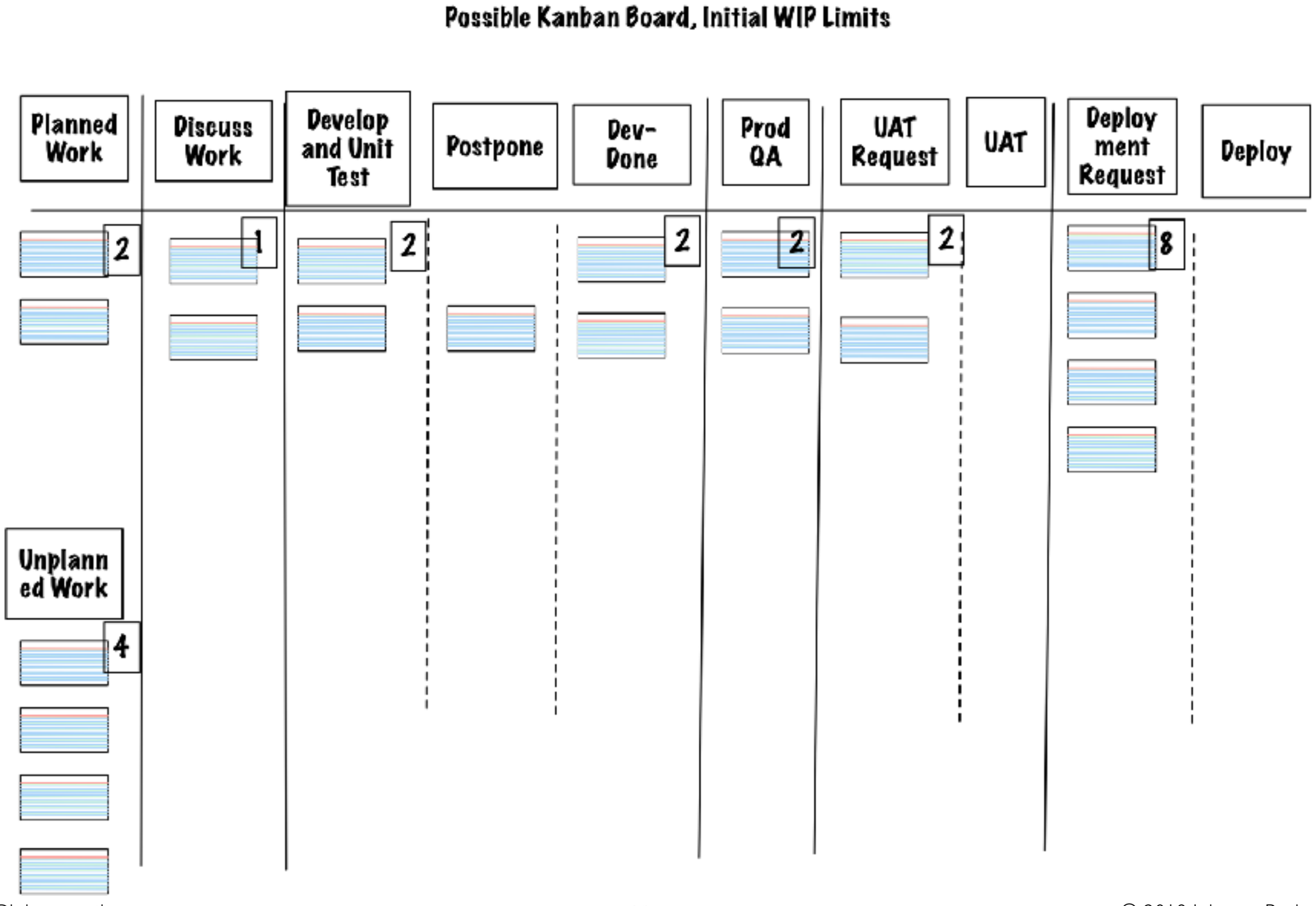
Cycle and Lead Time



Kanban Shows Work State



With WIP Limits



Stop Measuring Velocity

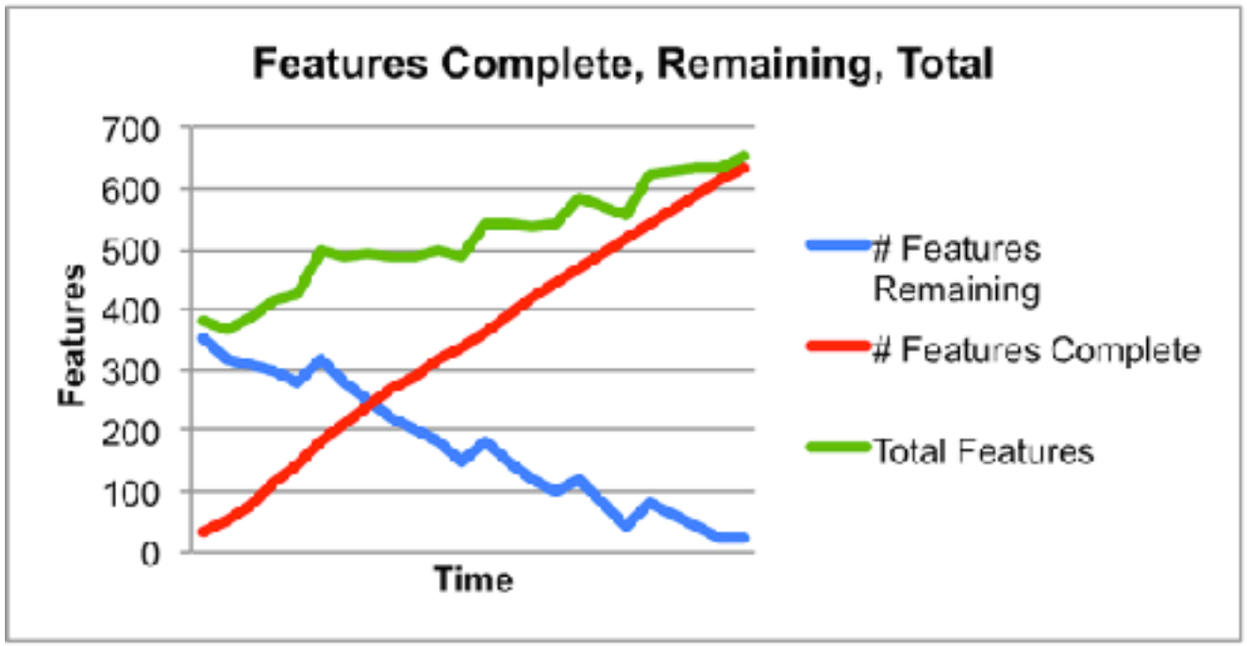
- Velocity is a measure of capacity, not productivity
- Velocity varies with complexity and team familiarity
- Not always predictable
- Individual to each team, and can vary with domain
- Misused when it's "dev" velocity and "QA" velocity

Team-Based Measures

- Cycle time
- Features completed, etc
- Product backlog burnup
- Cumulative flow and WIP

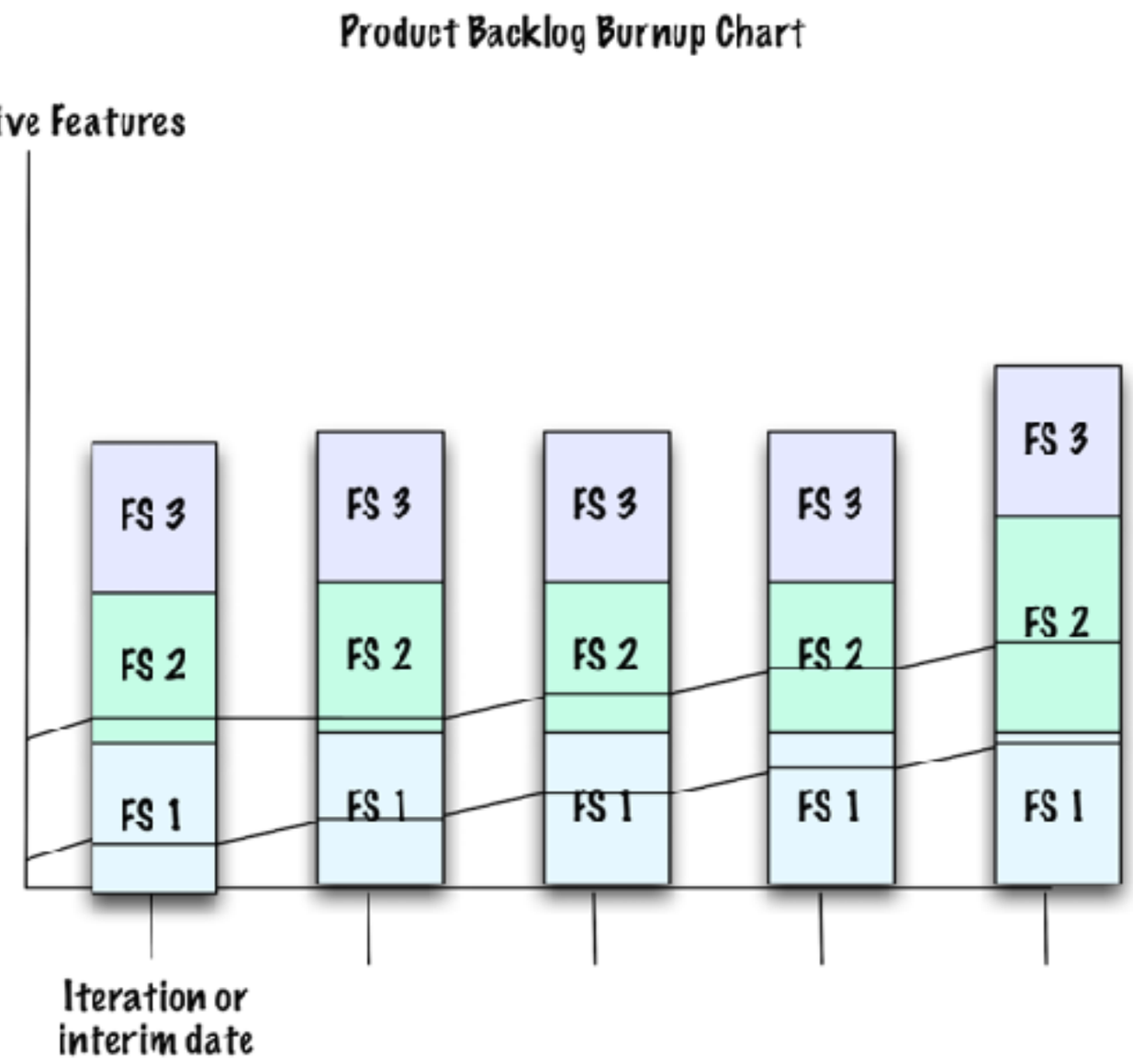
Measure Completed Features

- Completed features (running, tested features)
  - Your customers use them
  - You can release them
  - They are valuable
- Include total and remaining features so we have a sense of where we are
- Depends on deliverables, not epics or themes



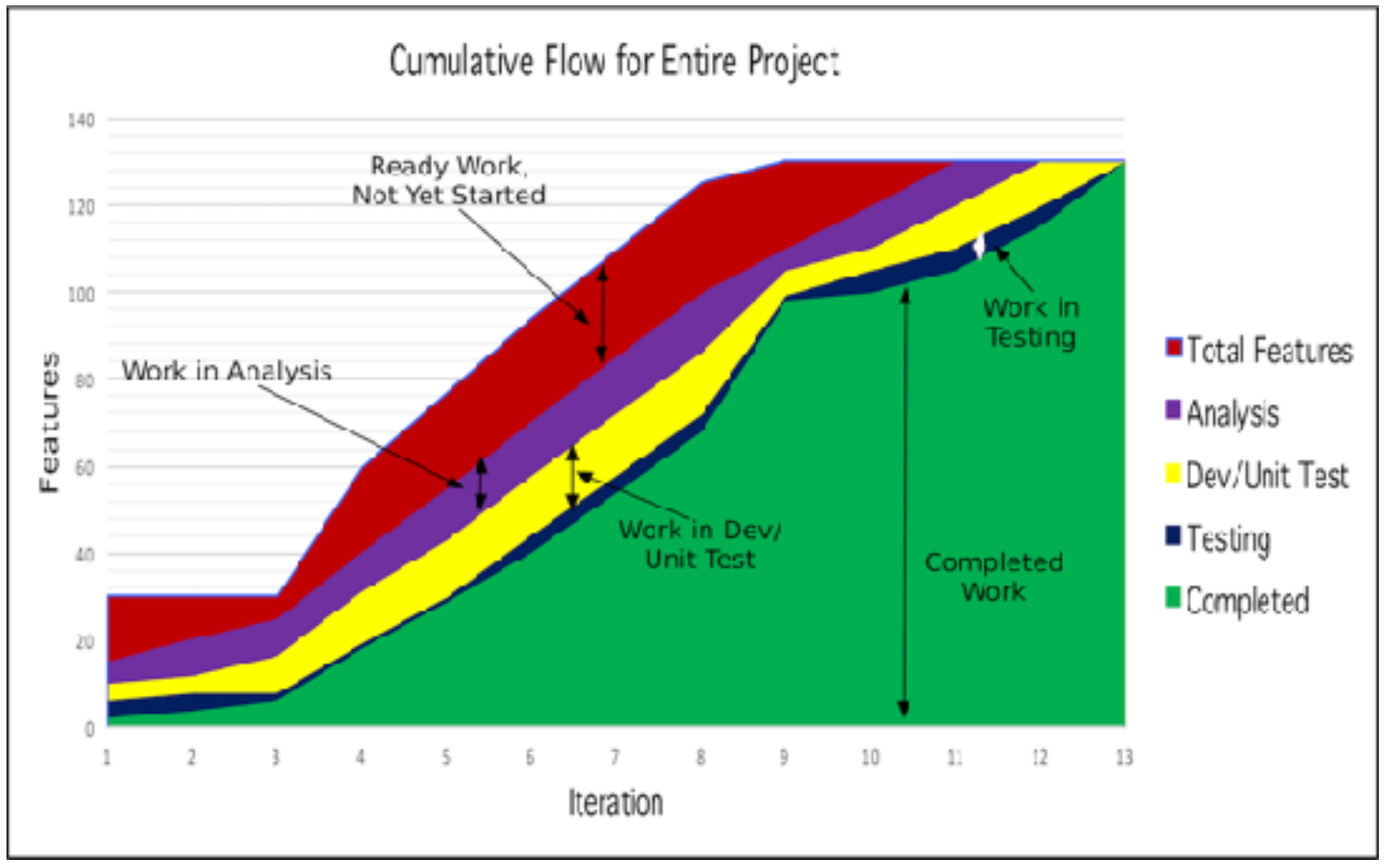
Product Backlog Burnup

- Real earned value
- Partial answer to "Where are we?"
- Shows value feature-by feature
- Shows when features grow



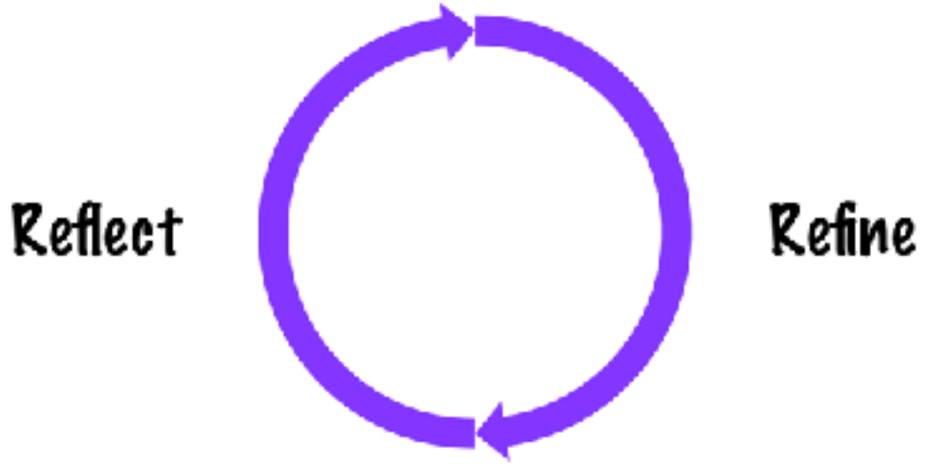
What Do You Want Less of?

- Work In Progress (across entire program)
- How often release
- Defects
- Other "Less of":
  - Multitasking
  - ?



Retrospect and Improve

- Retrospectives
- Kaizen
- Choose one thing to experiment with every week or two
- This is more important than any other meeting you have



Can You Create an Agile Team?

1. Work as a team
2. Visualize the work and your bottlenecks
3. Measure throughput
4. Retrospect and improve
5. Invite your managers to change the culture

Let's Stay in Touch

- Pragmatic Manager:
  - www.jrothman.com/pragmaticmanager
- Please link with me on LinkedIn