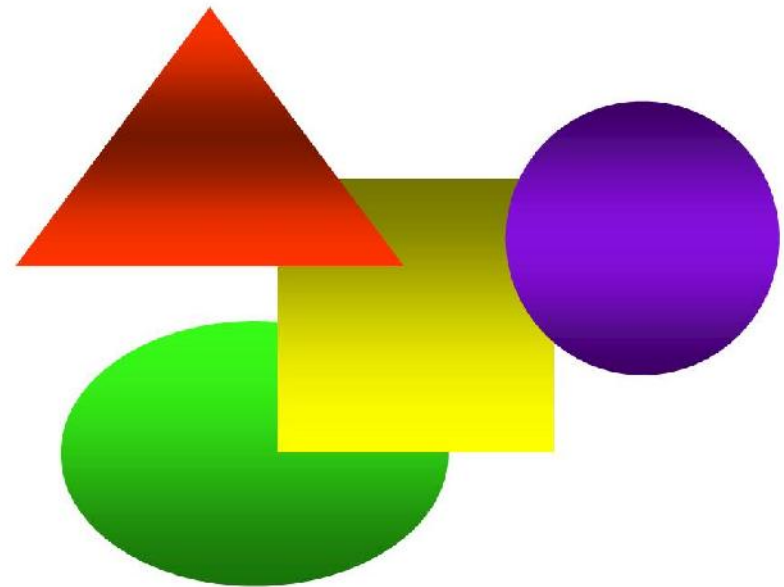


Agile Metrics

-- Beyond Burndown



Agile NYC
Agile Day September 27, 2011

Andrew Kazarinoff
Qalytic Consulting

v 4.2

Background

- Experience at an Insurance Company
- Framework
 - Tracking in Excel
 - Effort hours, story points
 - Minimally invasive
 - Good compliance
- Ideas from Jeff Sutherland and Scott Downey
 - “Scrum Metrics for Hyper-Productive Teams” July 2010

Areas of Interest

- Metrics - anti-patterns
- Root causes
- Coaching goals
- Behavior change

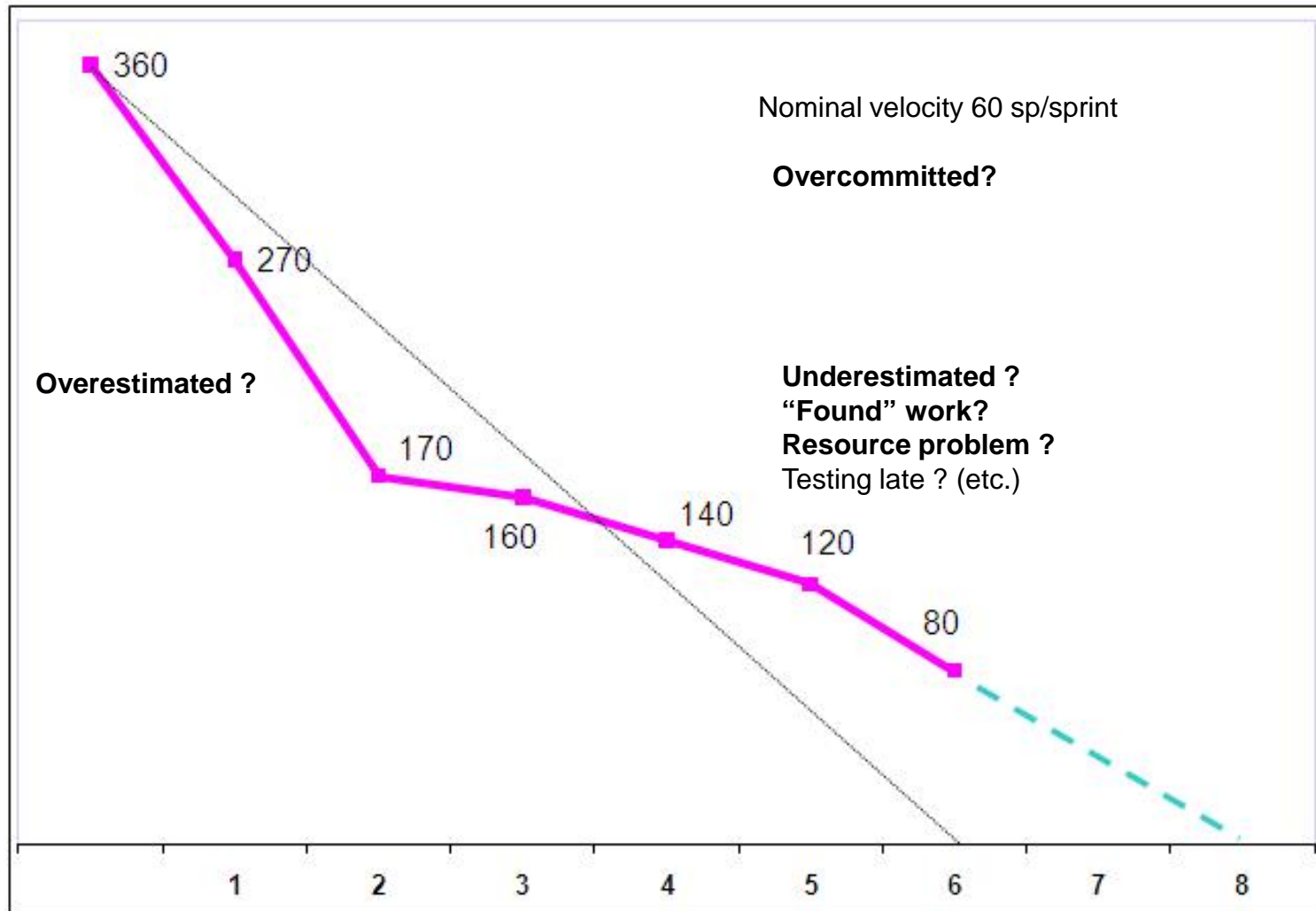
Anti-Patterns → Root Causes → Coaching Goals

Visibility

Inspection

Adaptation

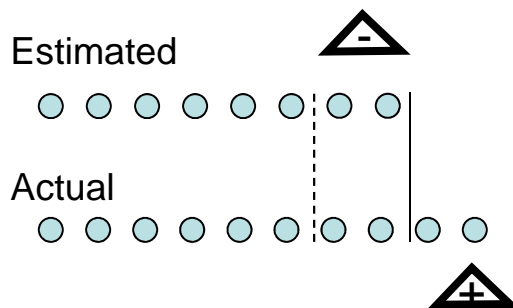
Yes, Burndown -- anti-patterns



Process Metrics

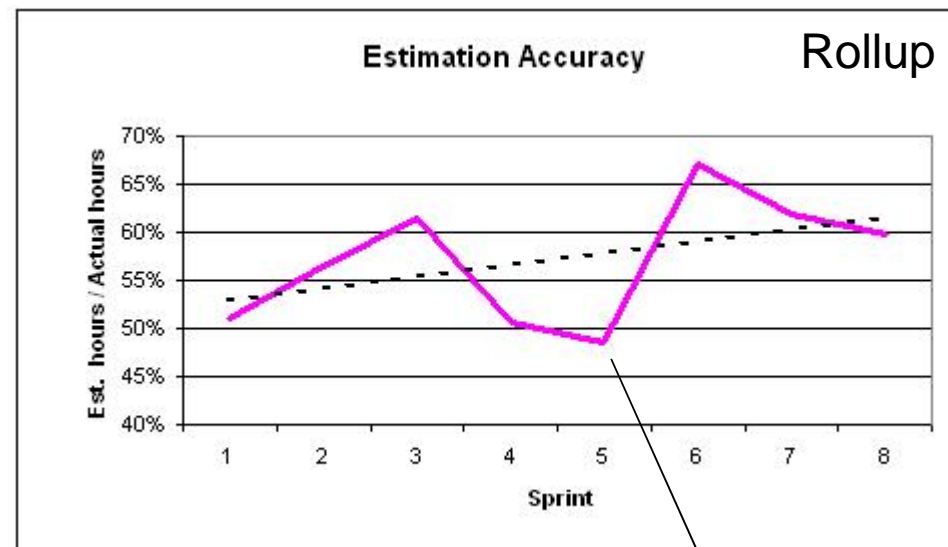
Estimation Accuracy

Affects reliability of roadmaps, release dates



READY READY

- Team understands roadmap (purpose)
- Target capabilities clearly defined
- Stories clearly keyed to target capabilities
- Stories understood: developers and testers
- Dependencies identified
- Acceptance tests designed – COS



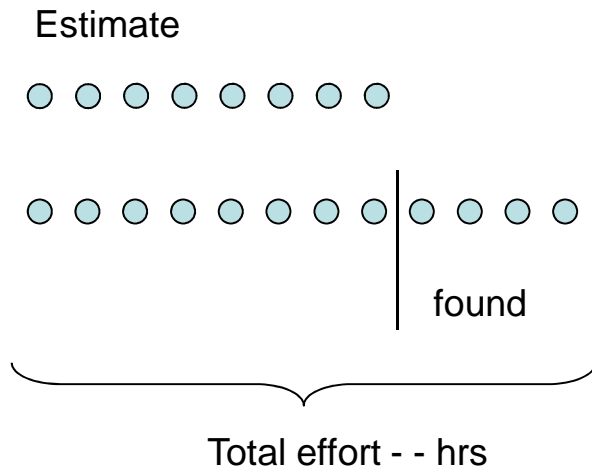
not READY READY?
“found” work?

Coaching Goals:

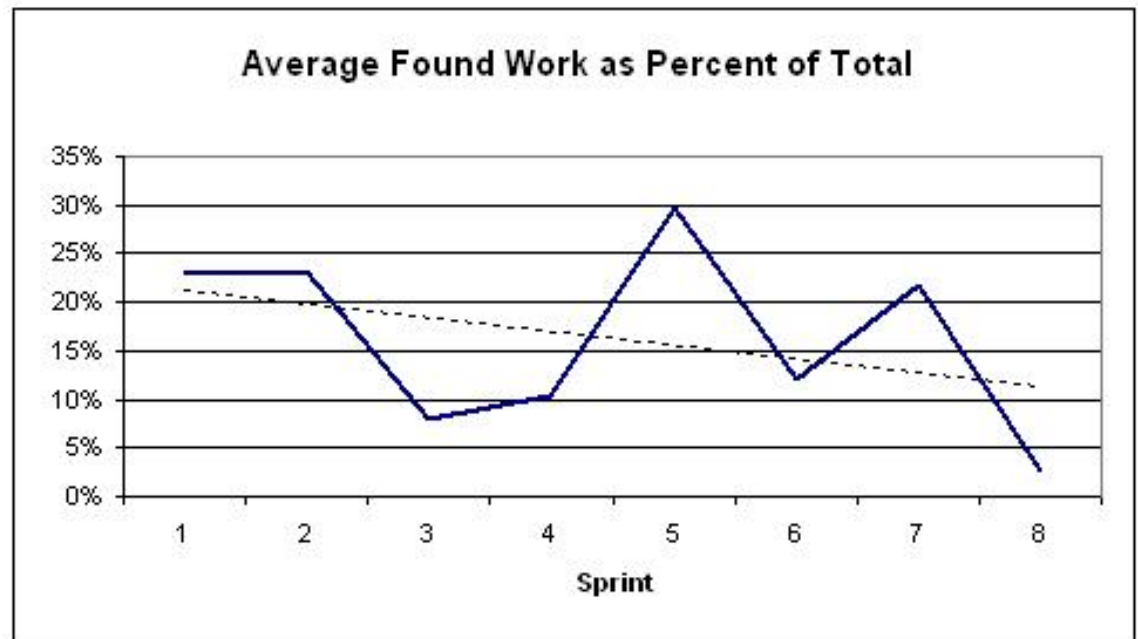
- whole-team collaboration on estimates
- analysis of tasks in sufficient depth to avoid “found” work
- assurance of READY-READY through intensive collaboration with product owners

“Found” (Unplanned) Work

Unexpected work relative to estimate

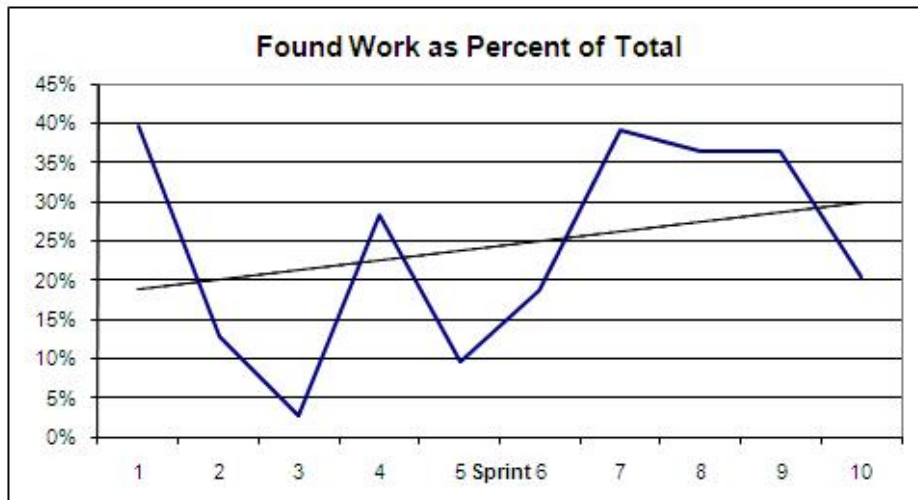


Rollup

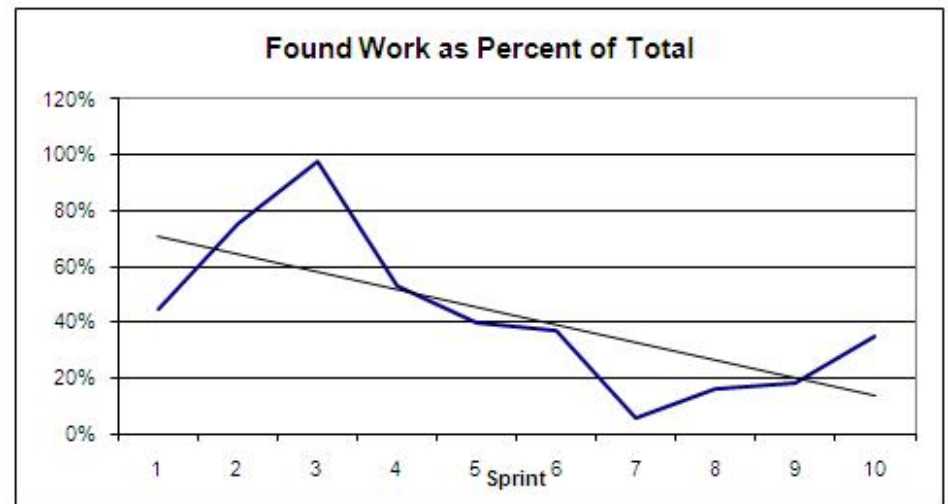


“Found” (Unplanned) Work

Team “E”



Team “F”

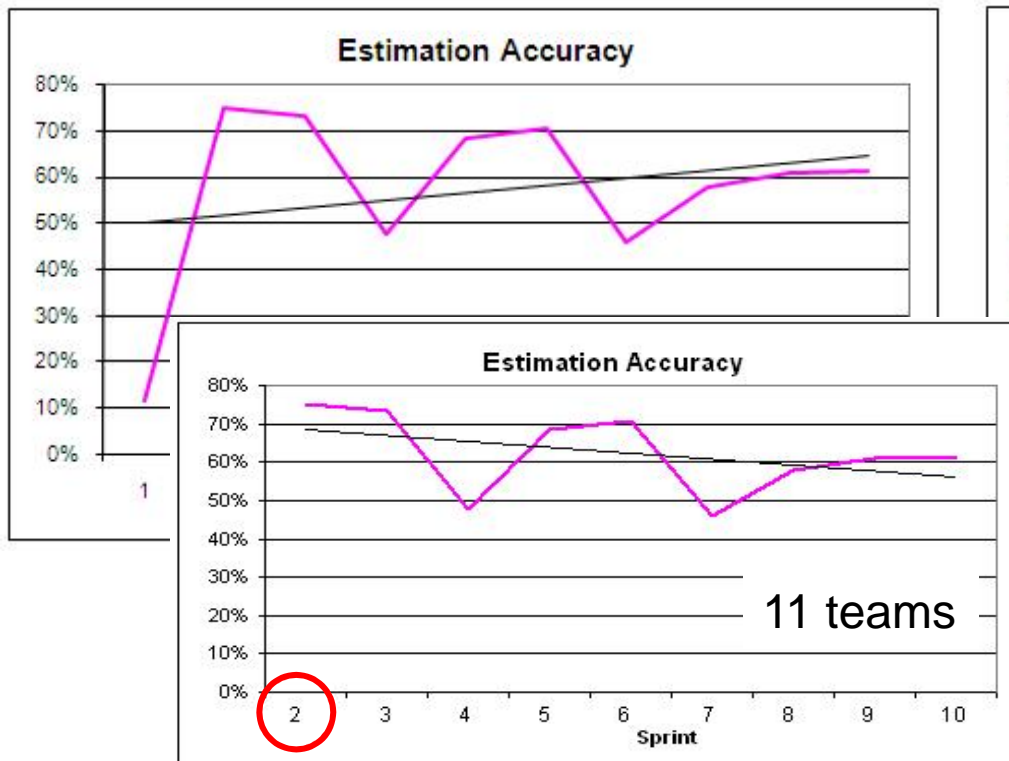


Coaching Goals:

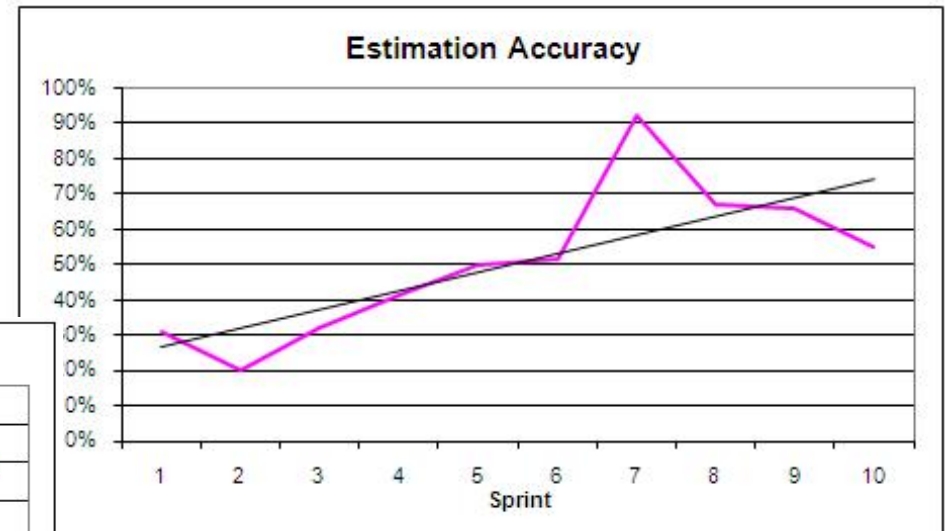
- whole-team collaboration on estimates
- analysis of tasks in sufficient depth

Estimation Accuracy

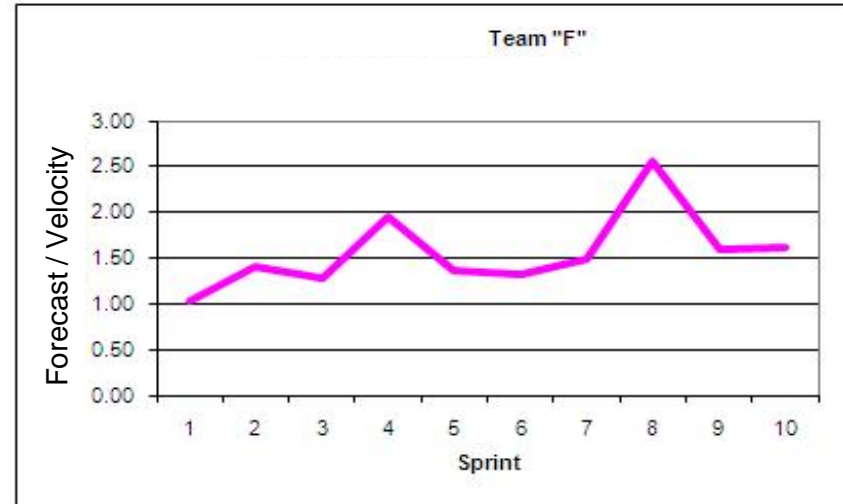
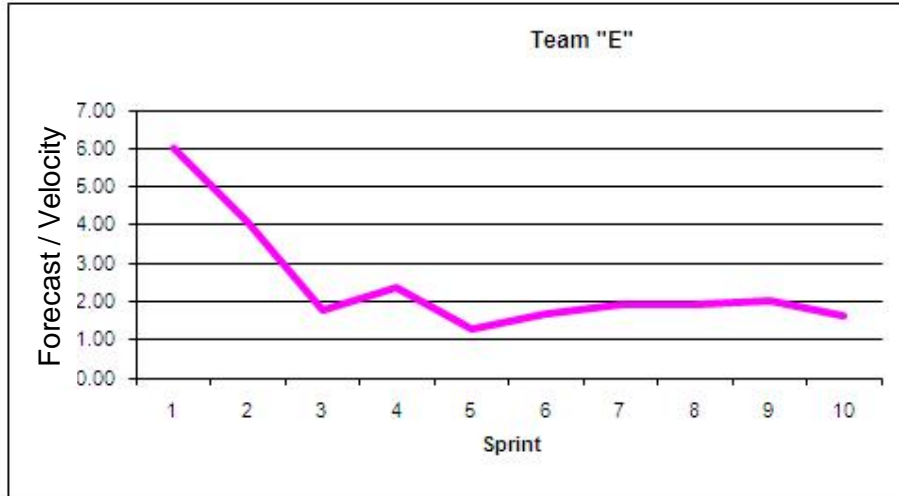
Team "E"



Team "F"



Forecast Accuracy – Teams “E” and “F”

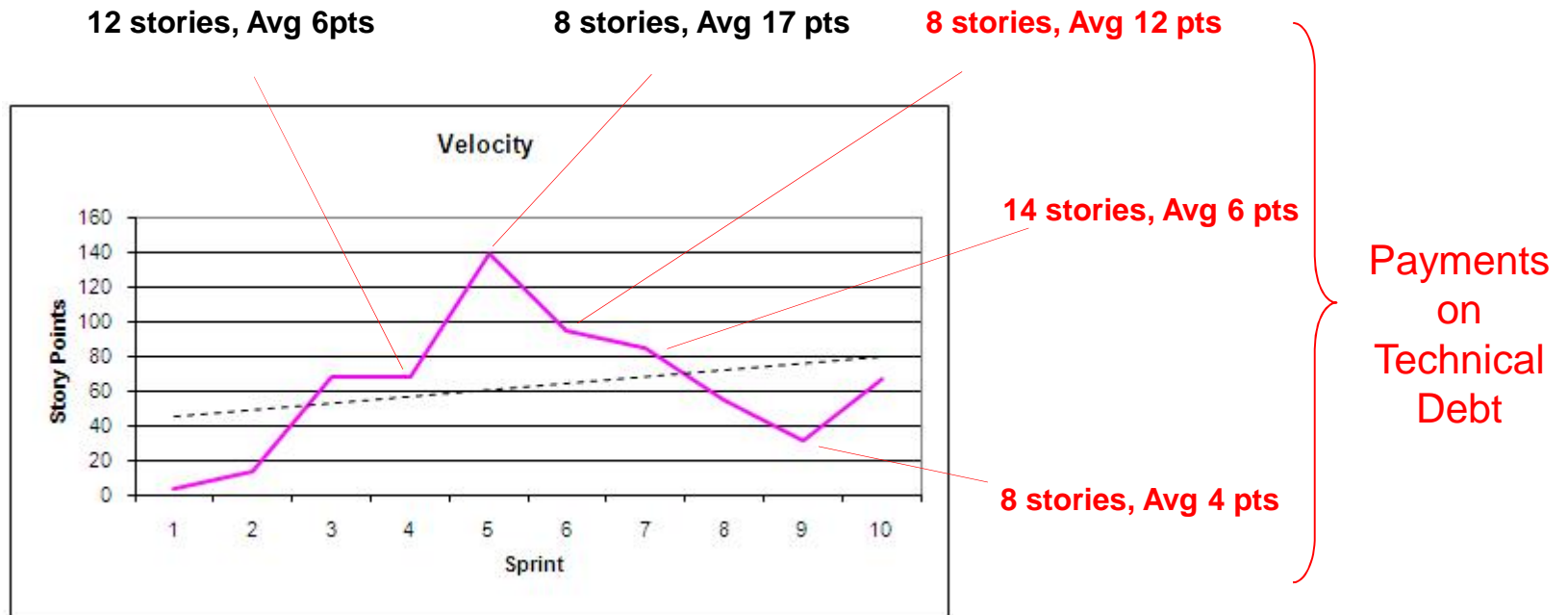


Productivity Metrics

Anti-Patterns in Velocity – Team “E”

*shipped with
technical debt
(not DONE DONE)*

DONE DONE
Stories Closed within Sprint
Features Tested and Working
Code Complete and Clean
No Known Defects
Production Ready (QA)
Approved by Product Owner (COS)

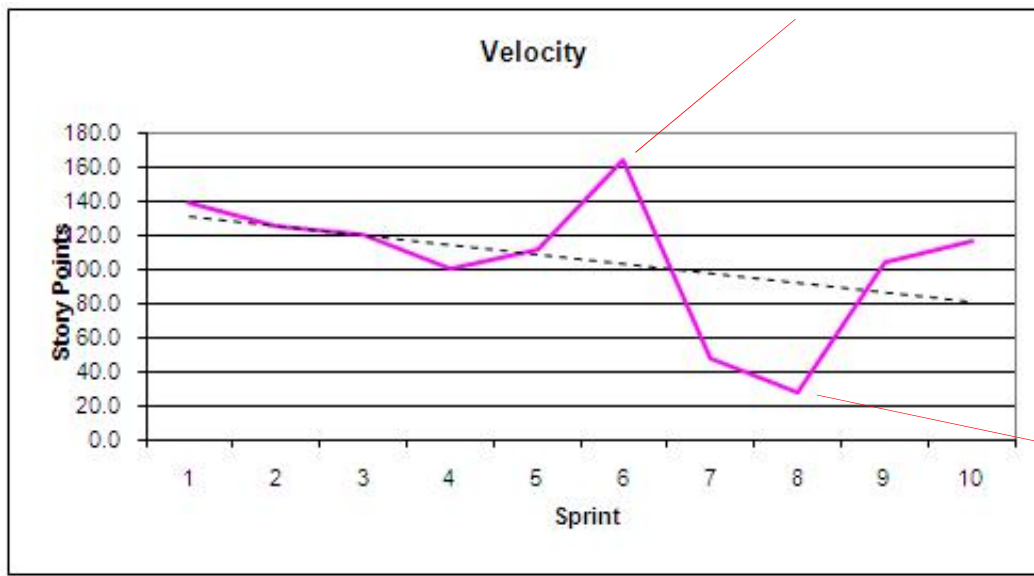


Anti-Patterns in Velocity – Team “F”

*shipped with
technical debt
(not DONE DONE)*

DONE DONE
Stories Closed within Sprint
Features Tested and Working
Code Complete and Clean
No Known Defects
Production Ready (QA)
Approved by Product Owner (COS)

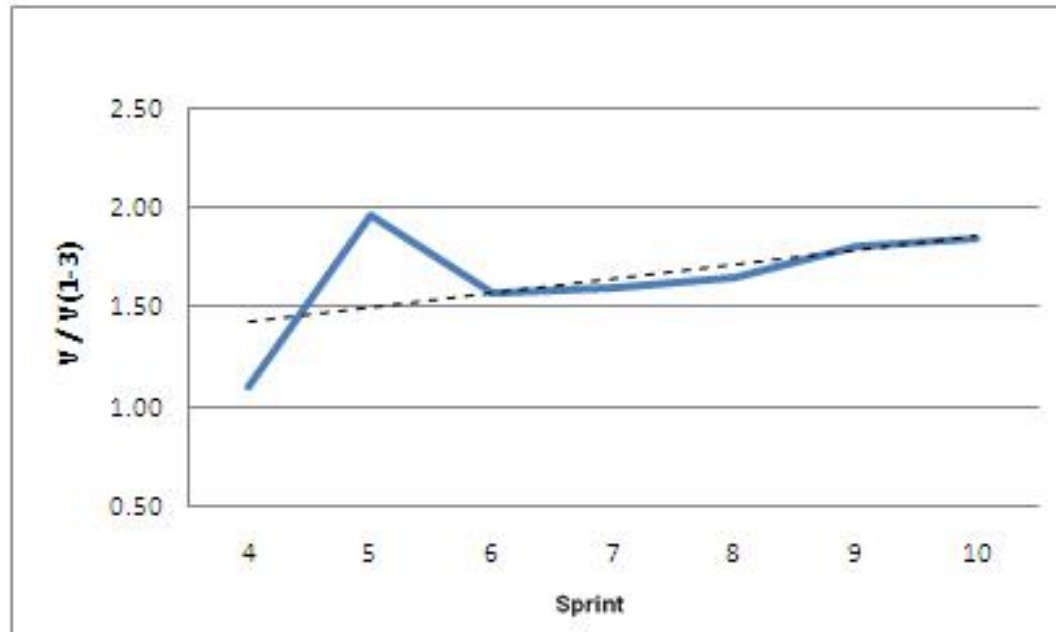
17 stories, Avg 9 pts



clean-up sprint
2 stories, Avg 9 pts

Velocity Trend

Productivity Improvement (or story point creep)



10 teams

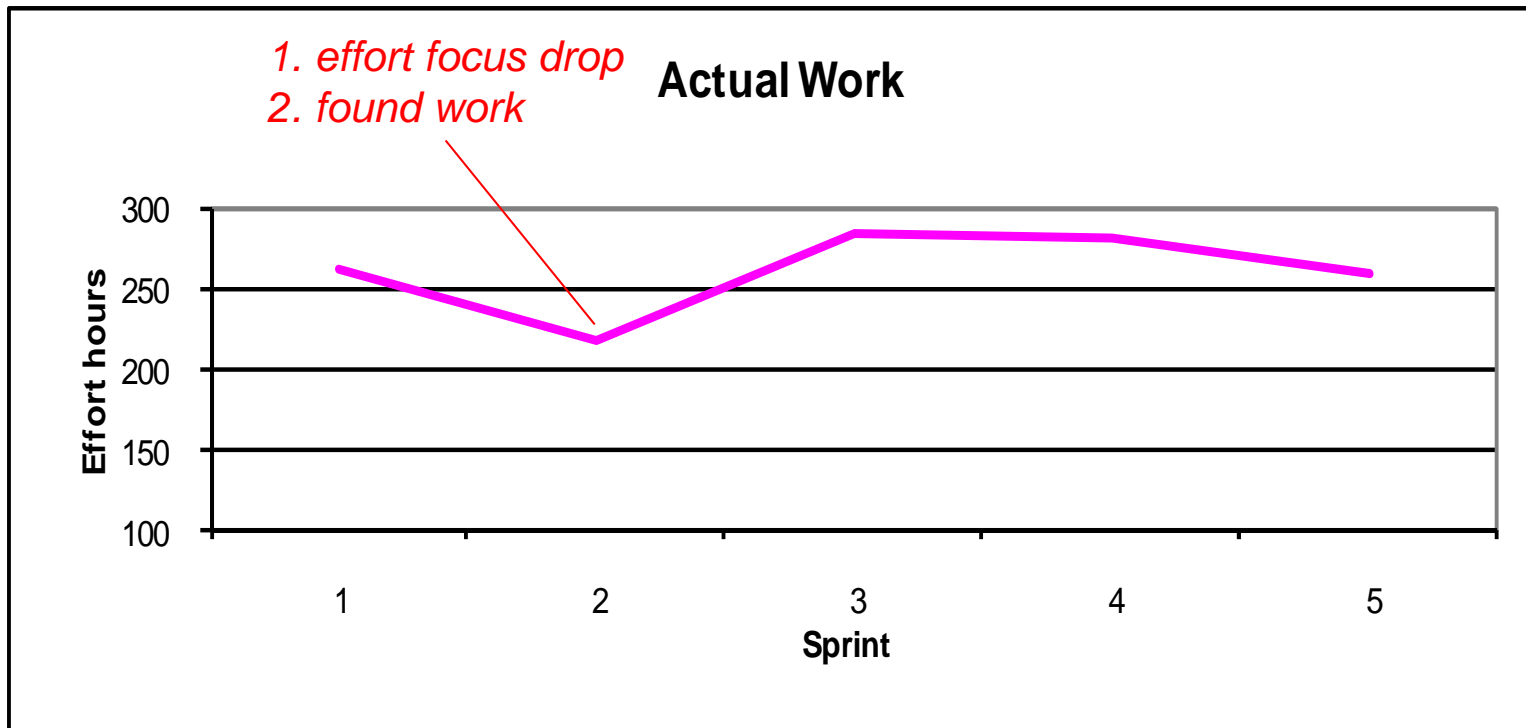
Coaching Goals:

- continuous unforced improvement in sprint velocity
- moderation in story size
- avoidance of technical debt (continuous integration)
- assurance of DONE-DONE through concurrent (automated) testing and in-sprint Product Owner reviews

Actual Work Trend

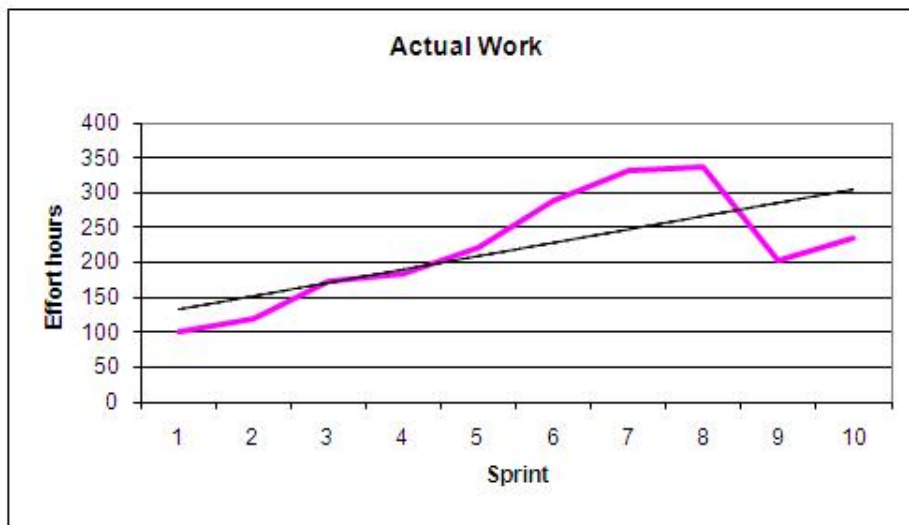
Total of team effort hours

reveals resource and task definition problems

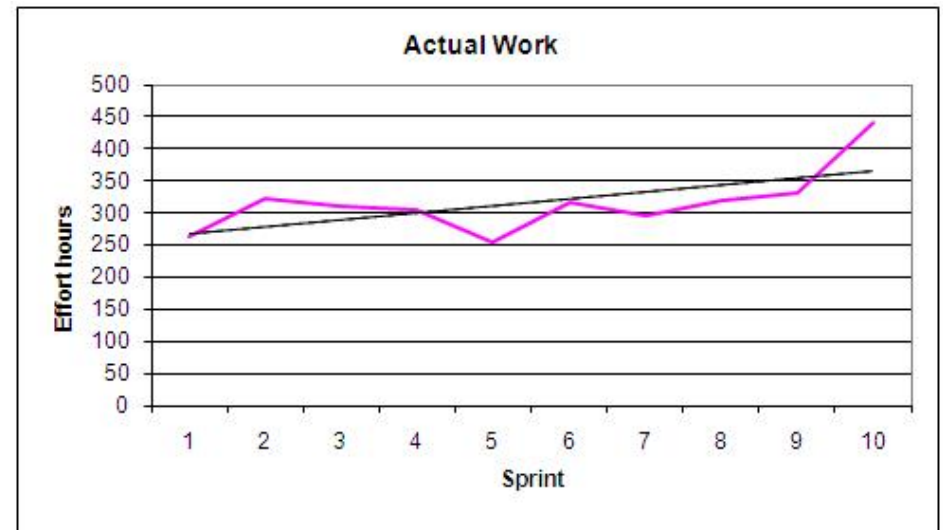


Actual Work Trend

Team "E"



Team "F"

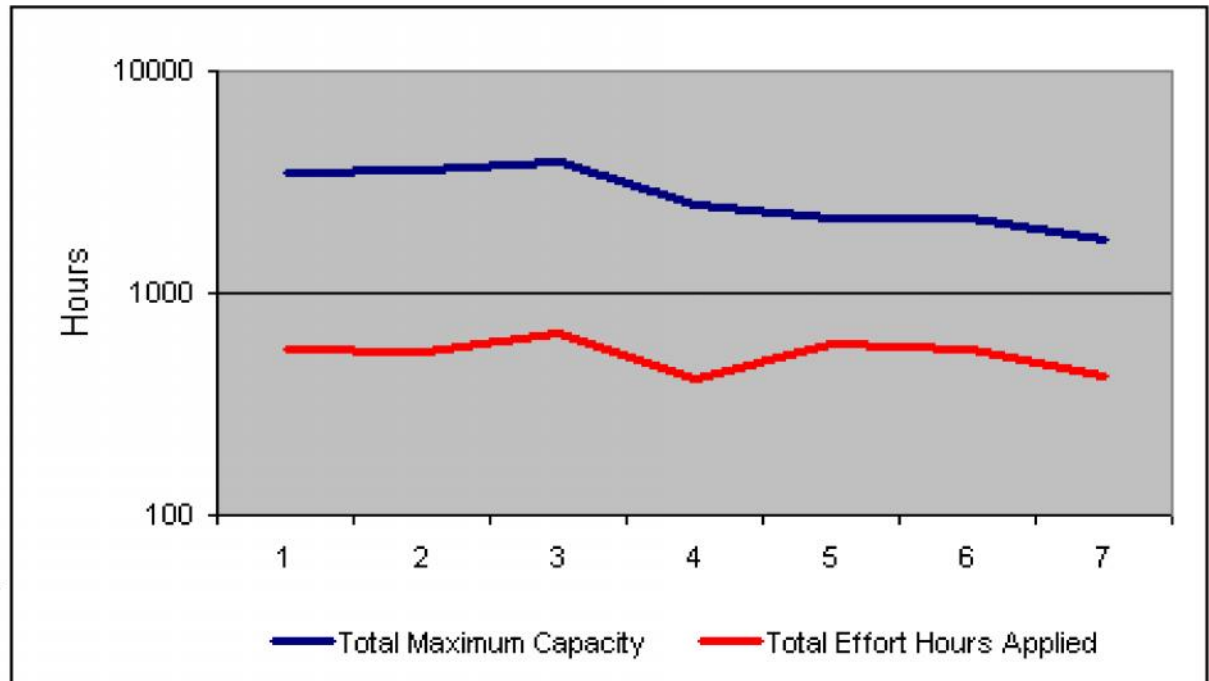


Coaching Goals:

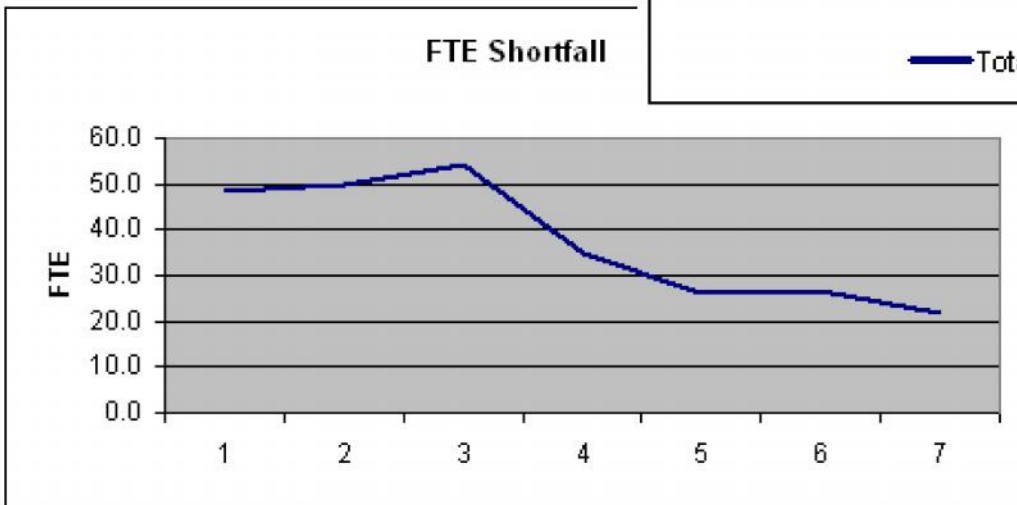
- Control context switching (effort focus)
- Enable capacity commitments to be met
- Make capacity commitments realistic

Management level

Effort Focus



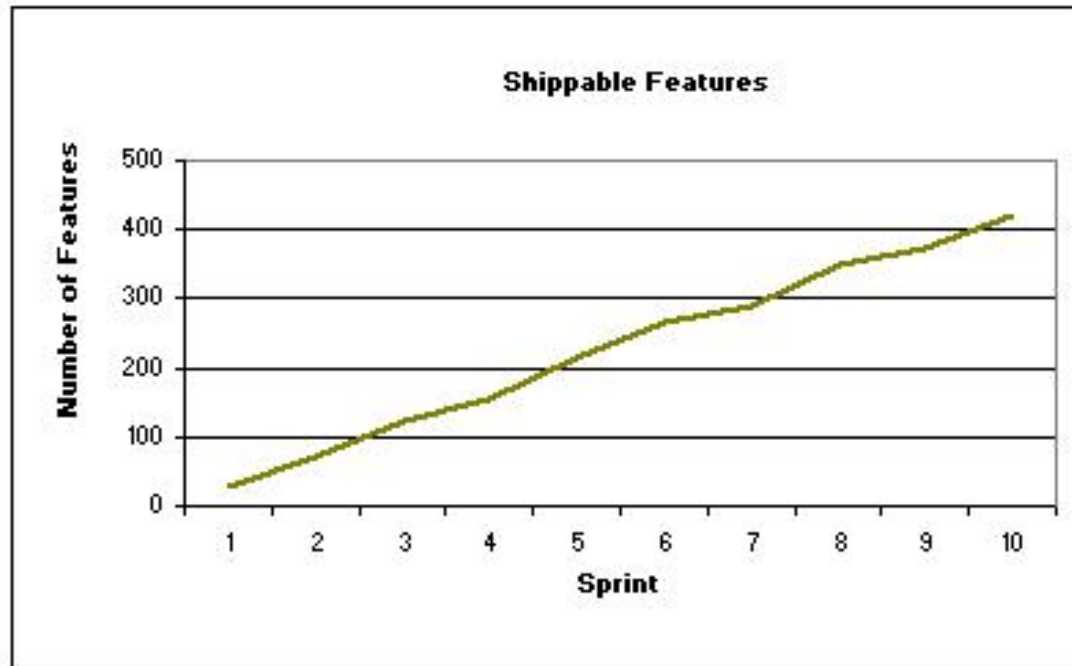
FTE Shortfall



16 teams

Completed Shippable Features

Buildup to capabilities -- what management relates to



18 teams

Coaching Goals:

- emphasis on tested and approved software
- ensuring DONE-DONE
- avoiding technical debt

DONE-DONE
Stories Closed within Sprint
Features Tested and Working
Code Complete and Clean
No Known Defects
Production Ready (QA)
Approved by Product Owner (COS)

www.qualytic.com

