

Scrum with Kanban



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TECHNOLOGY

Scrum with Kanban



Jonathan Hansen
Thumbtack Technology
NYC Lean Coffee

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Where's the conflict?

SCRUM RULES

- **3 Roles**
Product Owner, Team Member
Scrum Master
- **4 Meetings**
Sprint Planning, Daily Scrum
Sprint Review, Sprint Retrospective
- **3 Artifacts**
Product Backlog, Sprint Backlog
Increment

Where's the conflict?

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Product Backlog, Sprint Backlog
Increment

KANBAN METHOD

- Visualize your work
- Limit your Work in Progress
- Manage Flow
- Make Policies Explicit
- Implement Feedback Loops
- Improve Collaboratively,
Evolve Experimentally

There is no conflict

SCRUM RULES

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Scrum Master
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Product Backlog, Sprint Backlog
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&

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Evolve Experimentally

Scrum with Kanban

IN SPRINT | OUT OF SPRINT
BEYOND SCRUM

Scrum with Kanban

IN SPRINT



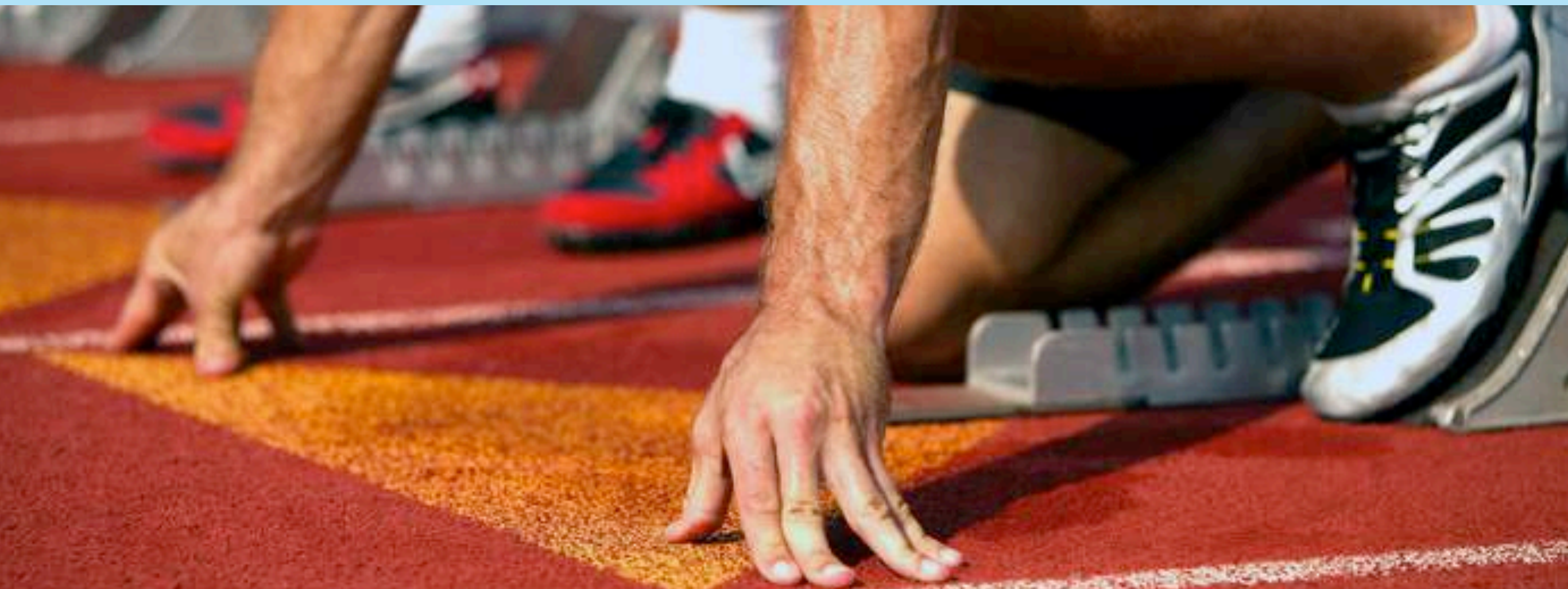
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Scrum with Kanban

IN SPRINT

FINISH FEATURES | FIX BUGS FASTER



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FINISH FEATURES

FIX BUGS FASTER

**Scenario: Adding Features
Item Search + Item Detail + User Edit**



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Scrum with Kanban

178 hours
of work

IN SPRINT

Scenario: Adding Features
Item Search + Item Detail + User Edit



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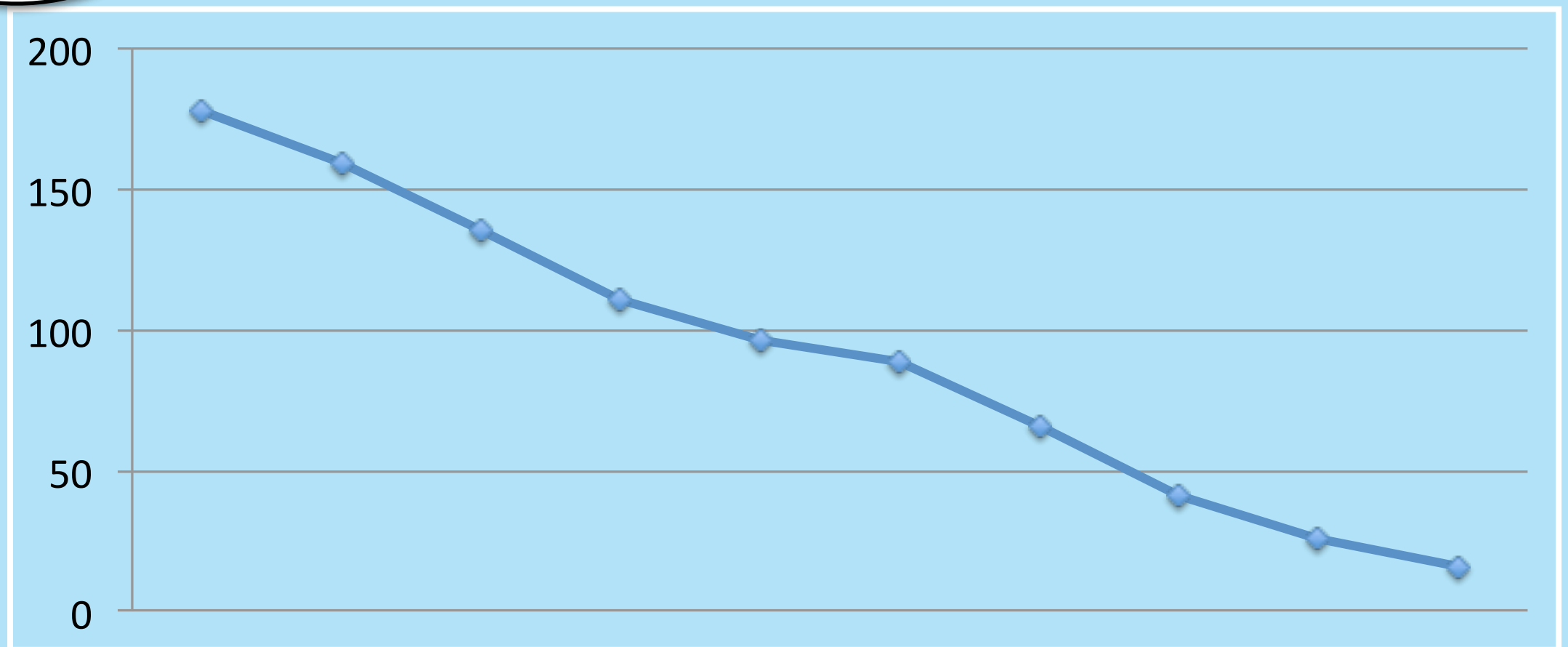
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178 hours
of work

IN SPRINT

Burndown Rate (sprint without kanban)



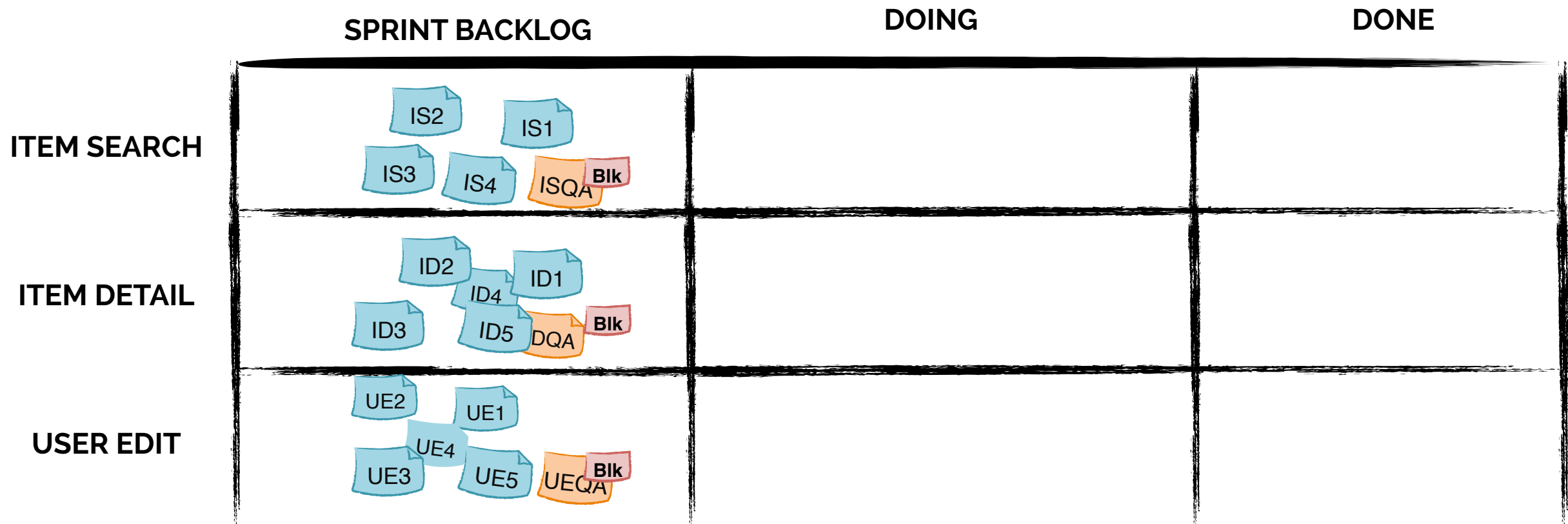
SUCCESSFUL SPRINT?

Scrum with Kanban

without
KANBAN

IN SPRINT

SCRUM SPRINT: DAY 1

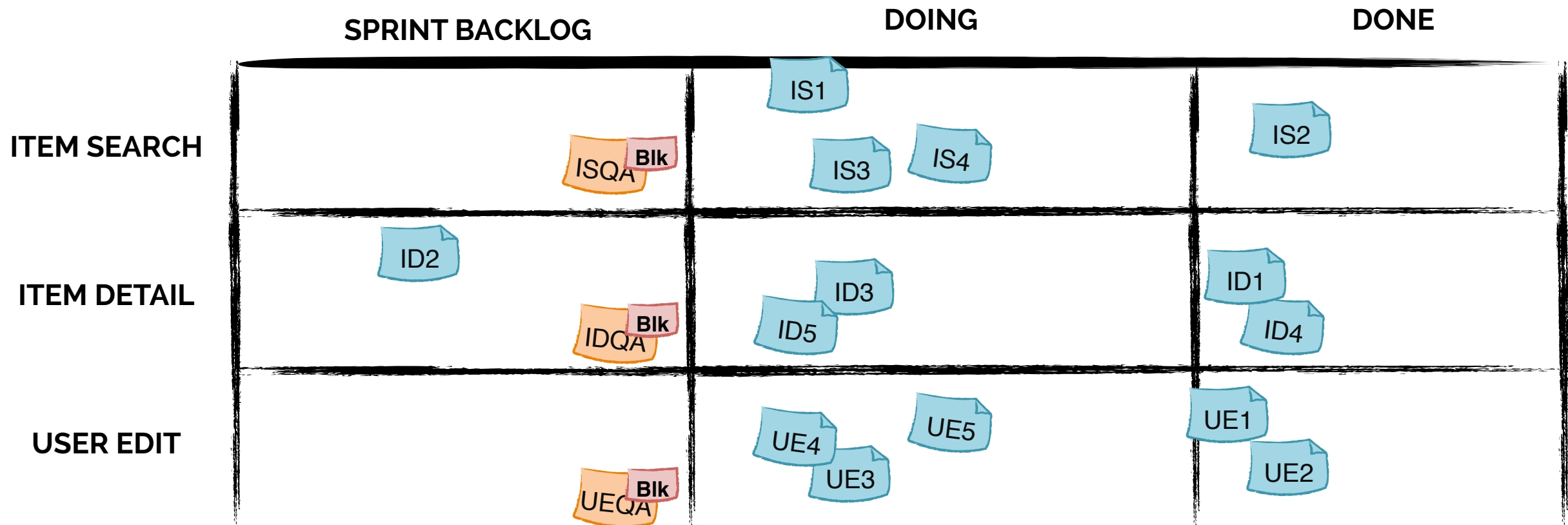


Scrum with Kanban

without
KANBAN

IN SPRINT

SCRUM SPRINT: DAY 5

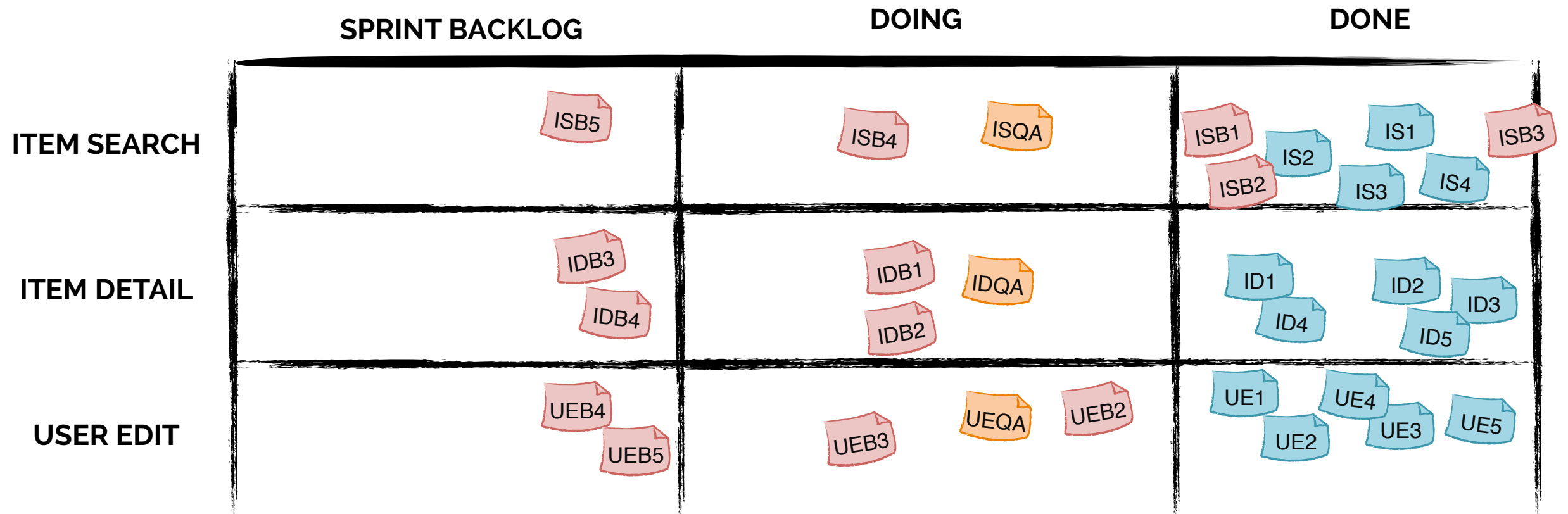


Scrum with Kanban

without
KANBAN

IN SPRINT

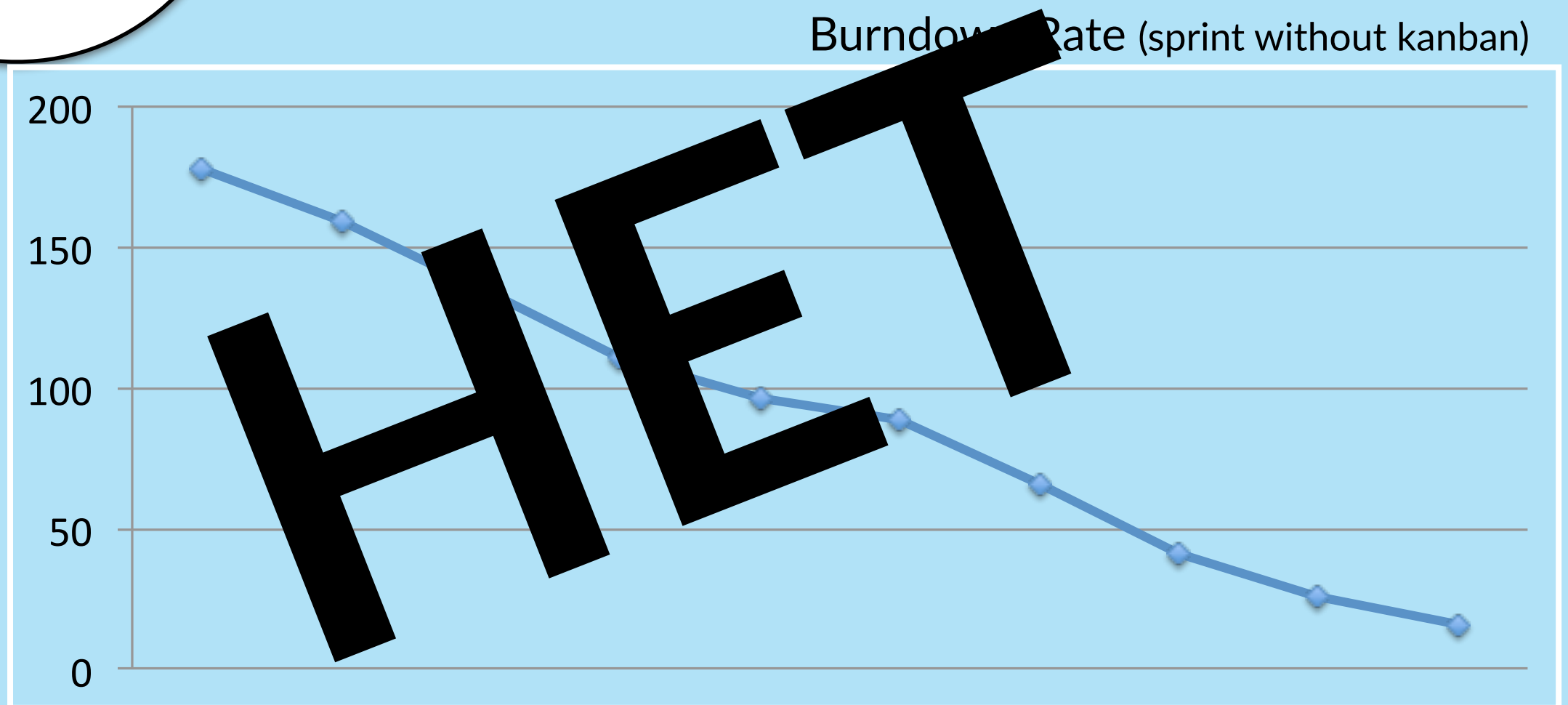
SCRUM SPRINT: DAY 10



Scrum with Kanban

without
KANBAN

IN SPRINT



SUCCESSFUL SPRINT?

Scrum with Kanban

IN SPRINT

**91% DONE =
100% USELESS**

Scrum with Kanban

IN SPRINT

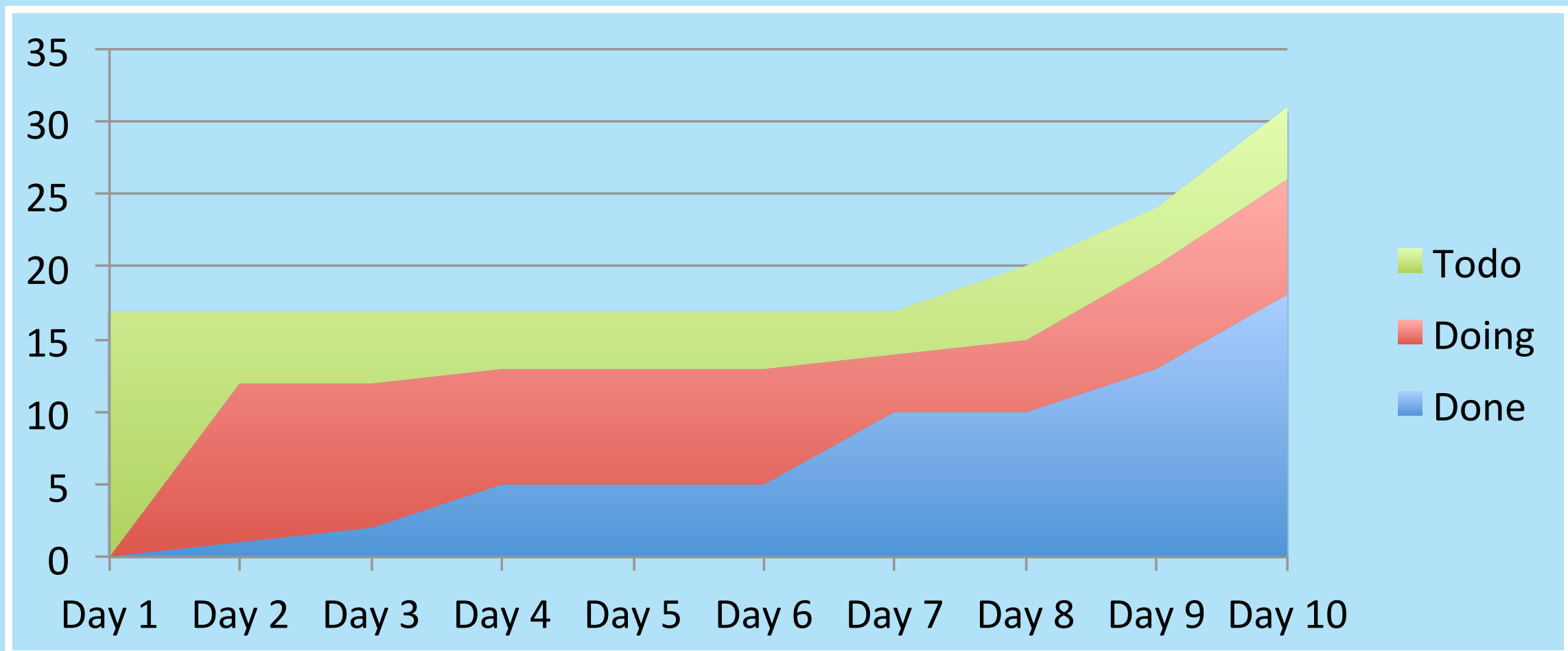
- 3 STATUSES** {
- 1. Not Started**
 - 2. In Progress**
 - 3. Done**

Scrum with Kanban

without
KANBAN

IN SPRINT

HIGH TASK WIP = SLOW TASKS

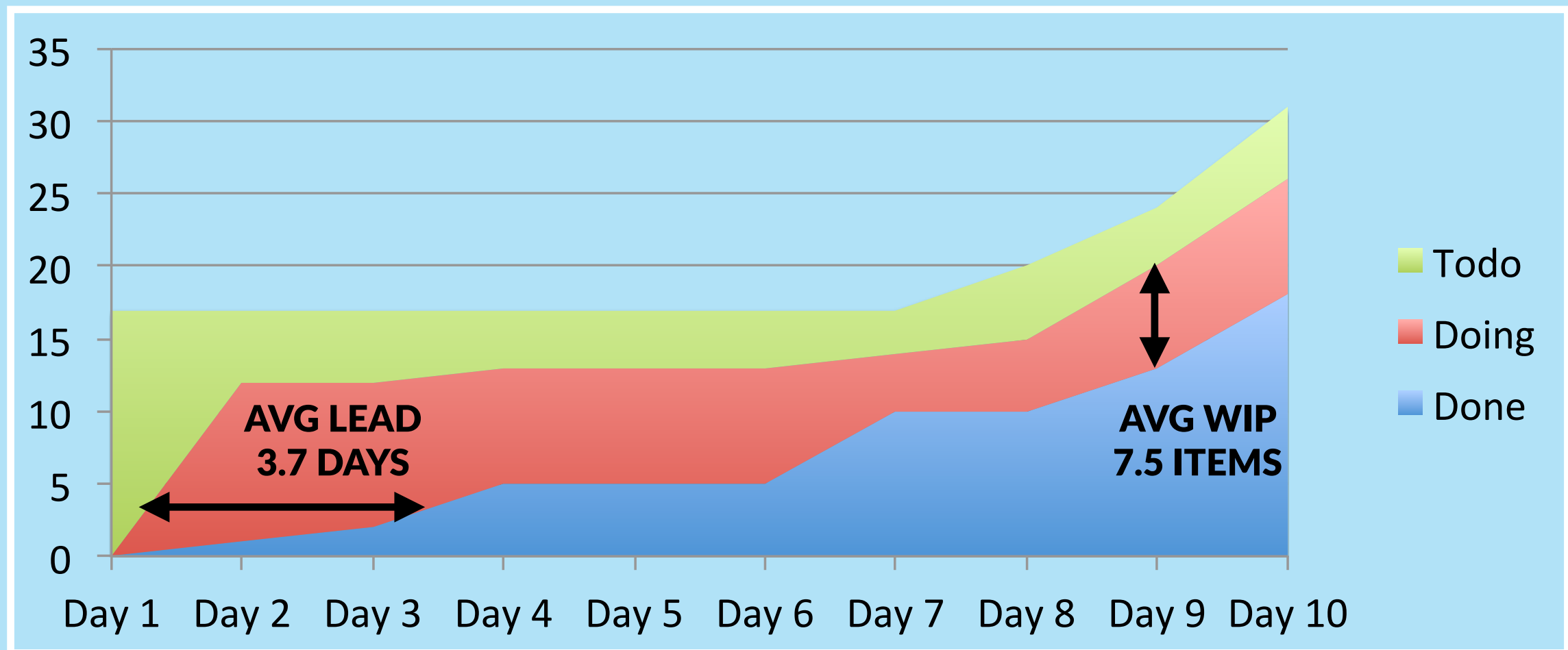


Scrum with Kanban

without
KANBAN

IN SPRINT

HIGH TASK WIP = SLOW TASKS



Scrum with Kanban

IN SPRINT

LITTLE'S LAW

$$\overline{\text{Lead Time}} = \frac{\overline{\text{WIP}}}{\text{Throughput}}$$

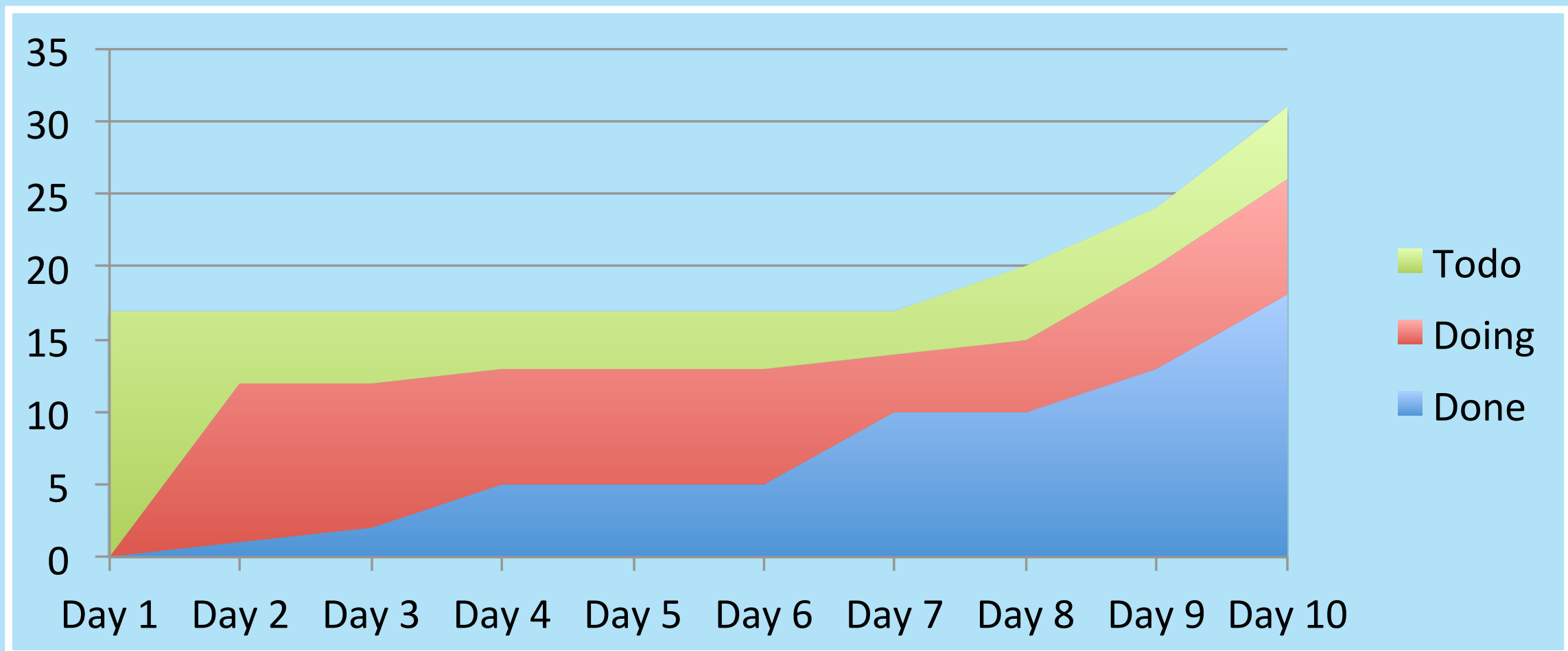
$$3.\overline{7} = \frac{7.\overline{5}}{2}$$

Scrum with Kanban

without
KANBAN

IN SPRINT

**HIGH FEATURE WIP =
IDLE QA + MORE BUGS**

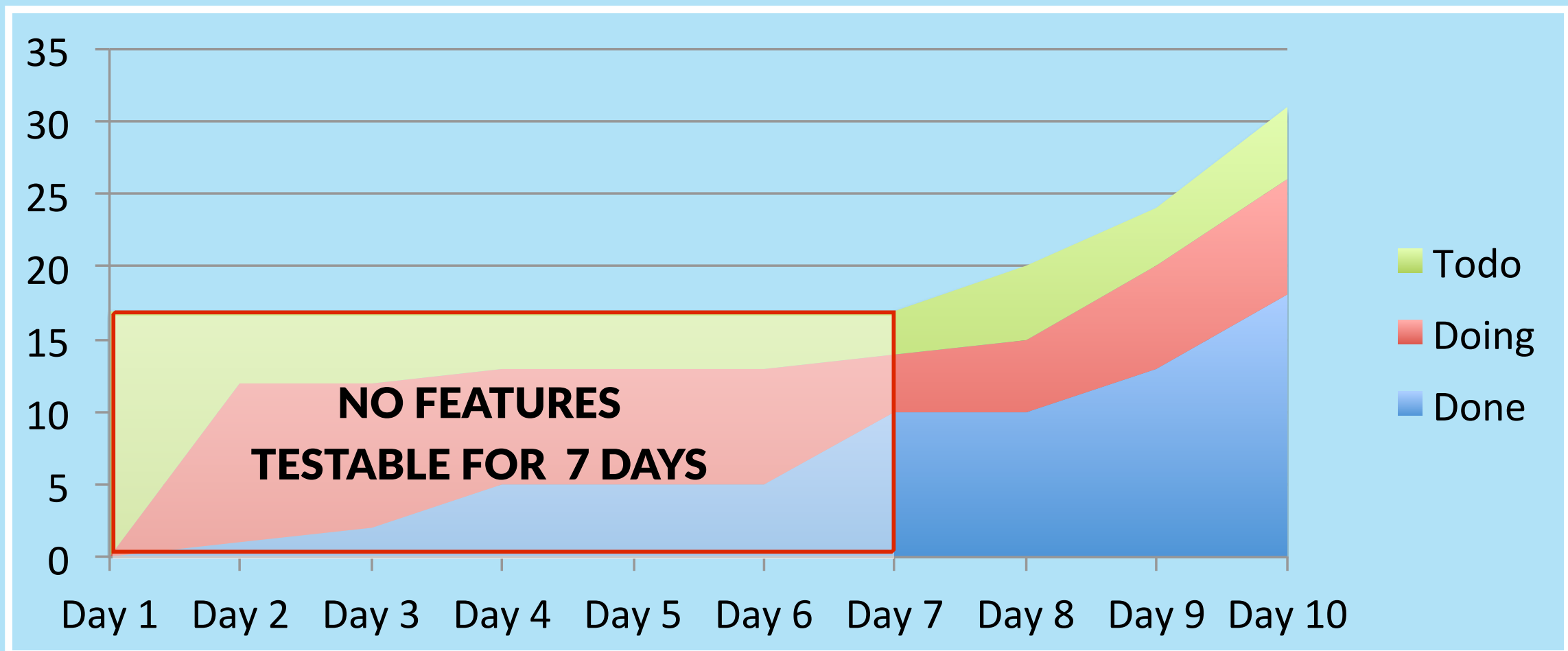


Scrum with Kanban

without
KANBAN

IN SPRINT

**HIGH FEATURE WIP =
IDLE QA + MORE BUGS**

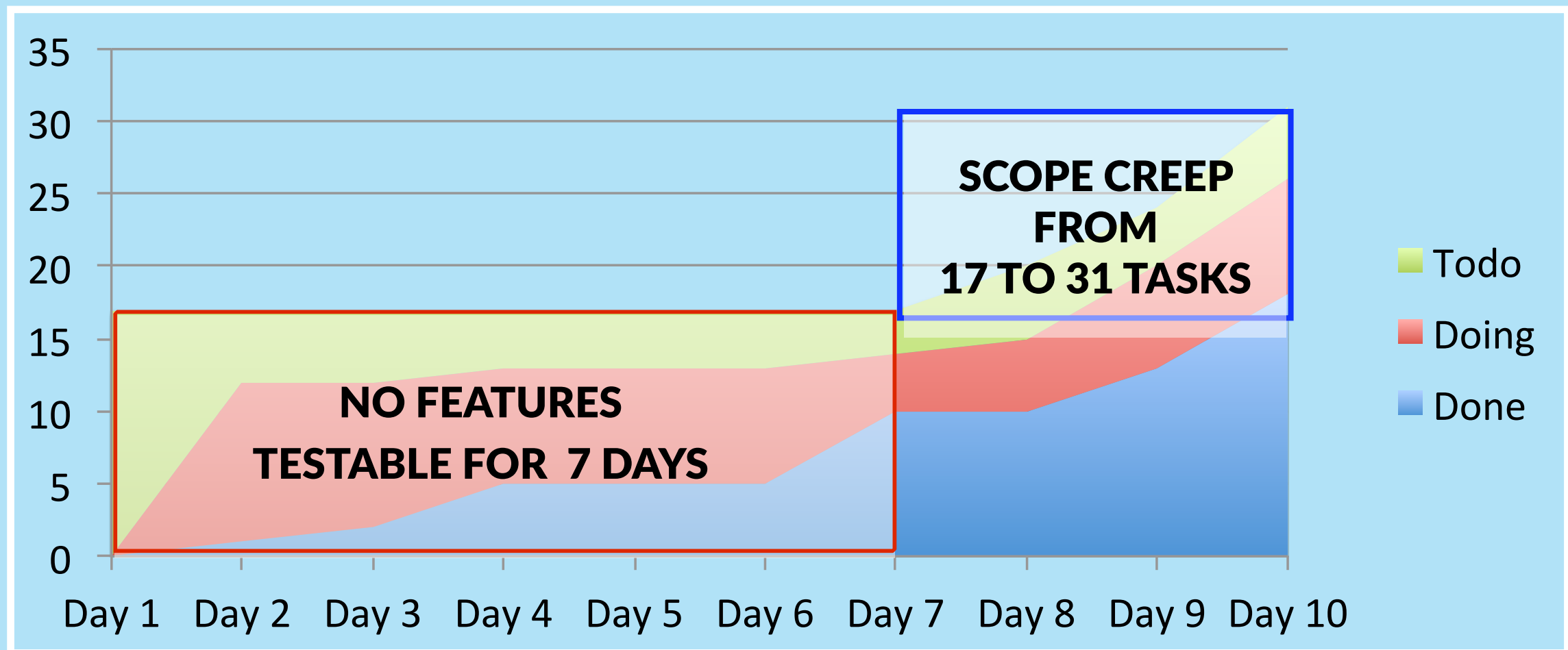


Scrum with Kanban

without
KANBAN

IN SPRINT

**HIGH FEATURE WIP =
IDLE QA + MORE BUGS**



Scrum with Kanban

IN SPRINT

SPRINT QUALITY & PREDICTABILITY

with
KANBAN

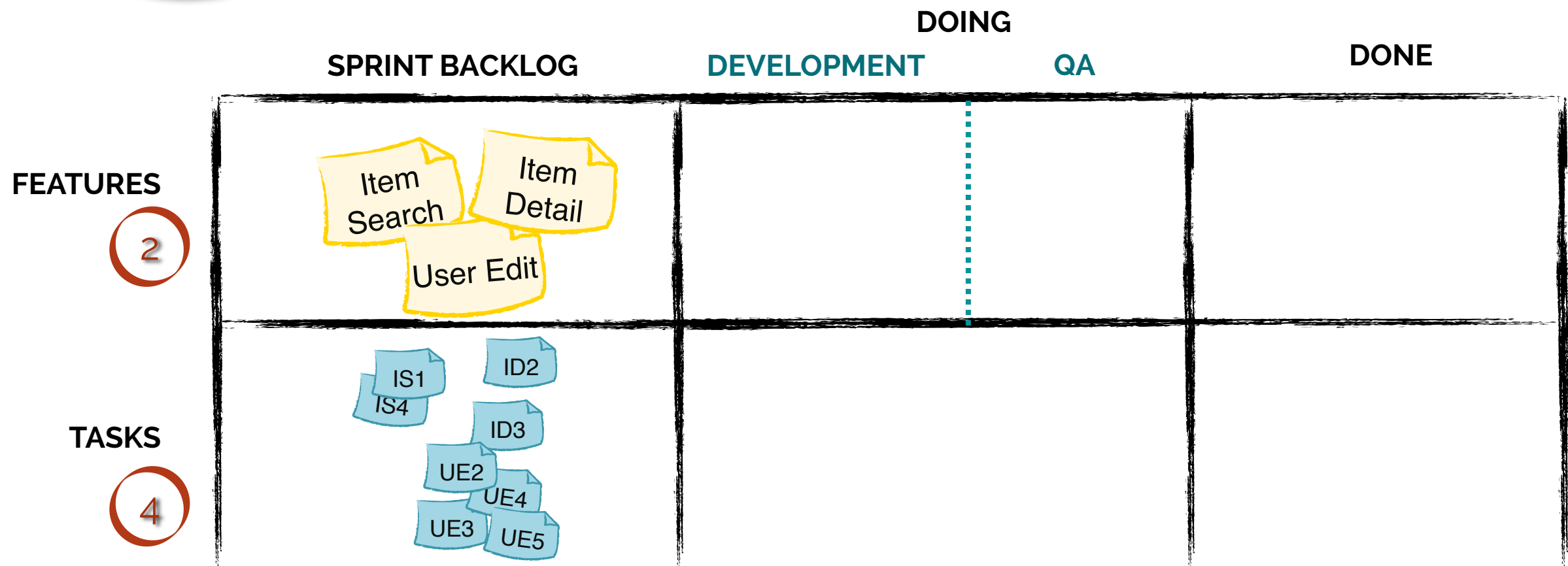
1. Map Value Stream
2. Limit Task WIP
3. Limit Feature WIP

Scrum with Kanban

with
KANBAN

IN SPRINT

DAY 1

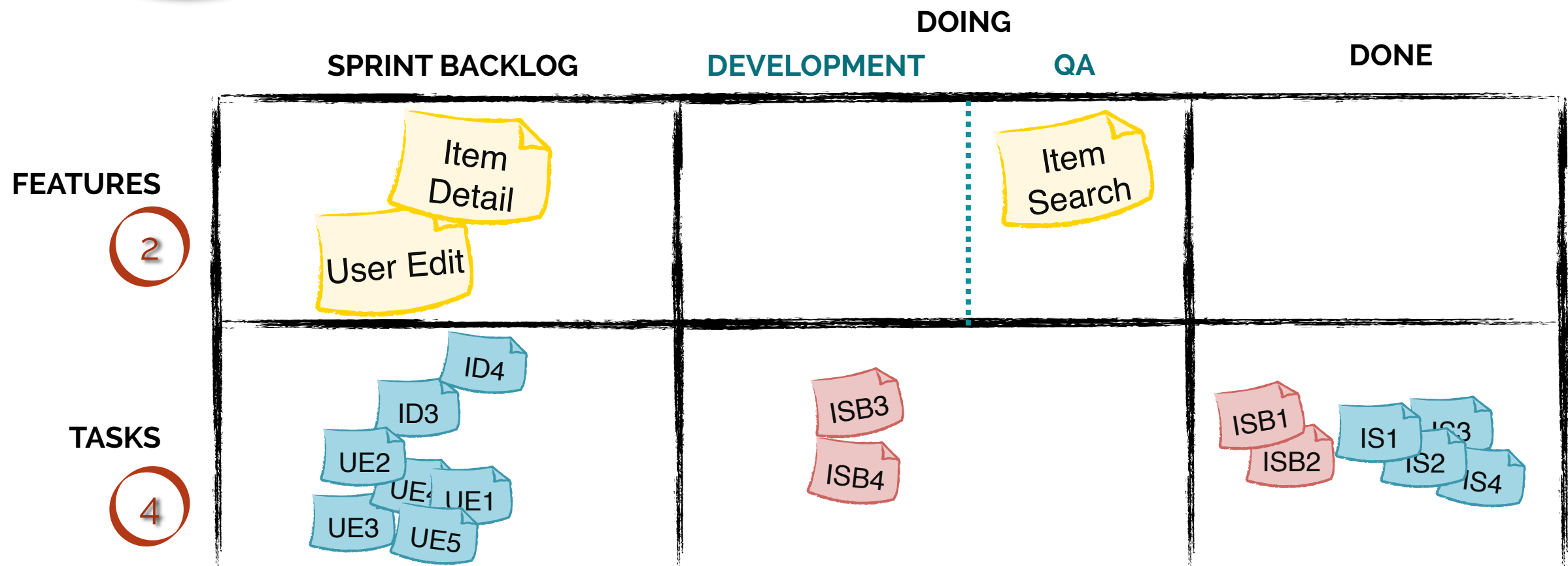


Scrum with Kanban

with
KANBAN

IN SPRINT

DAY 5

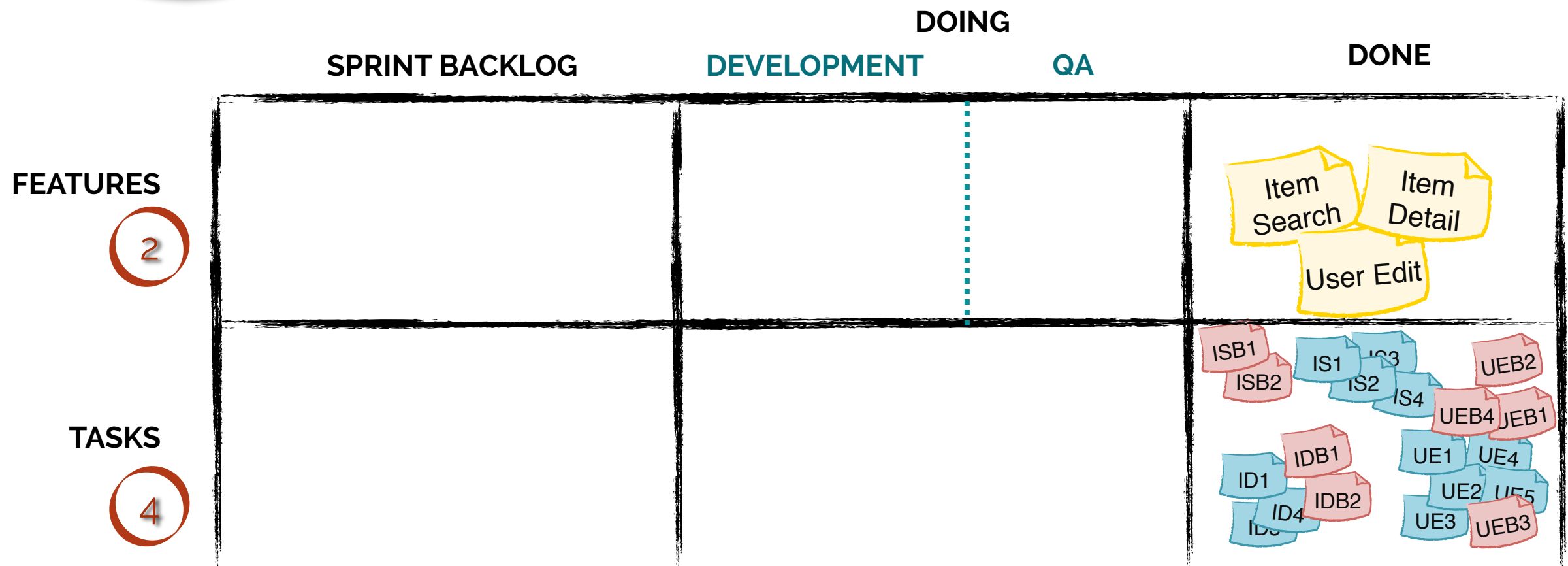


Scrum with Kanban

with
KANBAN

IN SPRINT

DAY 10

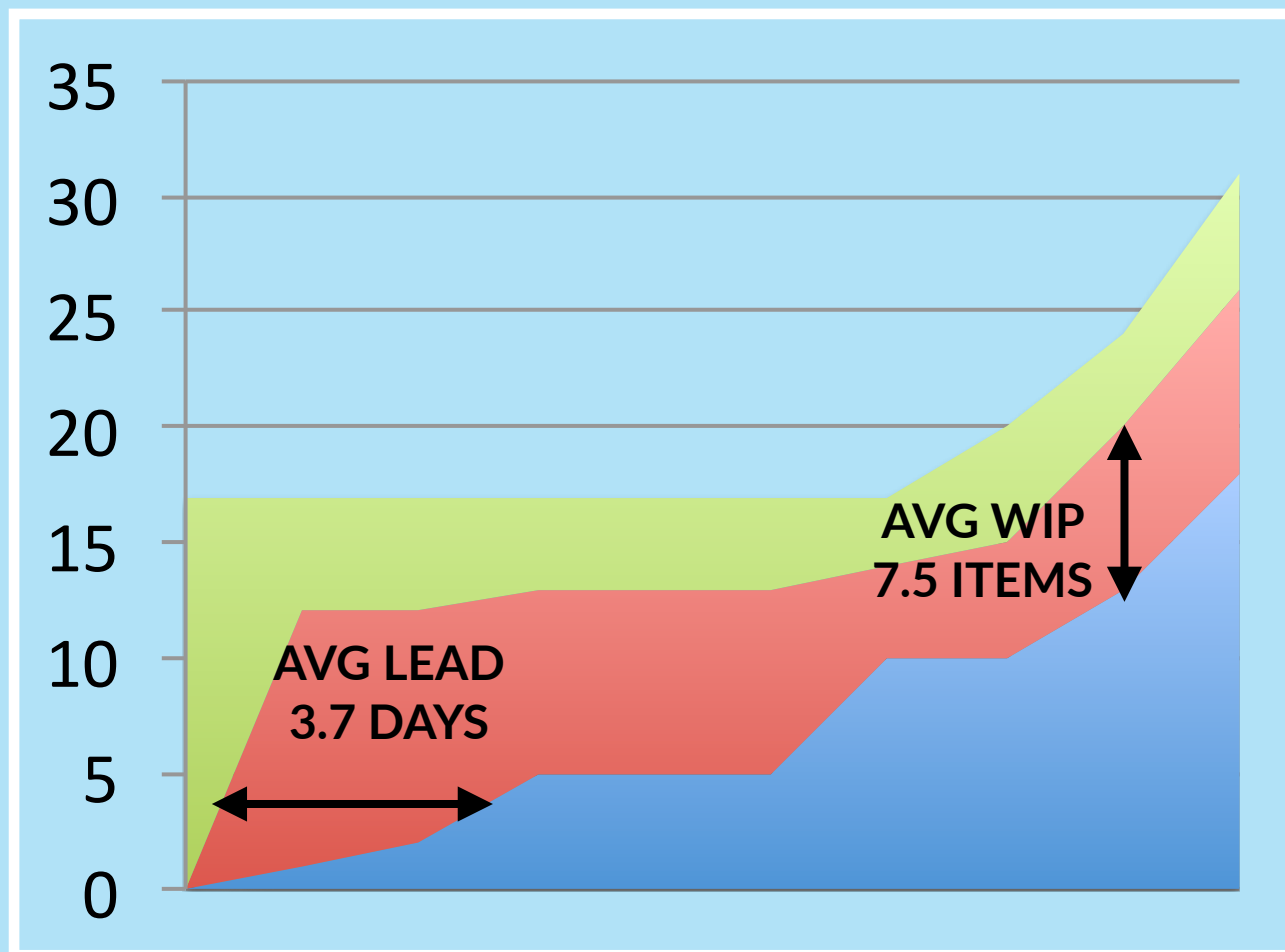


Scrum with Kanban

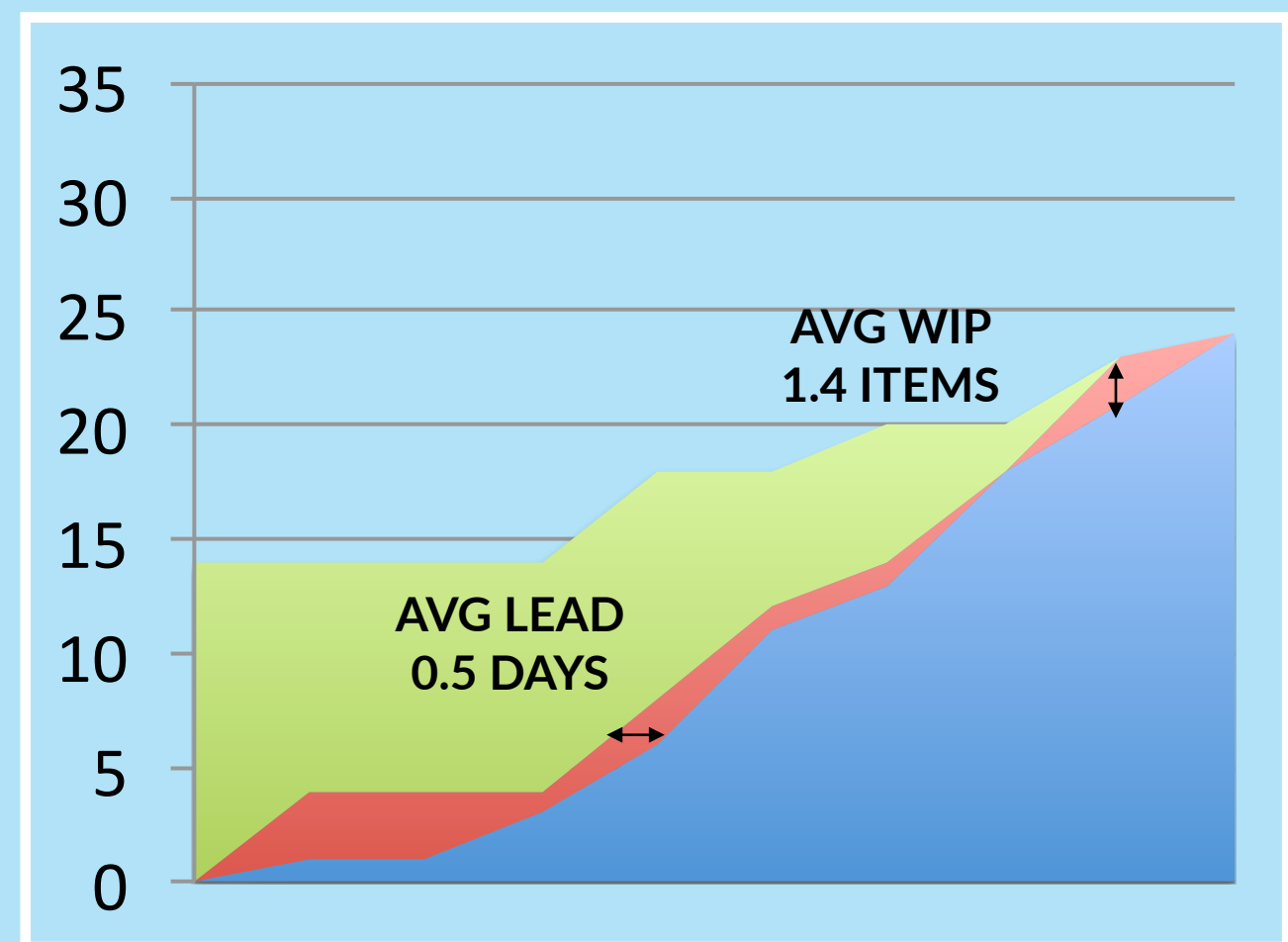
IN SPRINT

LOW TASK WIP = FAST TASKS

Scrum Alone



Scrum + Kanban

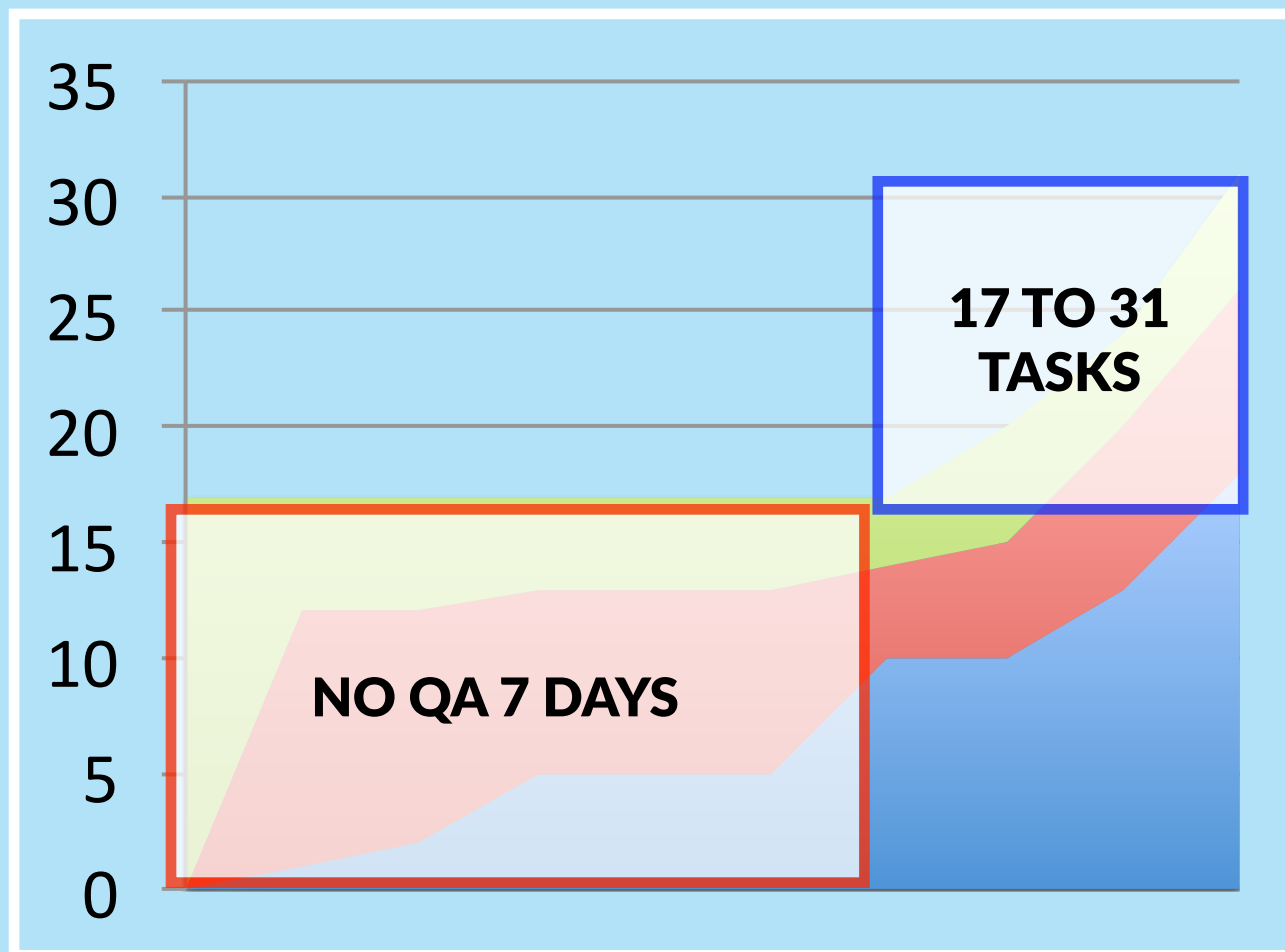


Scrum with Kanban

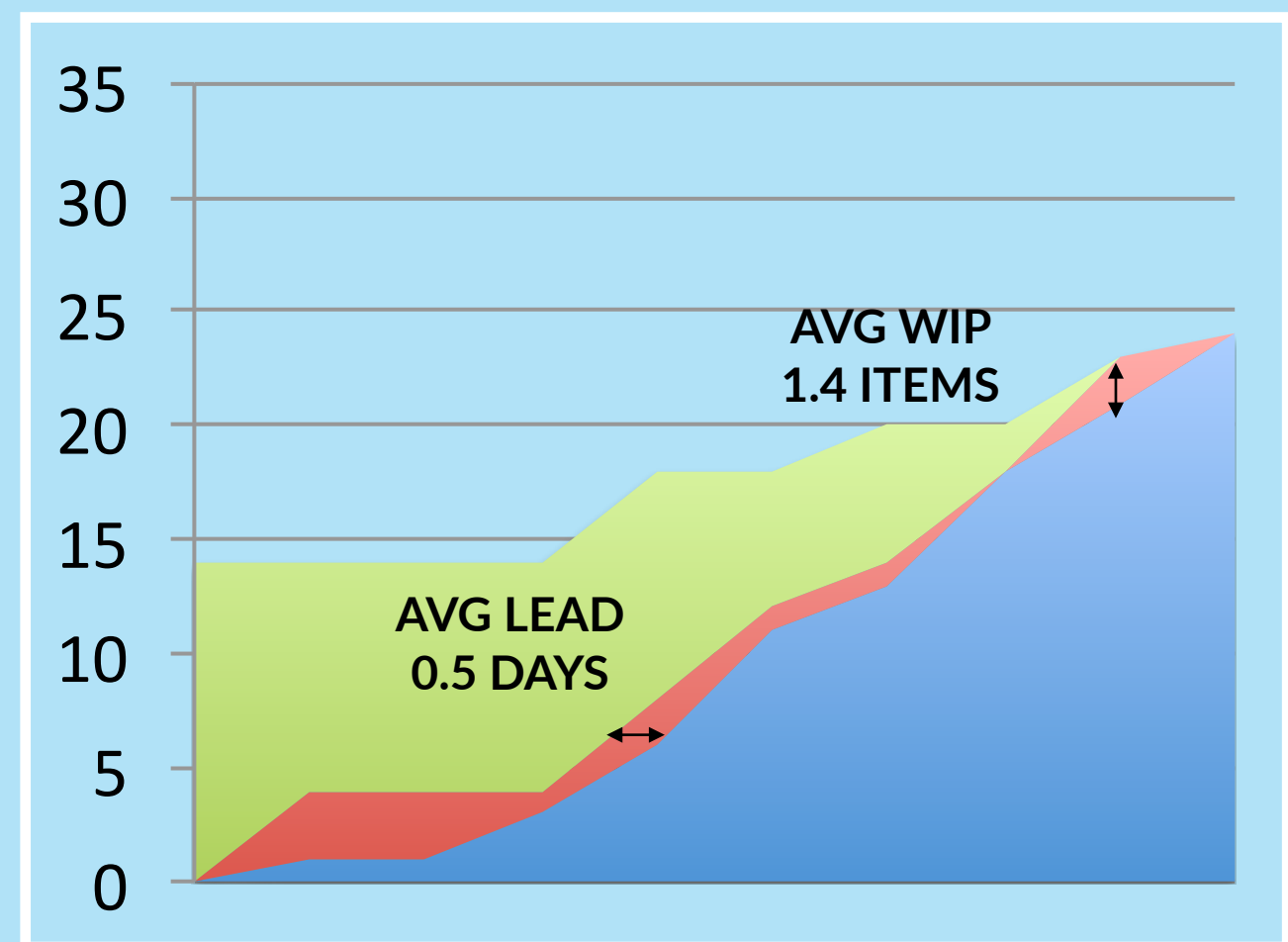
IN SPRINT

LOW FEATURE WIP = FAST / BETTER QA

Scrum Alone



Scrum + Kanban

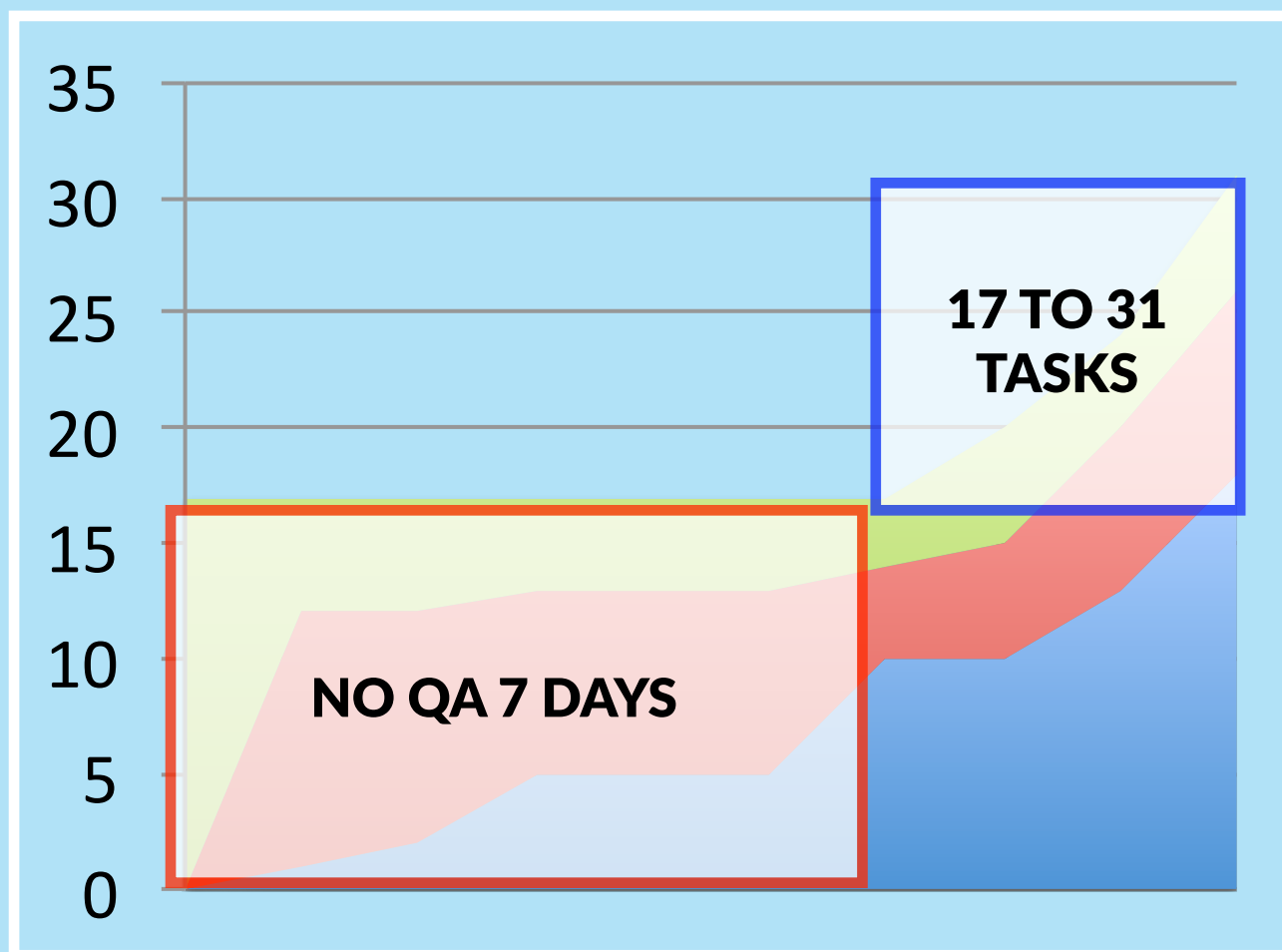


Scrum with Kanban

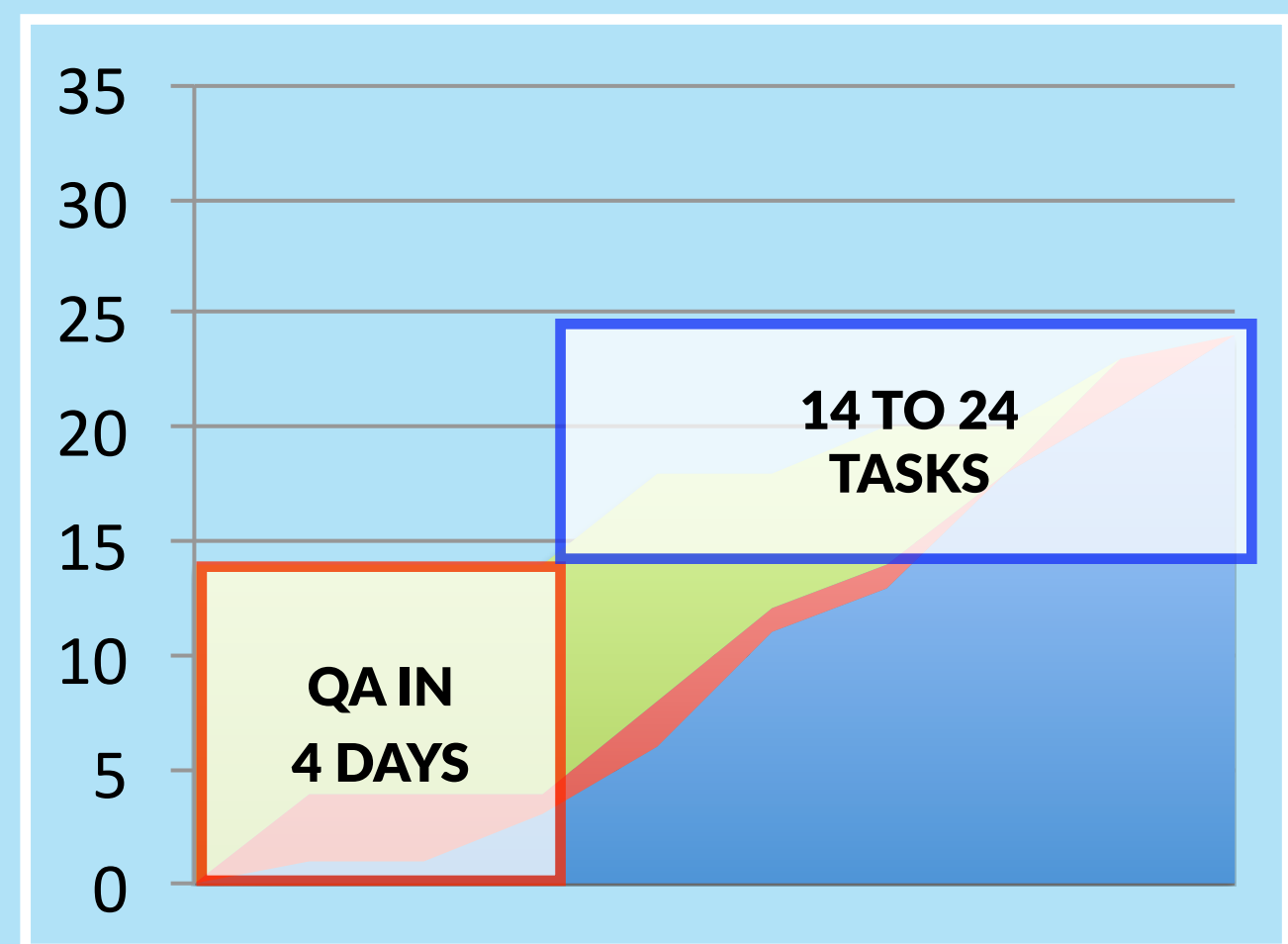
IN SPRINT

LOW FEATURE WIP = FAST / BETTER QA

Scrum Alone



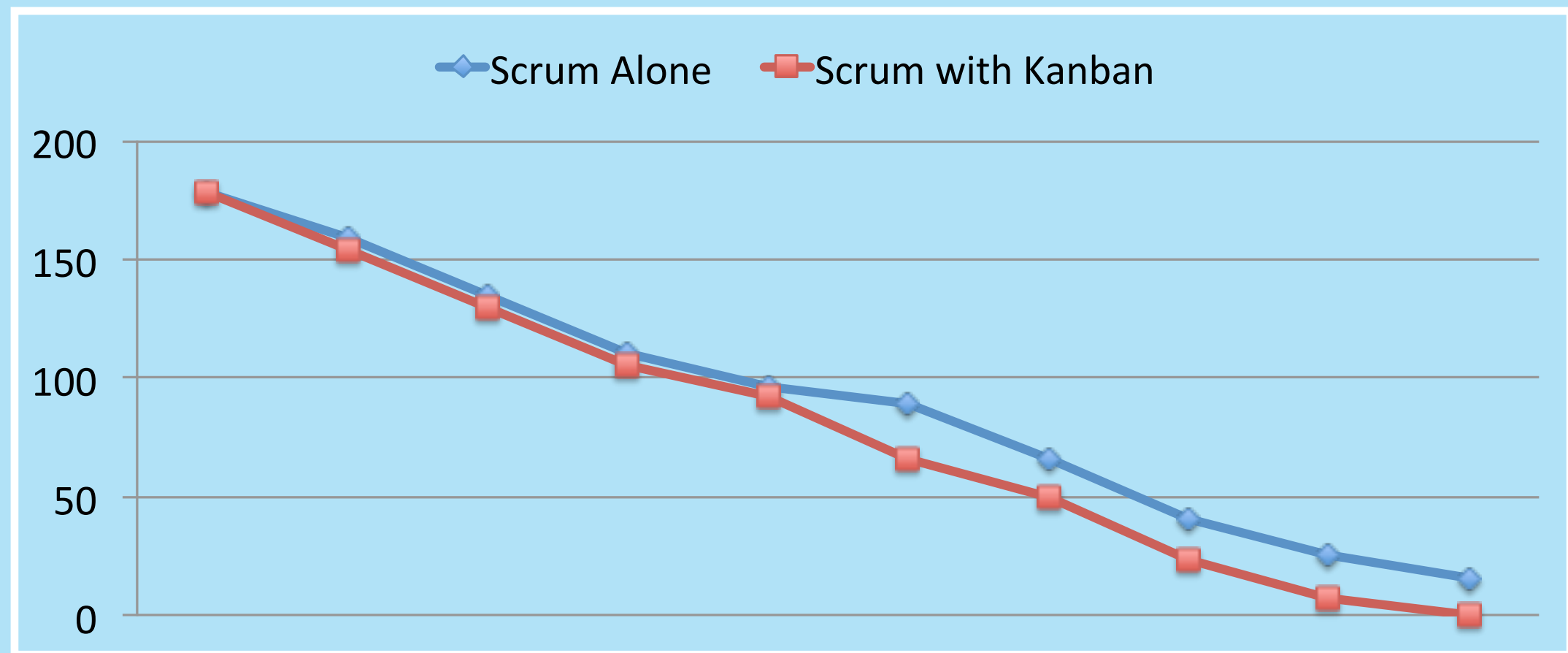
Scrum + Kanban



Scrum with Kanban

IN SPRINT

COMPARING BURNDOWNS



Scrum with Kanban

IN SPRINT

SPRINT QUALITY & PREDICTABILITY

with
KANBAN

1. Map Value Stream
2. Limit Task WIP
3. Limit Feature WIP

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IN SPRINT | OUT OF SPRINT

BEYOND SCRUM

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OUT OF A SPRINT



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OUT OF A SPRINT

SOME EPICS ARE UNBREAKABLE



Scrum with Kanban

OUT OF A SPRINT

SOME EPICS ARE UNBREAKABLE

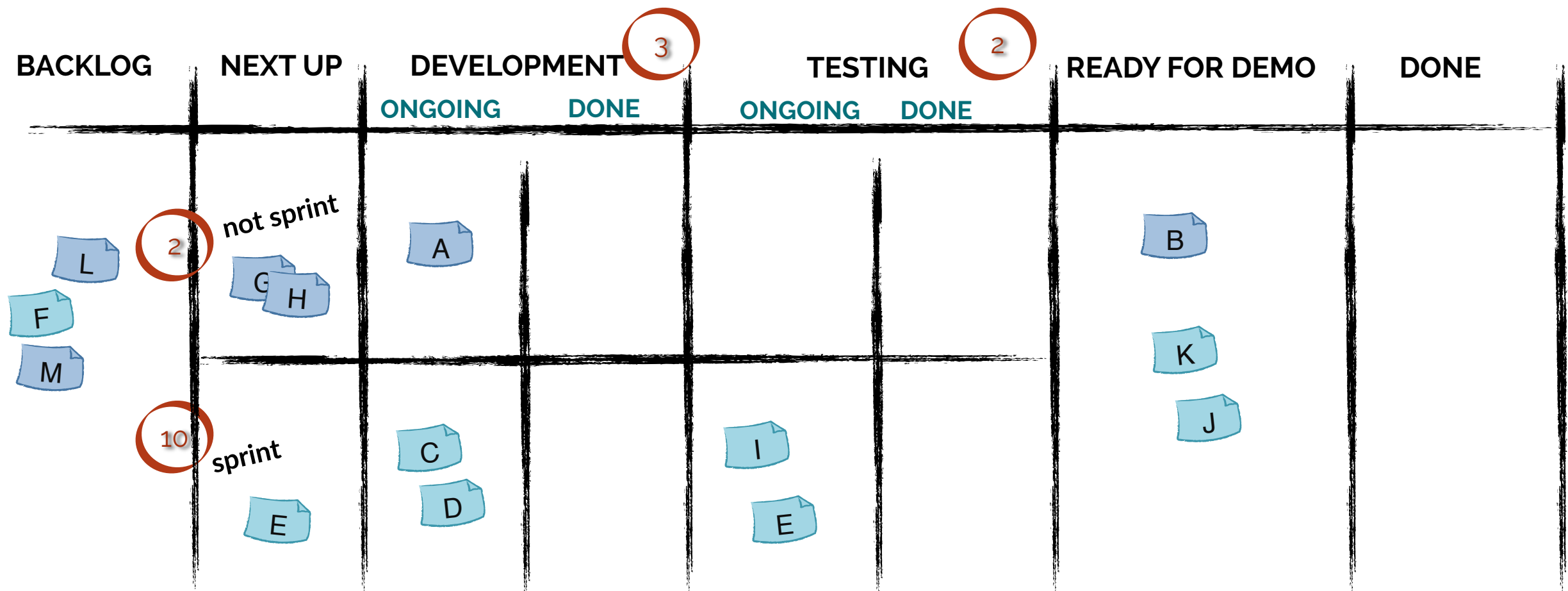
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-----  
T E S T S  
-----  
Running com.blogspot.helloglassfishmaven.NameStorageBeanTest  
getName  
setName  
Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.063 sec  
  
Results :  
  
Tests run: 2, Failures: 0, Errors: 0, Skipped: 0  
  
[INFO] --- maven-war-plugin:2.3:war (default-war) @ HelloGlassFishMaven ---  
[INFO] Packaging webapp  
[INFO] Assembling webapp [HelloGlassFishMaven] in [C:\workspace\GitMavenGlassFish_Build\HelloGlassFishMaven\target\HelloGlassFishMaven-1.0-SNAPSHOT]  
[INFO] Processing war project  
[INFO] Copying webapp resources [C:\workspace\GitMavenGlassFish_Build\HelloGlassFishMaven\src\main\webapp]  
[INFO] Webapp assembled in [163 msecs]  
[INFO] Building war: C:\workspace\GitMavenGlassFish_Build\HelloGlassFishMaven\target\HelloGlassFishMaven-1.0-SNAPSHOT.war  
[INFO] --- maven-install-plugin:2.4:install (default-install) @ HelloGlassFishMaven ---  
[INFO] Installing C:\workspace\GitMavenGlassFish_Build\HelloGlassFishMaven\target\HelloGlassFishMaven-1.0-SNAPSHOT.war to  
C:\workspace\GitMavenGlassFish_Build\.repository\com\blogspot\HelloGlassFishMaven\1.0-SNAPSHOT\HelloGlassFishMaven-1.0-SNAPSHOT.war  
[INFO] Installing C:\workspace\GitMavenGlassFish_Build\HelloGlassFishMaven\pom.xml to  
C:\workspace\GitMavenGlassFish_Build\.repository\com\blogspot\HelloGlassFishMaven\1.0-SNAPSHOT\HelloGlassFishMaven-1.0-SNAPSHOT.pom  
[INFO] -----  
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[INFO] -----  
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[INFO] Final Memory: 17M/310M  
[INFO] -----
```



Scrum with Kanban

OUT OF A SPRINT

EPICS: UNSPLITTABLE FEATURES



Scrum with Kanban

IN SPRINT | OUT OF SPRINT

BEYOND SCRUM

Scrum with Kanban

BEYOND SCRUM



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Scrum with Kanban

BEYOND SCRUM

*“In Scrum, you should inspect and adapt on everything...
except Scrum.”* - David J Bland



<https://twitter.com/davidjbland/status/430769613903654912>

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Scrum with Kanban

BEYOND SCRUM

ESTIMATION WASTE | THE TIME BOX



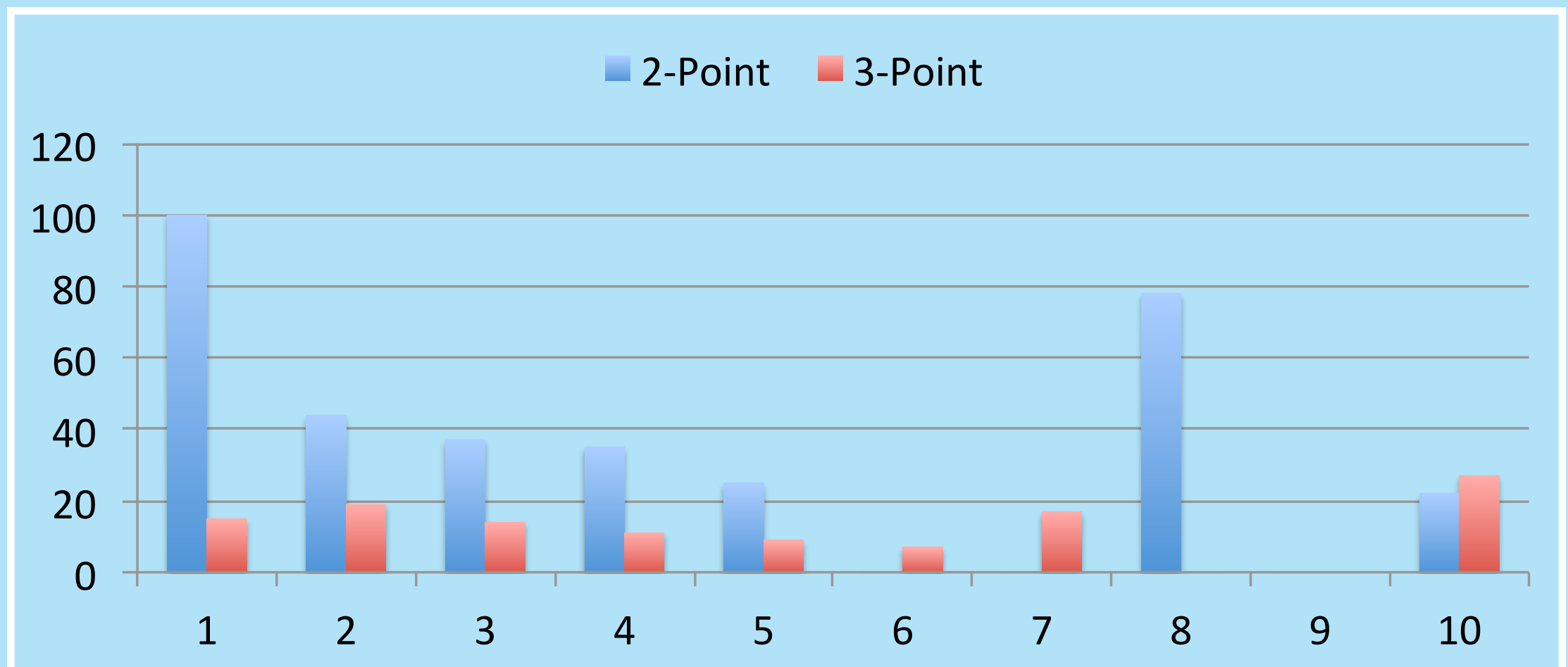
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Scrum with Kanban

BEYOND SCRUM

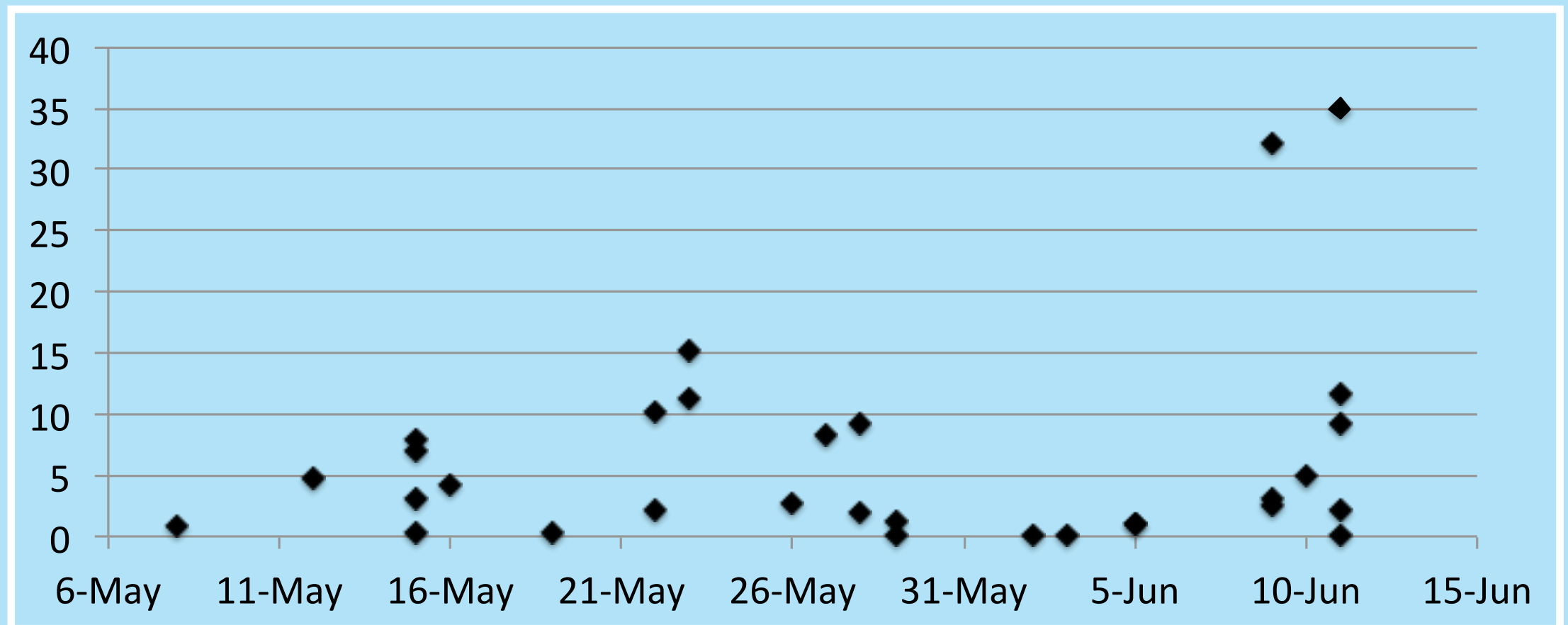
STORY POINT ACCURACY



Scrum with Kanban

BEYOND SCRUM

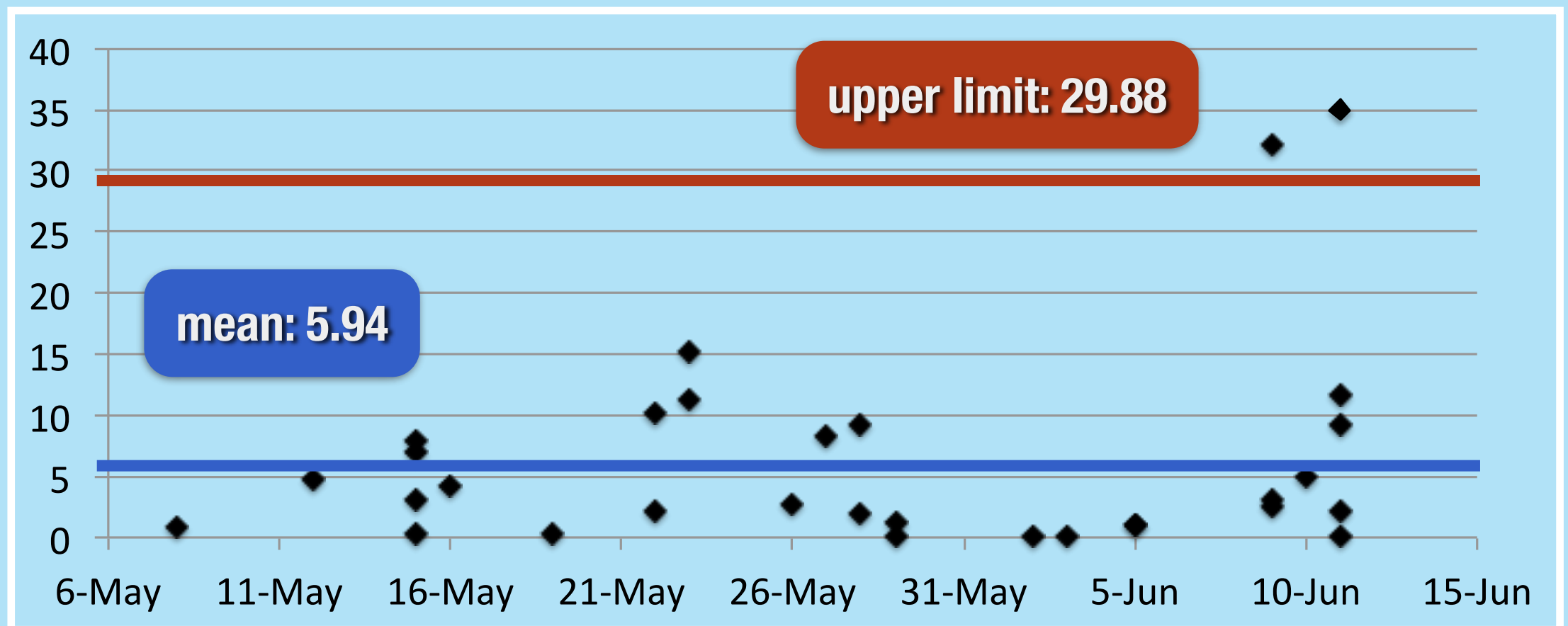
HISTORICAL LEAD TIMES



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BEYOND SCRUM

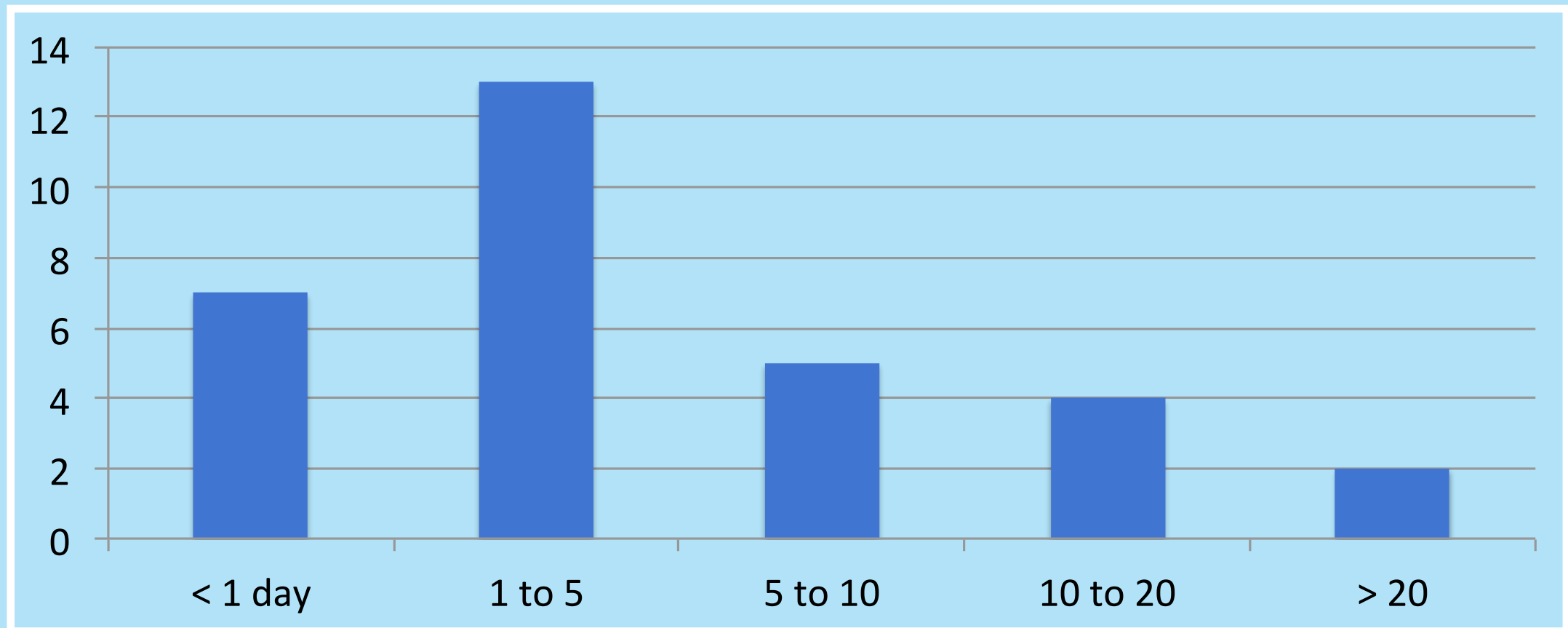
HISTORICAL LEAD TIMES



Scrum with Kanban

BEYOND SCRUM

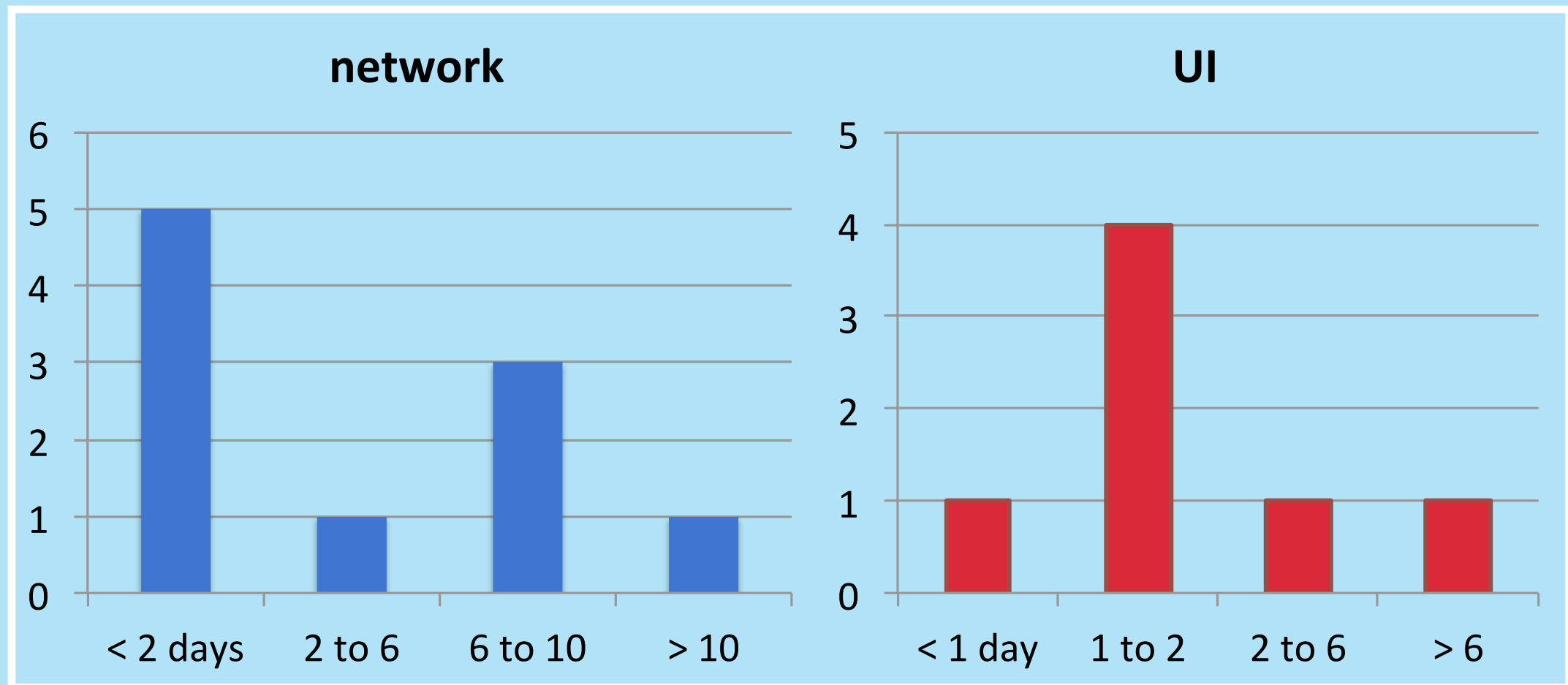
HISTORICAL LEAD TIMES: HISTOGRAM VIEW



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BEYOND SCRUM

HISTORICAL LEAD TIMES: CATEGORIZE & CALCULATE



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BEYOND SCRUM

FEATURE ESTIMATION ALTERNATIVE

with
KANBAN

1. Study historical data
2. Categorize cards
3. Calculate ranges
4. Shape sprint

Scrum with Kanban

BEYOND SCRUM

ESTIMATION WASTE | THE TIME BOX



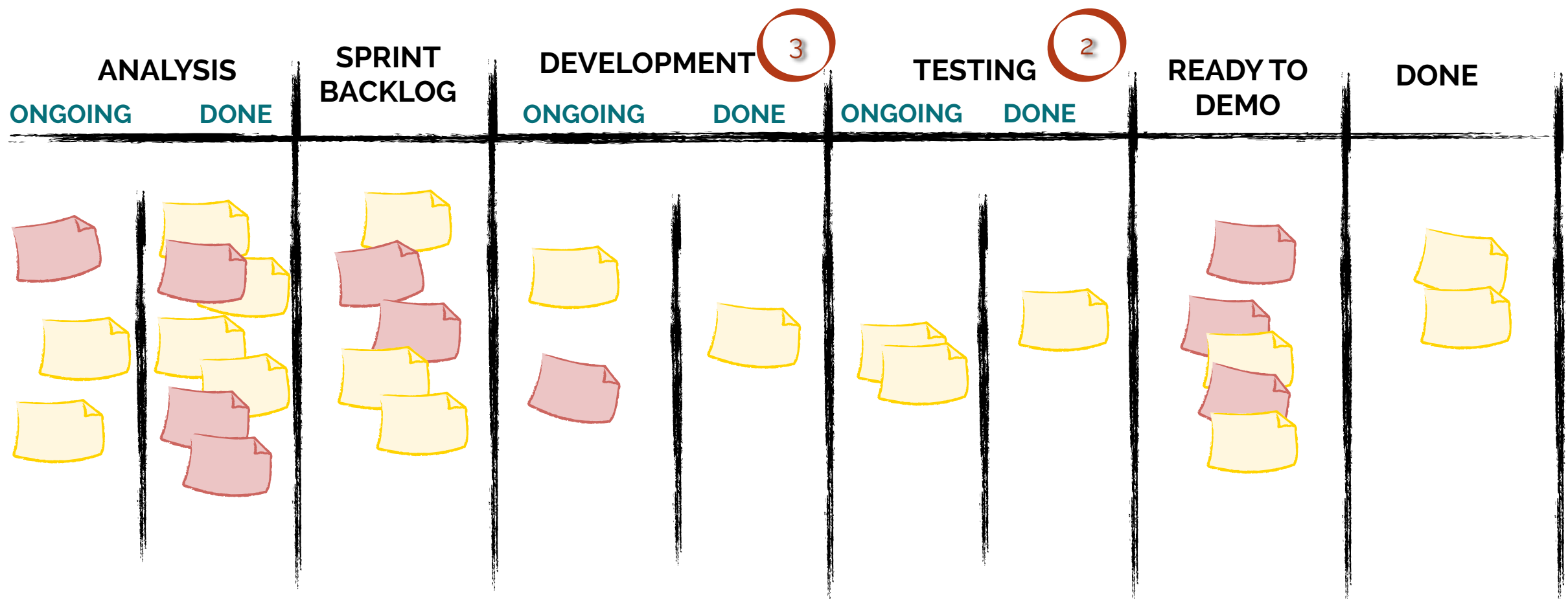
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Scrum with Kanban

BEYOND SCRUM

KANBAN IN A SCRUM



Scrum with Kanban

BEYOND SCRUM

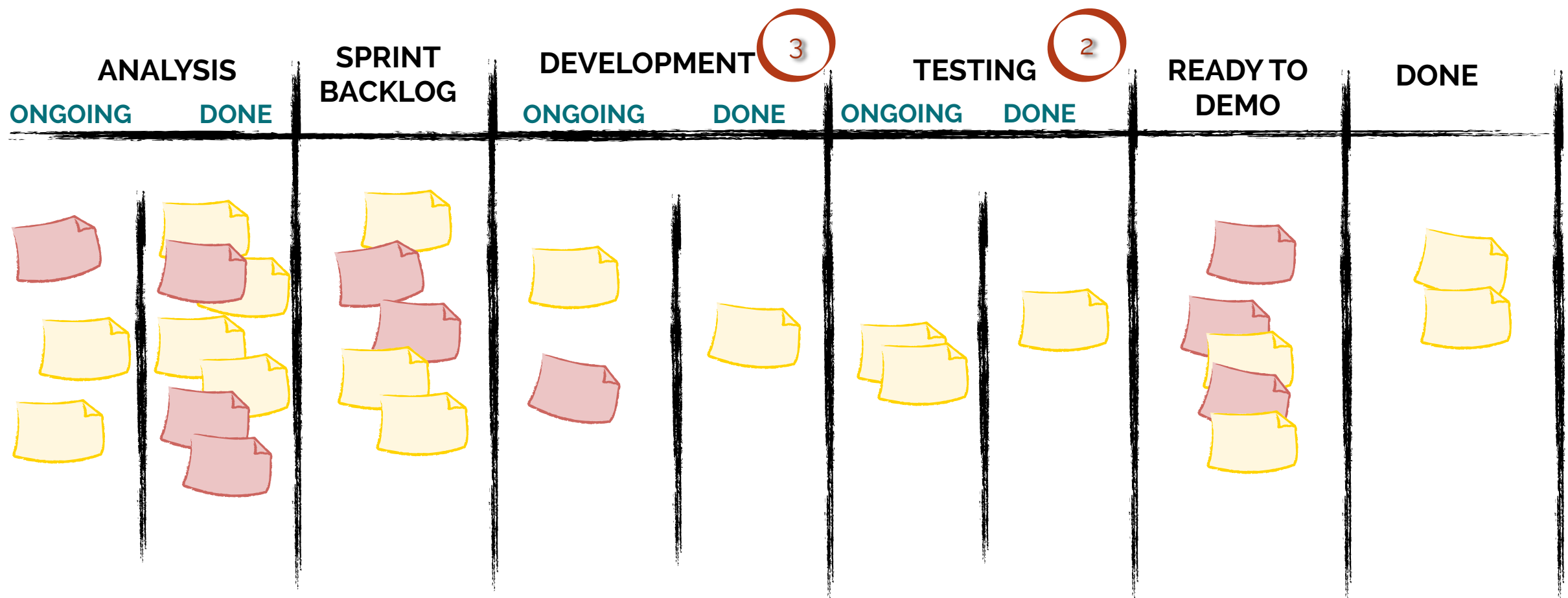
KANBAN IN A SCRUM



Scrum with Kanban

BEYOND SCRUM

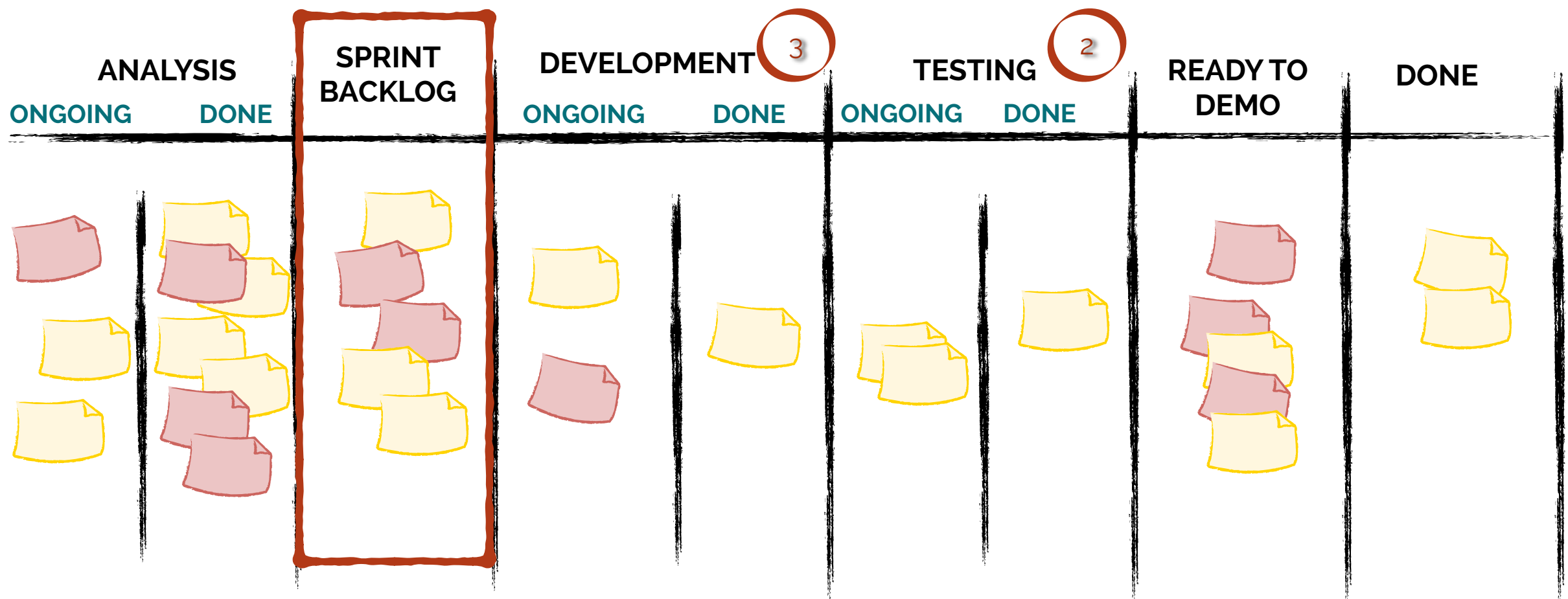
KANBAN IN A SCRUM



Scrum with Kanban

BEYOND SCRUM

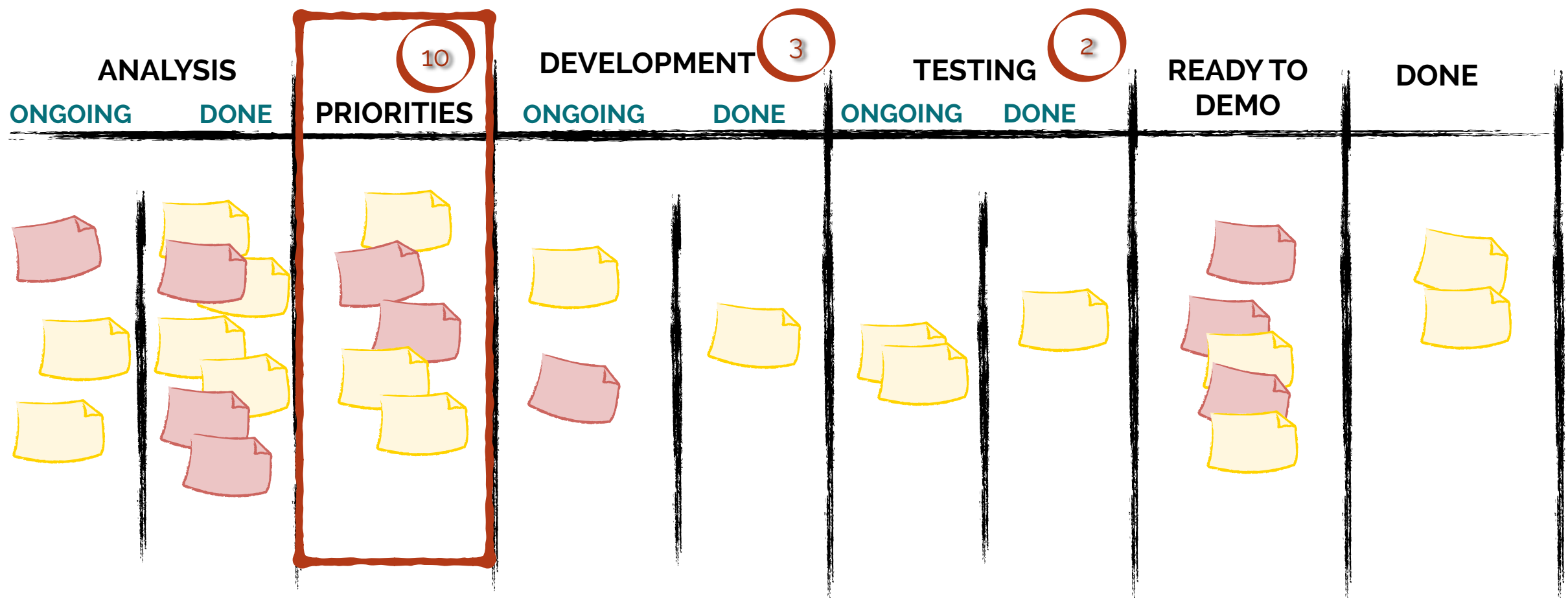
KANBAN IN A SCRUM: ROLLING PRIORITIES



Scrum with Kanban

BEYOND SCRUM

KANBAN IN A SCRUM: ROLLING PRIORITIES



Scrum with Kanban

BEYOND SCRUM

KANBAN IN A SCRUM: ROLLING PRIORITIES



Scrum with Kanban

BEYOND SCRUM

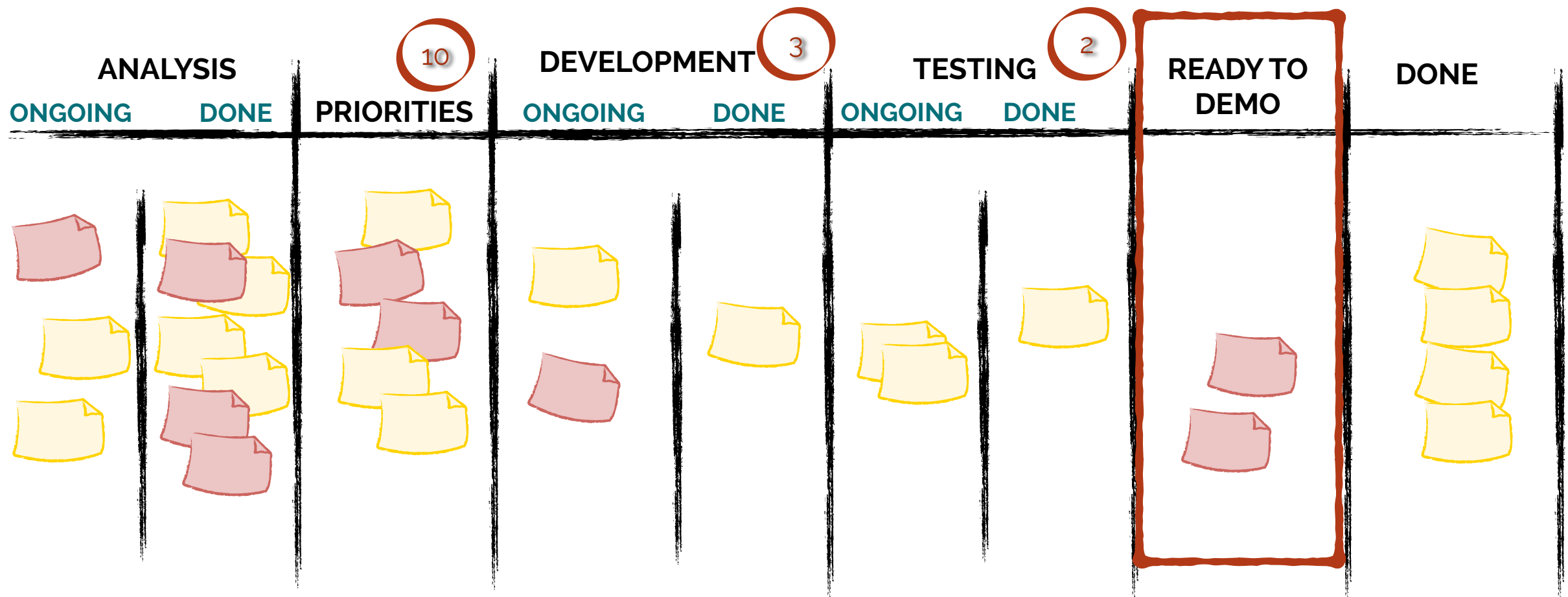
KANBAN IN A SCRUM: ROLLING PRIORITIES



Scrum with Kanban

BEYOND SCRUM

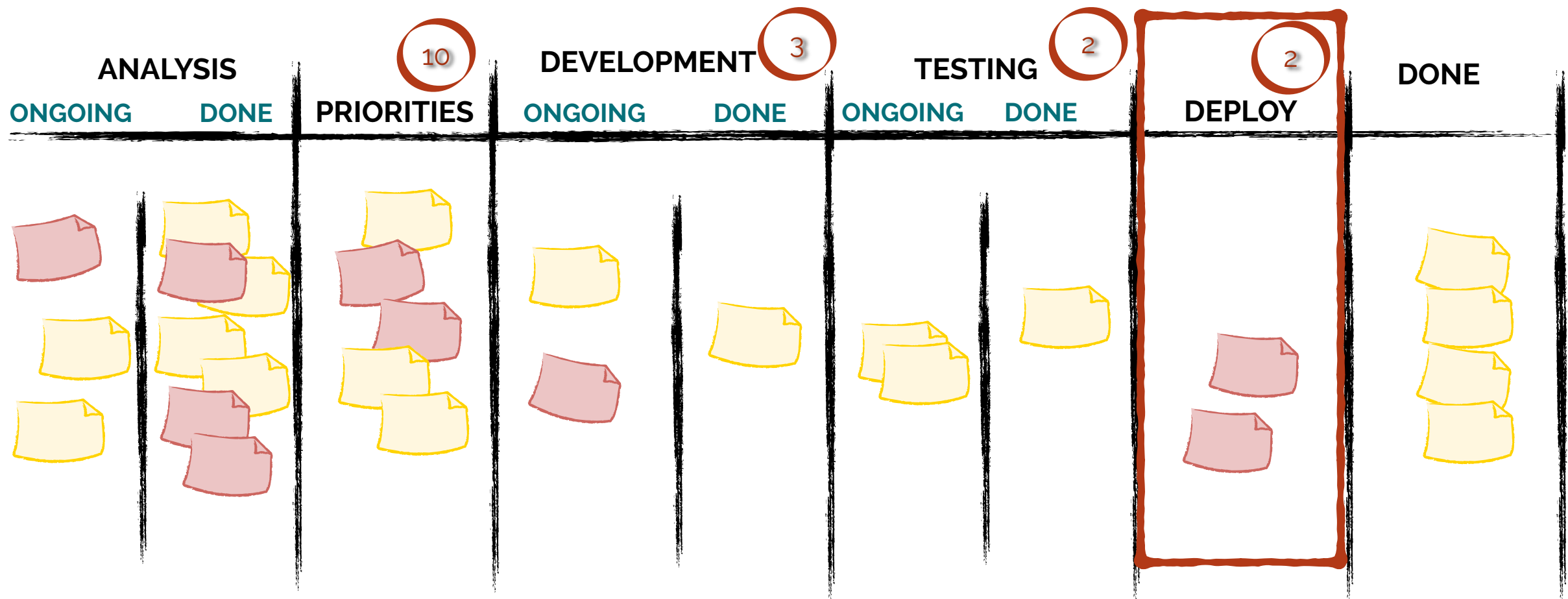
KANBAN IN A SCRUM: DEPLOY WHEN READY



Scrum with Kanban

BEYOND SCRUM

KANBAN IN A SCRUM: DEPLOY WHEN READY



Scrum with Kanban

BEYOND SCRUM

KANBAN IN A SCRUM: DEPLOY WHEN READY



Scrum with Kanban

BEYOND SCRUM

KANBAN IN A SCRUM: DEPLOY WHEN READY



Scrum with Kanban

BEYOND SCRUM

GOAL-CENTRIC PROCESS

with
KANBAN

1. Team Goals
2. Customer Goals

Scrum with Kanban

BEYOND SCRUM



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Scrum with Kanban

BEYOND SCRUM

OUT OF SPRINTS



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Scrum with Kanban

BEYOND SCRUM

OUT OF SPRINTS

IN SPRINTS



Scrum with Kanban

IMPROVE SPRINTS | MANAGE EPICS
ALIGN WITH CUSTOMER

Scrum with Kanban



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