

“There is plenty of ‘good’ out there, its those that can deliver ‘good’ FAST that win!”

Jeff Sutherland, co-creator of Scrum and creator of Scrum @ Scale

Scrum Patterns

Scrum is a framework that enables the execution of *patterns* that assist in propagating a spirit of interaction



<http://scrumbook.org>

11 Ways to Improve Velocity

Small Improvements in Velocity (avg. cycle time) can have large impacts on revenue

- 1 Small & Stable Teams
- 2 Scrumming the Scrum
- 3 Dedicated Teams
- 4 Pairing & Swarming
- 5 Ready Backlog
- 6 Collocation
- 7 T or π -Shaped people
- 8 All testing completed within a Sprint
- 9 Yesterday's Weather – Finish Early
- 10 Interrupt Buffer
- 11 Daily Clean Code

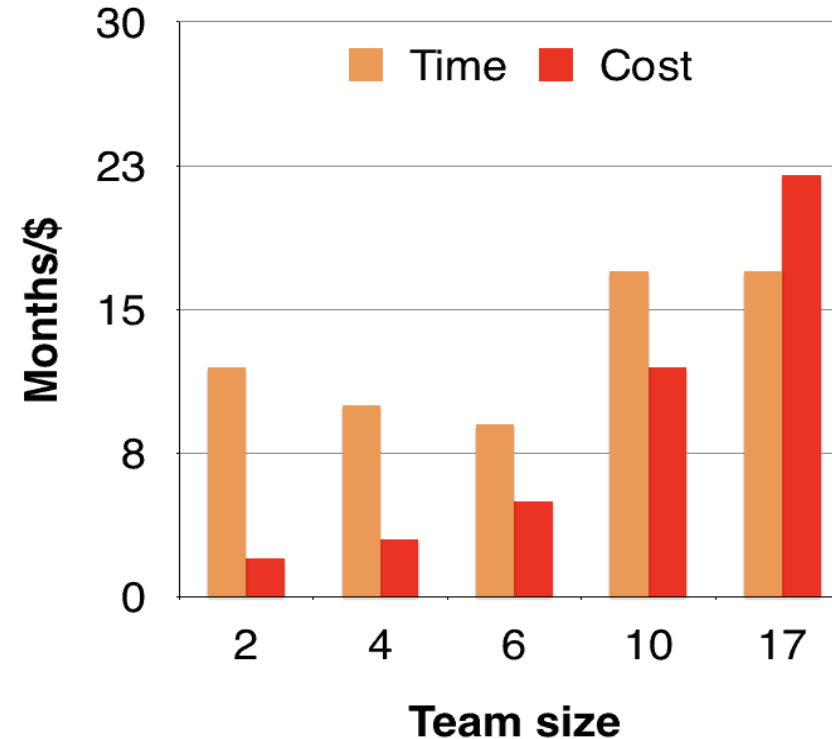
scruminc.

A 20% decrease in cycle time can improve revenue by 442%

Small and Stable Team Improves Velocity

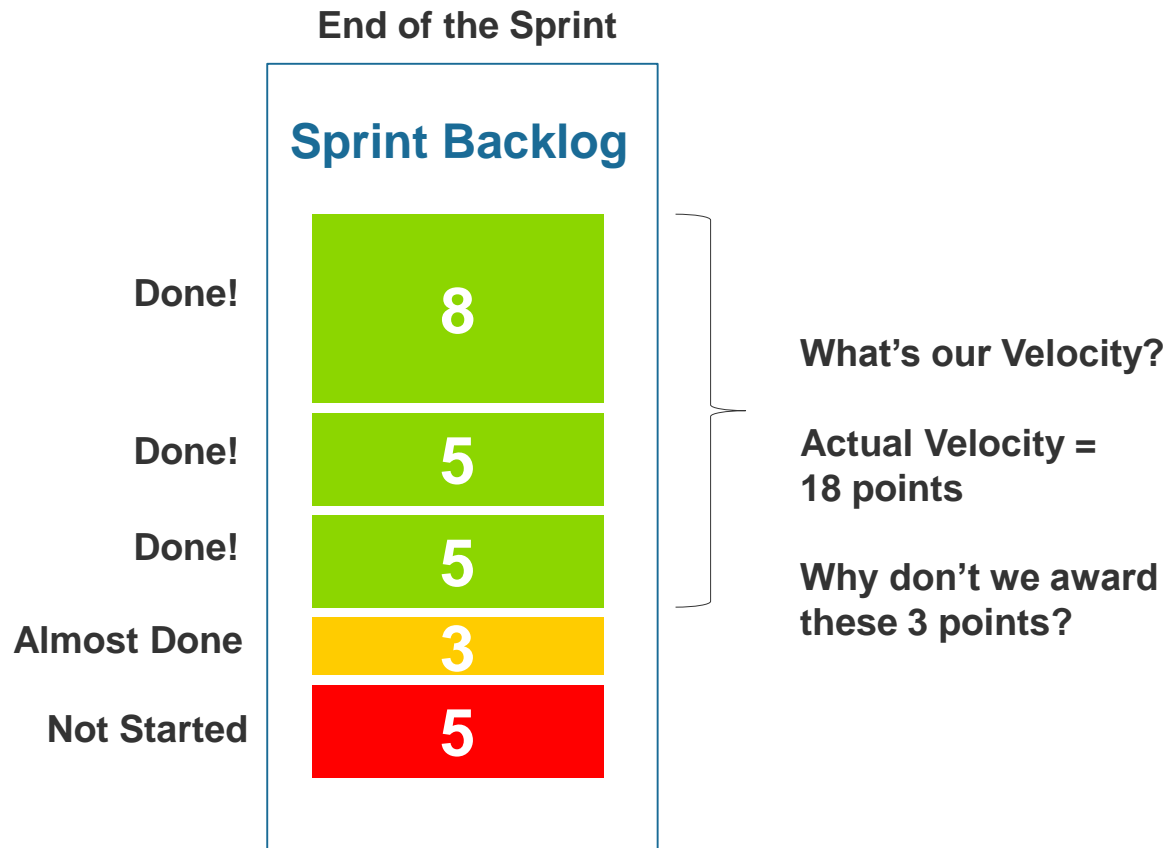
Brook's Law

“Adding manpower to a late software project makes it later.”



Finishing the Sprint Early Improves Velocity

Yesterday's Weather: Use the last Sprint to predict the next Sprint



If the team is stable, how much should we assume can be accomplished in the next Sprint?

Answer 18 points !!!

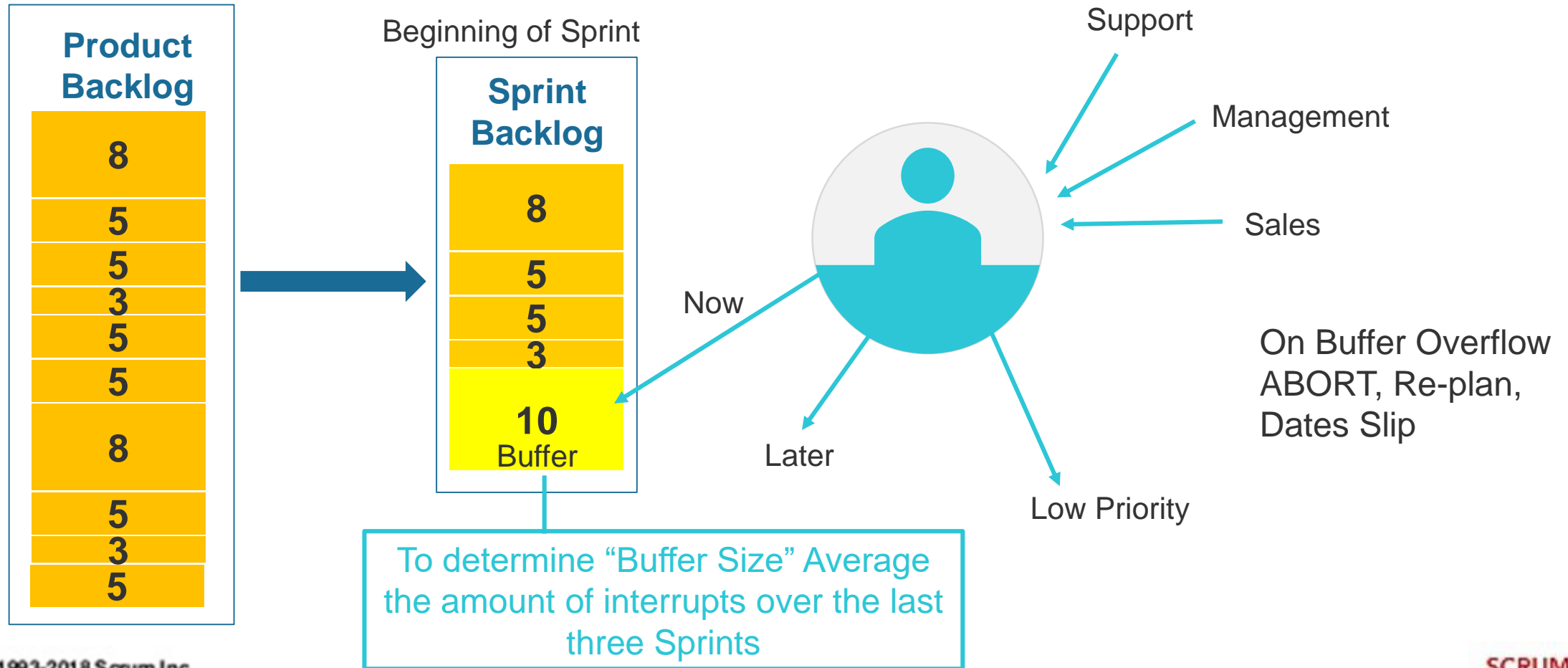
If we try to pull more and fail, it will reduce morale, further reducing productivity

But if we keep our expectations in line and implement the other patterns well, we will accelerate and be able to do more

NOTE: Take the average velocity from the last 3 Sprints to get the value for Yesterday's Weather

Handling Interrupts Improves Velocity

Implement a Buffer to Deal with the Unexpected



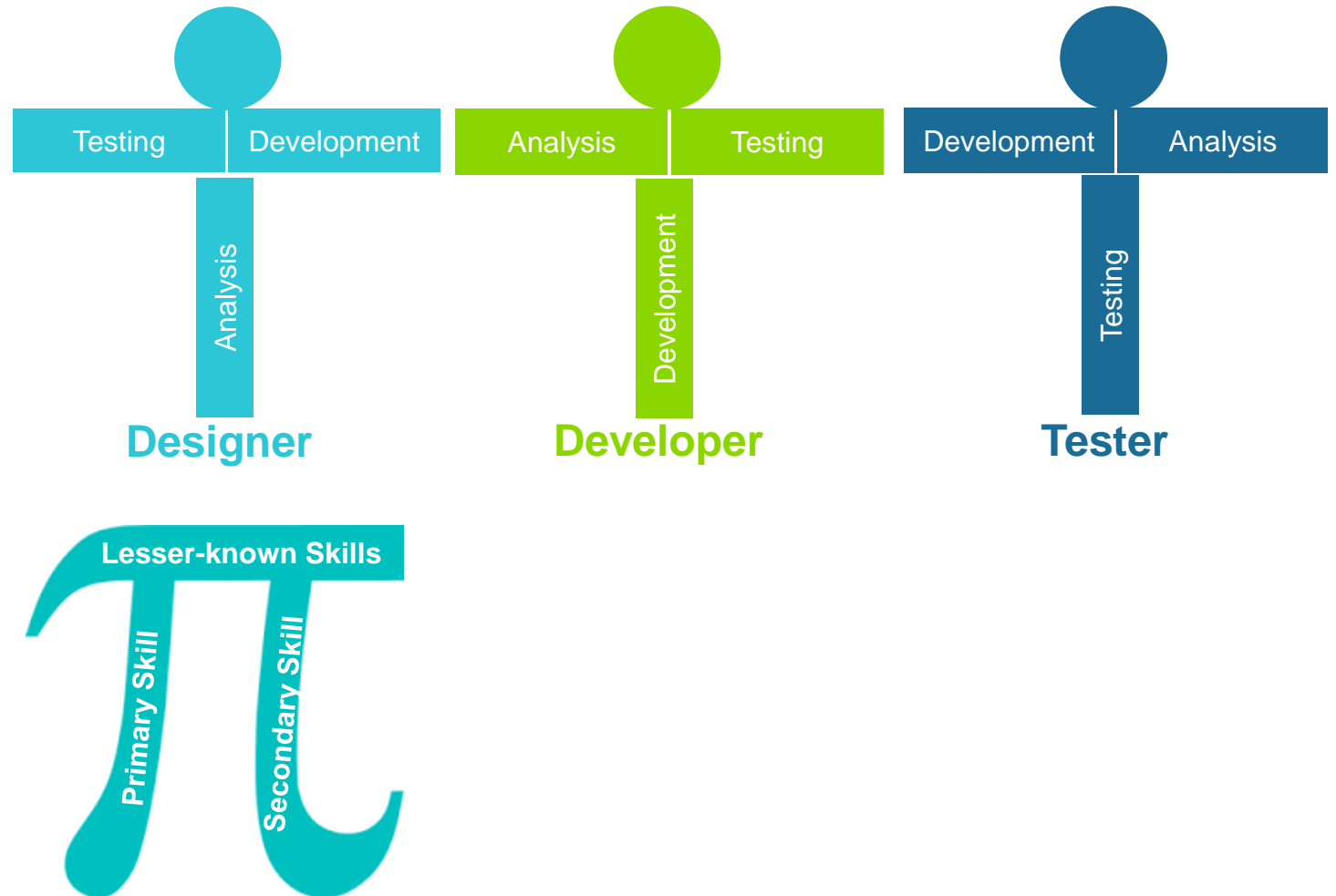
T or π Shaped Skilled People Improves Velocity

What does it mean to be T- Shaped?

BREADTH
Of experience, knowledge and skills

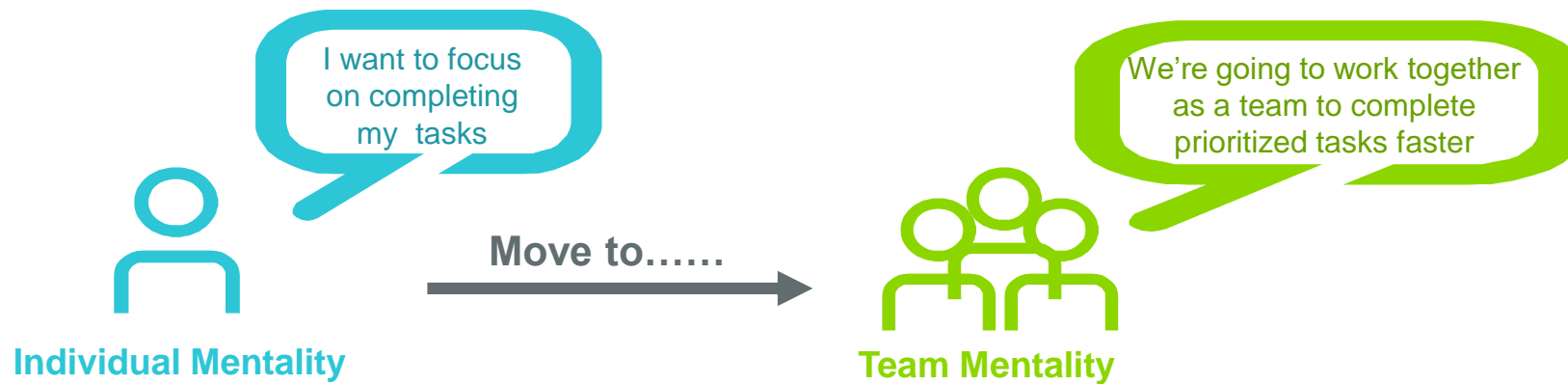


DEPTH
of discipline
and
experience



Swarming Improves Velocity

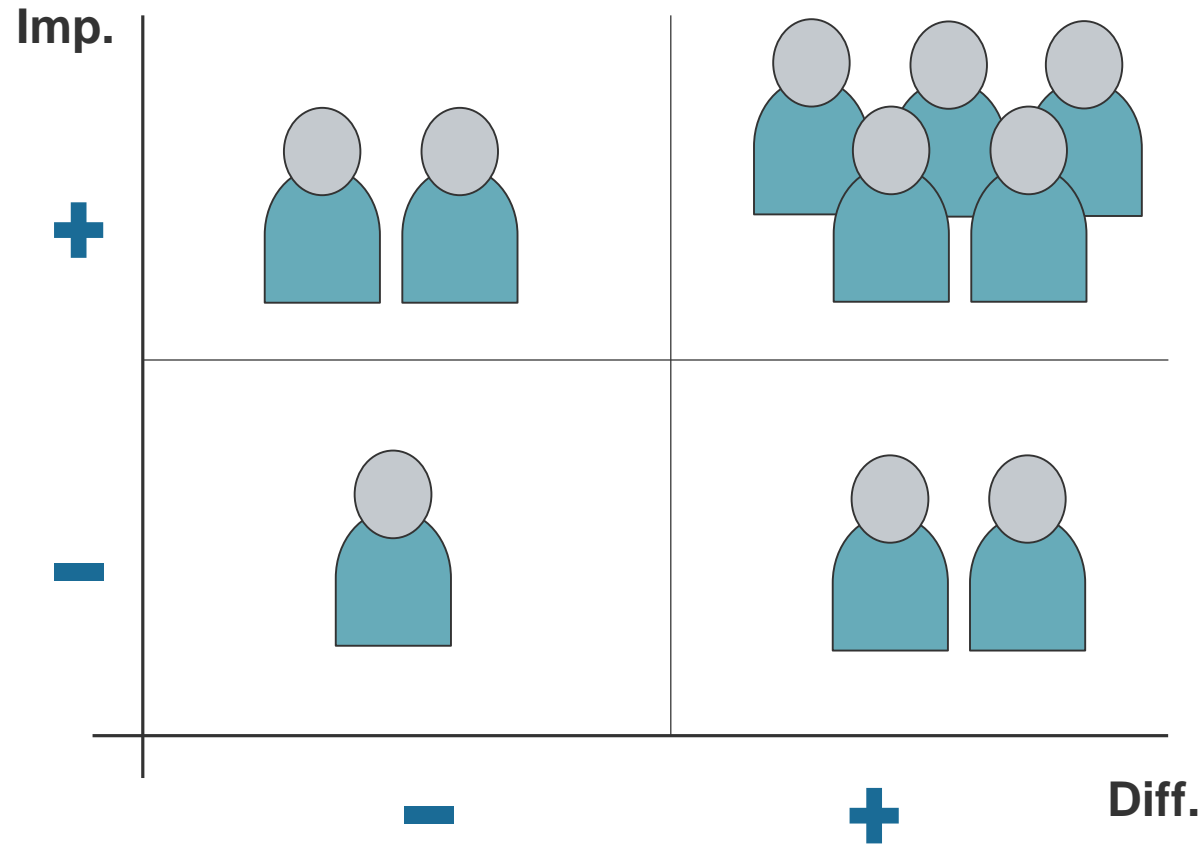
Swarming is the essence of agile teamwork. **Everyone on the team pitches in to push stories over the finish line.** Egos are left at the door and team members sometimes operate outside of their comfort zones so that the team can deliver on its commitments.



Effective Swarming:

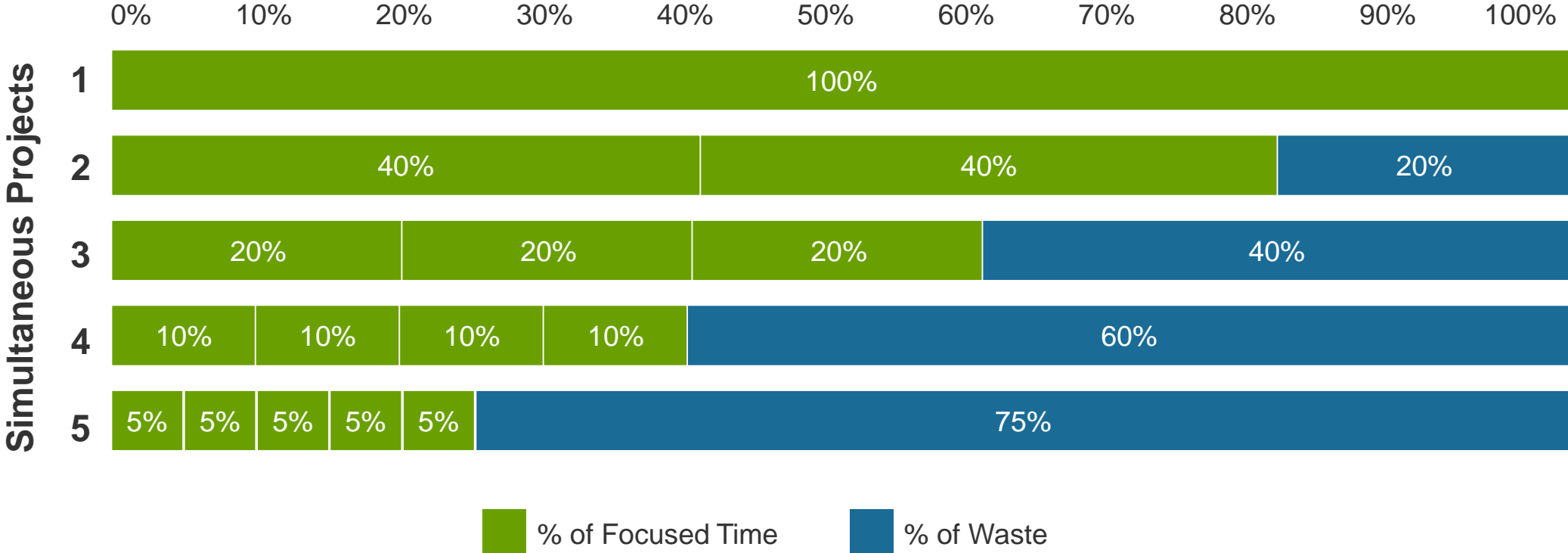
- Sprint Planning sets the table for effective swarming
- You must prioritize your projects to understand where the team should focus
- Teams must effectively break up the work so that everyone on the team can contribute

When should we use Pairing, Swarming or Simply work alone?



Limiting Work in Progress Improves Velocity

Effects of Context Switching



Good Housekeeping improves Velocity!

DAILY CLEAN CODE

The product must be in a Done (e.g. Definition of Done) state every day (or more often)

Continuous focus on maintaining the product in a state where anyone in the team can safely start working

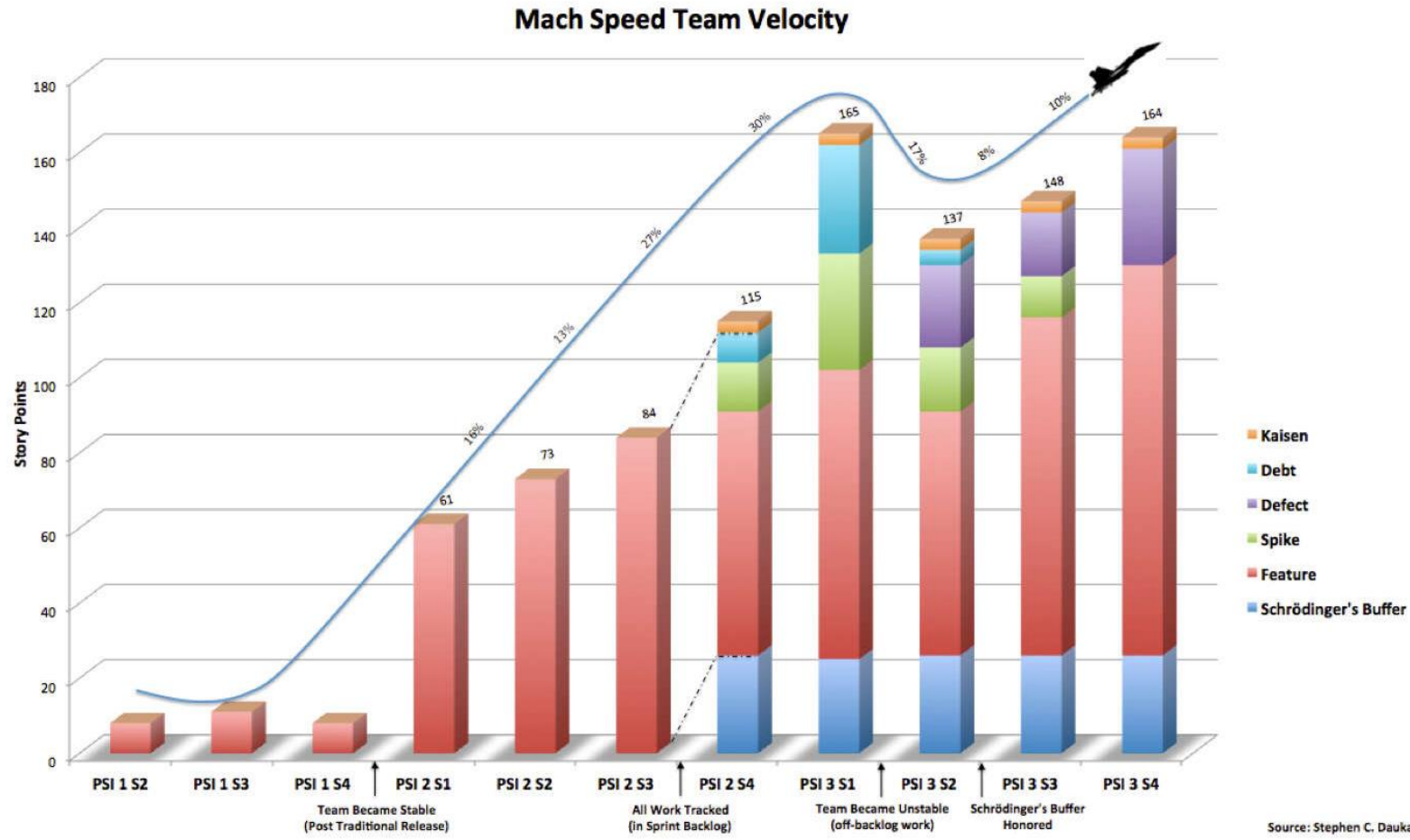
Cleanup work accumulates to stagnate progress if the team defers cleanup until the end of the Sprint

When there's a mess you lose time and energy finding where and what to start on

If not done may indicate a serious problem with the product, design, or work environment



Implementing Aggressive Scrum



Scrum Anti-Patterns: Seven Deadly Sins



Processes & Tools	Over	Individuals & Interactions
Status	Over	Flow of Value
Stories	Over	Strategy
Crap	Over	Craftsmanship
Iterations	Over	Releases
Illusion	Over	Reality
Organizational Hacks	Over	Leadership



Write Down one pattern you will try to implement within your team and discuss how it might be implemented.

What impact do you expect this pattern will make on your team and why?

Operational Metrics

Four Lenses for Measuring Progress

Productivity	Value Delivery	Quality	Sustainability
Are we improving our ability to deliver product over time?	Are we prioritizing the right features to deliver first?	Are we meeting our quality standards?	Are we working in a way we can continue for the long run?
<i>Example Metrics</i>			
<ul style="list-style-type: none">• Acceleration (velocity/time)	<ul style="list-style-type: none">• Business value per point	<ul style="list-style-type: none">• Defect rate• Service downtime	<ul style="list-style-type: none">• Happiness metric• Technical debt

What Metrics Should We Track?

2 Minutes:

- Brainstorm metrics with your group

4 Minutes:

- Discuss:
 - Leading / Lagging
 - Pros / Cons
 - Side Effects
 - Be ready to present a good and bad metric
 - Describe Why

Productivity

Value Delivery

Quality

Sustainability

Key Metrics tracked at Nuance



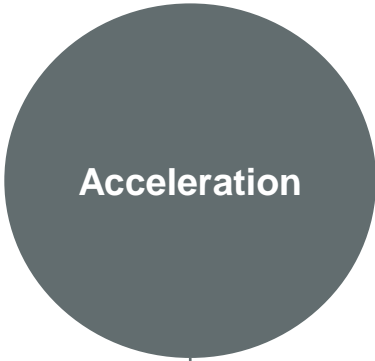
PROCESS EFFICIENCY

Real Work Time / Calendar Time

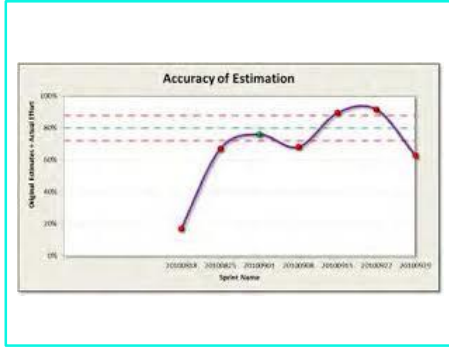
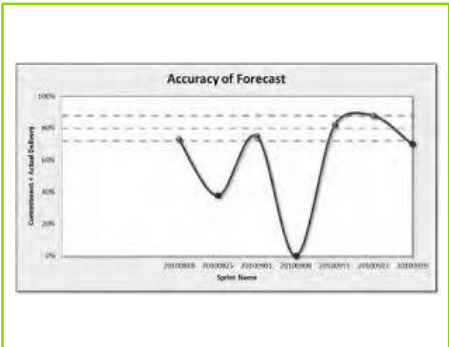
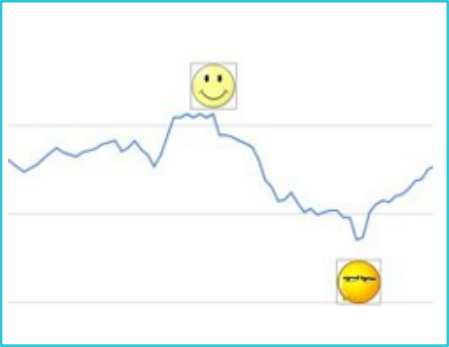
RWT = story size / team velocity

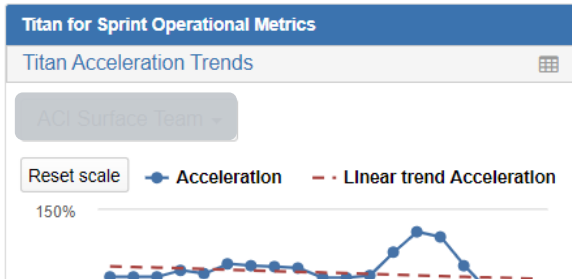
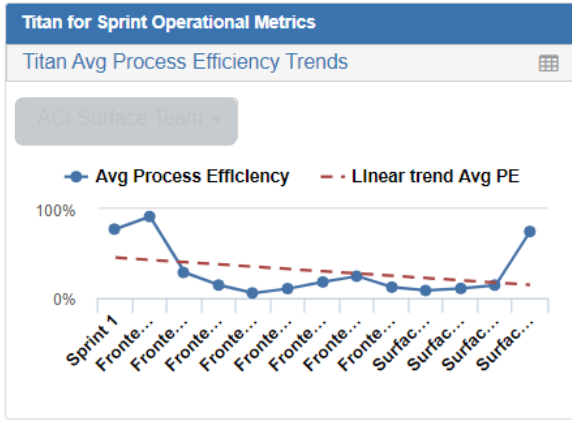
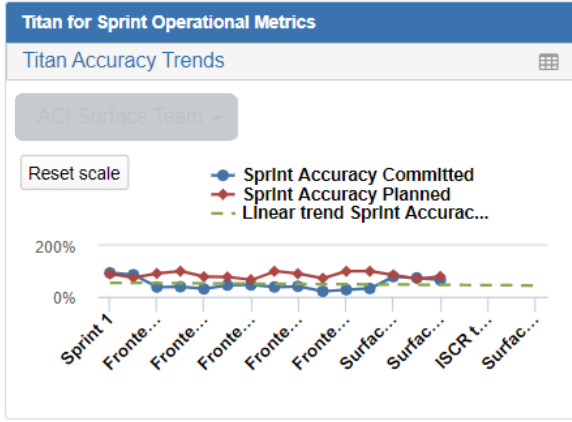
E.g. 5 point story, 50 point team velocity and ½ sprint to complete,

PE = (5/50) / .5 = .1 / .5 = .2 or 20%



$$\frac{(\text{New V} - \text{Initial V})}{\text{Initial Velocity}}$$





Titan for Sprint Operational Metrics

Sprint Metrics

Backend_20191002 Sprint15 Story

	Sprint issues committed	Sprint Story Points committed	Sprint Points Completed	Sprint Accuracy Committed	Sprint Accuracy Planned	Initial Velocity	Running velocity for 3 closed sprints	Acceleration	Avg Cycle Time	Avg Process Efficiency
	7	16.00	16	100%	81.25%	11.33	12.67	11.76%	11.35	61.81%
079 art failed	1	3.00	3	100%	100.00%		3.00	Infinity%	2.29	100.63%
atically	1	3.00	3	100%	100.00%		3.00	Infinity%	46.00	5.02%
100 ement istics in imes	1	2.00	2	100%	100.00%		2.00	Infinity%	0.00	
685 y to duction nning of st ta of arch ainers	1	1.00	1	100%			1.00	Infinity%	24.95	3.08%
058 ment duction	1	3.00	3	100%	100.00%		3.00	Infinity%	2.02	114.34%
arnetes Hermes oyments	1	2.00	2	100%	100.00%		2.00	Infinity%	2.25	68.40%
arnetes. 280 st job	1	3.00	3	100%	100.00%		3.00	Infinity%	2.02	114.34%
283 ement idence hold for imes	1	2.00	2	100%	100.00%		2.00	Infinity%	2.25	68.40%

Show available dimensions

Pages

Sprint

Issue Type

Select individual members

All Issue Types edit

Define new calculated member
Search and bookmark

All hierarchy level members

Drill into or expand

Rows

Nonempty

Issue

Select individual members

All Issues edit in Sprint = edit

Sub-task

All Issues with sub-tasks edit

Epic

All Issues by epics edit

Define new calculated member
Search and bookmark

Columns

Measures

Table Bar Line Pie Scatter Timeline Map Gantt Gauge

Sprint Points Completed > 0 All others Total Freeze header

Surface_20191114_Sprint18 All Issue Types

	Issues created	Sprint Story Points committed	Sprint Points Completed	Sprint Accuracy Committed	Sprint Accuracy Planned	Initial Velocity	Running velocity for 3 closed sprints	Acceleration	Issue Cycle Time	Process Efficiency
- in Sprint	45	114.00	76	67%	92.11%	38.33	58.00	51.30%	15.11	13.00%
TN-1699 Automate ingestion of offline logs	1	5.00	5	100%	100.00%		5.00		30.91	4.46%
TN-1741 Edit iPhrase	1	3.00	3	100%	100.00%		3.00		22.99	3.60%
TN-1742 Remove iPhrase	1	2.00	2	100%	100.00%		2.00		32.02	1.72%
TN-2052 Auth0 Prod Environment	1	3.00	3	100%	100.00%		3.00		14.99	5.52%
TN-2053 Deploy To Prod	1	3.00	3	100%	100.00%		3.00		14.93	5.54%
TN-2549 Playback the speaker turn	1	2.00	2	100%	100.00%		2.00			
TN-2550 Transcript UI element	1	8.00	8	100%	100.00%		8.00		22.17	9.95%
TN-2553 Non-speech in transcript	1	3.00	3	100%	100.00%		3.00			
TN-2554 Sync speaker turn with playback	1	2.00	2	100%	100.00%		2.00			
TN-2555 Track Scribing Surface Usage	1	5.00	5	100%	100.00%		5.00		25.94	5.32%
TN-2561 Auto-scroll transcript	1	3.00	3	100%	100.00%		3.00			
TN-2685 Handle secrets in development environment	1	3.00	3	100%	100.00%		3.00		7.32	11.31%
TN-2687 Complete Rancher, CI/CD, and k8s setup for iscribes-web-legacy and iscribes-	1	8.00	5	63%	100.00%		5.00		8.17	16.88%

Columns

▼ Measures

Filter measures by name

► Predefined

▼ User defined

Running velocity for 3 closed sprints = [edit](#) Issue C

Sprint Accuracy Planned = [edit](#) Sprint Accuracy Co

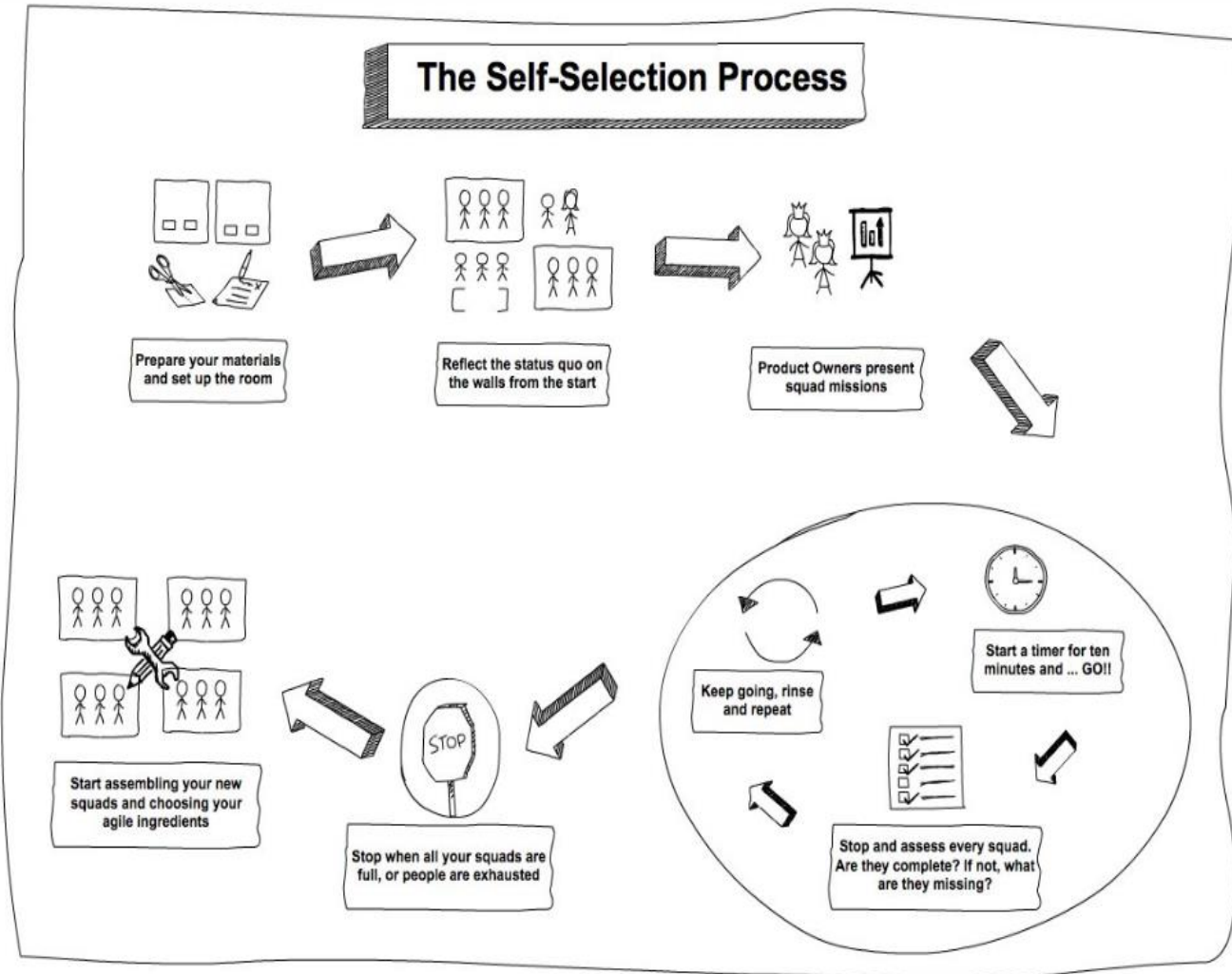
Initial Velocity = [edit](#) Sprint Length = [edit](#)

[Define new calculated measure](#)

```
CASE WHEN [Measures].[Sprint Points Completed] > 0
  AND [Measures].[Issue Cycle Time] > 0.25 -- filter out
  bad cycle times
THEN
  (
    [Measures].[Sprint Points Completed]
  /
    CASE WHEN
      [Issue].CurrentHierarchyMember.Level.Name = "Issue"
    THEN
      NonZero(Round((([Measures].[Running velocity for 3 closed
sprints],
      [Issue].CurrentHierarchyMember.Parent)))
    ELSE
      NonZero(Round([Measures].[Running velocity for 3 closed
sprints]))
    END
  )
  /
  (
    [Measures].[Issue Cycle Time] / [Measures].[Sprint Length]
  )
END
```

Team Self Selection

- Prepare Teams/Leadership and Gain Explicit Agreements
- Prepare Space!
- Prepare mission statements / skills matrix for each team that is to be created
- Create Small and Stable teams of 5
- Management leaves space when self-selection process starts
- Management allowed to review results and ask questions, but ultimately respects the decision of the teams
- Be prepared – **Not everyone will be happy!**



Retrospective

More

Love

Less

Huh?

Hate