

# Scrum

## The Essence

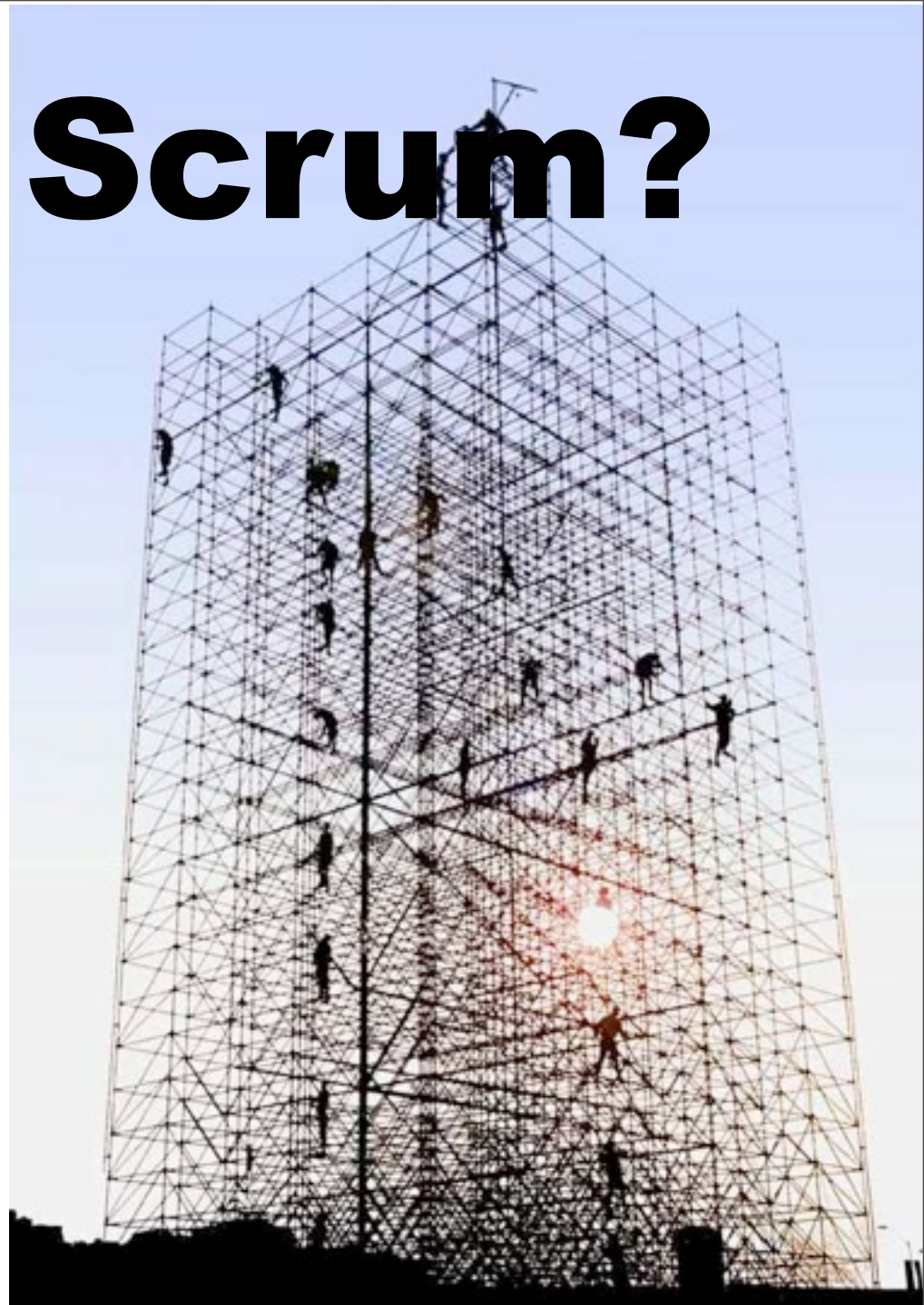
# What is Scrum?

Scrum is a framework that allows you to create your own lightweight process for developing new products.

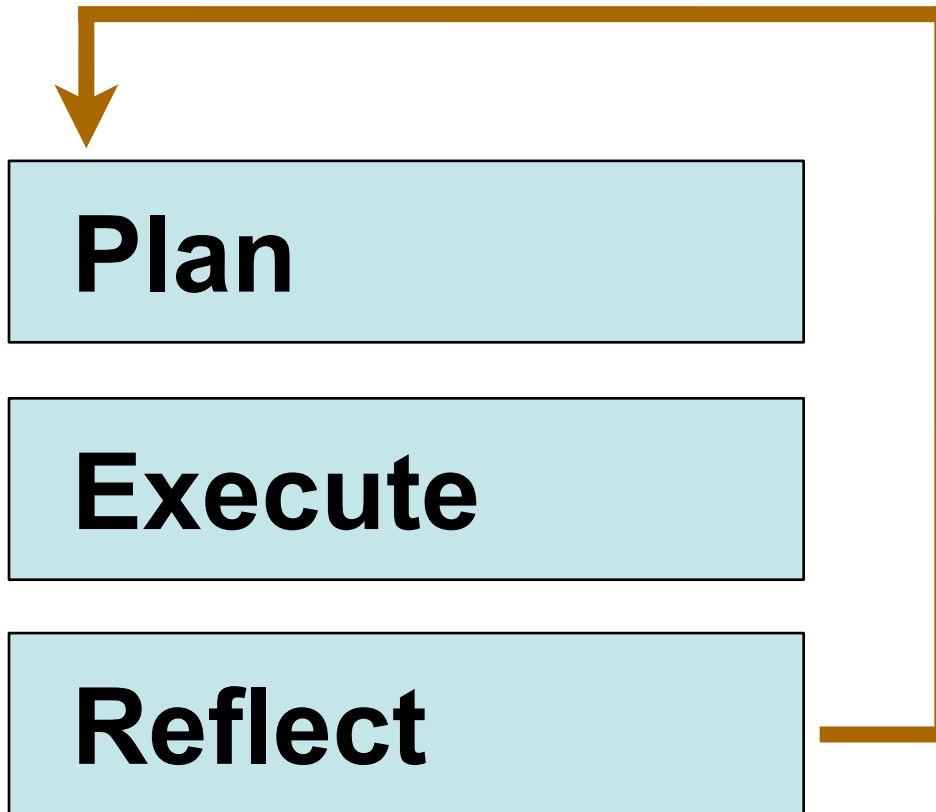
Scrum is simple.  
It can be understood and implemented in a few days.  
It takes a lifetime to master.

*“Scrum is not a methodology  
– it is a pathway”*

– Ken Schwaber (Boulder, Co, Nov. 2005)

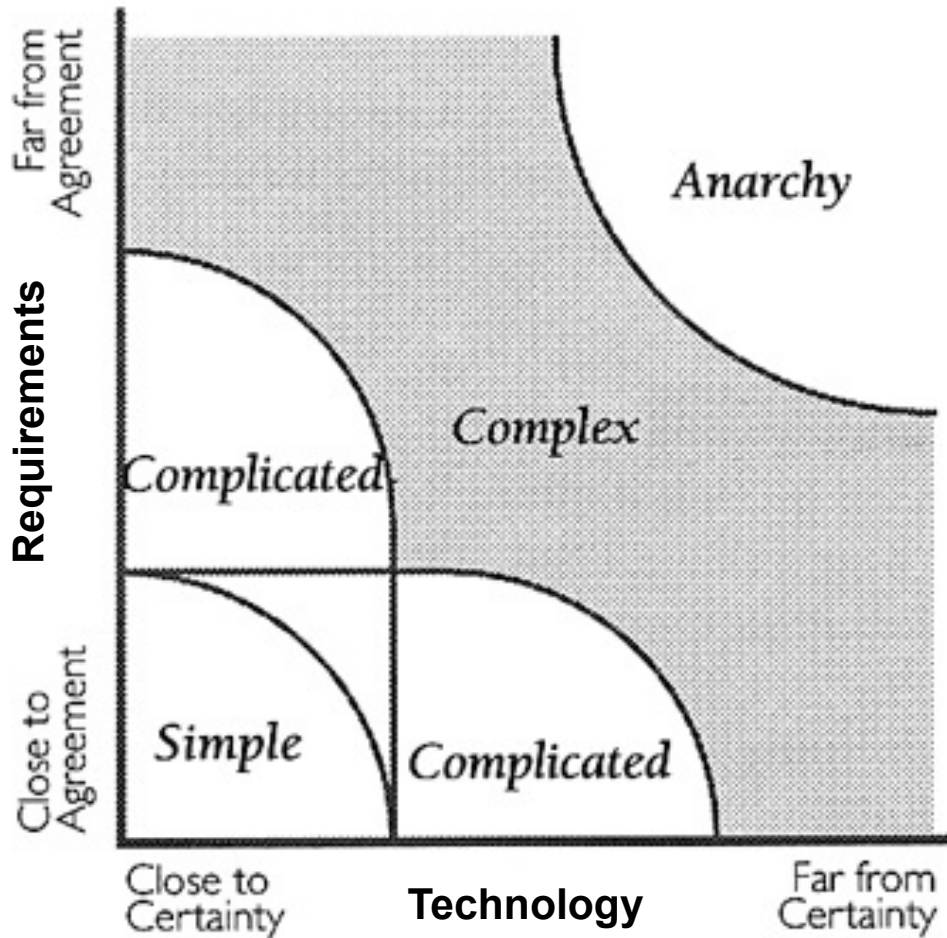


# The Empirical Process



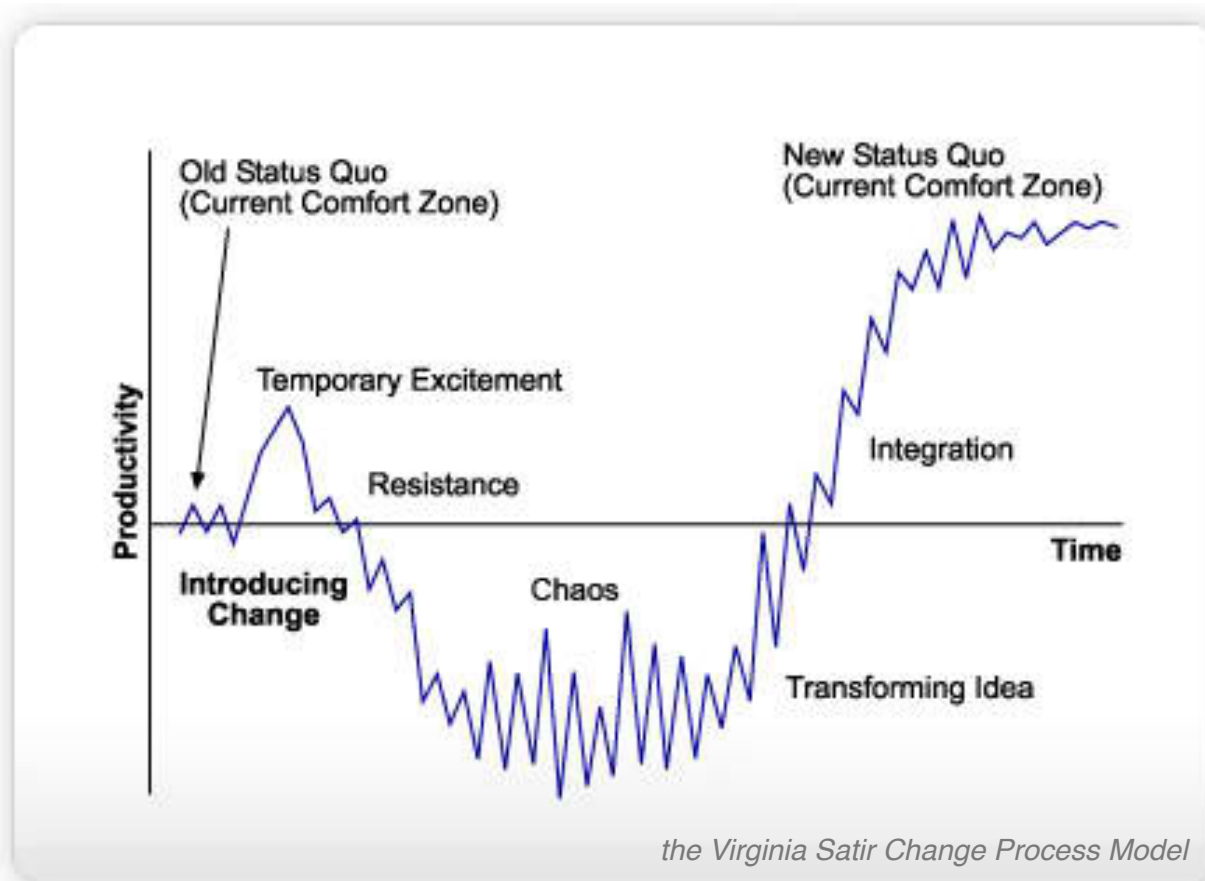
*The Core of Scrum*

# When is Scrum Appropriate?



- Scrum works best when the problems to be solved lie in the Complex Space.
- New Product Development Work and Knowledge Work both tend to exist in the Complex Space.
- Research lies in the Anarchy space
- Maintenance lies in the Simple Space

# The Curve of Change



The situation sometimes gets worse before it gets better

# The Scrum Space



**Play**  
**Explore**  
**Enquire**  
**Discover**  
**Communicate**  
**Collaborate**  
**Push Your Edge**  
**Take Risks**


**Dare to Fail**



# **Scrum is a Dance**

**Follow the rules and  
discover your team's  
innate creativity**

**Break the rules and  
watch it all fall apart**

A black silhouette of a person in a dynamic, falling or jumping pose with arms outstretched, set against a dark gray background. The person's head is tilted back, and their legs are bent in a way that suggests movement.

**Scrum will help  
you fail in 30  
days or less**

-- Ken Schwaber, c2001



# Scrum Values



# The Scrum Foundation

- **Empiricism**
- **Self-organization**
- **Collaboration**
- **Prioritization**
- **Rhythm**





# Empiricism

**Detailed up-front planning  
and defined processes are  
replaced by just-in-time  
inspect and adapt cycles**

A large flock of birds is flying across a sky that transitions from a deep purple at the top to a bright orange and yellow near the horizon, where the sun is setting. The birds are silhouetted against the colorful sky. Below the horizon, there is a field of tall grasses or reeds, and a single, small tree stands on the right side of the field. The overall scene is serene and natural.

# Self-organization

**Small teams manage their own workload and organize themselves around clear goals and constraints**

# Collaboration



**Scrum leaders, product visionaries and customers collaborate with developers – they do not manage or direct them**

# Prioritization



**Work on the most important thing – do not waste time focusing on work that does not add immediate value**

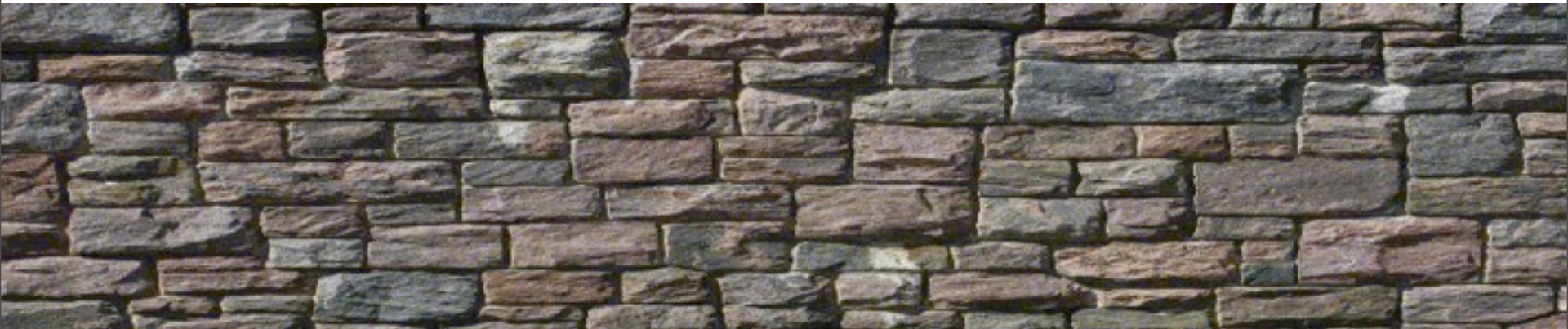


**Timeboxing creates the rhythm  
that drives development**



# **With a solid foundation...**

**your process, your design and your  
product will emerge in the way most  
appropriate to your context**





# Emergence

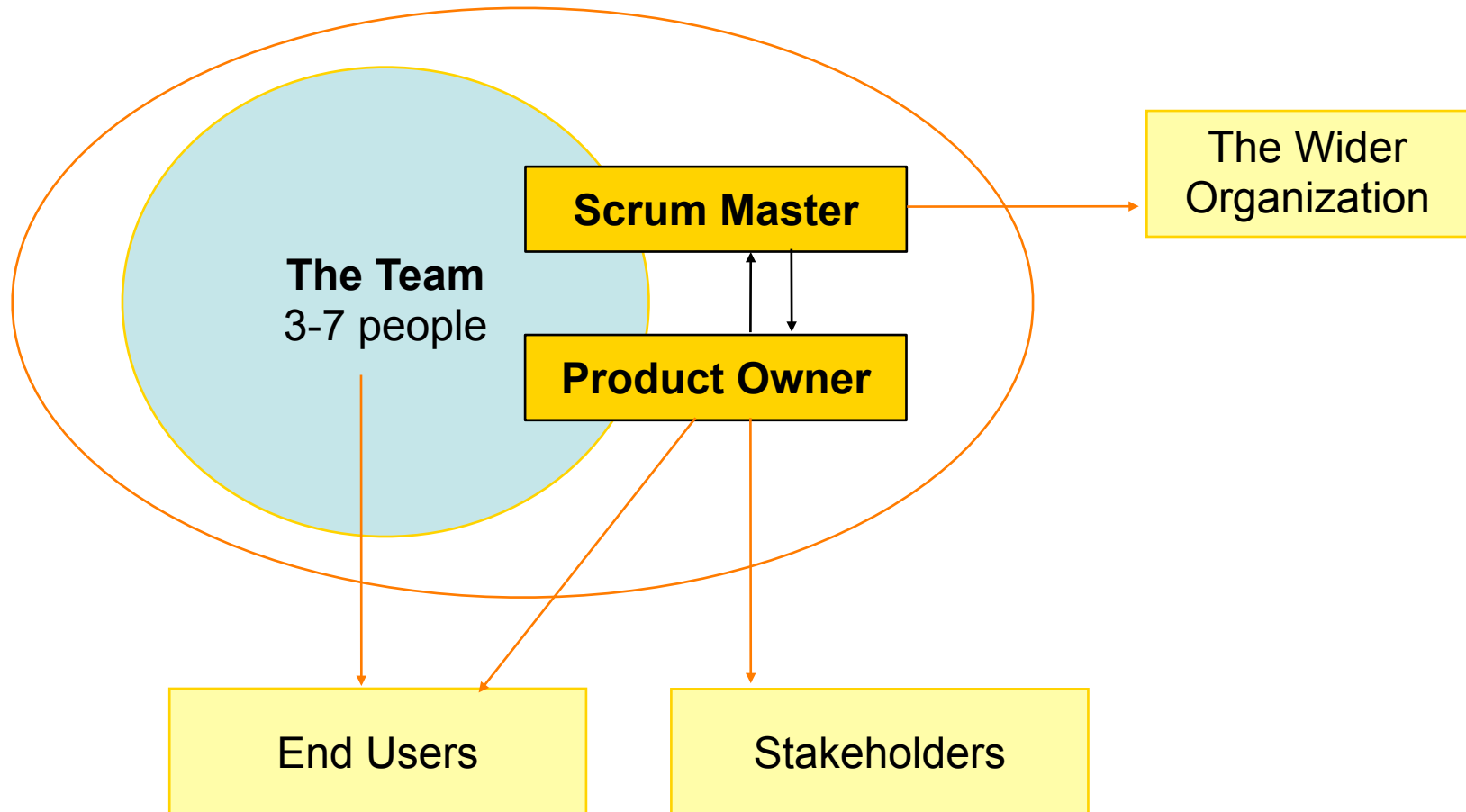


**The beauty of letting go, and trusting**

# Scrum

## People

# Scrum Relationships



# Product Owner



## Thought Leader & Visionary

- Drives the Product Vision
- Maintains the Product Backlog
- Prioritizes the Requirements
- Accepts the Working Software

# Scrum Master

## Trouble Shooter & Servant Leader

- **Manages the Process**
- **Supports the Team**
- **Removes Organizational Impediments**
- **Socializes Scrum to Management**

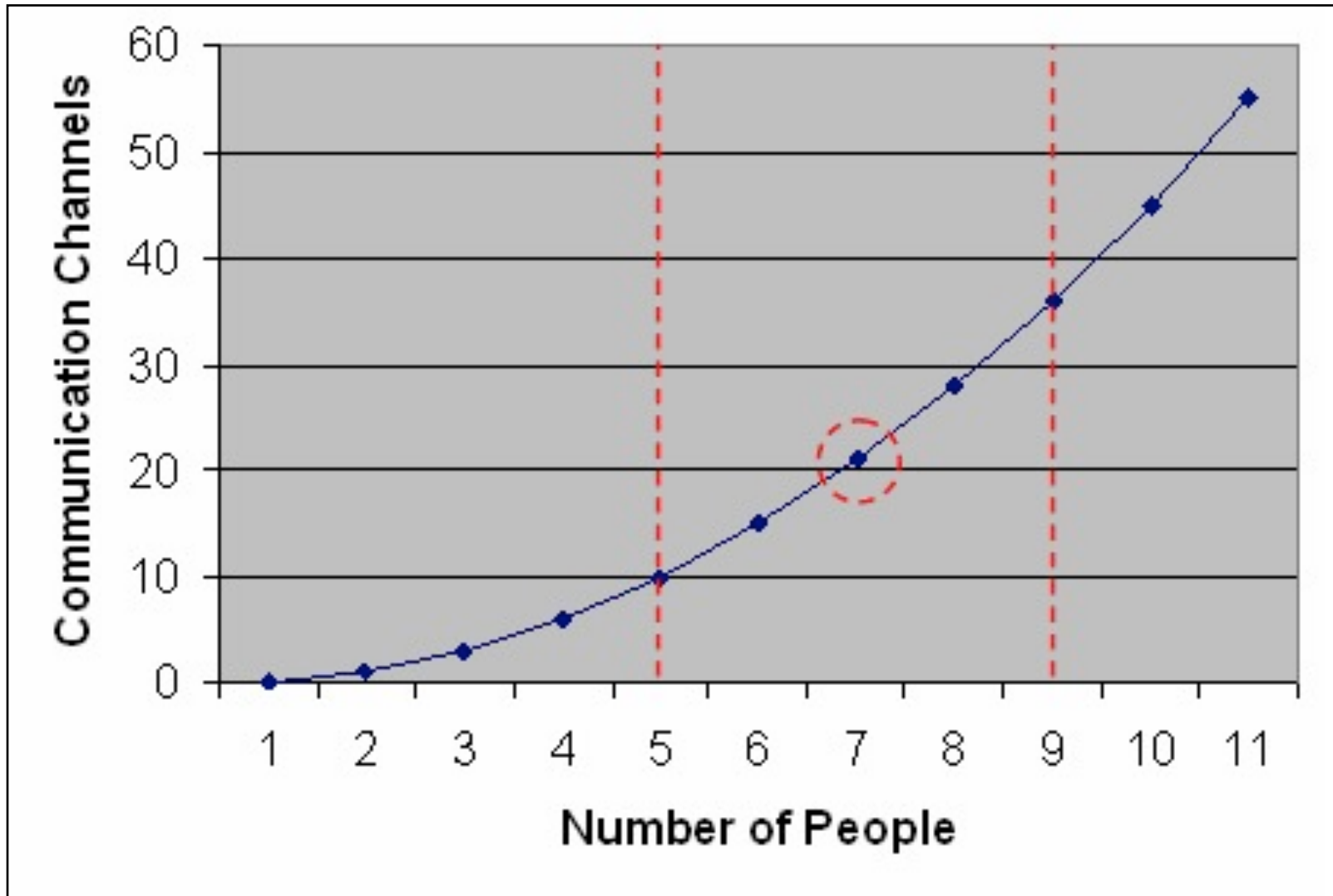


# The Team

A group of six people, five men and one woman, are smiling and posing together in a meeting room. They are leaning over a table with a whiteboard in the background. The whiteboard has some colorful sticky notes on it. The room is brightly lit with warm yellow light.

**5-8 Members**  
**Cross-Functional**  
**Self-Managing**  
**Autonomous**  
**Accountable for**  
**Meeting Commitments**

# Team Size



# Scrum

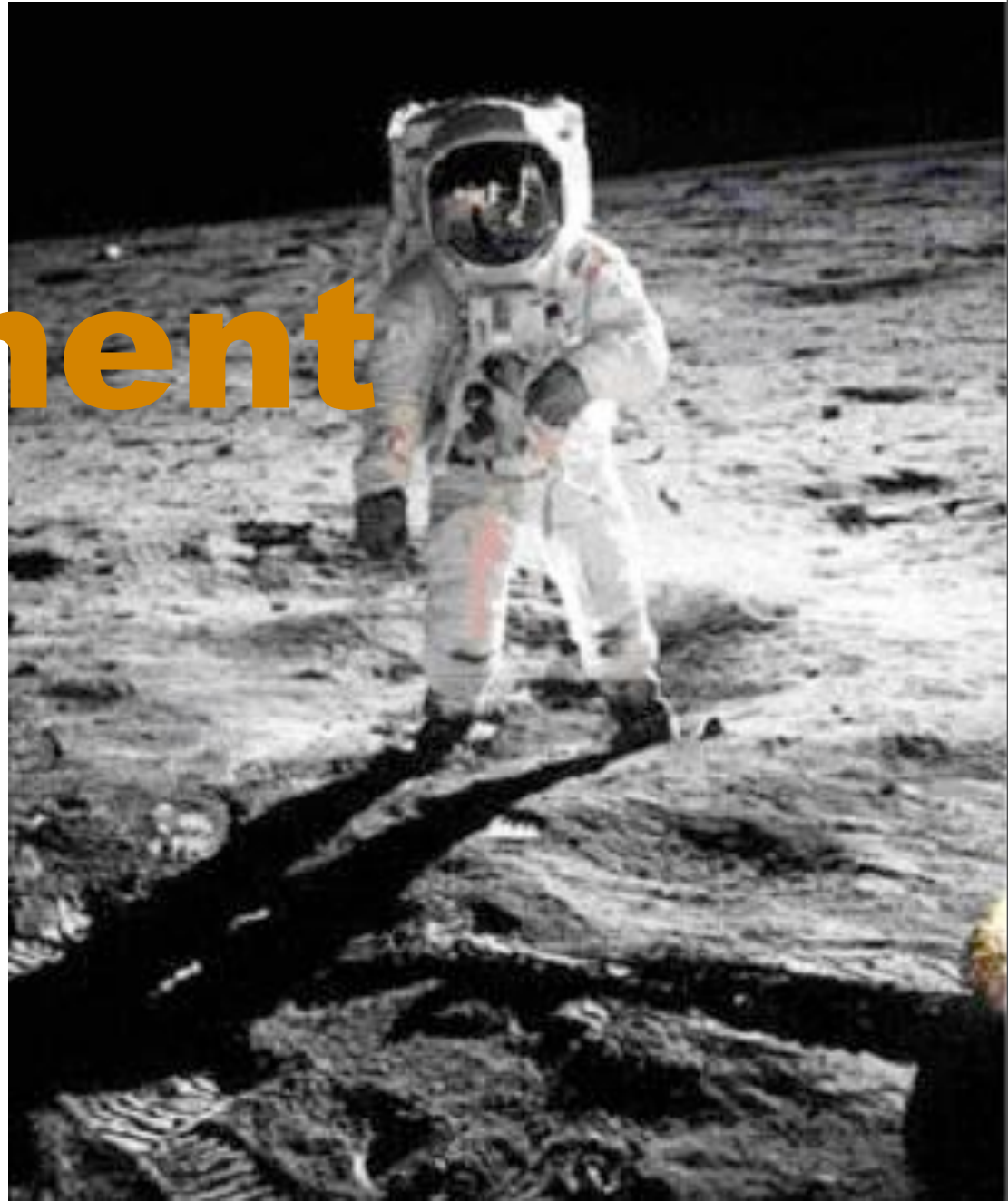
## Planning



# Vision Statement

**A short statement  
of intent**

**A goal to aspire to**



# Product Backlog

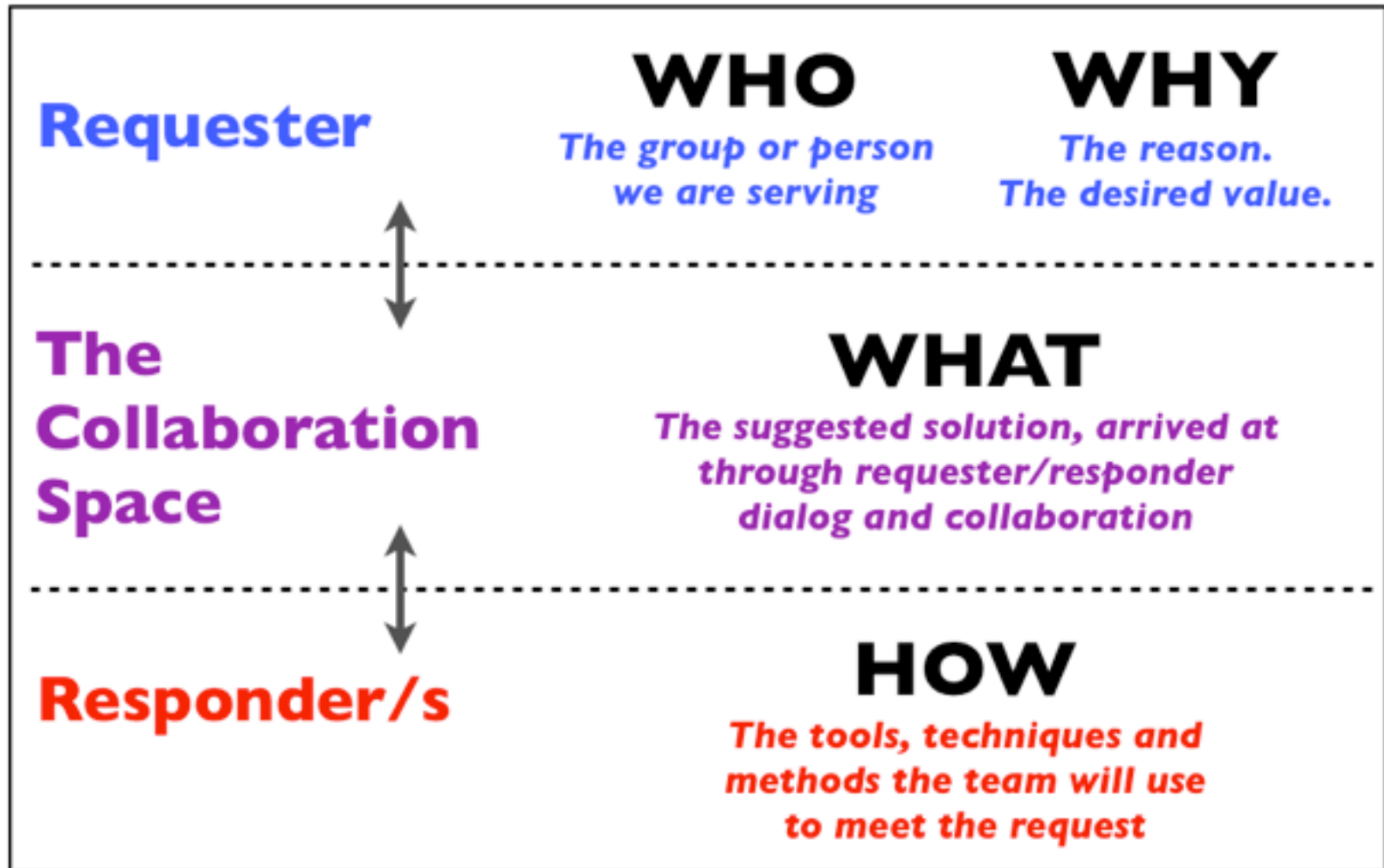
A living list of requirements

The Product Backlog represents the **WHAT** of the system

**Prioritization is essential!**



# Request/Response Model



# Planning 1

**The team meets with the PO to discuss priorities, refine the stories, and determine acceptance criteria.**

**This happens initially *before* development and then iteratively, every sprint.**



# Feature Prioritization



- Deliver the highest value early on
- But don't neglect the bigger picture

# Planning 2



**Occurs at the start of each sprint. Team and PO negotiate the commitment, then the team members begin the design process and generate tasks**



# Sprint Goal

**The vision for the sprint**

**The Sprint Goal is a  
negotiated agreement  
between Product Owner  
and Team**

# Scrum

## Execution



# Sprint Backlog



**The Committed  
Stories and a list of  
tasks representing the  
HOW of the system**

**The Sprint 'To Do' List  
is owned and  
managed by the Team**

# Daily Scrum

A group of people in a meeting room, likely during a daily scrum, with a whiteboard in the background. The image is dimly lit and serves as a background for the text.

## 15 Minutes | 3 Questions

1. What did I complete in the past 24 hours?
2. What do I commit to in the next 24 hours?
3. What is getting in my way?

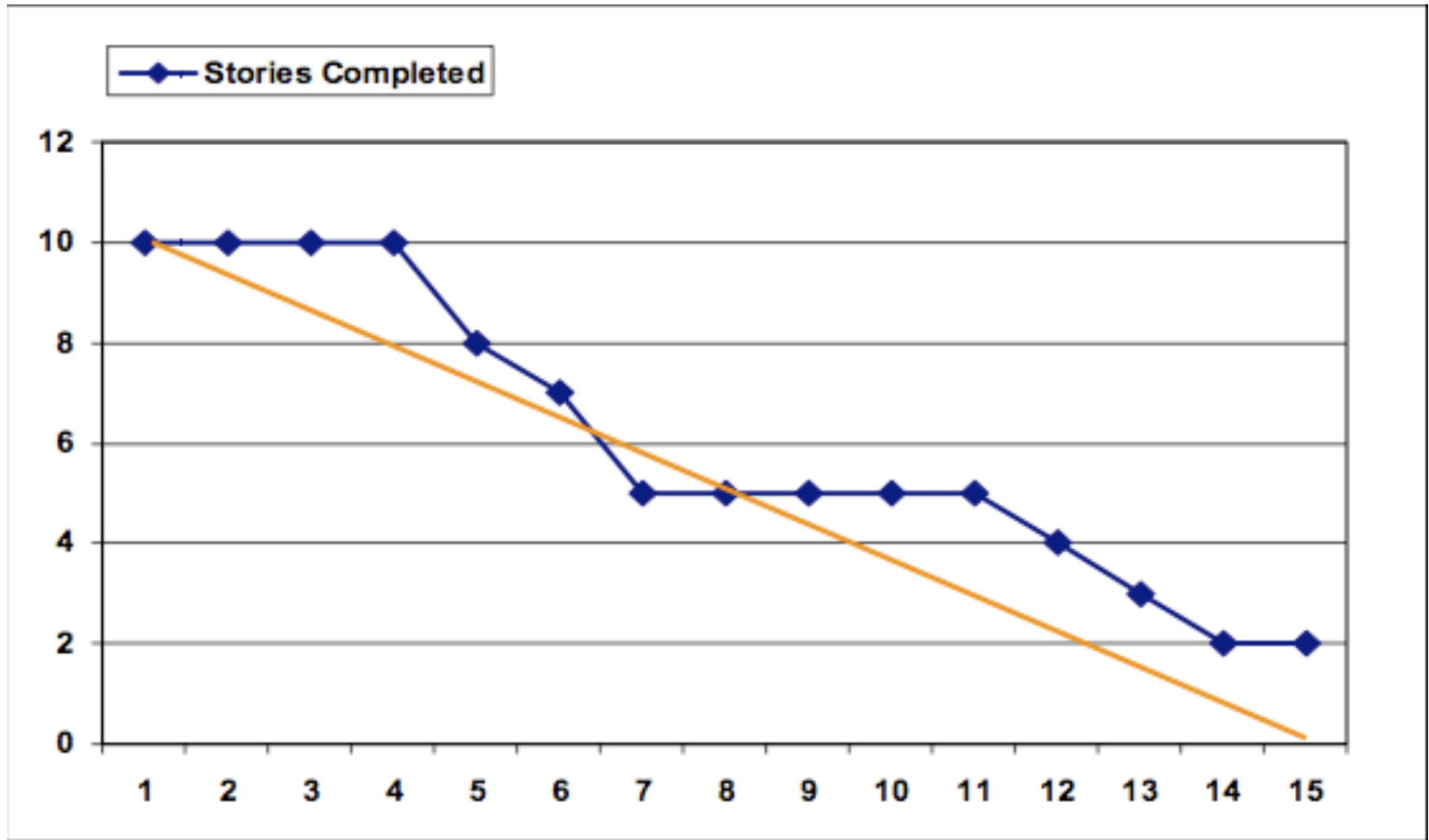
# Impediment List

**A list of organizational  
and team impediments  
– *with suggested  
solutions***

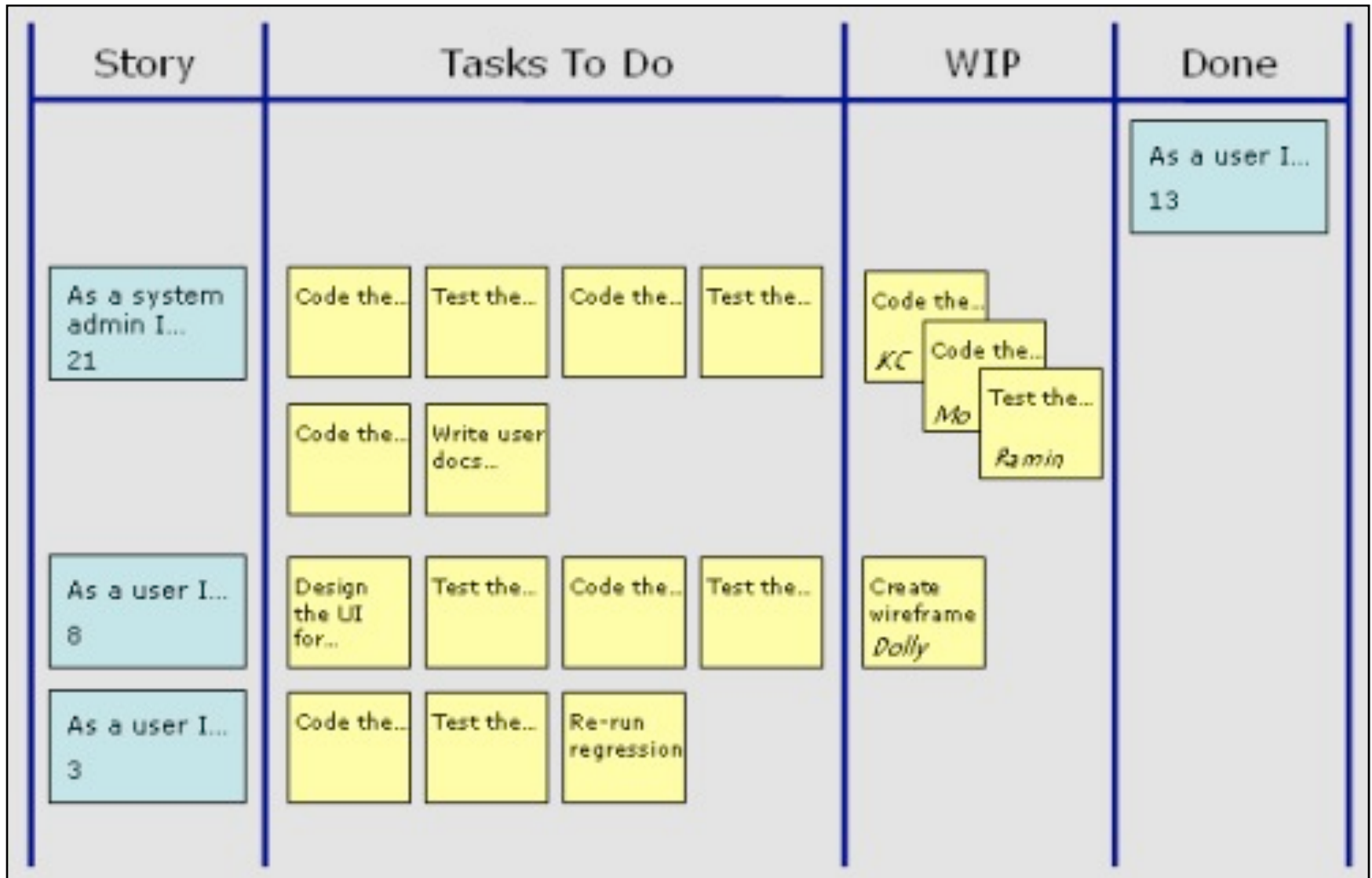
**This list is maintained  
by the Scrum Master**



# Story Burndown



# Team Task Board



# Example Task Board



Tobias Mayer, <http://agilethinking.net>

Sonntag, 19. Februar 12

# “Done”

## Example checklist for working software

- Unit tests pass
- Customer Acceptance tests pass
- User docs written
- UI design approved by PO
- Integrated into existing system
- Regression test/s pass
- Deployed on staging server
- ...



# Working Software

**Recording Options**

Format Commands with New Lines & Tabs   
Reduce TestSmith to Toolbars only

Advanced Settings  
Max. Size of Validation Bitmaps: 65536

Dual **Playback Options**

Show  Show Playback Prompt   
 Minimize TestSmith during Playback   
 Maximize Report View during Playback   
 Bring TestSmith to Front after Playback   
Inter-command Delay (msecs): 100  
Delay after Errors

Logging Options

Log OK Results   
Log ERR Results   
Log FLG Messages   
Log WRN Messages   
Log INF Messages   
Log REM Messages   
Log DSC Messages   
Log Sleep and Delay Info   
Use GMT (UCT) in Time Stamps   
Plain Text Logs only

Advanced

Number of Parallel Playbacks: 1  
Parallel Playback Delay Value: 0  
Html Element Search Range: 50  
Default Sync Timeout (seconds): 10  
Default Sync Interval (seconds): 2

Report Refreshing   
Always Attempt Afx Class Matching   
Use Mouse Messages

TIMESTAMPNOW1: Date: %B %d in the year %Y  
TIMESTAMPNOW2: %Y/%m/%d,%H:%M:%S  
TIMESTAMPNOW3: %H:  
TIMESTAMPFFD1: Time: %H hours, %M minut  
TIMESTAMPFFD2: %i:%M:%S %p  
TIMESTAMPFFD3: %Hc

OK Cancel Advanced <<

**TestSmith by Quality Forge - yahoo-login.smith**

Script Data Report Record Play Tools Help

yahoo-login\_1: TestSmith Report

TimeStamp (Local)	Cmd	Line	Detail...
2005-05-30:18:10:46.828	1	36	INF Waiting to retry wndInit in 1000 milliseconds
2005-05-30:18:10:47.829	1	36	INF Fuzzy match on window [title=Microsoft Internet Explorer, class=IEFrame]
2005-05-30:18:10:52.466	1	36	OK wndInit completed successfully
2005-05-30:18:10:52.466	2	42	INF Waiting to reinitialize Html Document in 2000 milliseconds
2005-05-30:18:10:54.960	2	42	OK htmlNavigate completed successfully
2005-05-30:18:10:57.313	3	47	INF Waiting to retry htmlLink in 2000 milliseconds
2005-05-30:18:10:59.456	3	47	INF Fuzzy match on specified <A> element
2005-05-30:18:10:59.486	3	47	OK htmlLink completed successfully
2005-05-30:18:11:01.239	4	58	INF Waiting to retry htmlText in 2000 milliseconds
2005-05-30:18:11:04.433	4	58	FLG <INPUT> element found at new index 143

```
36  wndInit
37      id=1
38      wtitle=="Microsoft Internet Explorer" # approximate match on t
39      wclass=IEFrame
40      wrect=MAXIMIZED ;
41
42  htmlNavigate #f.a Navigate to my.yahoo.com
43      id=1
44      wname=(wname)
45      url=http://my.yahoo.com/ ;
46
47  htmlLink #f.a Click sign-in link
48      id=1
49      wname=(wname)
50      btag=a
51      hidx=33
52      href=="login.yahoo.com/config/login",'.src="my'
53      hvistext='Sign In'
54      hrange=100
55
```

Current Script: C:\QualityForge\TestSmith\Scripts\yahoo-login.smith

Lao Tzu



# Scrum

# Reflection

# Review

Occurs at the end of each sprint.

Inspect and Adapt the product.

The team meets with the Product Owner and the Stakeholders to demonstrate the *working software* from the sprint.



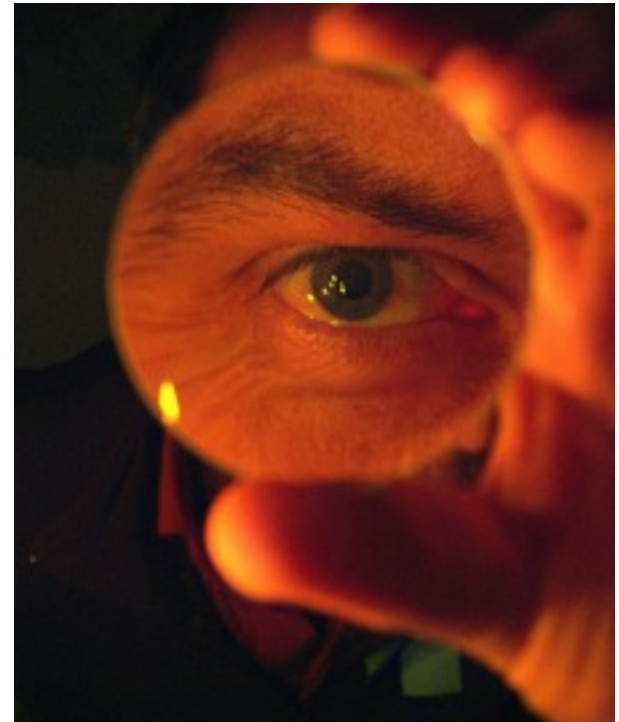
# Retrospective

**Occurs at the end of each sprint.**

**Inspect and Adapt the process.**

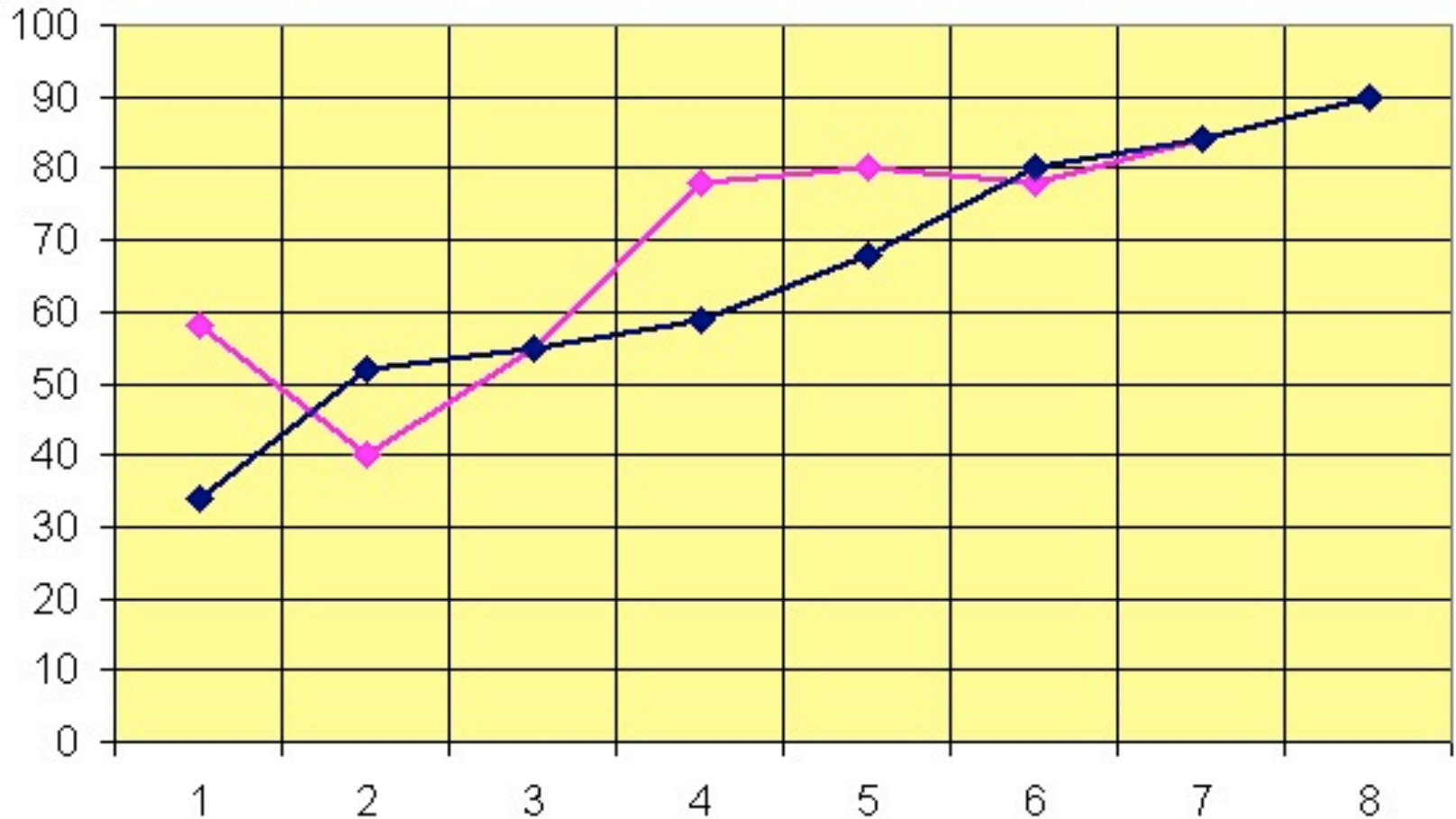
**The team meets with the Scrum Master to look at what went well and what can be improved.**

**Retrospectives must conclude with individual commitments to action.**



# Velocity Graph

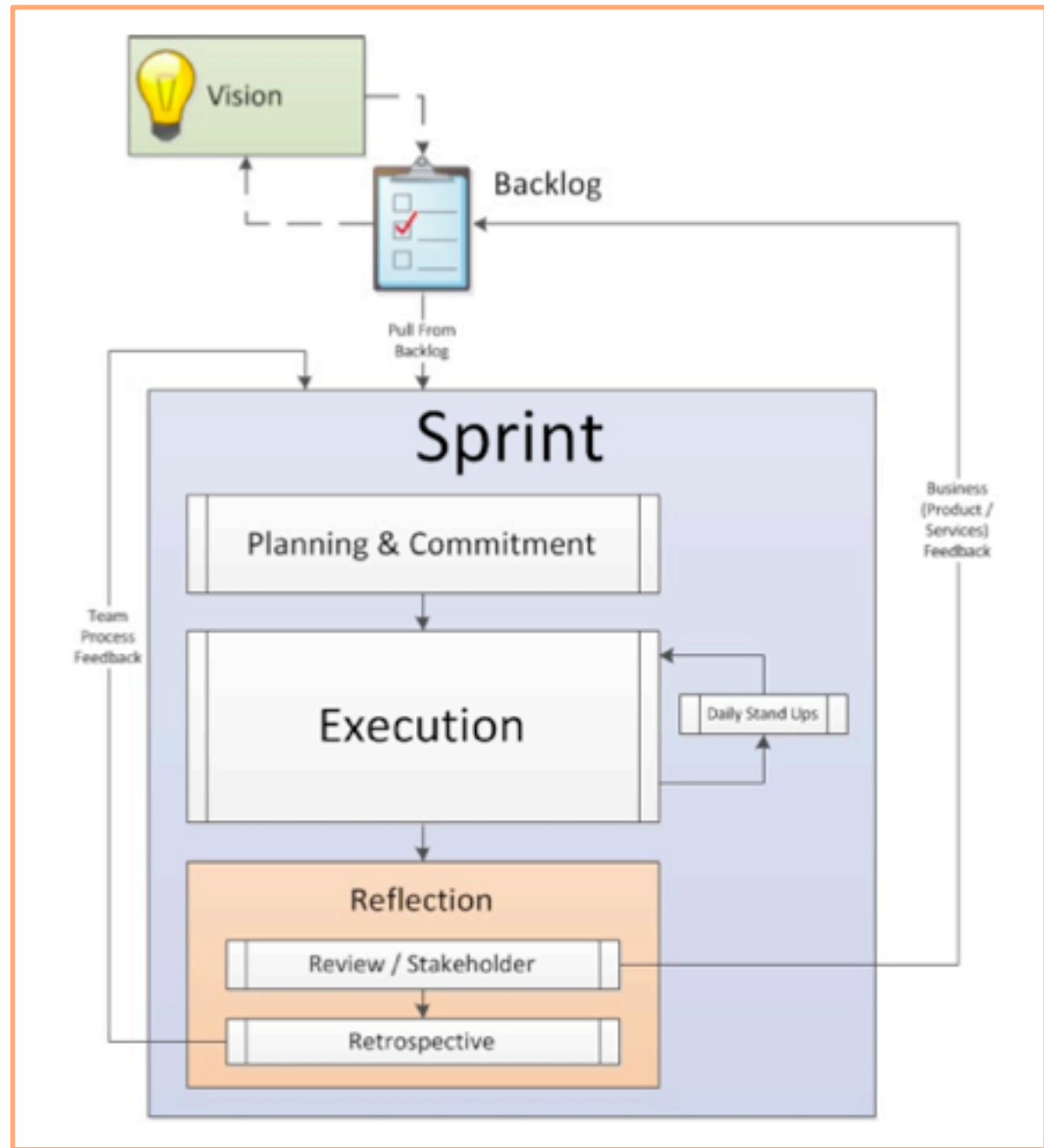
Velocity: Points Completed Per Iteration



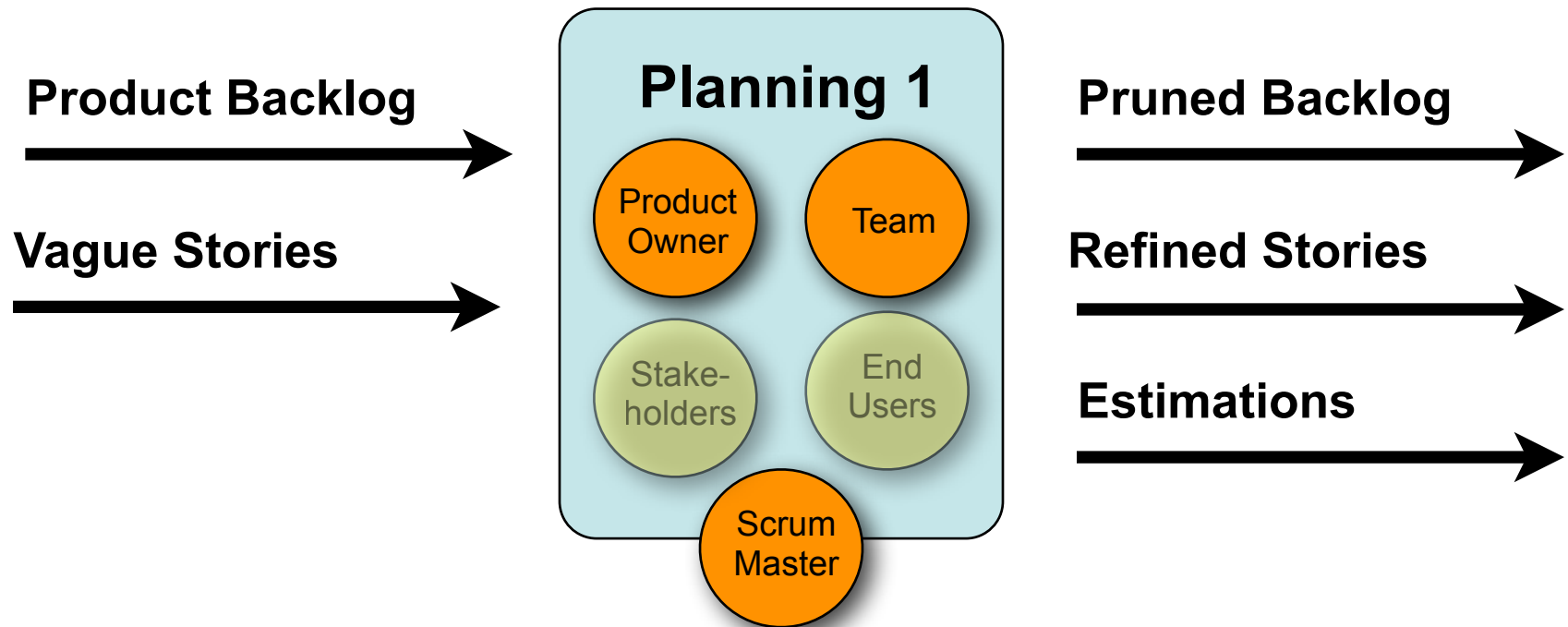
# Scrum

In More Detail

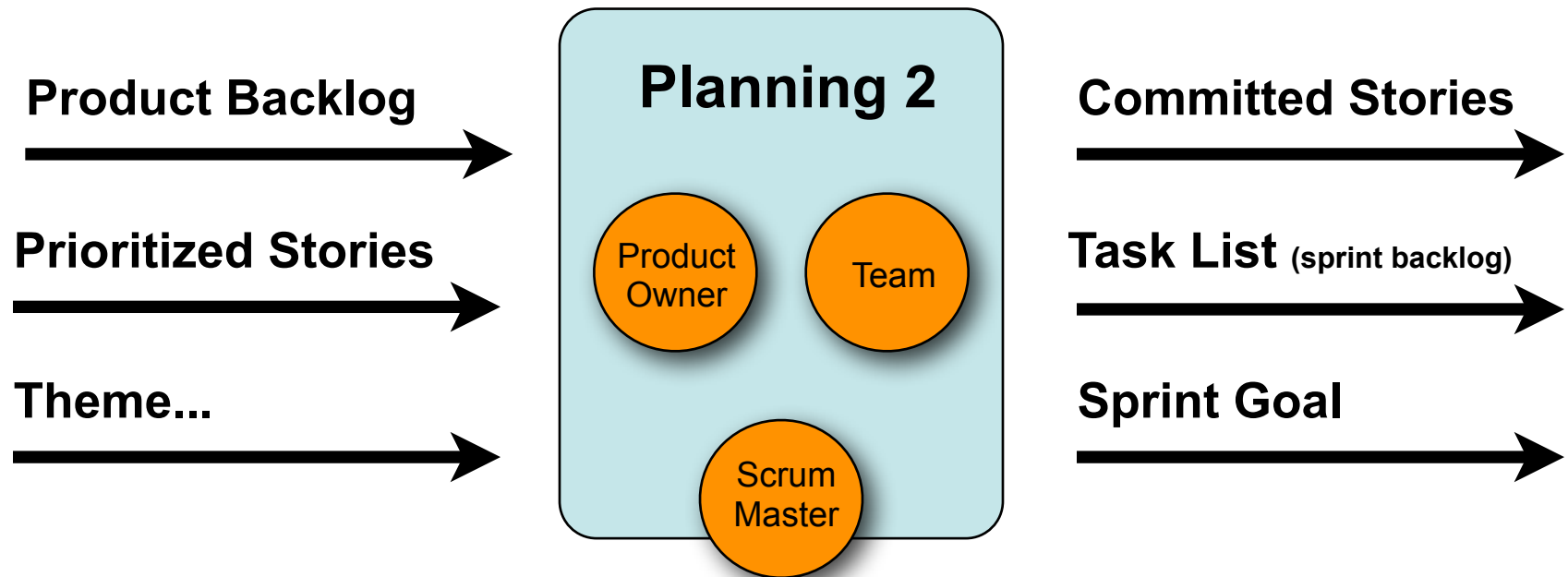
# The Scrum Flow



# Planning 1 in detail...

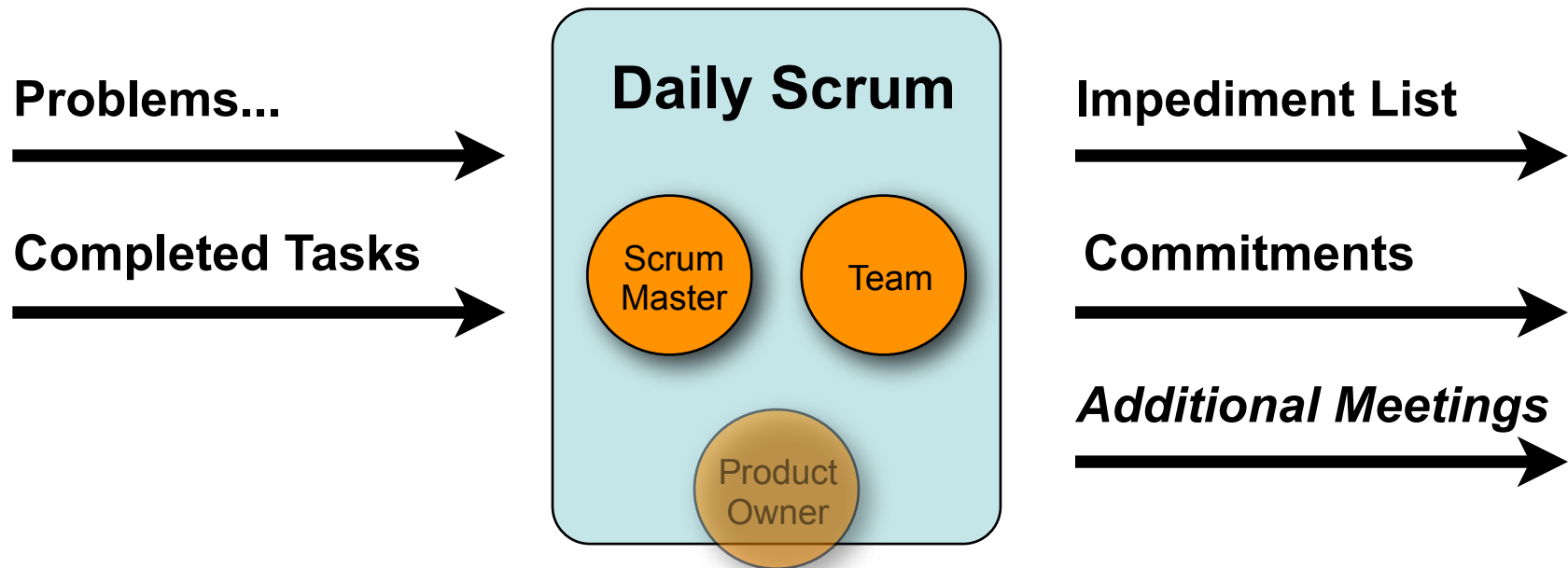


# Planning 2 in detail...

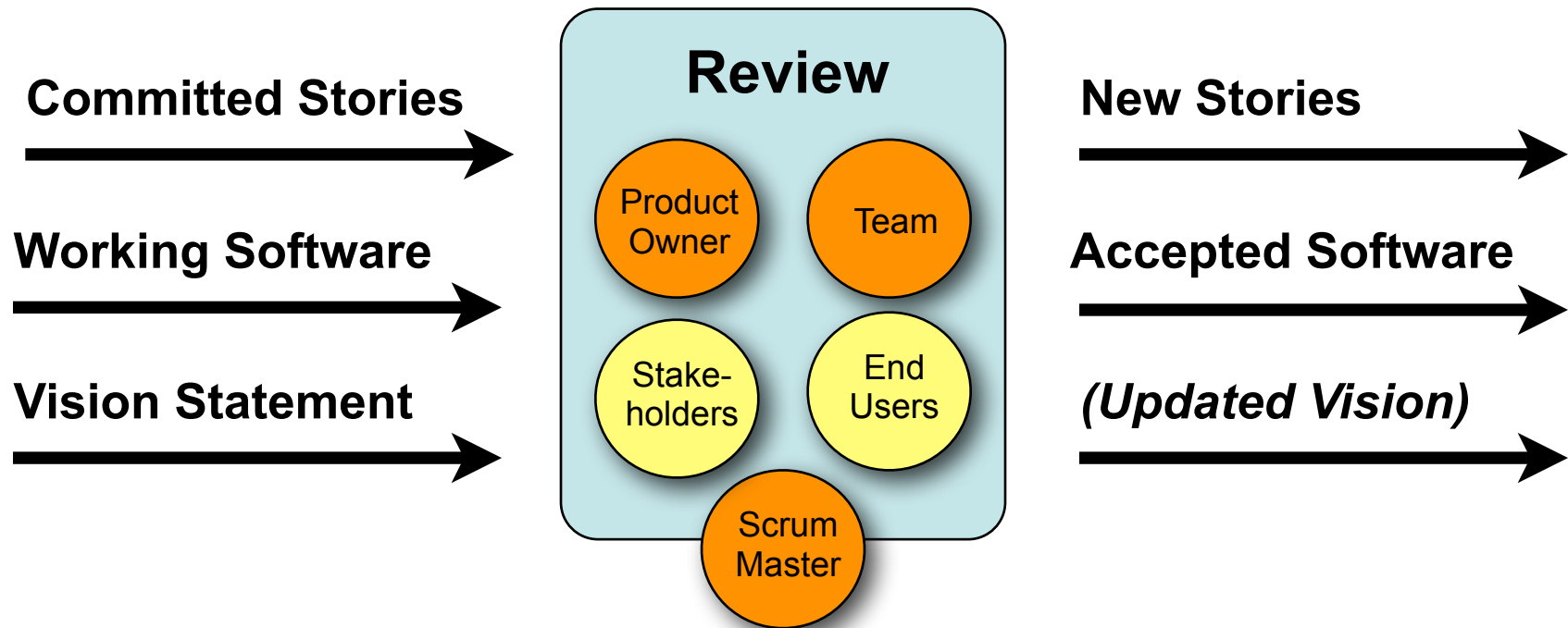




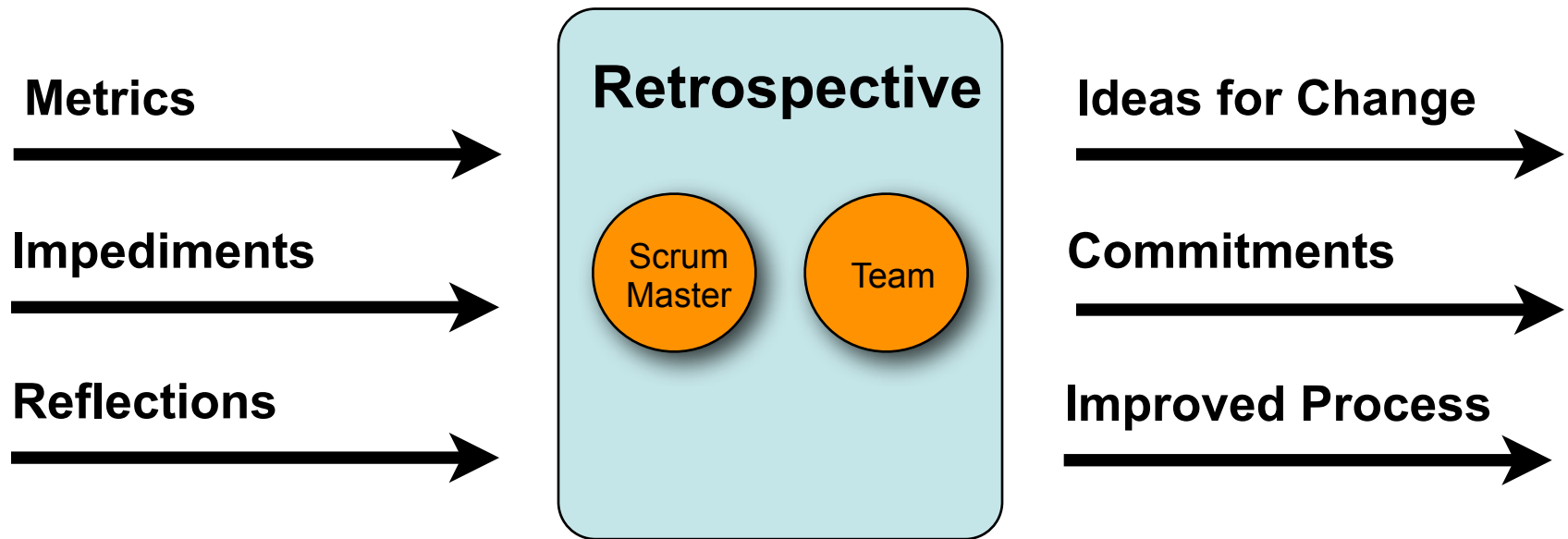
# Daily Scrum in detail...



# Review in detail...



# Retrospective in detail...



# Scrum

## What next?

# Change

**...Nothing of him that doth fade  
But doth suffer a sea-change  
Into something rich and strange...**

**William Shakespeare, "The Tempest"**

# Take Action

A photograph showing the lower legs and feet of several people in business attire walking from left to right. The image is in silhouette against a light background.

**What will you do on your first day back at work to initiate change?**

**Make a commitment to someone on this course**

**Write it down, sign it, exchange emails**

**Follow up!**

# Top Five...

- **Five books that I recommend to cultivate the Agile Mindset**
  - **Surfing the Edge of Chaos**  
Pascale, Milleman & Gioja
  - **Slack**  
Tom De Marco
  - **Artful Making:**  
Rob Austin and Lee Devin
  - **User Stories Applied**  
Mike Cohn
  - **Scrum & XP from the Trenches**  
Henrik Kniberg



Top five chairs made out of trash: something from nothing



# where to now?

Start here:

**Bay Area Agile Project Leadership Network**  
**<http://bayAPLN.org>**

Tobias Mayer, <http://agilethinking.net>

Sonntag, 19. Februar 12