Essential Scrum

A short introduction to Scrum and its underlying Agile principles

Presented by Tobias Mayer, 11/7/2008

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To Begin...

- **Scrum is not a Methodology.**

- **Scrum is a Framework for surfacing organizational dysfunction.**

- **Scrum doesn't provide answers. It helps you ask better questions.**

- **Scrum doesn't actually do anything. People do things.**

PART ONE

Scrum

The Foundation

What is Agile?

- **Agile is a set of values**
  - Individuals/Interactions
  - Working software
  - Customer collaboration
  - Responding to change
- **and twelve principles**
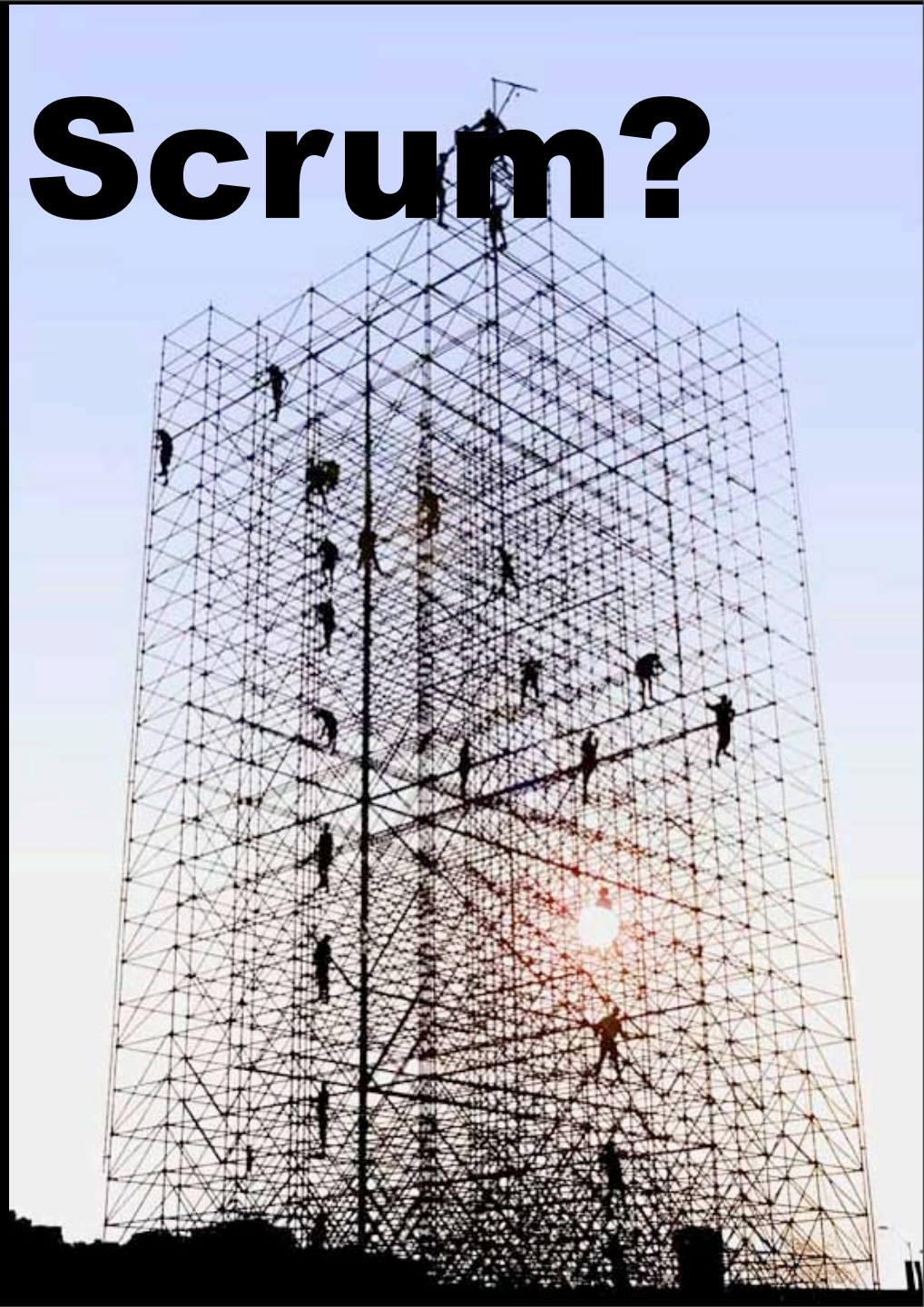 - http://agilemanifesto.org/principles.html

What is Scrum?

Scrum is an Agile framework that allows you to create your own lightweight process for developing new products.
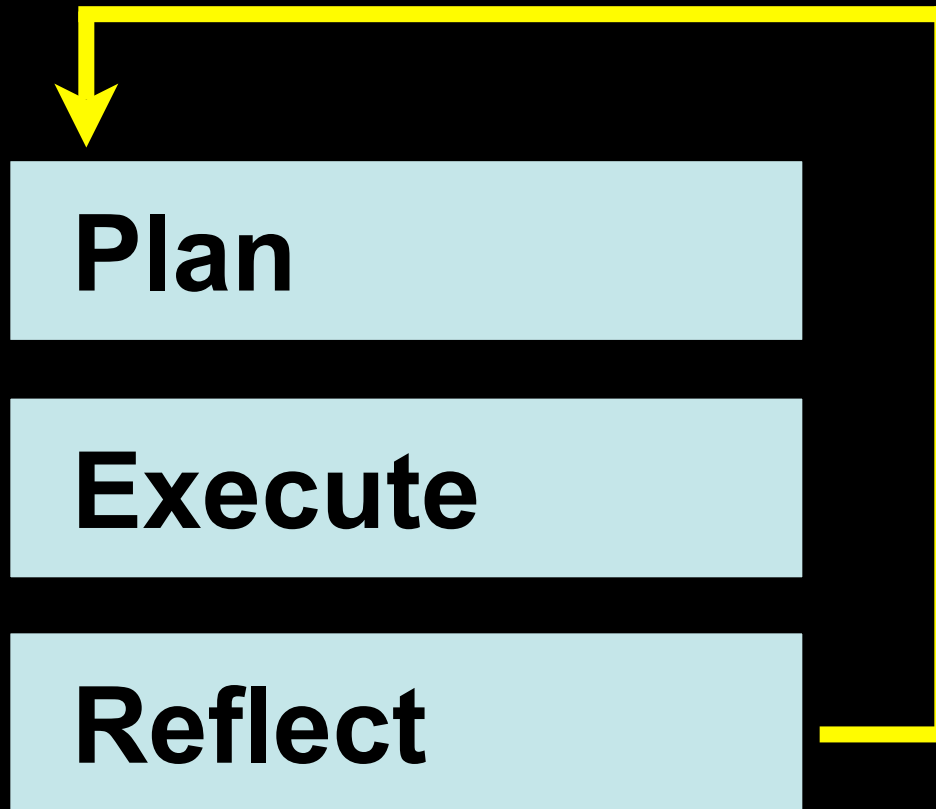
Scrum is simple.
It can be understood and implemented in a few days.
It takes a lifetime to master.

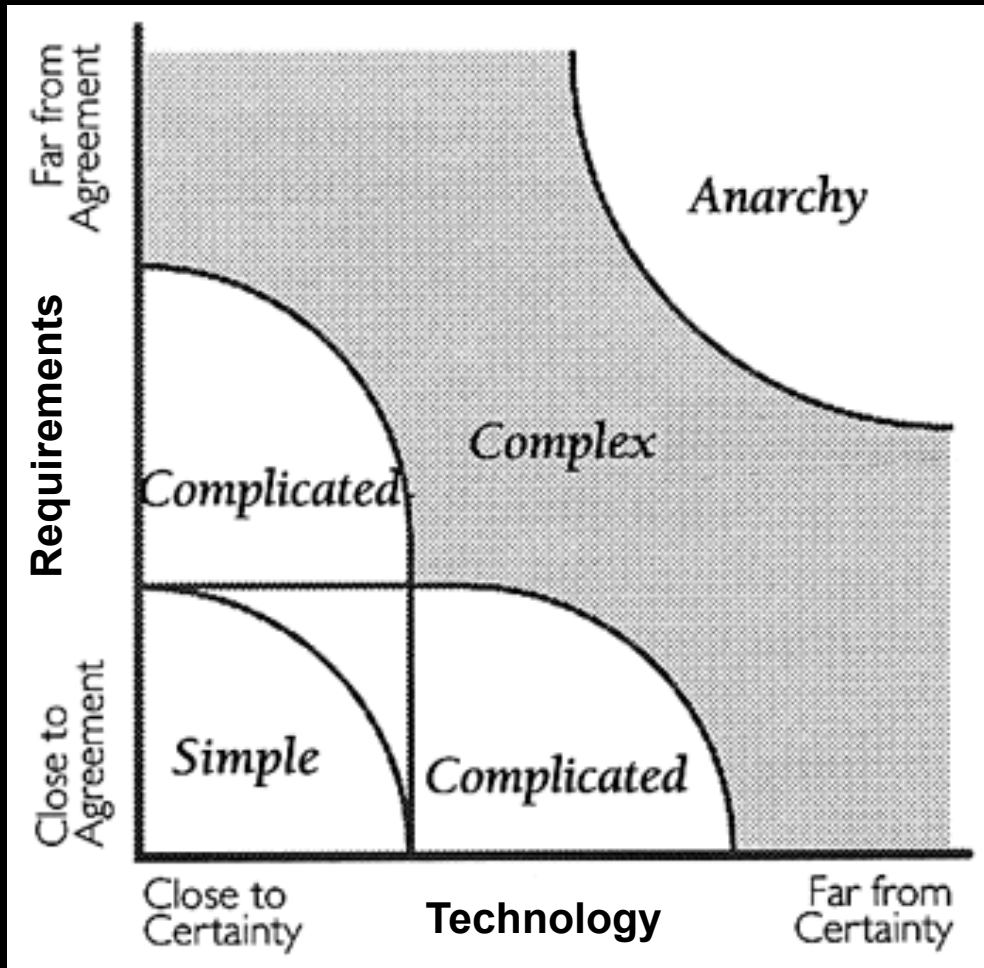*"Scrum is not a methodology – it is a pathway"*

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

The Rhythm of Scrum

When is Scrum Appropriate?

Far from Agreement / Close to Agreement (Requirements vertical axis)

Anarchy

Complicated

Complex

Simple

Complicated

Close to Certainty — Technology — Far from Certainty

ref: The Stacey Diagram, by Ralph Stacey

- 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

Scrum will help you fail in 30 days or less

The Scrum Foundation

- **Empiricism**
- **Self-organization**
- **Collaboration**
- **Prioritization**
- **Time Boxing**

Empiricism

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

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

Timeboxing

**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

PART TWO

Scrum

People

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
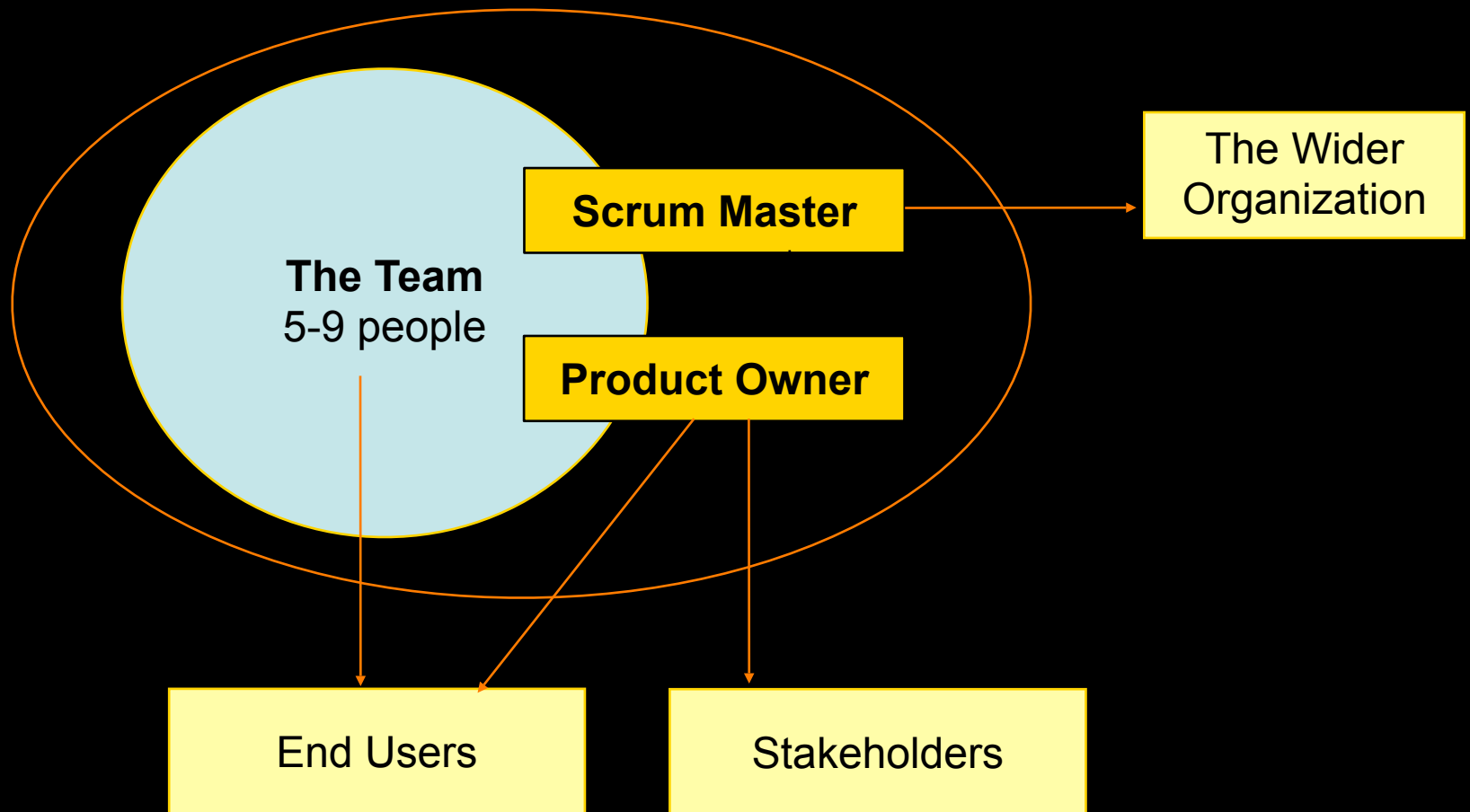- Removes Organizational Impediments
- Socializes Scrum to Management

The Team

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

Scrum Relationships

The Team
5-9 people

Scrum Master

Product Owner

The Wider Organization
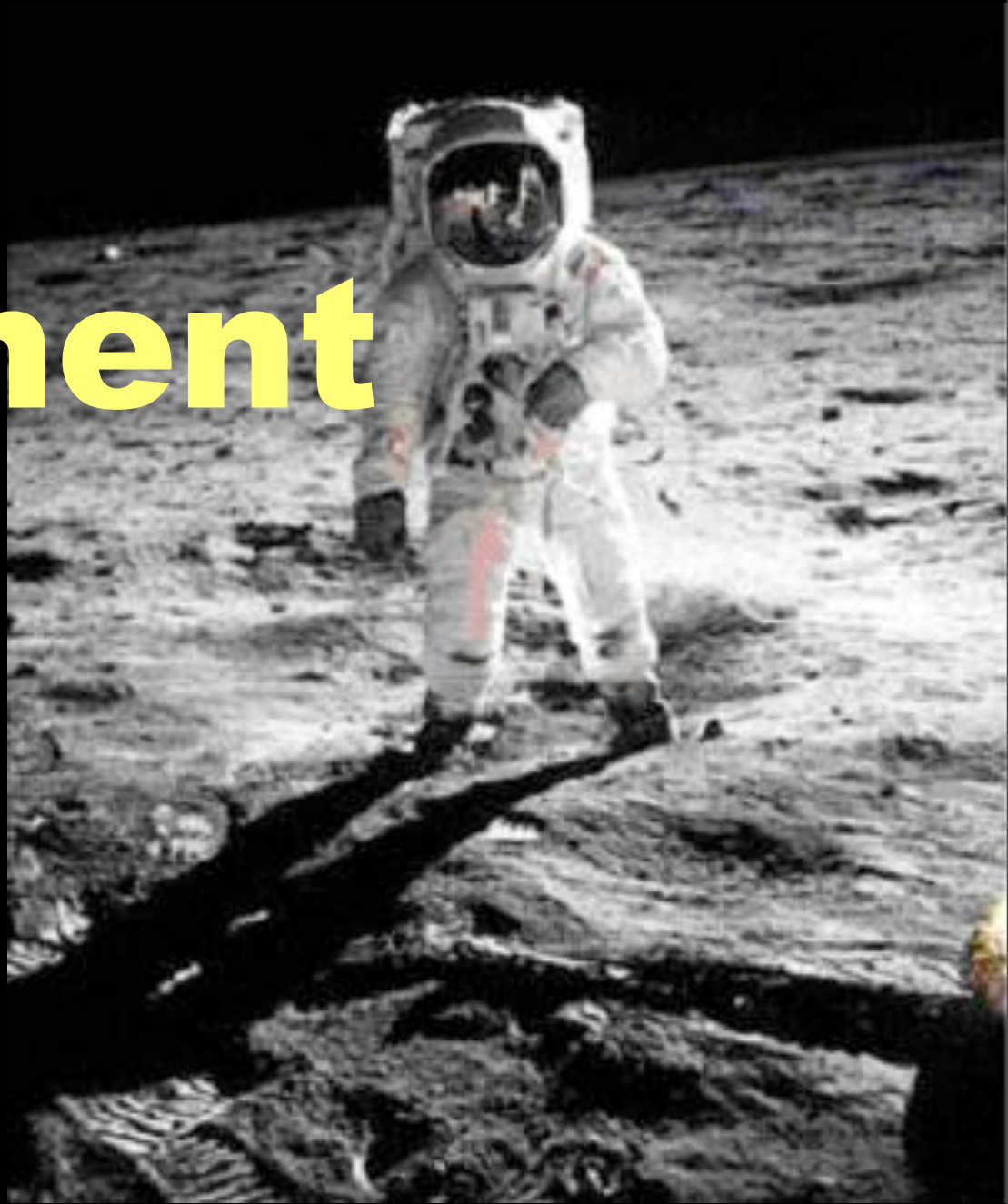
End Users

Stakeholders

PART THREE

Scrum

Planning

Vision Statement

A short statement of intent

A goal to aspire to

Vision Statement Example

ScrumSpace: For members of the international Scrum community, **who need** to connect with like-minded thinkers, ScrumSpace **is a** website **that** provides for the ultimate sharing of knowledge about Scrum. **Unlike** blogs, on-line groups, wikis and YouTube, ScrumSpace **offers** the simplicity of a single location that allows for the sharing of ideas via any online collaborative medium.

Features:
Scrum Profile | Scrum Buddies | Blogging | Video Sharing
Book Recommendations | Research/White Papers | Job Board

ScrumSpace vision statement written by Stacia Broderick, CST

Product Backlog

A living list of requirements

The Product Backlog represents the WHAT of the system

Prioritization is essential!

Planning

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

Design versus Delivery

- Deliver the highest value early on

- But don't neglect the bigger picture

- Allow design and architecture to emerge

Sushi Delivery means more frequent, smaller, but functional deliveries are made until the system is complete.

Growing tree is a good metaphor for building the right thing. From sapling to full oak tree, the plant must deliver business value from the start to feed itself (photosynthesis, etc.).

Scrum

Execution

Sprint Backlog

A list of tasks representing the HOW of the system
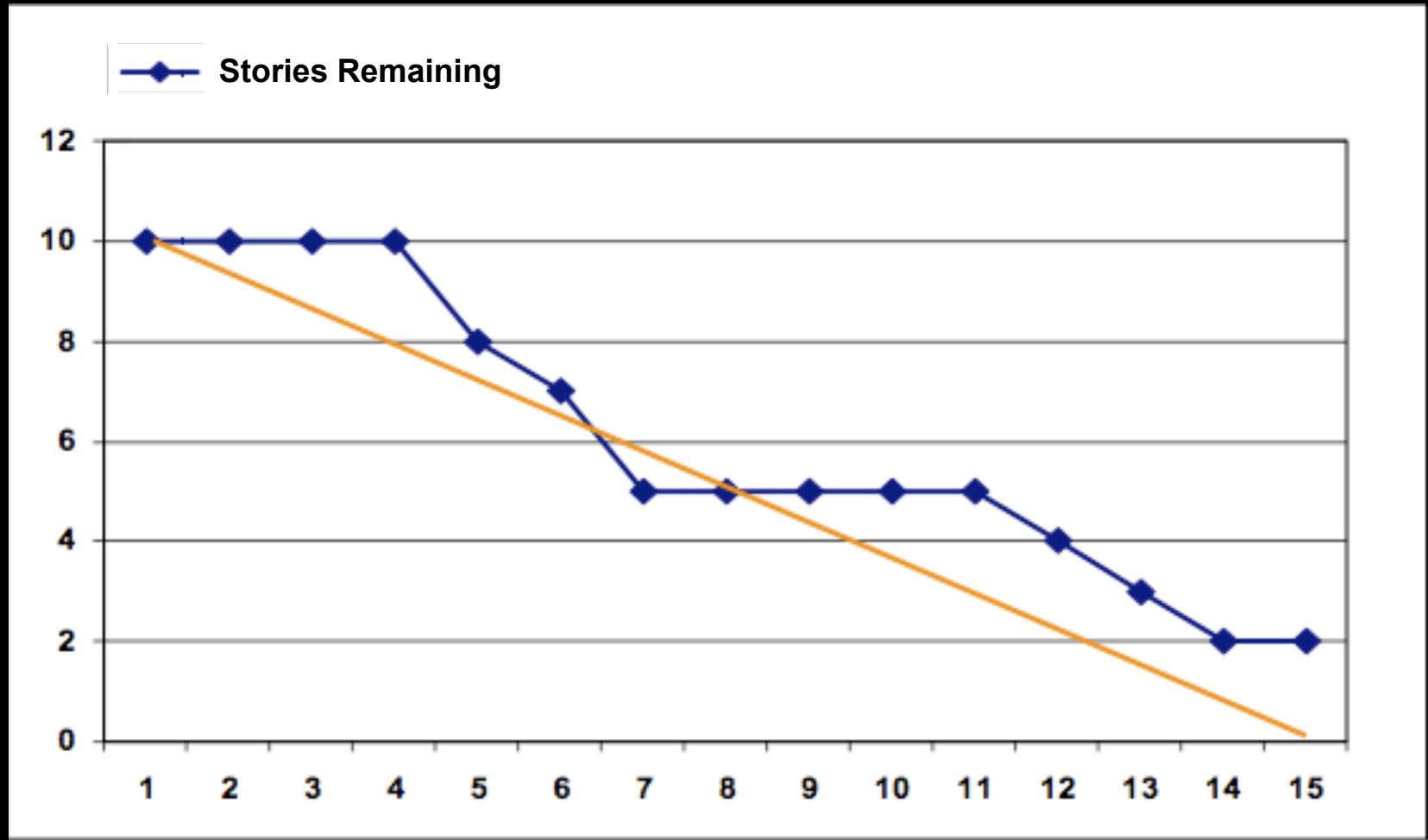
The Sprint Backlog is owned and managed by the Team

Daily Scrum

15 Minutes | 3 Questions

- What did you do since the last Daily Scrum?

2. What will you do by the next Daily Scrum?

3. What is getting in your way?

Story Burndown

Team Task Board

Story	Tasks To Do	WIP	Done

Done: As a user I... 13

Story: As a system admin I... 21

Tasks To Do: Code the.. | Test the.. | Code the.. | Test the.. | Code the.. | Write user docs...

WIP: Code the.. KC | Code the.. Mo | Test the.. Ramin

Story: As a user I... 8

Tasks To Do: Design the UI for... | Test the.. | Code the.. | Test the...

WIP: Create wireframe Dolly

Story: As a user I... 3

Tasks To Do: Code the.. | Test the.. | Re-run regression
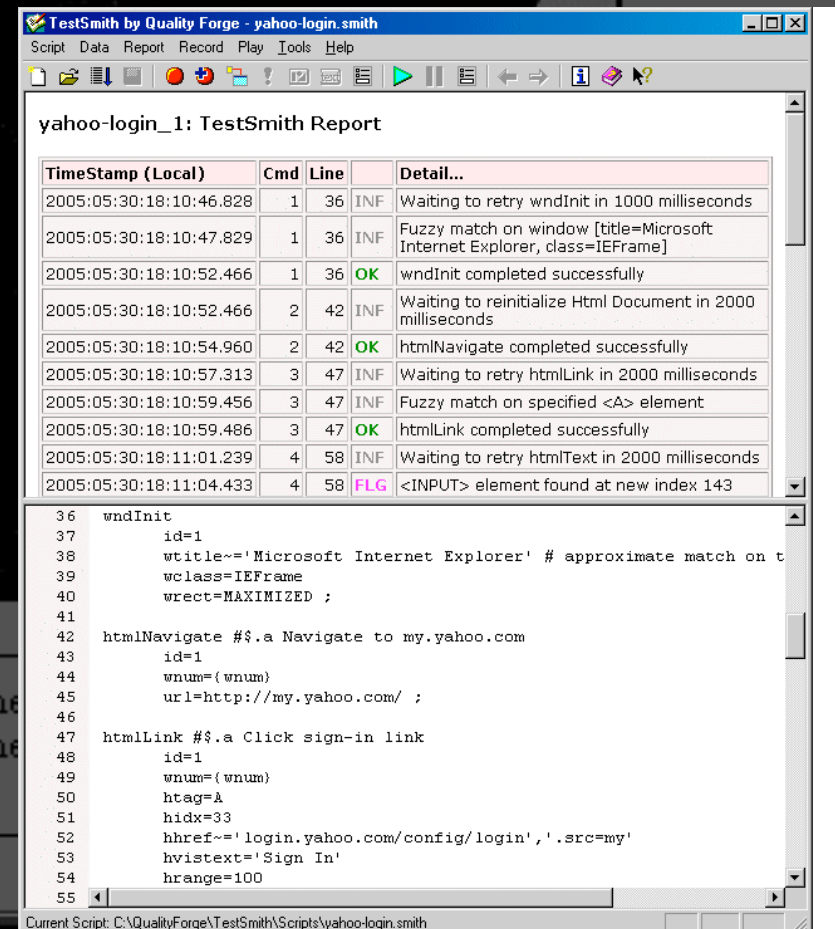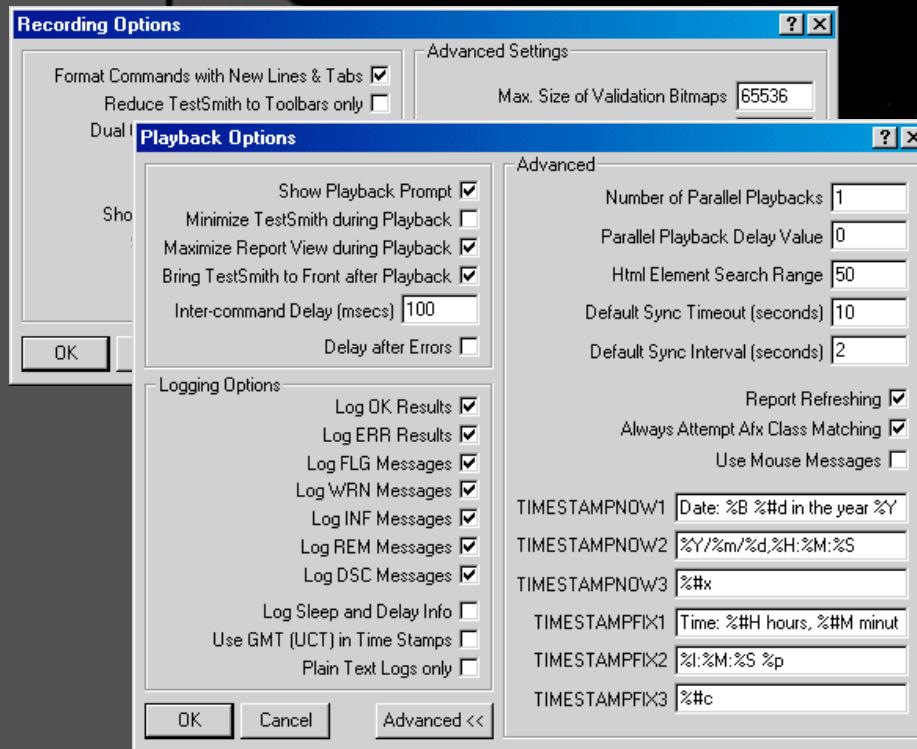
Example Task Board

"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

TestSmith by Quality Forge - login-test.smith

Script   Data   Report   Record   Play   Tools   Help

Recording Options

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

Advanced Settings

Max. Size of Validation Bitmaps 65536

Playback Options

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 %#x
TIMESTAMPFIX1 Time: %#H hours, %#M minut
TIMESTAMPFIX2 %I:%M:%S %p
TIMESTAMPFIX3 %#c

OK   Cancel   Advanced <<

Lao Tzu

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

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 #$.a Navigate to my.yahoo.com
43        id=1
44        wnum={wnum}
45        url=http://my.yahoo.com/ ;
46
47   htmlLink #$.a Click sign-in link
48        id=1
49        wnum={wnum}
50        htag=A
51        hidx=33
52        hhref~='login.yahoo.com/config/login','.src=my'
53        hvistext='Sign In'
54        hrange=100
55
```

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

Scrum

Reflection

Script Data Report Record Play Tools Help
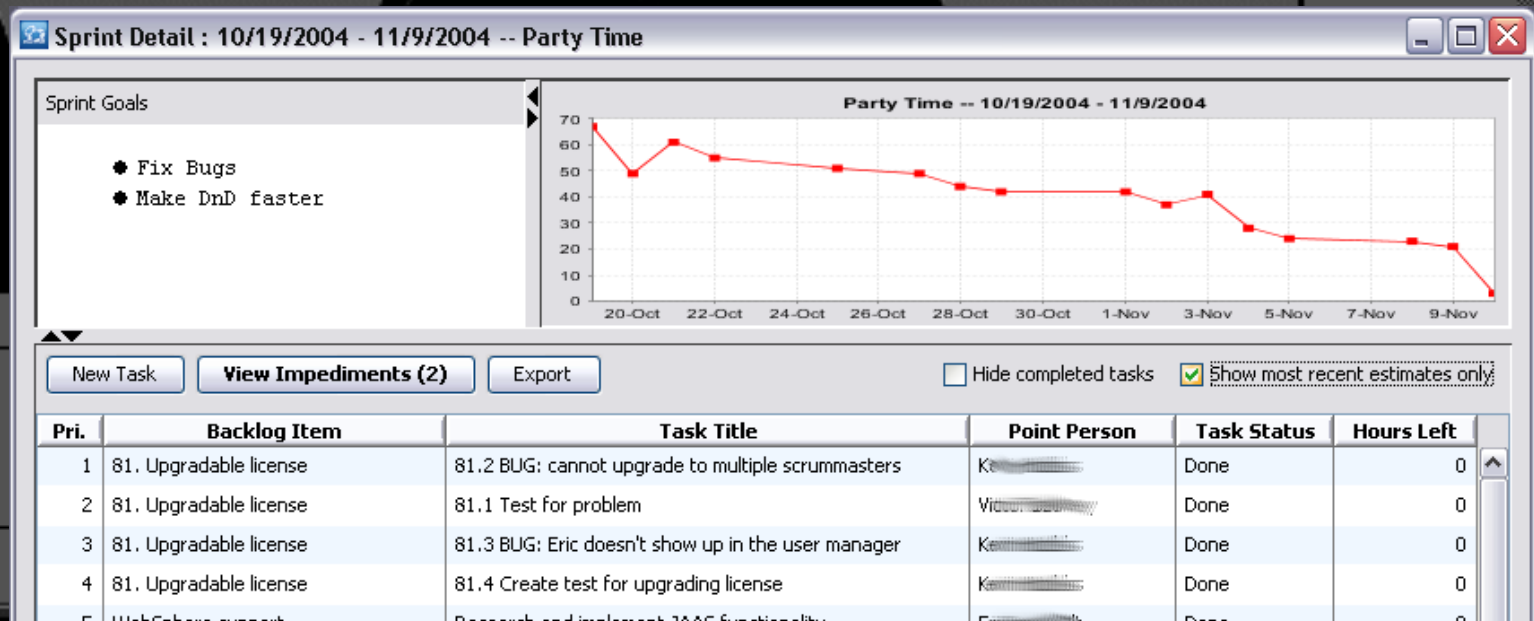
Review

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.

Sprint Detail : 10/19/2004 - 11/9/2004 -- Party Time

Sprint Goals

● Fix Bugs
● Make DnD faster

Party Time -- 10/19/2004 - 11/9/2004

| New Task | View Impediments (2) | Export | | ☐ Hide completed tasks | ☑ Show most recent estimates only |

Pri.	Backlog Item	Task Title	Point Person	Task Status	Hours Left
1	81. Upgradable license	81.2 BUG: cannot upgrade to multiple scrummasters	K	Done	0
2	81. Upgradable license	81.1 Test for problem	Vi	Done	0
3	81. Upgradable license	81.3 BUG: Eric doesn't show up in the user manager	K	Done	0
4	81. Upgradable license	81.4 Create test for upgrading license	K	Done	0
5	WebSphere support	Research and implement JAAS functionality	E	Done	0

Bugs

- There are two types of bug recognized in a Scrum process:
  - Bugs found on a story in the current iteration
    - Write a task for that bug and put it in "To Do". These are fixed as they are found. Remember a Story is not "Done" until all tasks are complete.
  - Bugs found outside an iteration, e.g. at the Review Meeting
    - These simply become new stories, are put into the backlog and prioritized by the PO

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.

Impediment List

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

This list is maintained by the Scrum Master

Scrum Values

Courage

Trustfulness

Transparency

Where to Now?

- Read "Scrum: it's place in the world"
  - http://agilethinking.net/blog
- Watch "The Road from Project Manager to Agile Coach" by Lyssa Adkins (lyssaadkins) available on YouTube:
  - http://youtube.com/watch?v=TvYqhYEaqMs
  - http://youtube.com/watch?v=L9tSjpqeBa4
- Read "A Scrum Master's Checklist"
  - http://danube.com/blog/michaeljames/a_scrummasters_checklist
- Join the Scrum Development Group
  - http://groups.yahoo.com/group/scrumdevelopment

Picture Credits