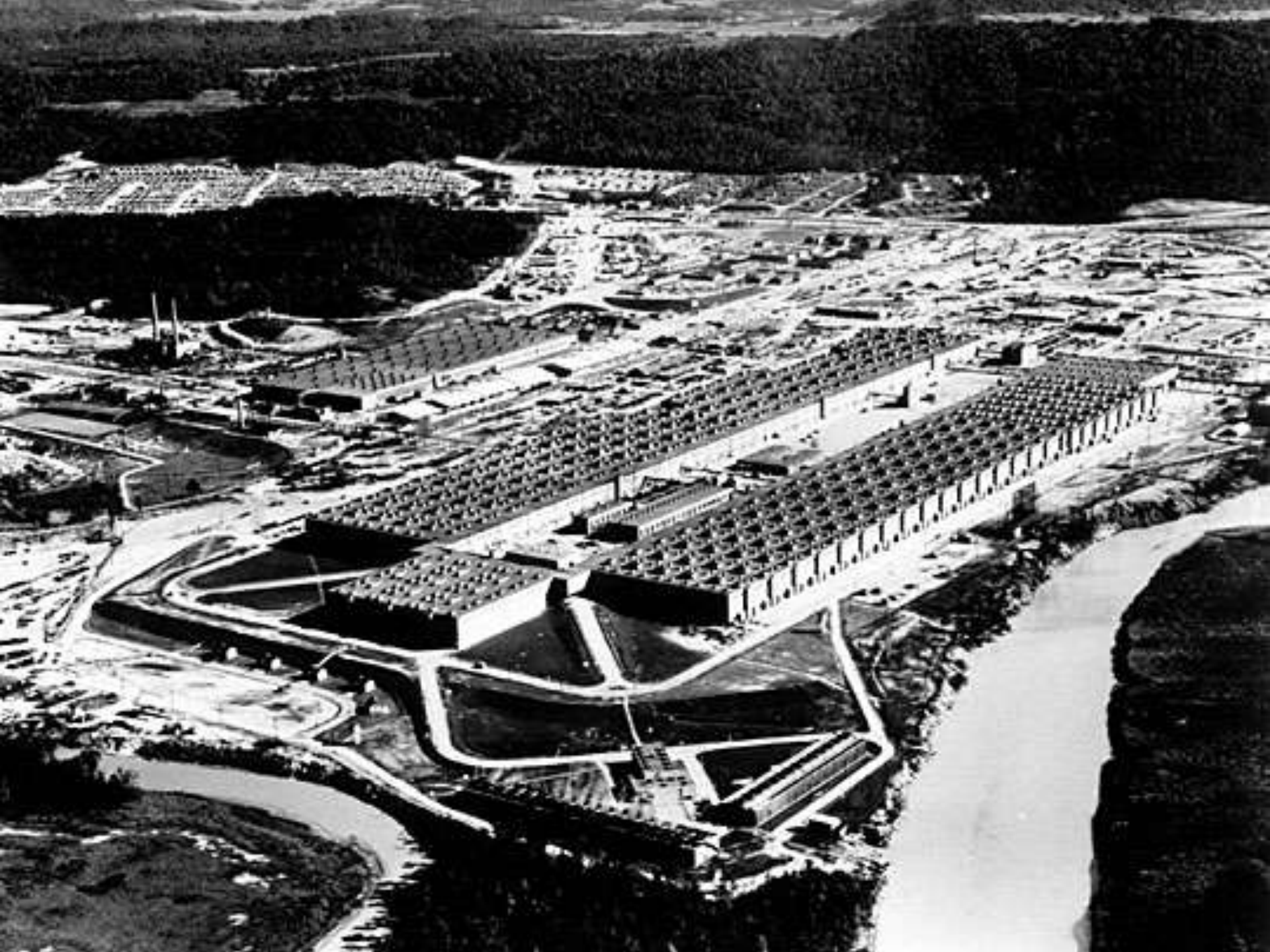
Agile Tools for Every-one

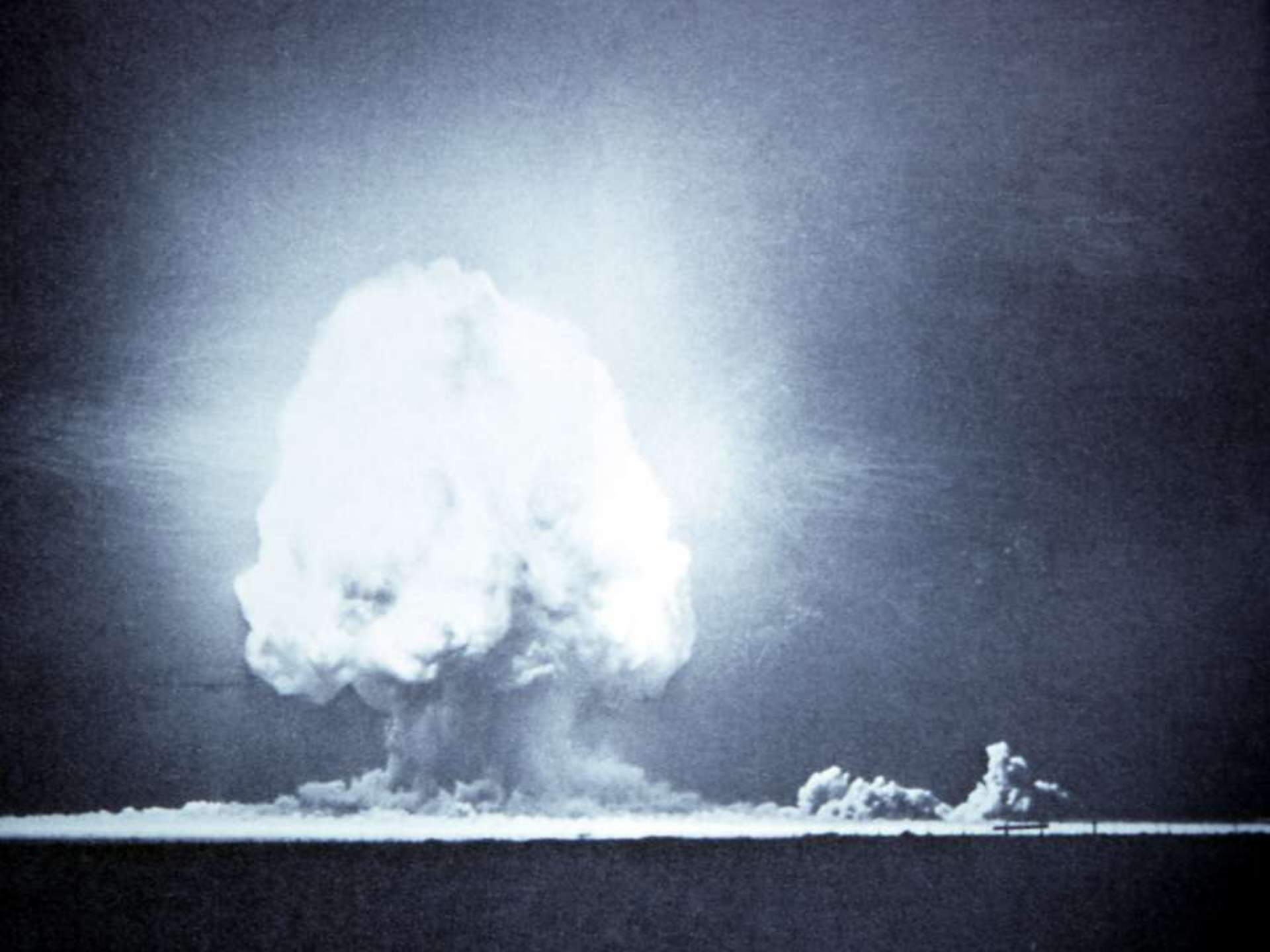
Don Bolen, PMP, CSM

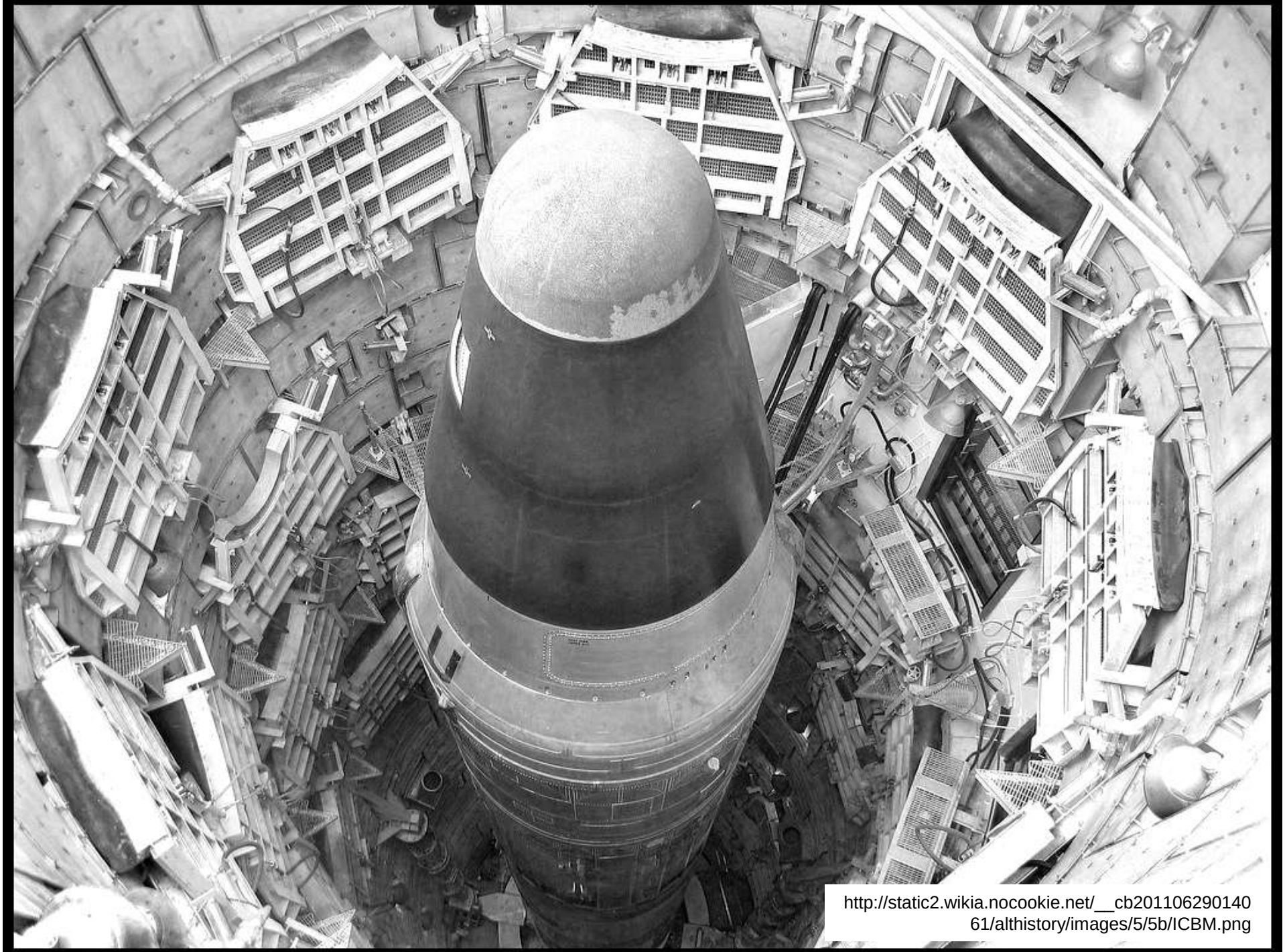
25 FEB

http://www.slideshare.net/dlb1700/

A Brief History of PROJECTS







http://static2.wikia.nocookie.net/__cb20110629014061/althistory/images/5/5b/ICBM.png

How Projects become such a "PROJECT?"

“Efficiency and plannability”

Project Lifecycle

Initiating

- Develop Project Charter
- Identify Stakeholders

Planning

- Develop PM Plan
- Collect Requirements
- Define Scope
- Create WBS
- Define, Sequence Activities
- Estimate Activity Resources, Durations
- Estimate Costs
- Determine Budget
- Quality
- Develop HR Plan
- Plan Communications
- Risk Management
- Identify Risks
- Risk Analysis, Responses
- Plan Procurements

Executing

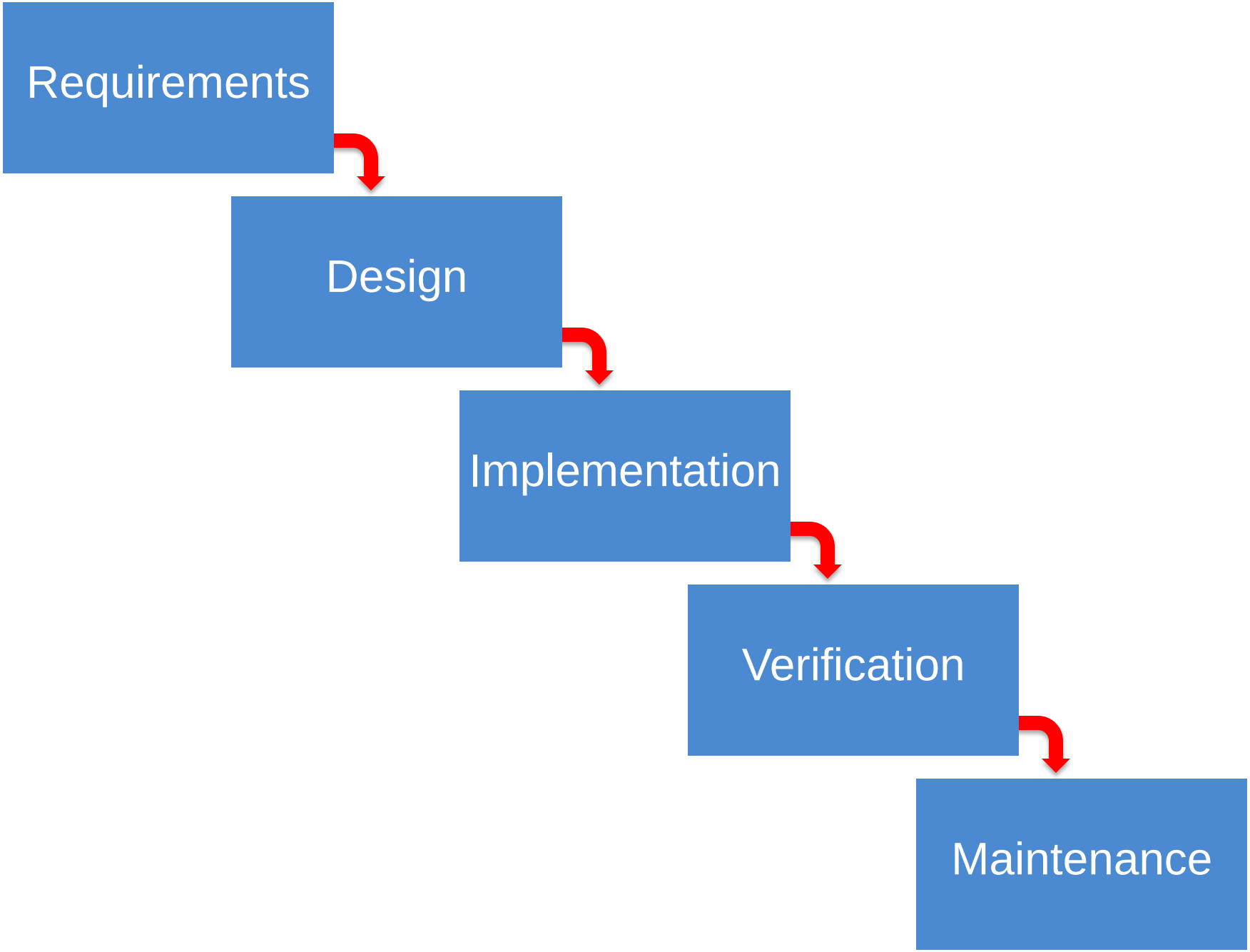
- Manage Project Execution
- Perform QA
- Acquire, Develop, Manage Team
- Distribute Information
- Manage Stakeholder Expectations
- Conduct Procurements

Monitoring & Controlling

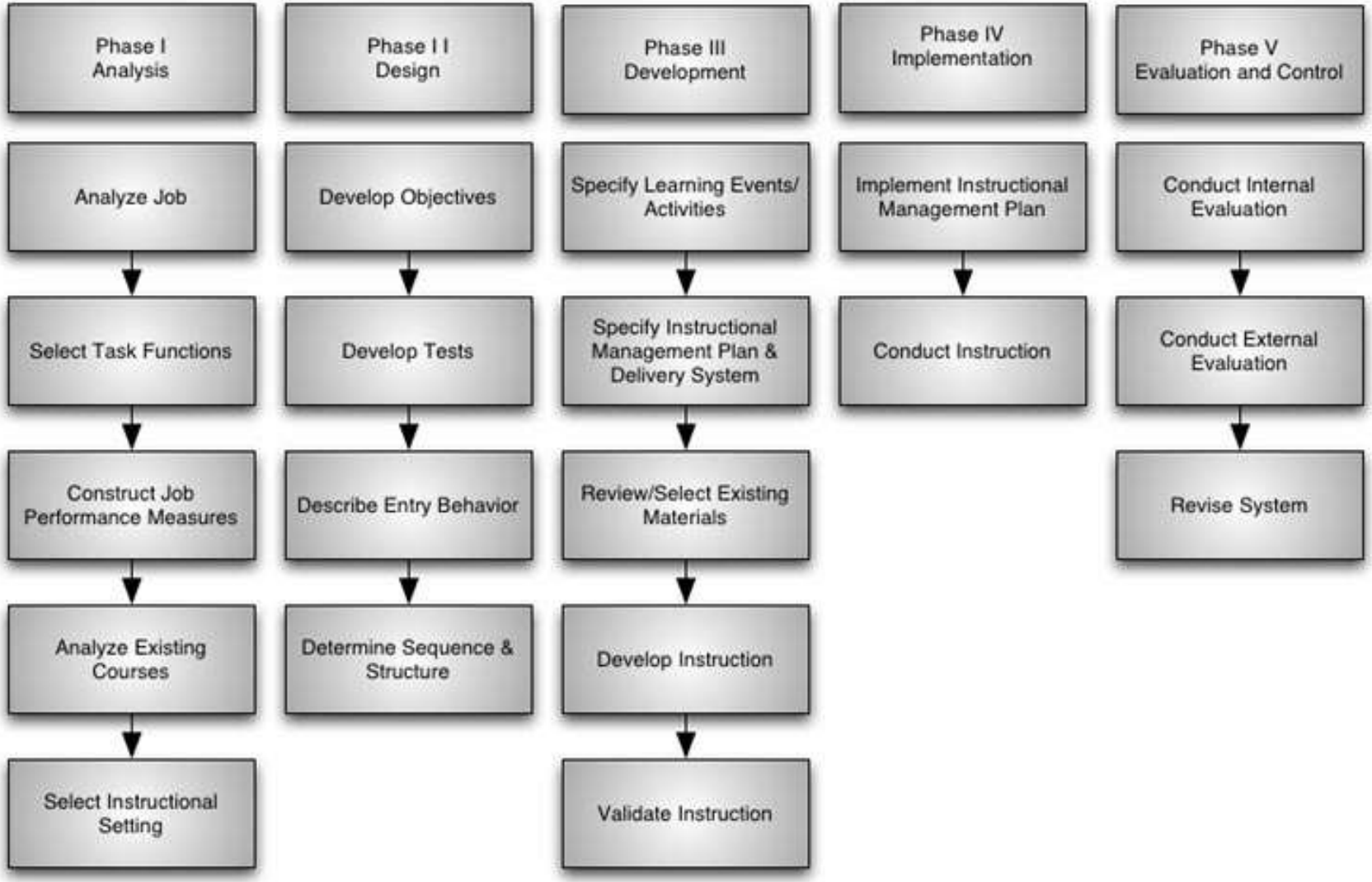
- Monitor, Control Project Work
- Change Control
- Verify, Control Scope
- Control Schedule
- Control Costs
- Perform QC
- Report Performance
- Monitor, Control Risks
- Administer Procurements

Closing

- Close Project
- Close Procurements


Requirements
Design
Implementation
Verification
Maintenance

An Even Briefer History of ADDIE



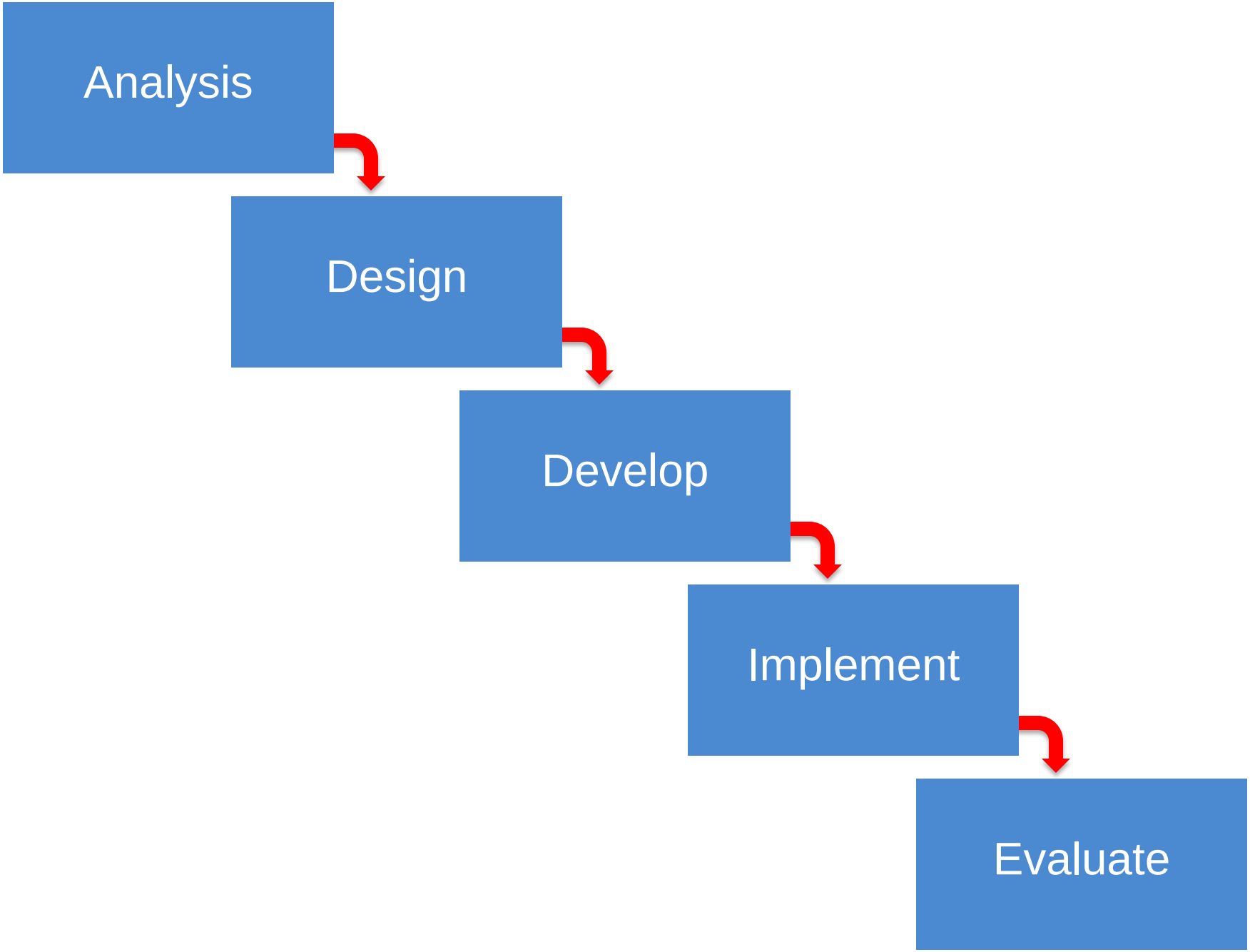
Florida State University Five Phases of ISD (1975)

http://www.nwlink.com/~donclark/history_isd/addie.html

ADDIE
The Basic Process of Instructional Systems Design

The purpose of ADDIE is to illustrate the fundamental components of an Instructional Systems Design Process. Instructional Systems Design (ISD) is a systematic approach to creating performance-based, interactive and innovative episodes of guided learning. The ADDIE process facilitates action learning strategies, authentic assessment and student-centered learning.

Phase	Analysis	Design	Development	Implementation	Evaluation
Purpose	Identify the probable causes for a performance gap.	Verify the desired performances, the learning tasks, and the appropriate testing strategies.	Generate and validate the training materials.	Prepare the training environment and conduct the training.	Assess the quality of the instructional products and processes both before and after implementation.
Product	*Analysis Summary*	*Design Brief*	*Development Summary*	*Implementation Plan*	*Evaluation Plan*
	assessment ➢ Determine instructional goals ➢ Conduct a learner analysis ➢ Conduct a resource analysis ➢ Determine probable delivery system (including cost estimate)	➢ Compose performance objectives ➢ Generate testing strategies ➢ Calculate return on investment	➢ Select or develop supporting media ➢ Develop the Learner Guide ➢ Develop the Facilitator Guide ➢ Conduct formative revisions ➢ Conduct a Pilot Test	➢ Select, prepare and schedule facilitators	➢ Select evaluation tools ➢ Conduct evaluations
Product	*Analysis Summary*	*Design Brief*	*Development Summary*	*Implementation Plan*	*Evaluation Plan*


Analysis
Design
Develop
Implement
Evaluate


AGILE
4
You

The Manifesto

"We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more."

http://www.agilemanifesto.org/

The Principles

- Customer satisfaction by rapid delivery of useful software
- Welcome changing requirements, even late in development
- Working software is delivered frequently (weeks rather than months)
- Working software is the principal measure of progress
- Sustainable development, able to maintain a constant pace
- Close, daily co-operation between business people and developers
- Face-to-face conversation is the best form of communication (co-location)
- Projects are built around motivated individuals, who should be trusted
- Continuous attention to technical excellence and good design
- Simplicity
- Self-organizing teams
- Regular adaptation to changing circumstance

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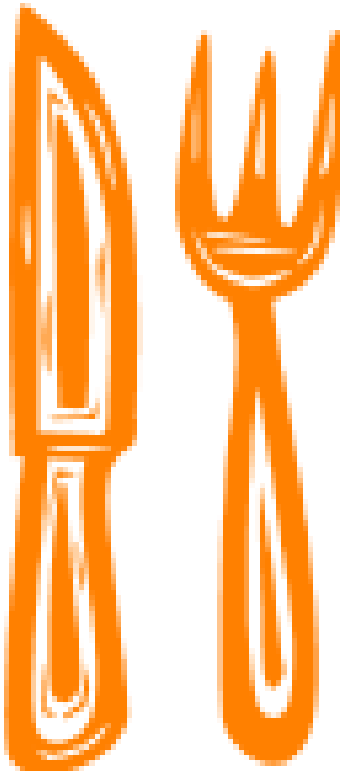
Contrasting Approaches

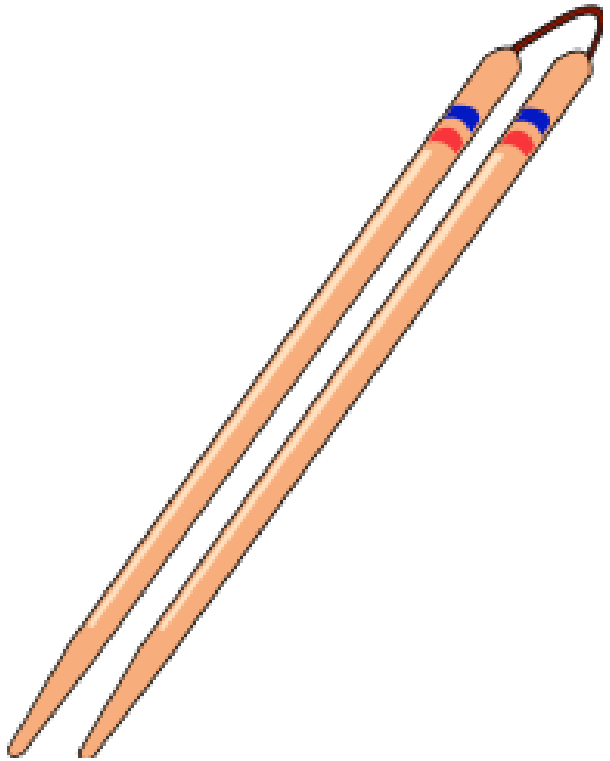
Traditional	Agile
Plan what you expect to happen	Plan what you expect by iteration
Enforce the plan	Control is through adaption/ inspection
Large, in-charge PM	
Directive, top down	Use Agile proactively to manage change
Use change control	

Why Agile?

- Less defects, better quality
- Increased productivity
- Faster time to market
- Market alignment
- Quicker identification of loser projects
- LEAN

Which is better?





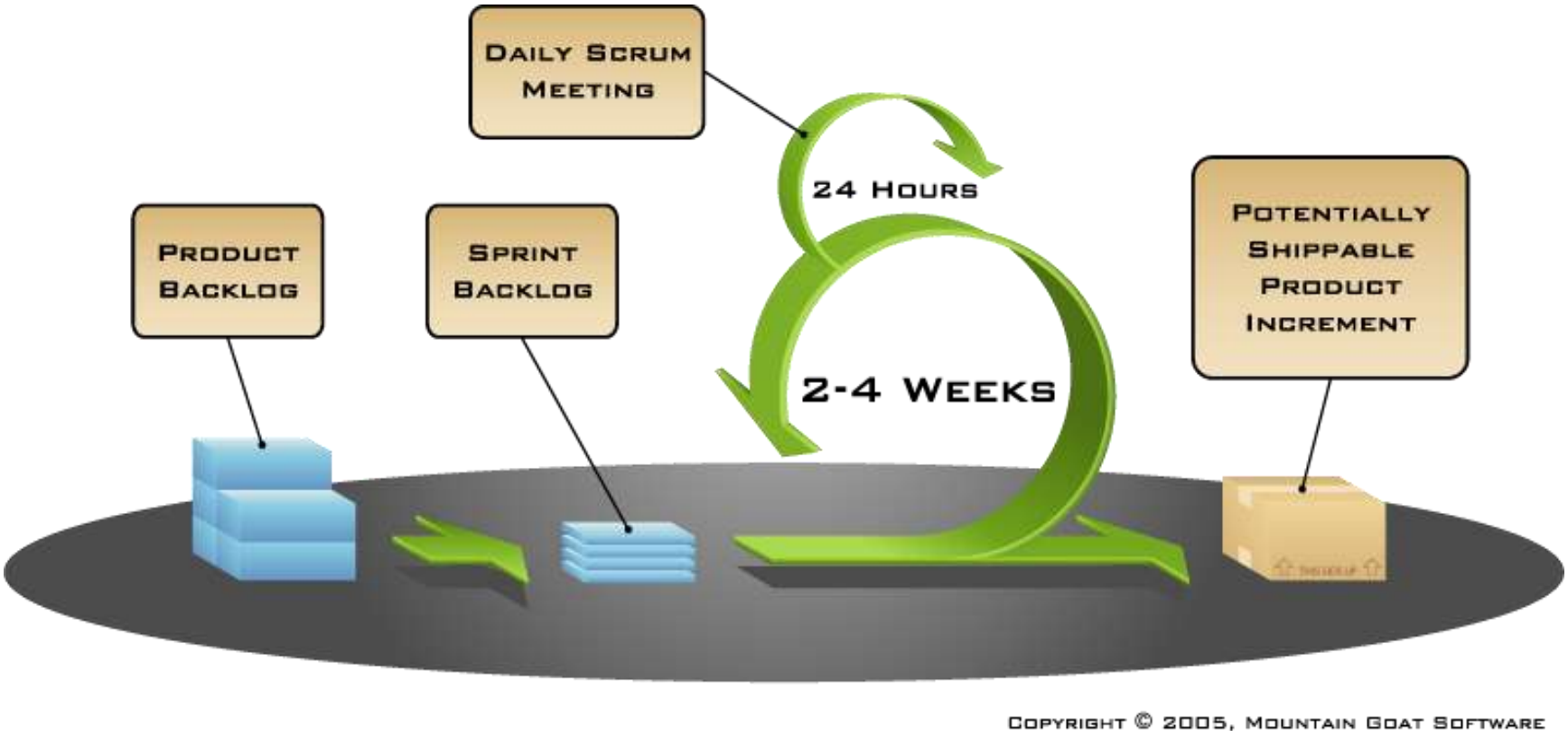

SCRUM

Scrum

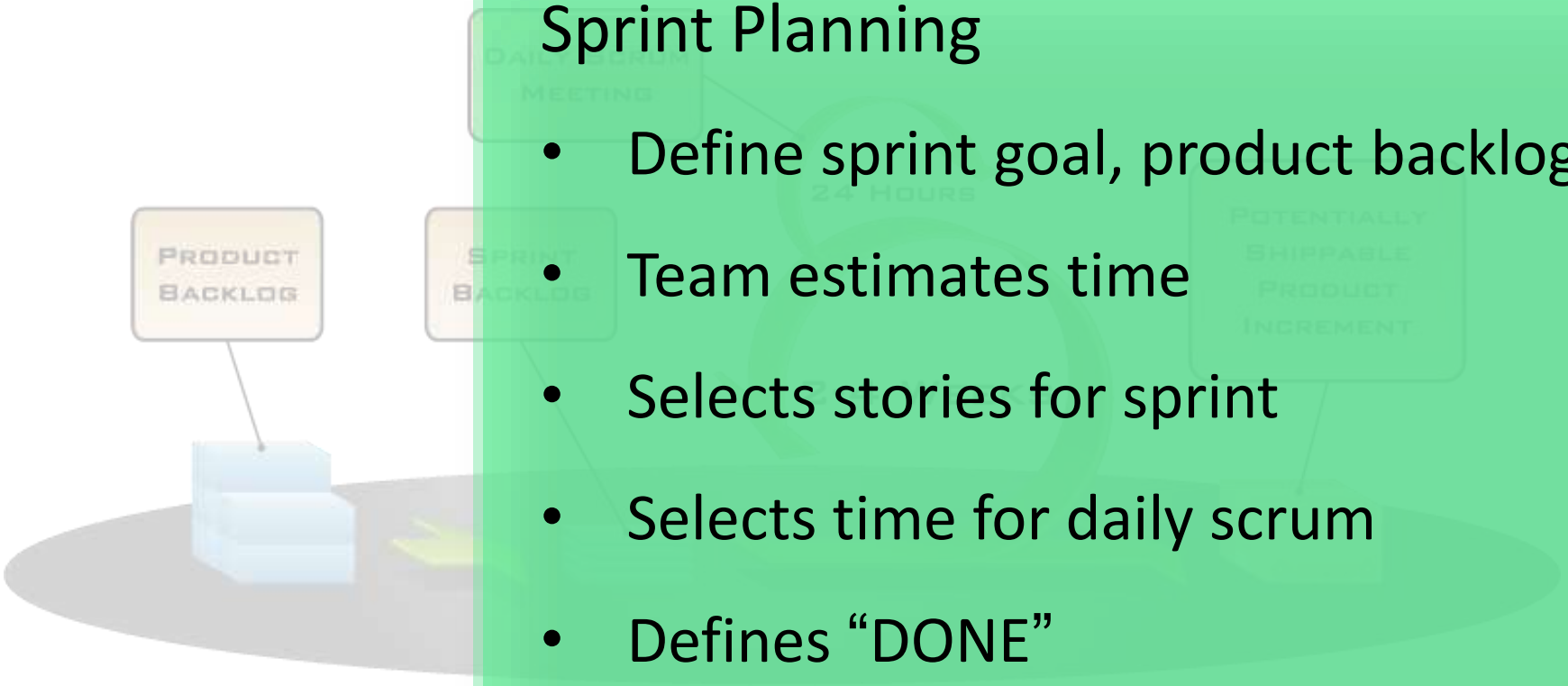
- A process framework
- Team roles
- Rules
- Timeboxed iterations (SPRINTS)
- Prescribed, limited meetings

https://www.scrum.org/Scrum-Guide

Product Owner | Team | Scrum Master



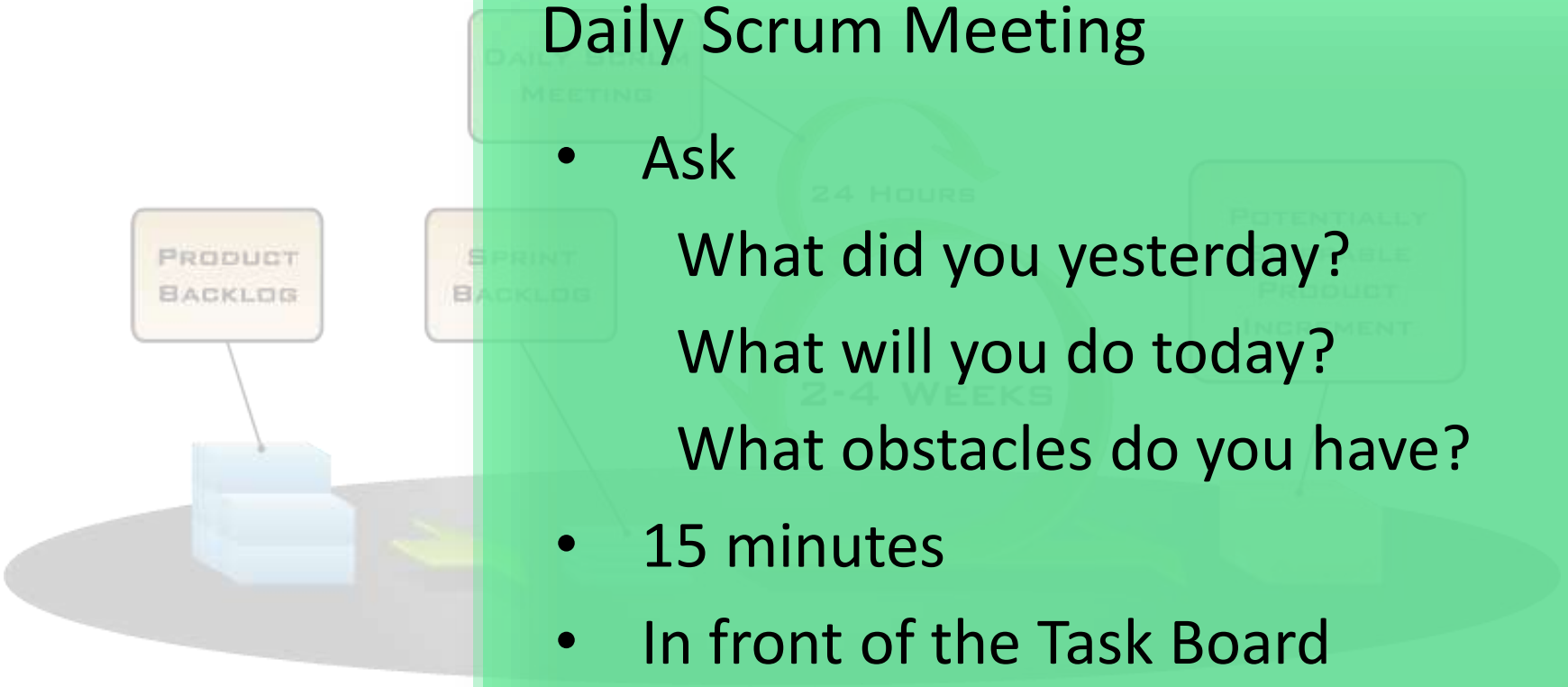
http://www.mountaingoatsoftware.com/system/asset/file/17/ScrumLargeLabelled.png



Sprint Planning

- Define sprint goal, product backlog
- Team estimates time
- Selects stories for sprint
- Selects time for daily scrum
- Defines “DONE”

Tool #1

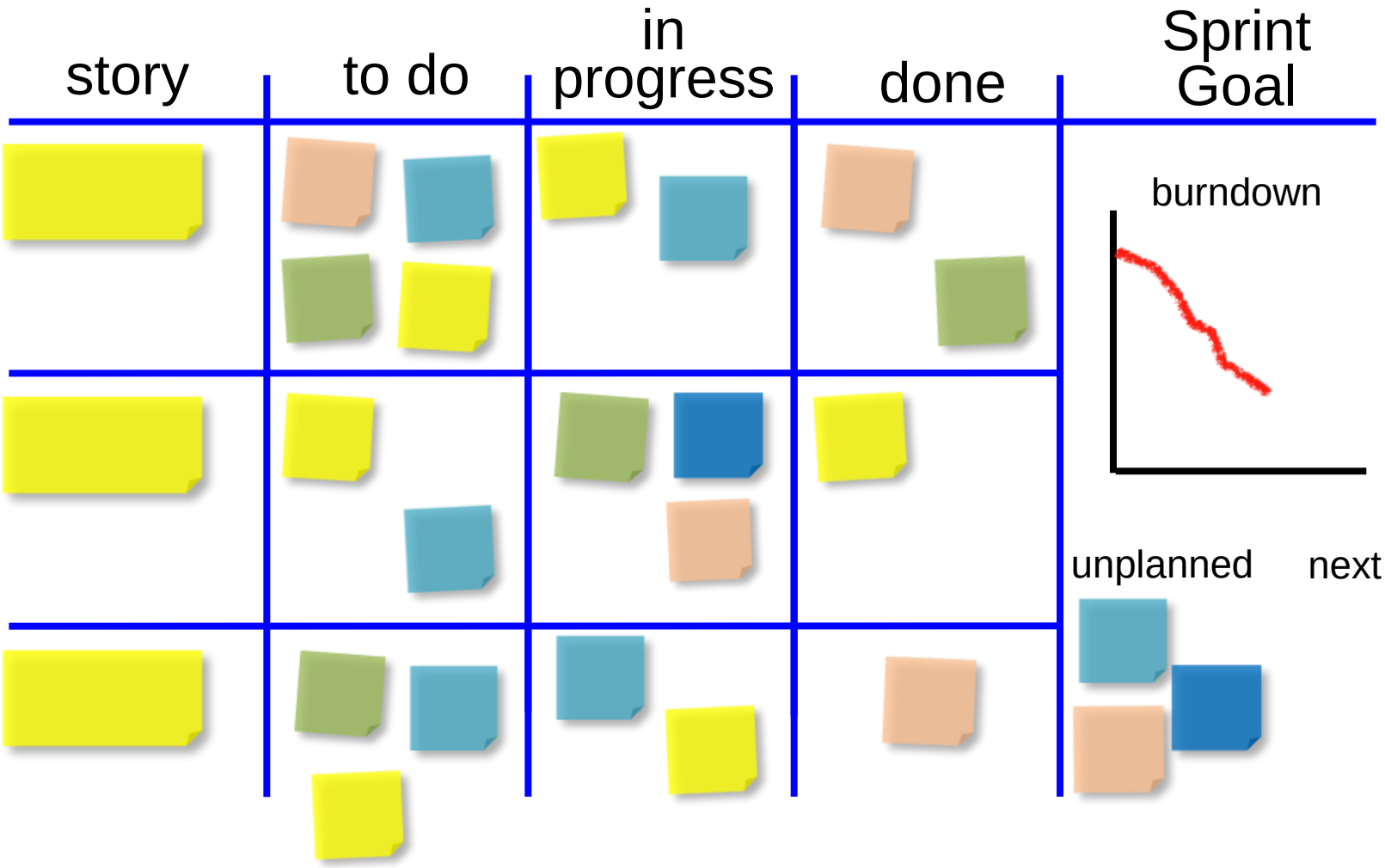


Daily Scrum Meeting

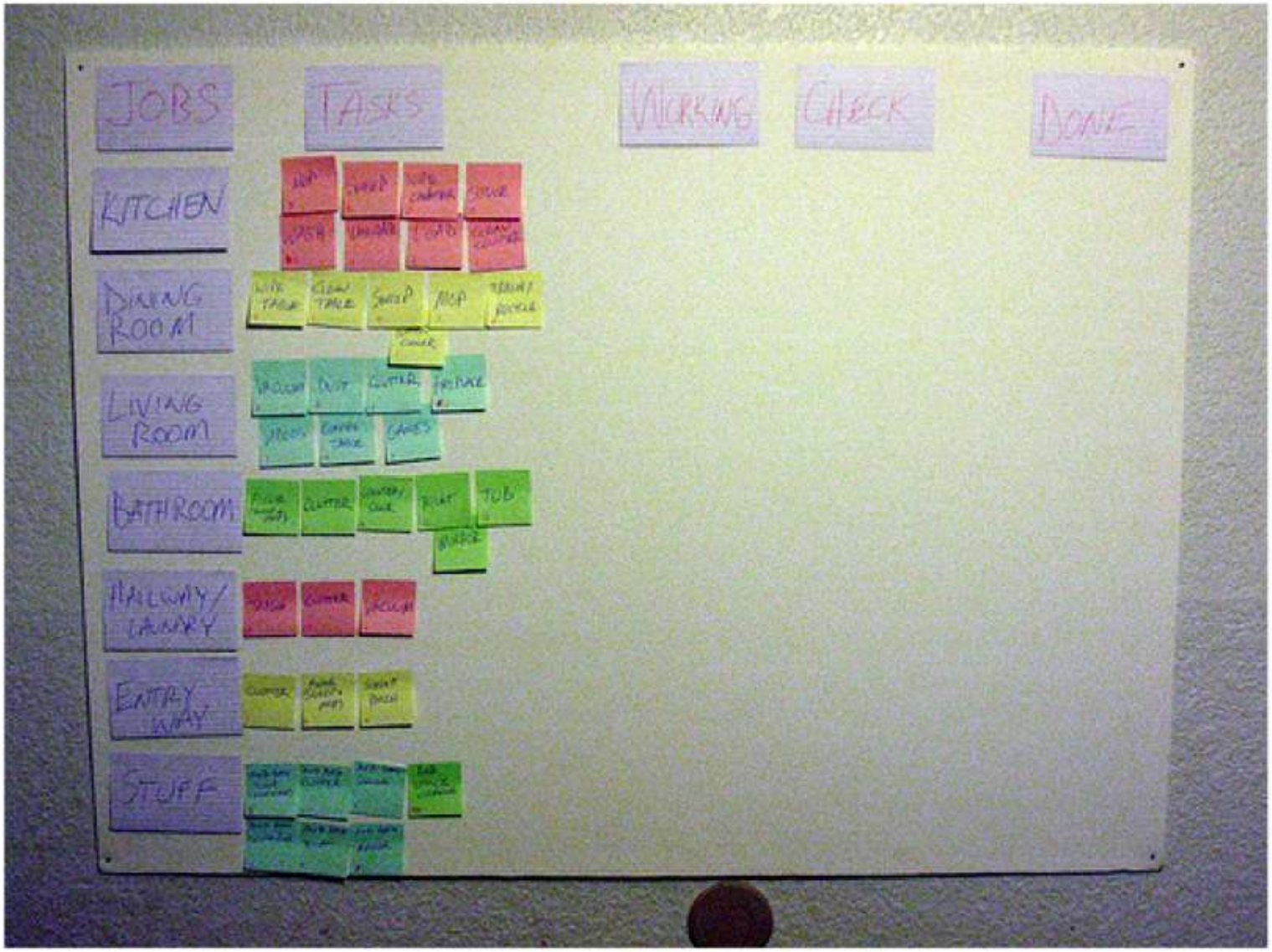
- Ask
  - What did you yesterday?
  - What will you do today?
  - What obstacles do you have?
- 15 minutes
- In front of the Task Board

Tool #2

Task Board

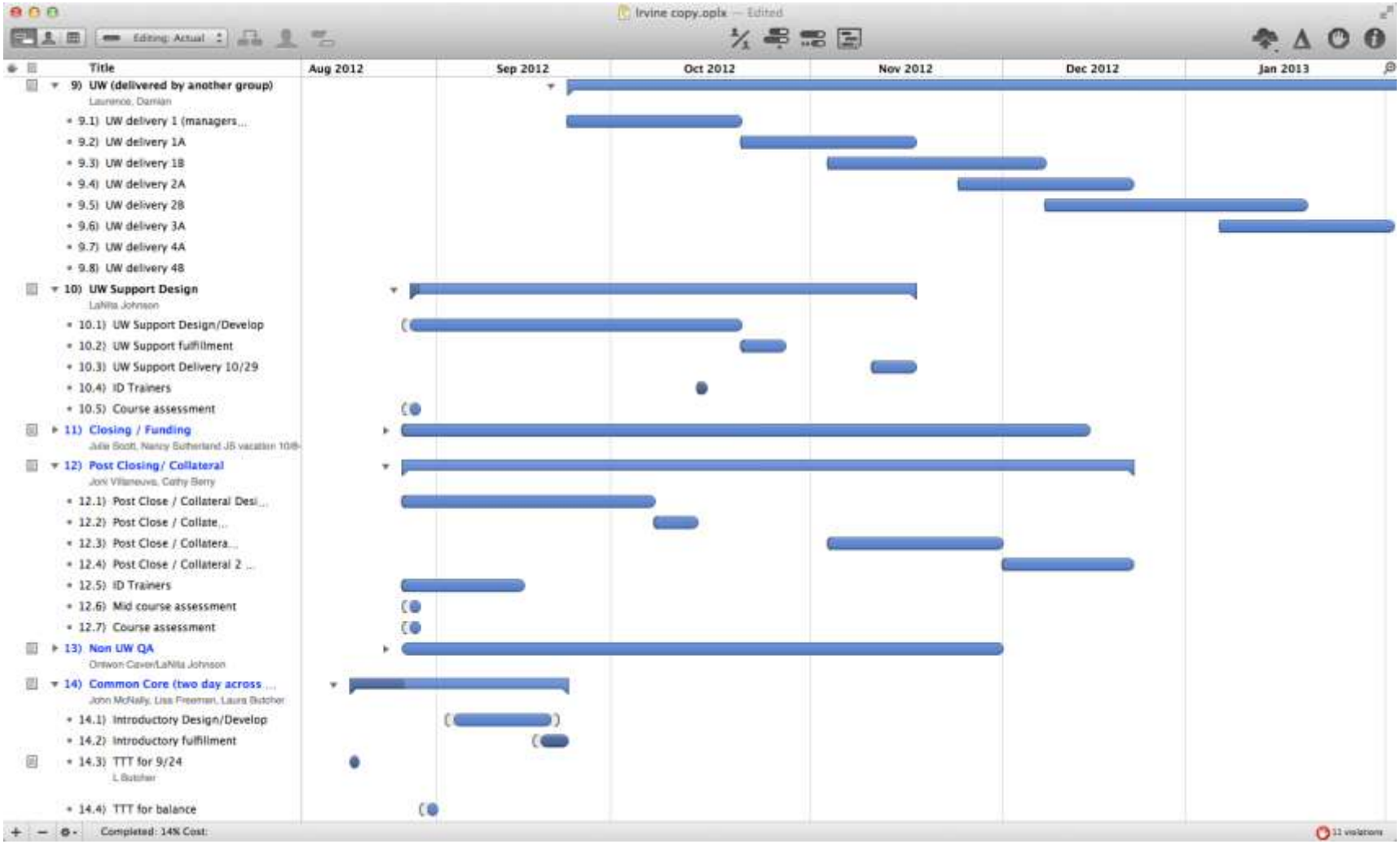

story
to do
in progress
done
Sprint Goal
burndown
unplanned
next


BLUE
Siddha's Backlog
YELLOW
Rick's Backlog
PINK
Jenn's Backlog
COMPLETED TASKS

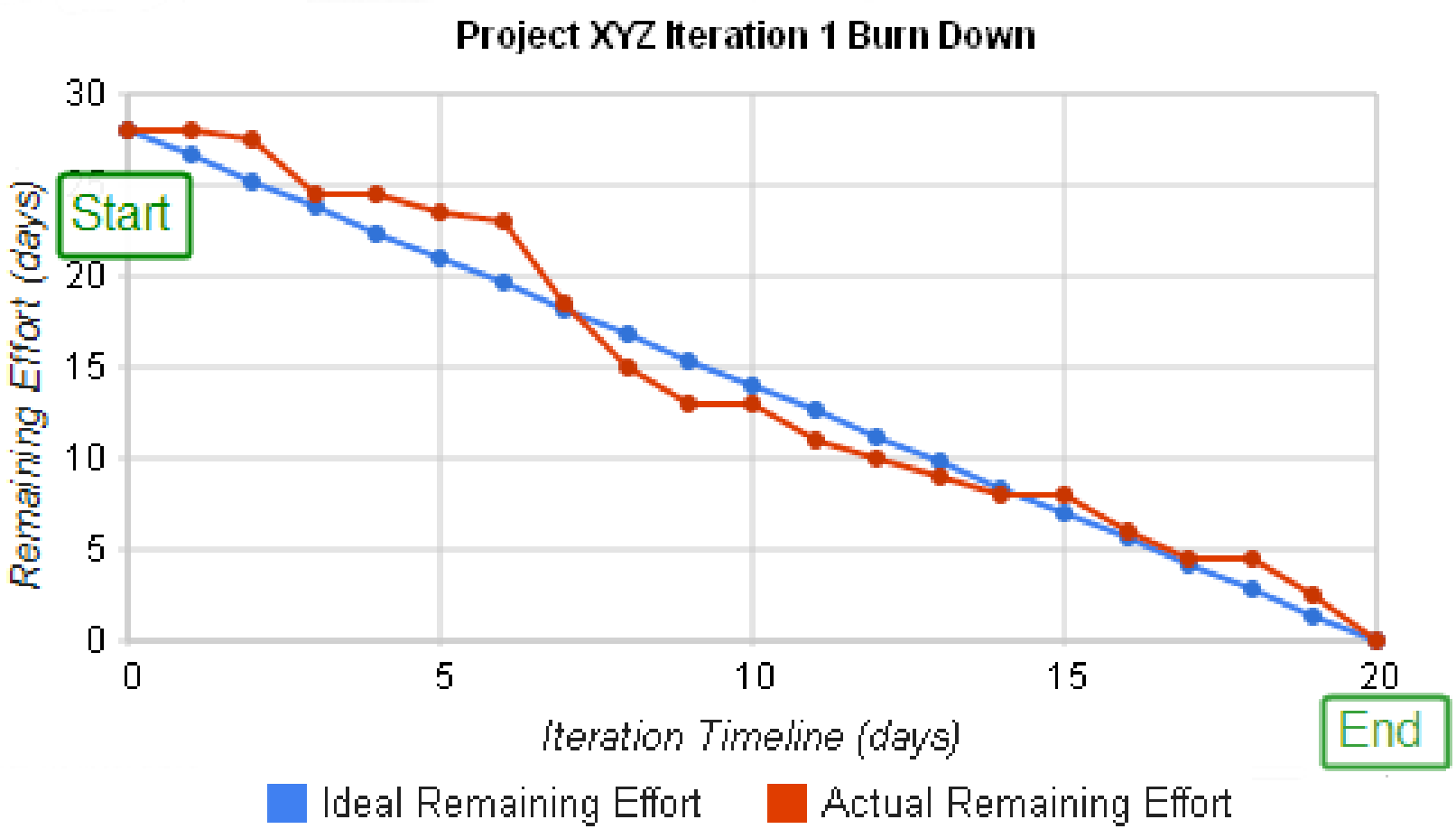


http://scrum4kids.blogspot.com/2010/09/using-scrum-for-saturday-chores.html

Which is better?



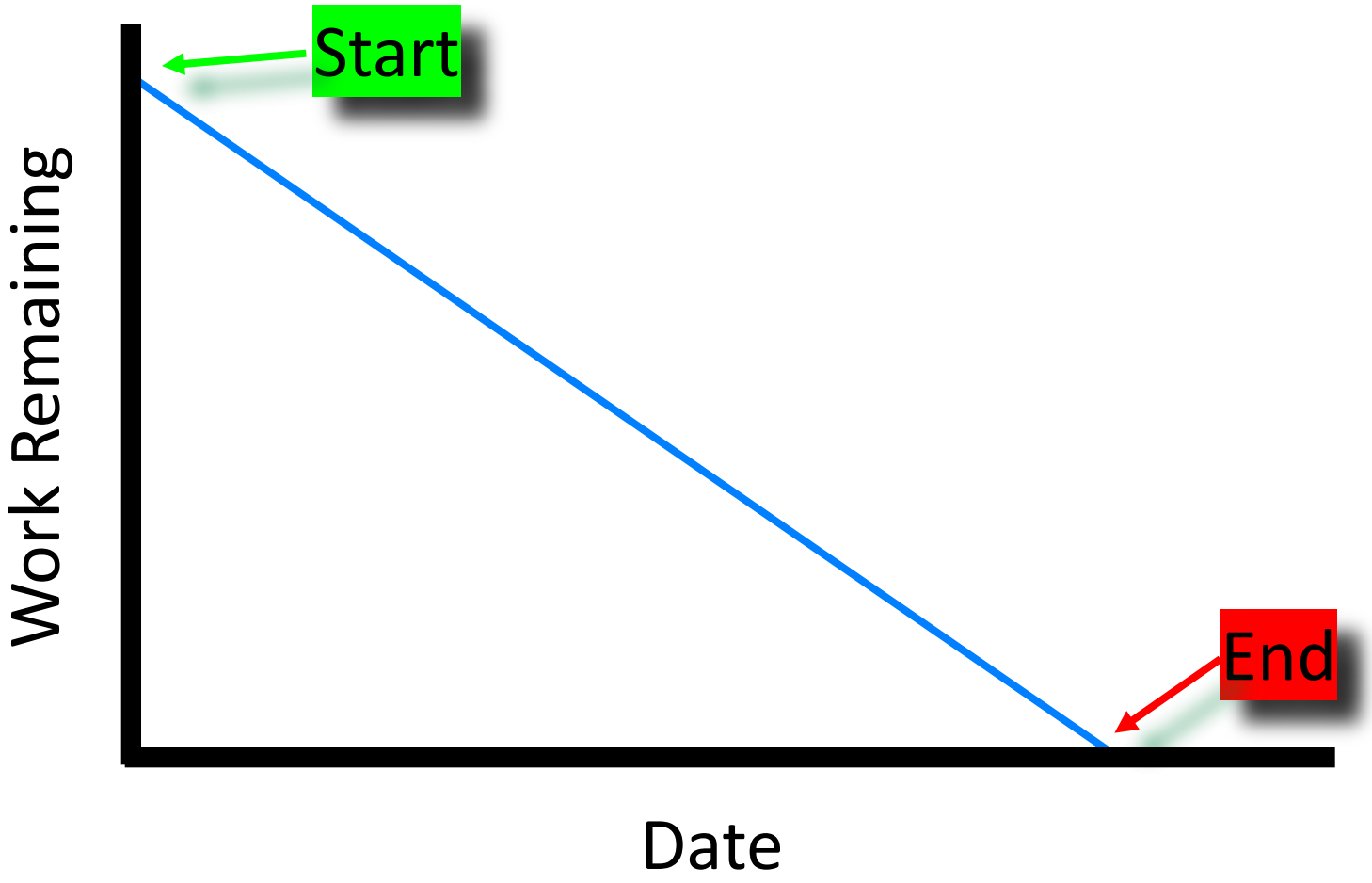
Which is better?

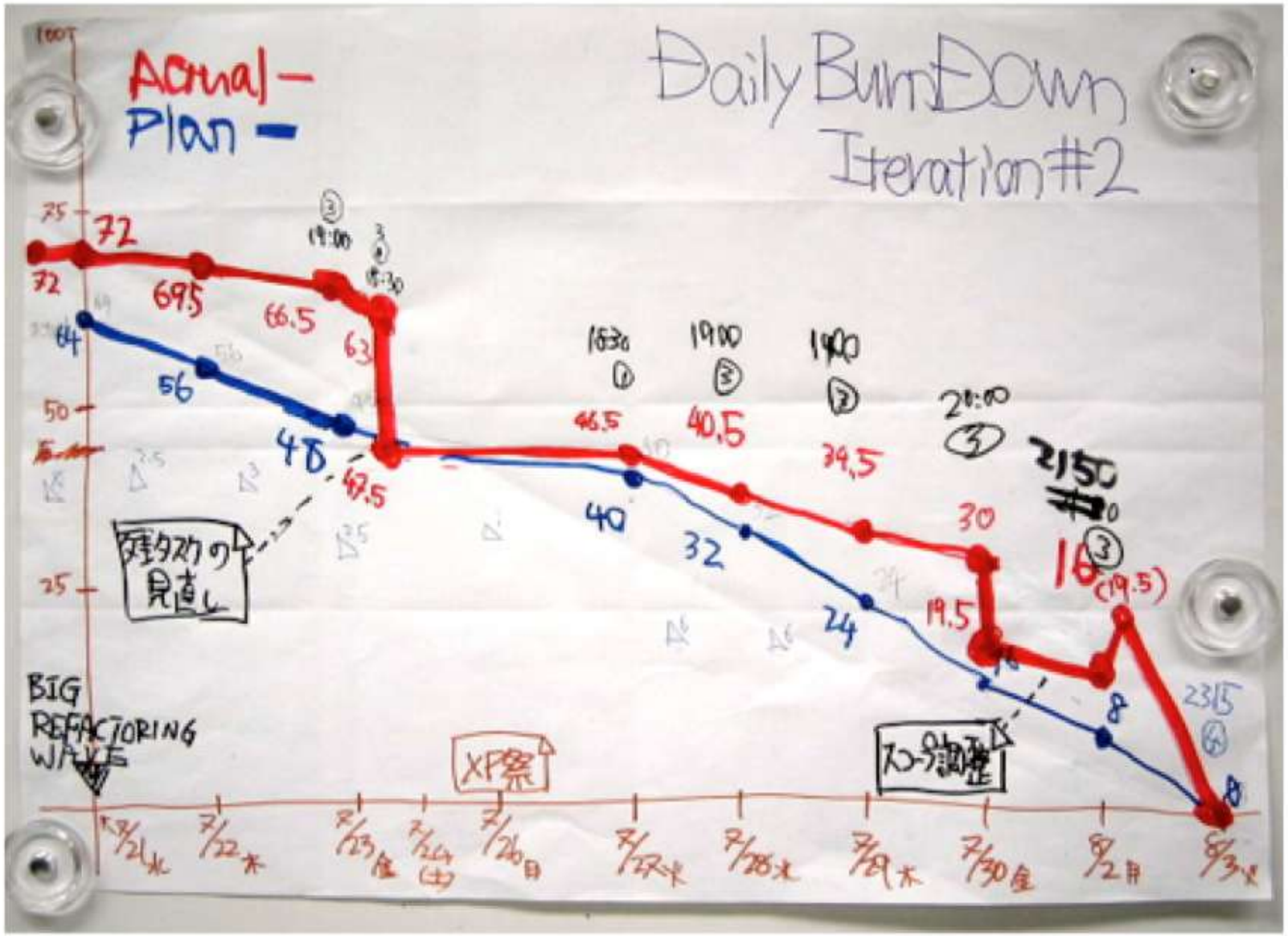


http://joel.inpointform.net/wp-content/uploads/2010/11/burndown132.png

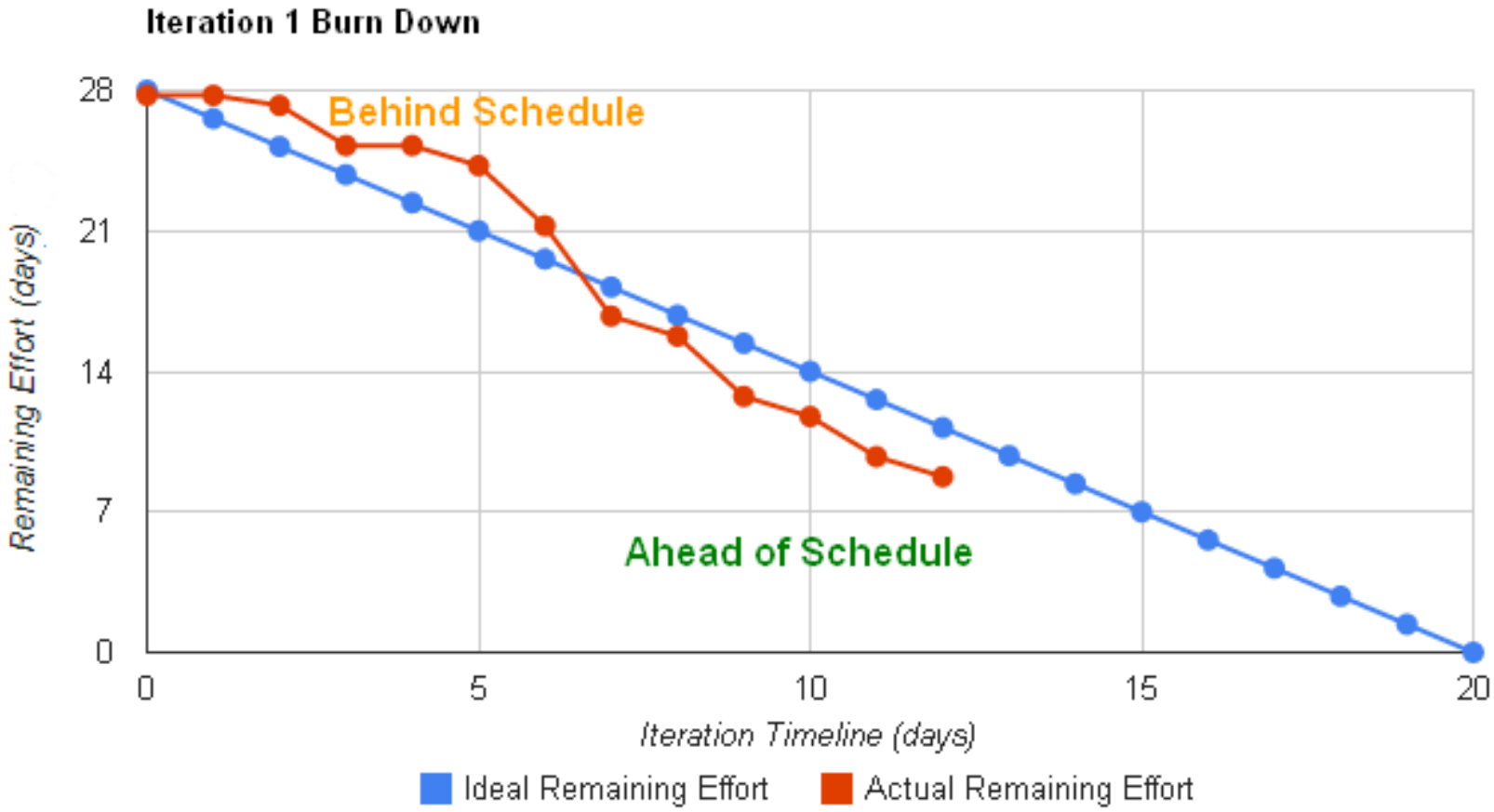
Tool #3

Measuring via “Burndown”





http://www.infoq.com/articles/agile-kanban-boards

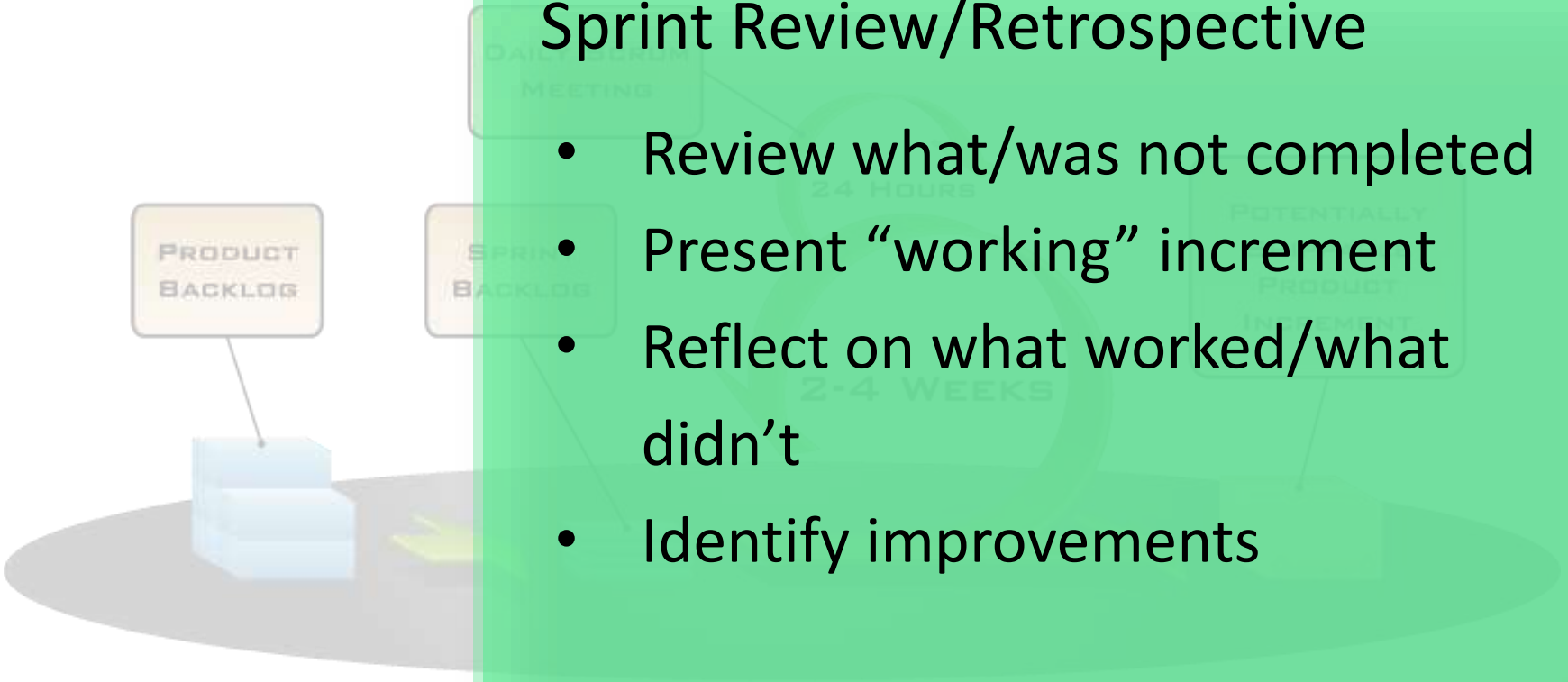


http://joel.inpointform.net/wp-content/uploads/2010/11/reading-burn-down-chart2.png

Day	Burned down		Balance		Daily
	Planned	Actual	Planned	Actual	Completed
0			250	250	#N/A
1	12	8	238	242	8
2	18	10	220	232	10
3	11	0	209	232	0
4	4	12	205	220	12
5	5	19	200	201	19
6	6	13	194	188	13
7	10	8	184	180	8
8	20	2	164	178	2
9	20		144	#N/A	#N/A
10	18	2	126	176	2
11	6		120	#N/A	#N/A
12	13	2	107	174	2
13	7	34	100	140	34
14	14		86	#N/A	#N/A
15	12		74	#N/A	#N/A
16	14		60	#N/A	#N/A
17	12		48	#N/A	#N/A
18	11		37	#N/A	#N/A
19	19		18	#N/A	#N/A
20	18		0	#N/A	#N/A

http://chandoo.org/img/pm/data-burndown-chart.png

Tool #4



Sprint Review/Retrospective

- Review what/was not completed
- Present “working” increment
- Reflect on what worked/what didn’t
- Identify improvements

Scrum and SAM…

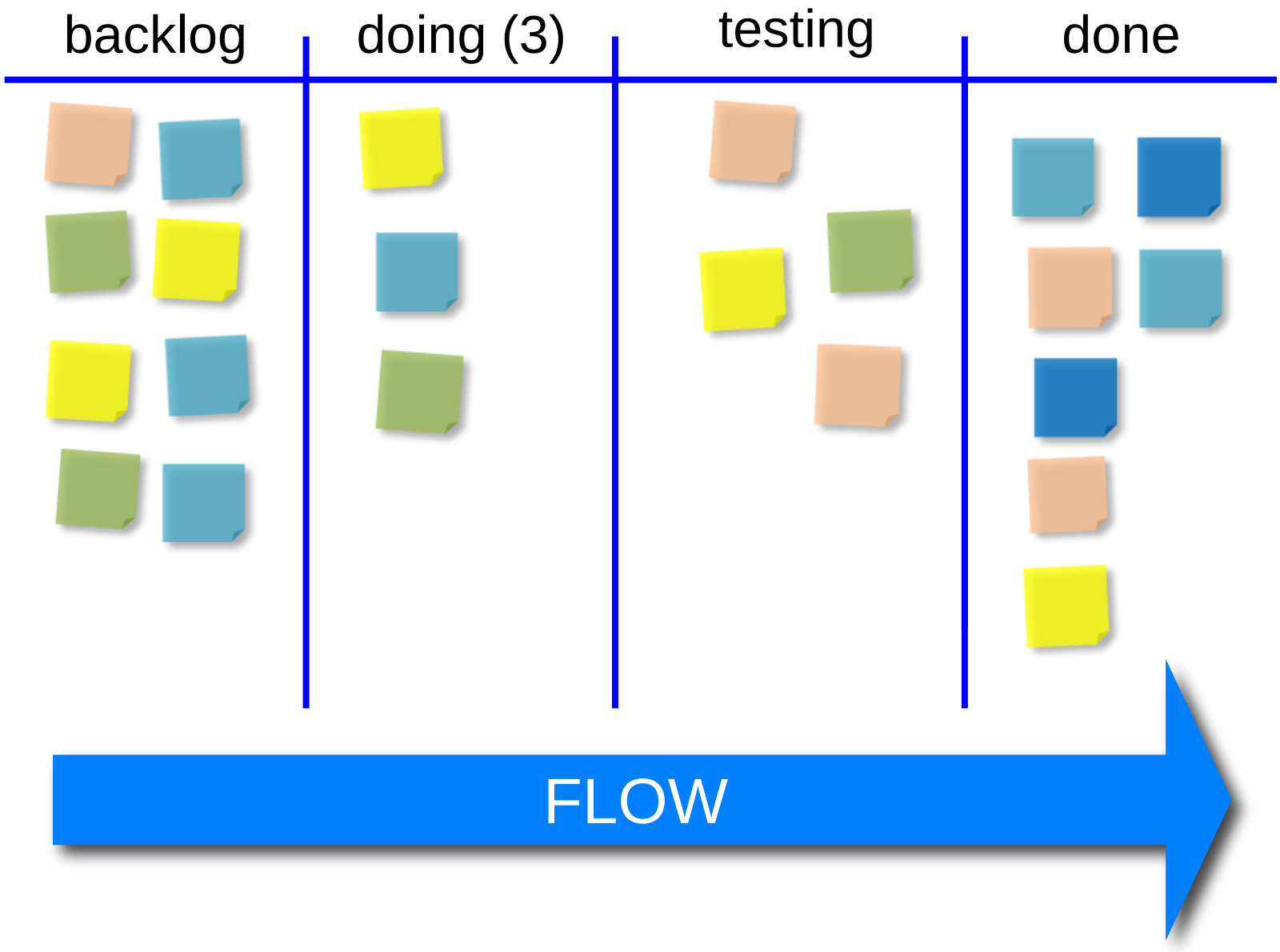

看板

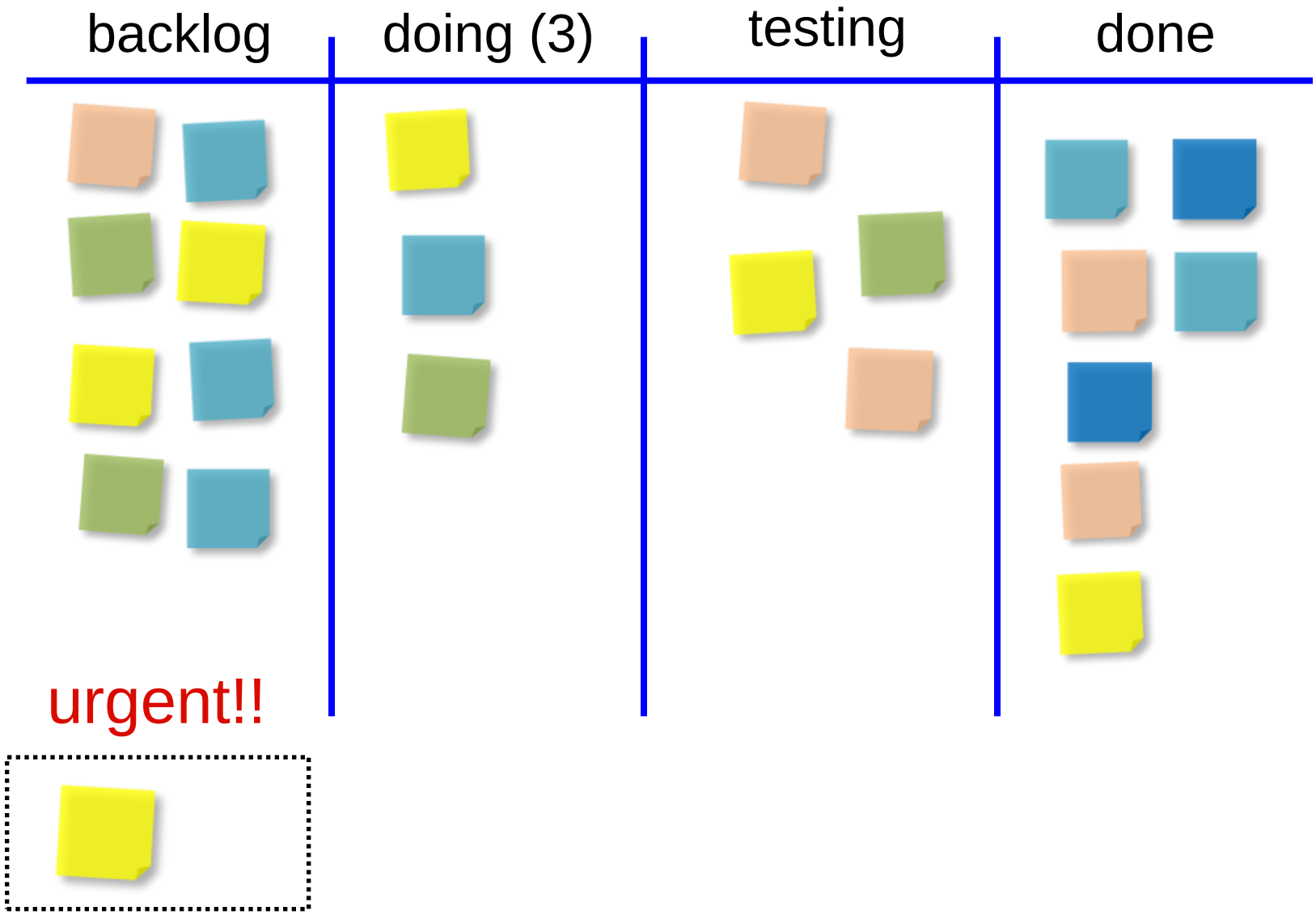

KANBAN

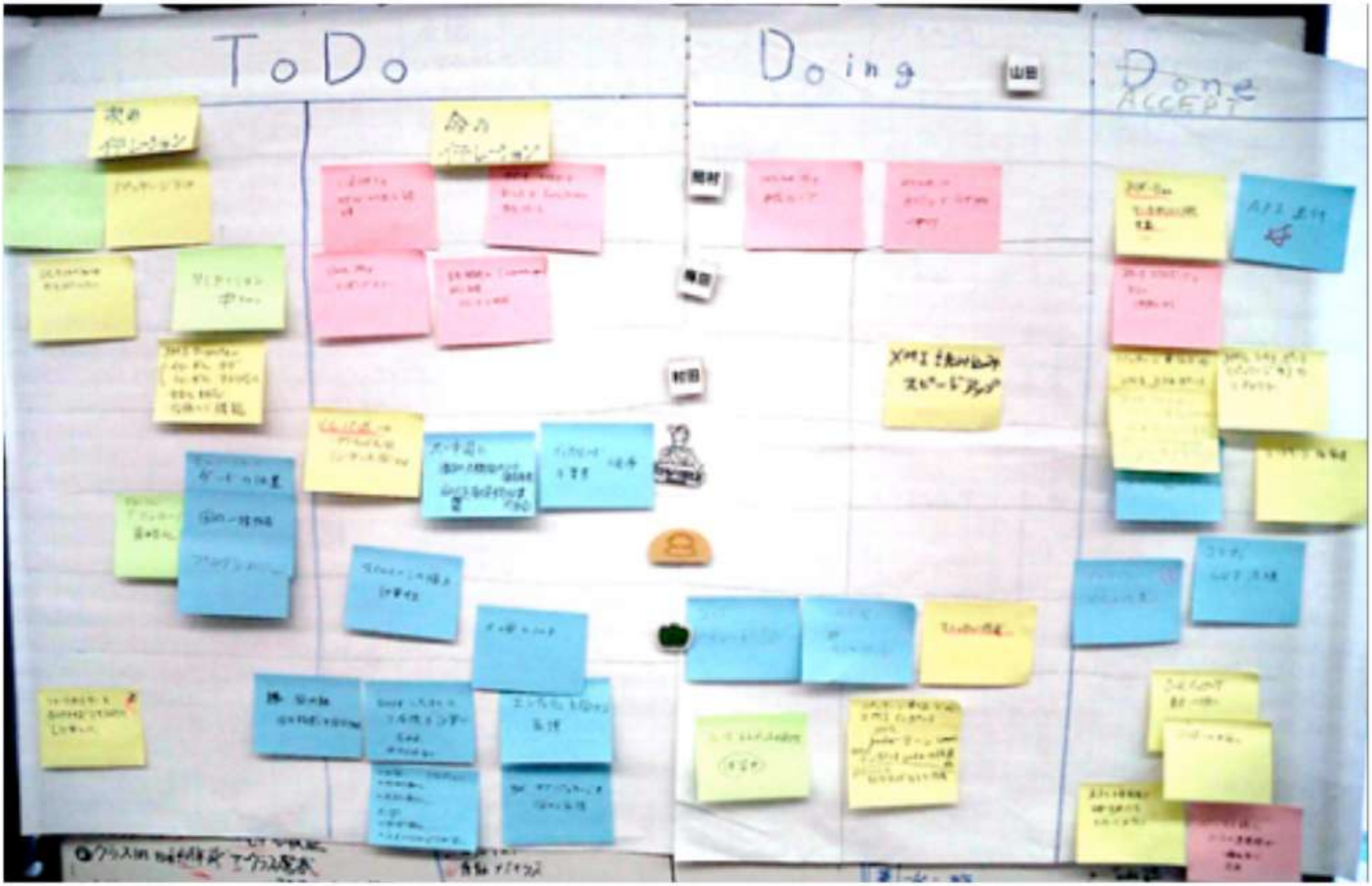
Kanban

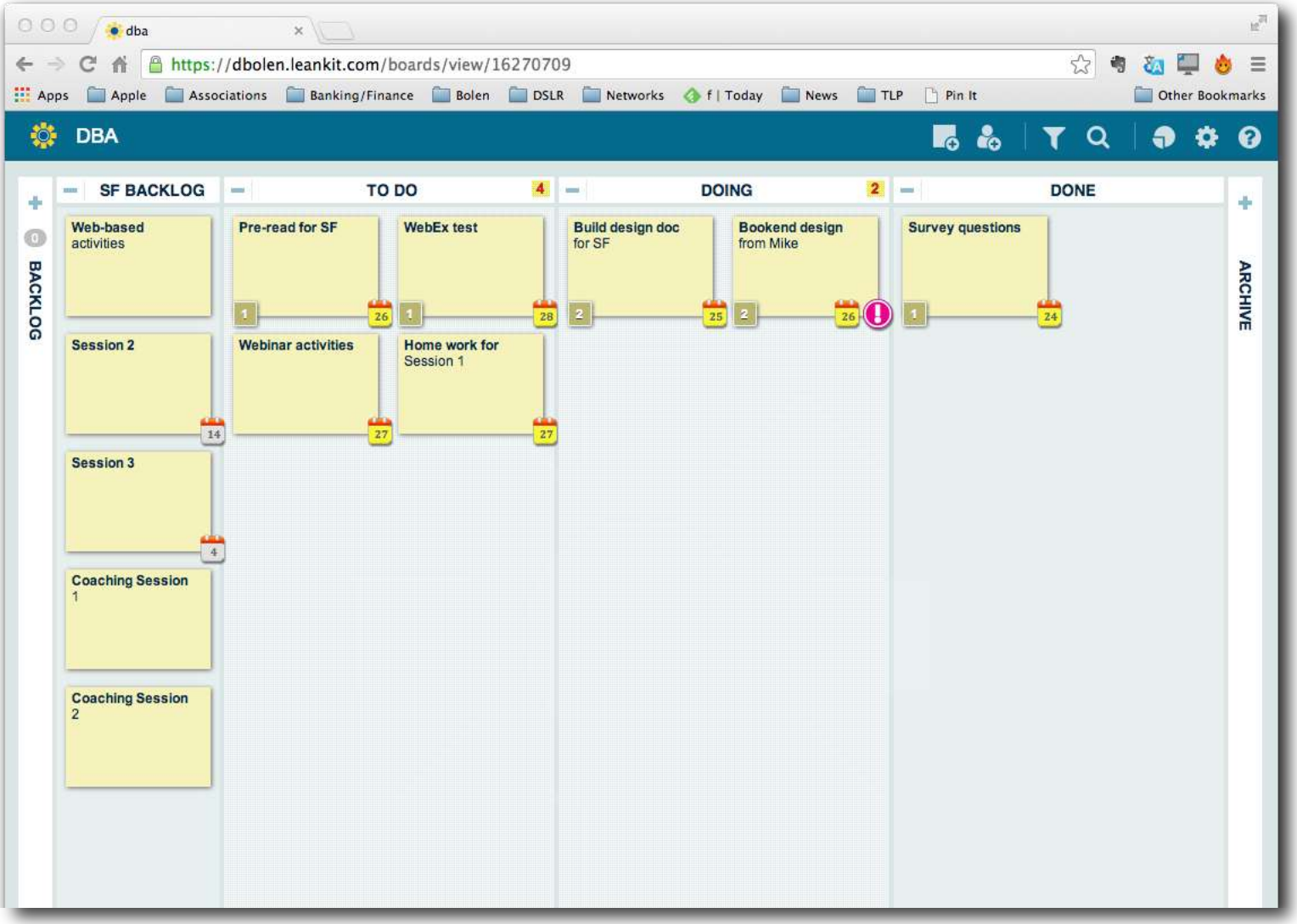
- Visualize the workflow
- Limit Work In Progress (WIP)
- Manage flow
- Process policies must be explicit, DONE is defined
- Improve collaboratively

Tool #5


backlog
doing (3)
testing
done
FLOW


backlog
doing (3)
testing
done
urgent!!


ToDo
Doing
Done
ACCEPT



http://leankit.com/

IN THE BEGINNING: BRIDGING

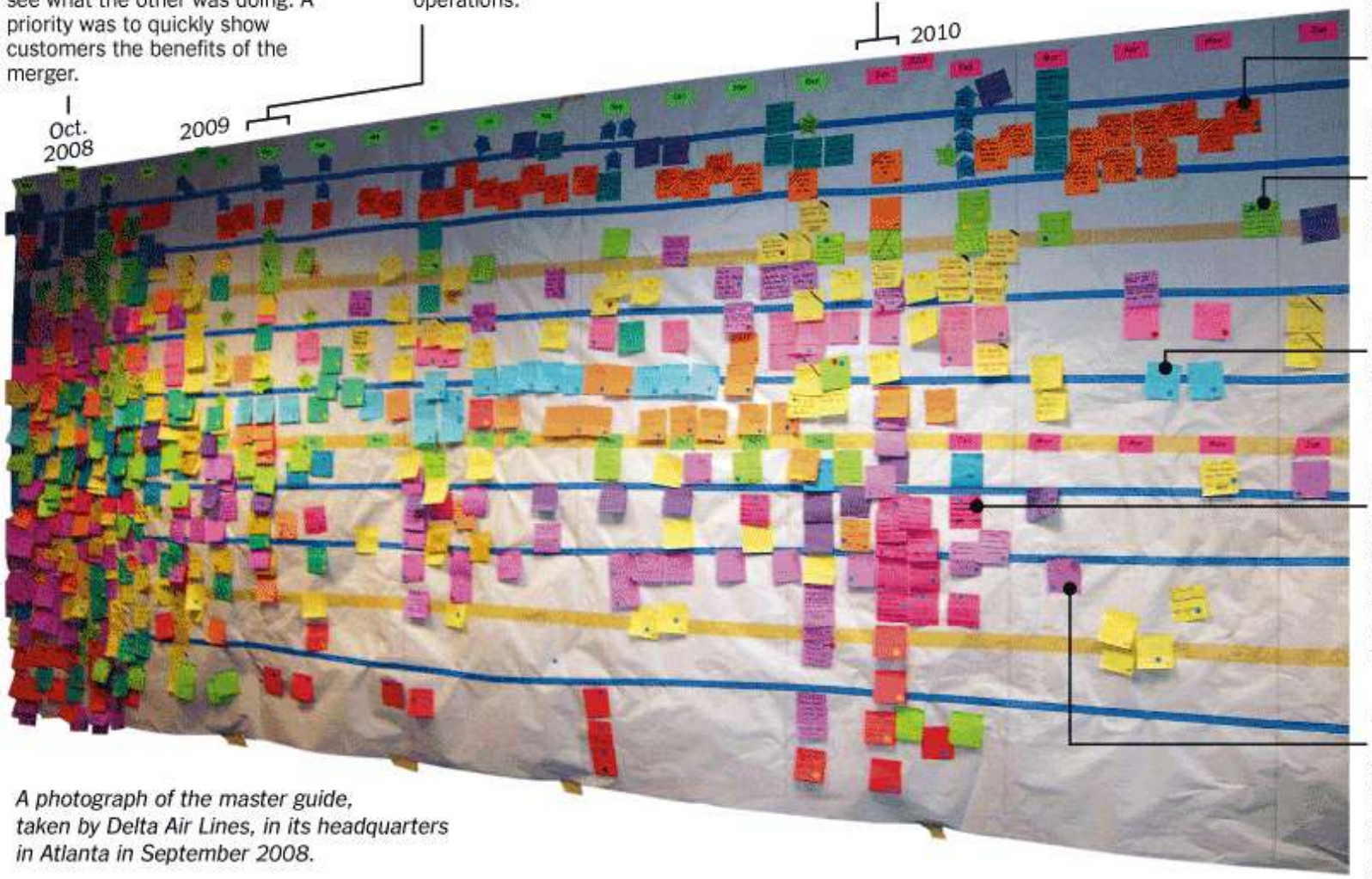
In the months around October 2008, when the merger was closed, there was a flurry of "bridging" projects: opening up access between the airlines' computer systems so each could see what the other was doing. A priority was to quickly show customers the benefits of the merger.

THE NEXT STEP

About five months after the merger, the two airlines began "cross-fleeting," when critical systems like reservations had to start talking to each other. But they remain separate operations.

ONE AIRLINE, ONE BRAND

Delta received final government approval to operate as a single airline in January 2010. At that point, all the computer systems could be switched to unified platforms. Many, like reservations and seat availability and pricing, had to be switched over at the same time.



AIRPORTS AND GATES

Orange notes indicate changes in customer service at airport counters and kiosks.

ALLIANCE PARTNERS

Bright green notes were for updates in coordinating with the airlines' partners, like Air France-KLM.

LOYALTY PROGRAMS

Light blue notes show steps in integrating customer loyalty programs.

AIRPORT OPERATIONS

Pink notes represent airlines' interaction with the airports — coordinating gates, flights and communications with the control tower.

AIRCRAFT CONTROL

Light purple notes were for changes in the systems that keep track of where flights are, rerouting and cancellations.

A photograph of the master guide, taken by Delta Air Lines, in its headquarters in Atlanta in September 2008.

Seth W. Feaster/The New York TImes | Send Feedback

Delta Air Lines

http://www.nytimes.com/interactive/2011/05/18/business/delta-northwest-merger-graphic.html?ref=business

Tool(s) #6

Kanban to Scrumban

Scrumban

- Kanban board
- WIP limits, not Sprints, daily Scrum standup
- Planning meetings as needed
- Review/Retrospectives
- Cycle time as primary metric

Keys to success

- Limit WIP
- Commit to frequent releases
- Pull the work
- Be transparent (Task/Kanban board)
- Collaborate
- Do what works
- Be AGILE

Thank You

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