



SOFTWARE
PROCESS
CONSULTANT INC.

26 May 2010 CQAA Lunch & Learn
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AGILE THROUGH SCRUM

AGENDA & LEARNING POINTS

1. Open
 2. Agile Overview
 3. Scrum Basics
 4. How-to trial Scrum
 5. Close
- Learning Points*



AGILE MANIFESTO -- 4 AGILE VALUES

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.

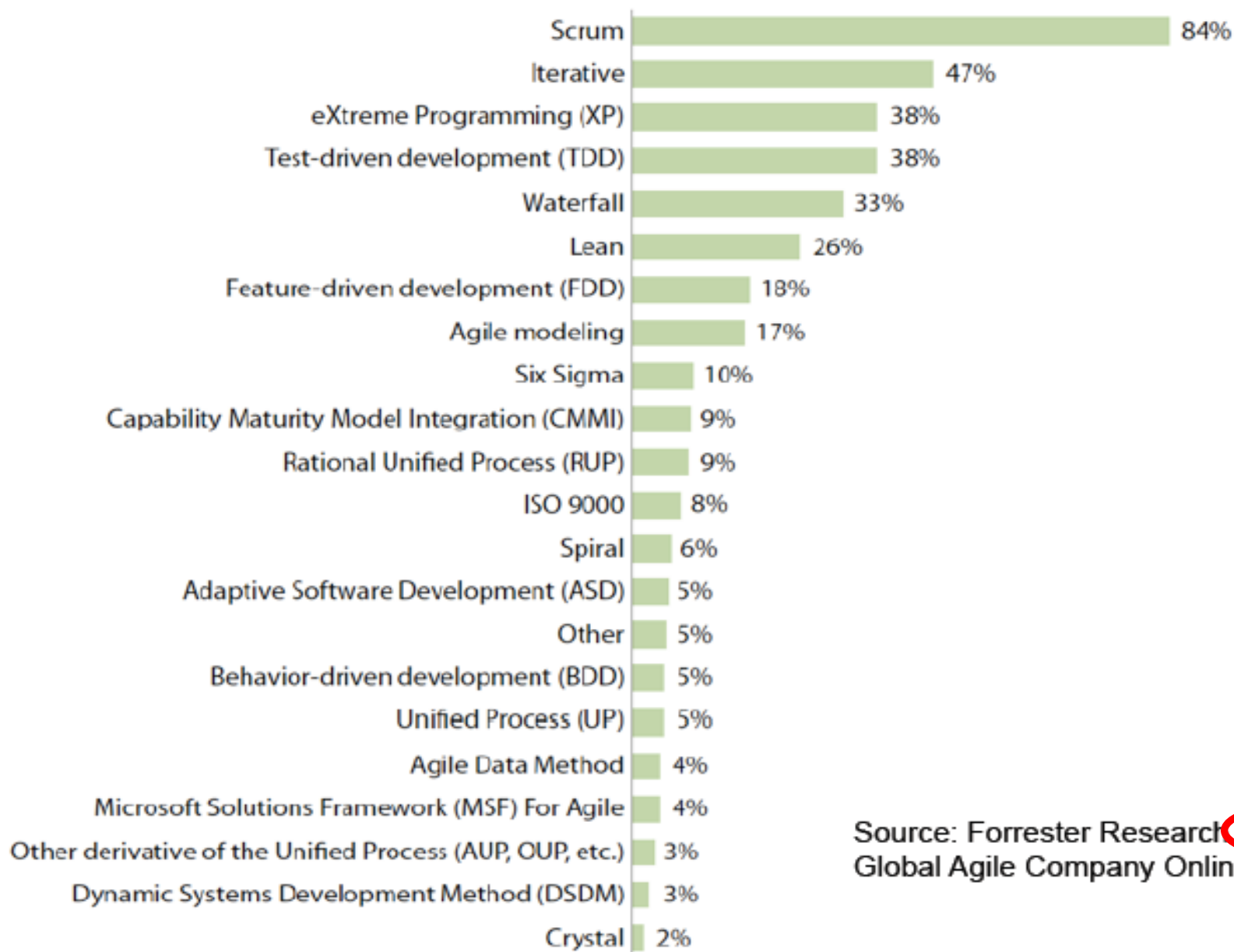
(12) PRINCIPLES BEHIND THE AGILE MANIFESTO

1. Our highest priority is to **satisfy the customer** through **early and continuous** delivery of valuable software.
2. **Welcome changing requirements**, even late in development. Agile processes harness change for the customer's competitive advantage.
3. **Deliver** working software **frequently**, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. **Business** people and **developers** must **work together daily** throughout the project.
5. Build projects around **motivated individuals**. Give them the environment and support they need, and **trust** them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is **face-to-face conversation**.
7. **Working software** is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a **constant pace indefinitely**.
9. Continuous attention to **technical excellence** and **good design** enhances agility.
10. **Simplicity**--the art of maximizing the amount of work not done--is essential.
11. The best architectures, requirements, and designs emerge from **self-organizing** teams.
12. At regular intervals, the **team reflects** on how to become more effective, then **tunes and adjusts** its behavior accordingly.

ARE YOU A AGILE MANIFASTO SIGNATORY?

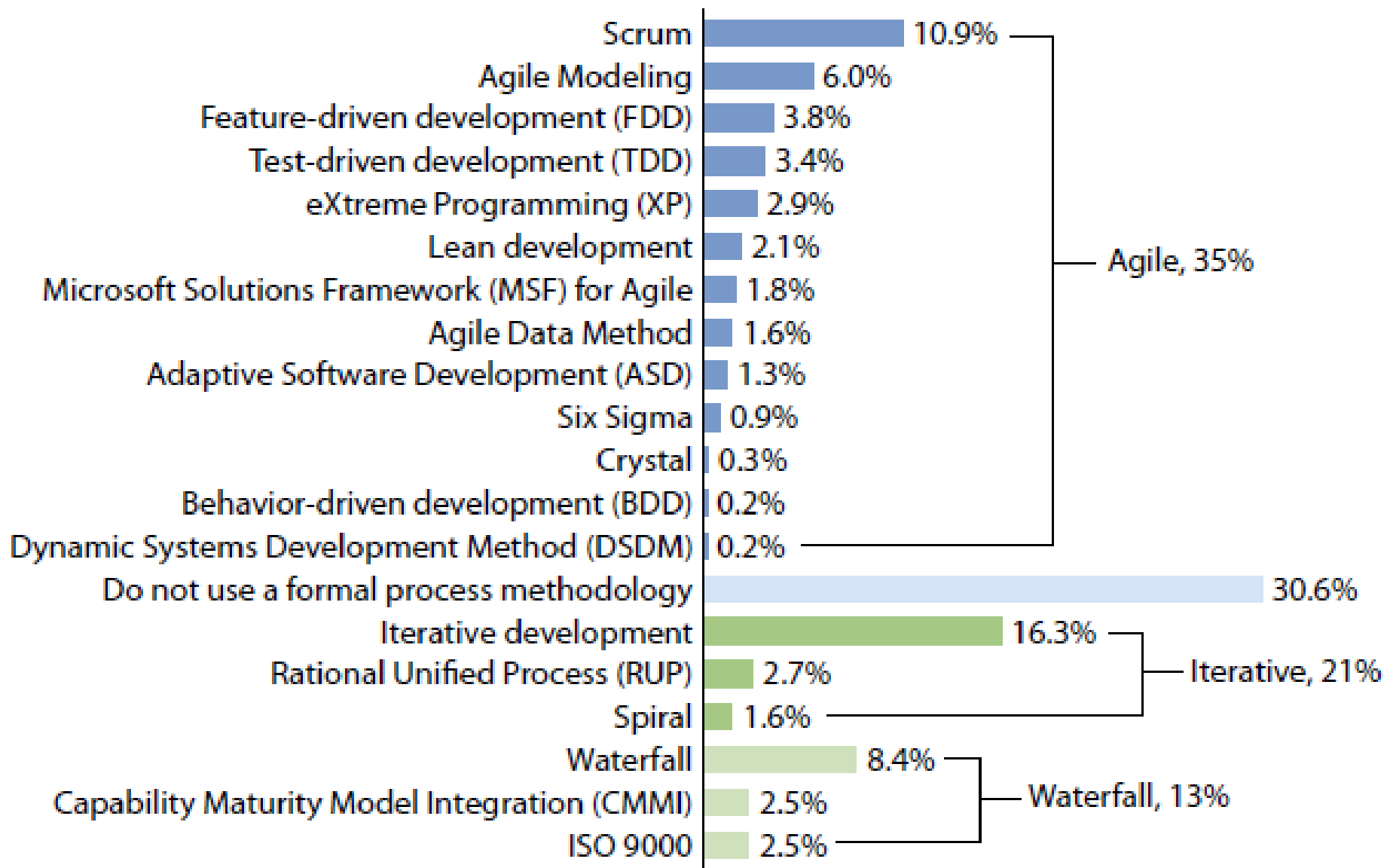
- ✘ 8826 Signatories as of: 21 April 2010
- ✘ From all over the world
- ✘ Anyone can add their info
- ✘ Please join at: <http://agilemanifesto.org/>
- ✘ ... its free!

Techniques or Methodologies Used



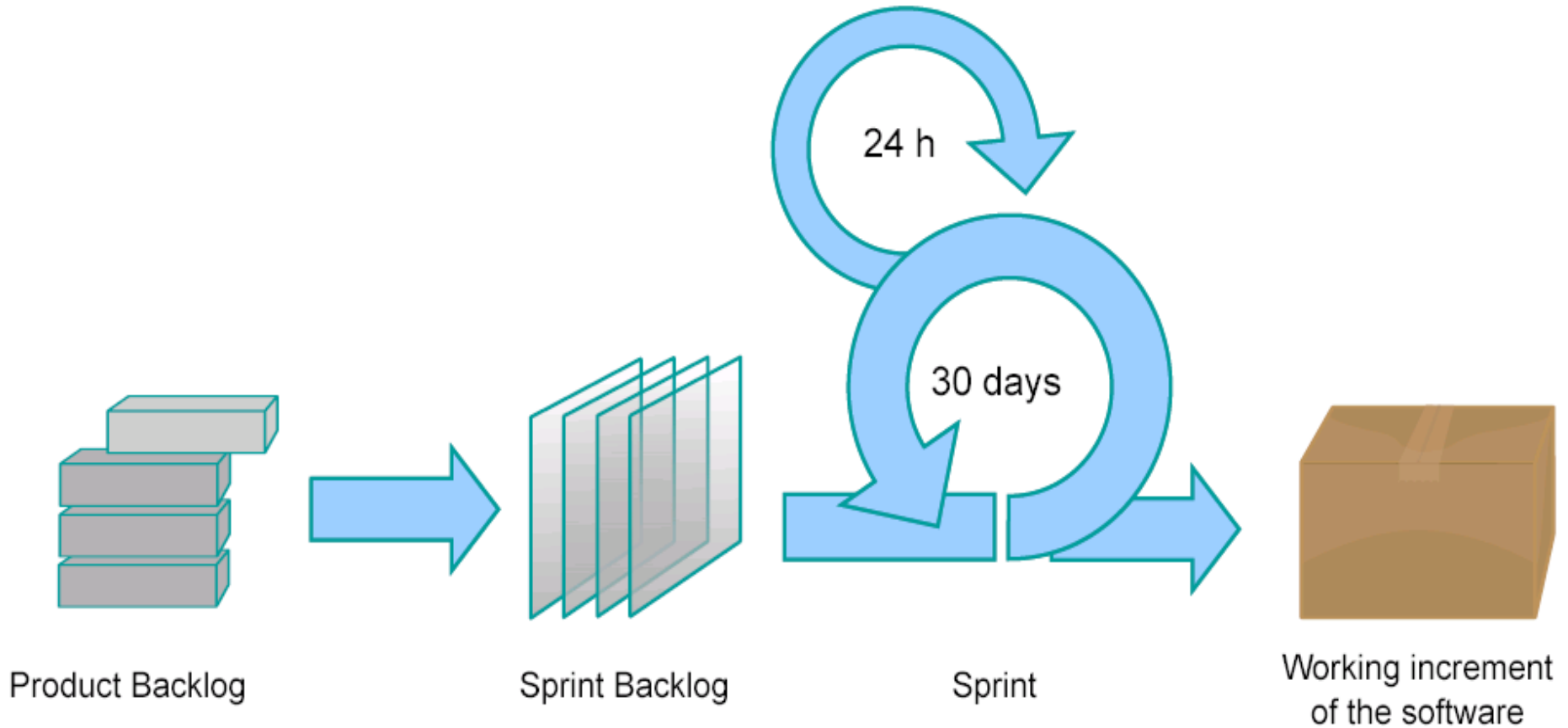
Source: Forrester Research **December 2008**
Global Agile Company Online Survey

“Please select the methodology that most closely reflects the development process you are currently using.”
 (select only one)



Base: 1,298 IT professionals

SCRUM BASICS – SCRUM DIAGRAM



SCRUM BASICS – 3 X 3

× 3 Roles

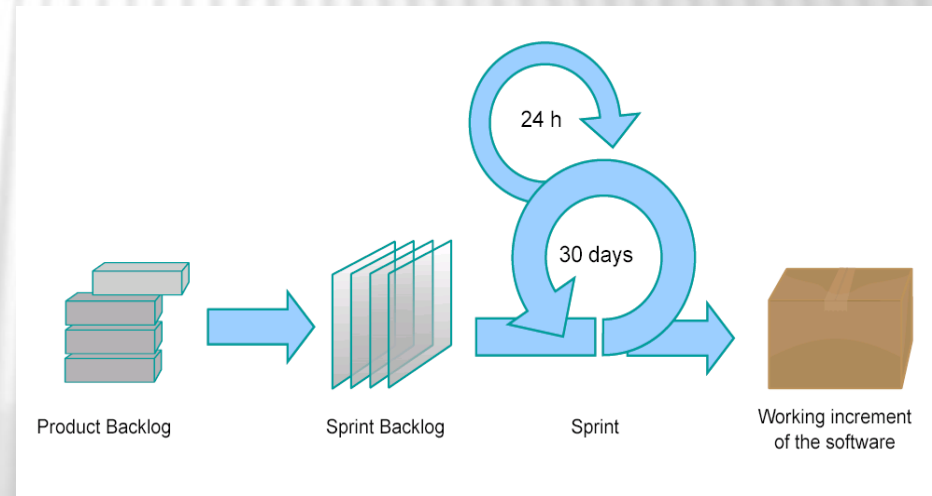
- + Product Owner
- + Scrum Master
- + Scrum Team

× 3 Activities

- + Sprint Planning
- + Daily Scrums
- + Sprint Review

× 3 Artifacts

- + Product Backlog
- + Sprint Backlog
- + Burndown Chart(s)



EXAMPLE – MOVING

Project: Family moving
from one home to another

- **Product Owner:** Mother
- **Scrum Master:** Daughter
- **Scrum Team:** entire Family
- **Product Backlog:** all Items

1. Prep & Organize

- Subject matter research*
- Option selection*
- Move Budget*

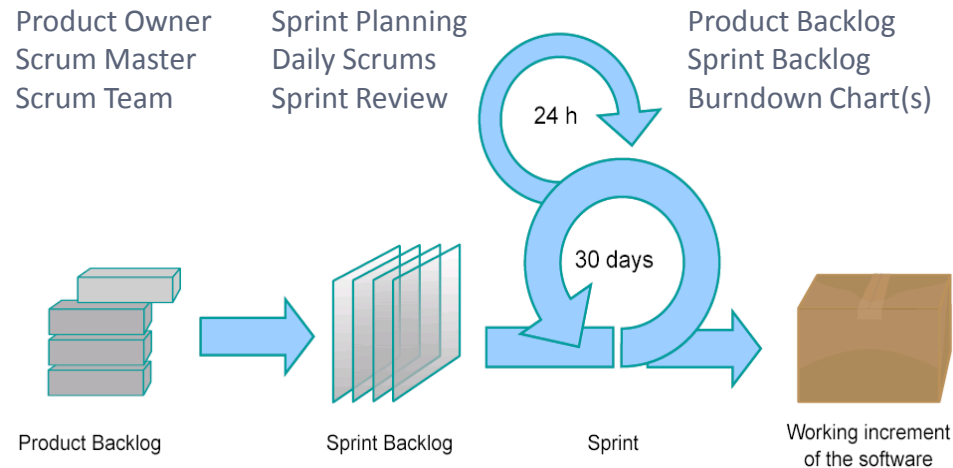
2. Buy new Home

3. Sell old Home

4. Move from old to new

Items: Activities & Deliverables

Sprints: 10 at 2 weeks each



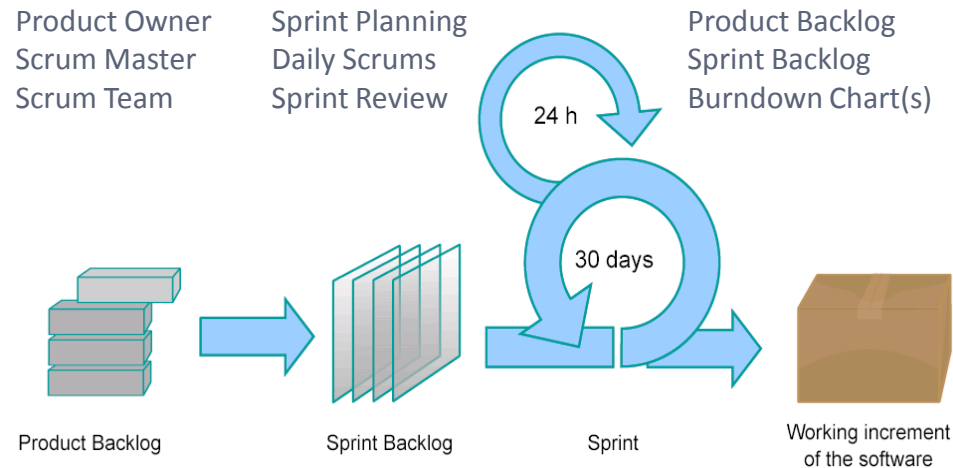
- **Sprint Backlog:** subset of Items
For example “Options” Tasks :
 - 1) Identify Options for Buying
 - 2) Identify Options for Selling
 - 3) Identify Options for Moving
 - 4) Estimate, compare, & choose best options

EXAMPLE – MOVING

- **Sprint Planning:**

Pre-Planning: Sprint-0 vs. Sprint-1
 Id Product Backlog, Items, Sprints
 Roles ... all the stuff here!

Regularly: estimate, prioritize,
 allocate & adjust.



- **Daily Scrums:** at breakfast

Ask 3 Scrum Questions of everyone:

1. **What did you do yesterday?**
2. **What will you do today?**
3. **What issues do you face?**

Each person takes Tasks for next day.
 Scrum Master updates Burndown Chart.

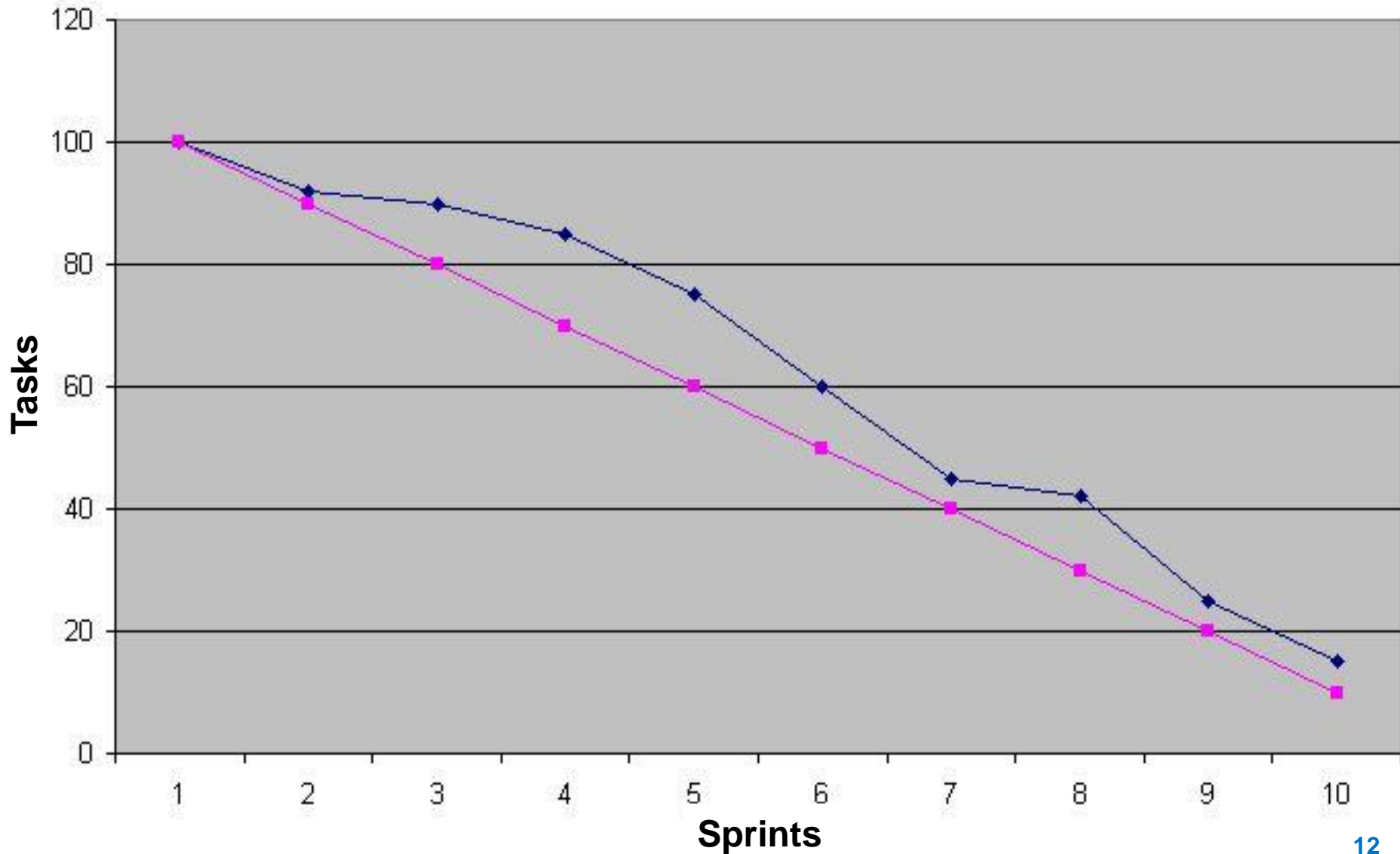
- **Burndown Chart:** track Tasks
 Estimate 100 total.

10 per Sprint.

2 lines: estimated & actual

- **Sprint Review:** See how's it going?
 Review done Items & their Tasks.
 Decide changes on next Sprint.

EXAMPLE – BURNDOWN CHART



SCRUM – GLOSSARY (MORE TERMS)

Impediment: Issue, Problem, Block

Work Increment: Sprint Goal

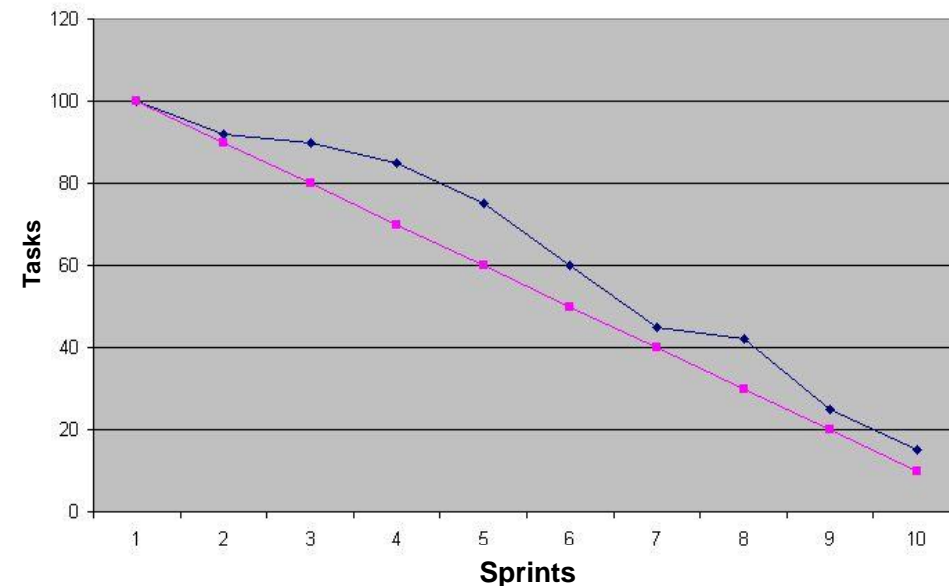
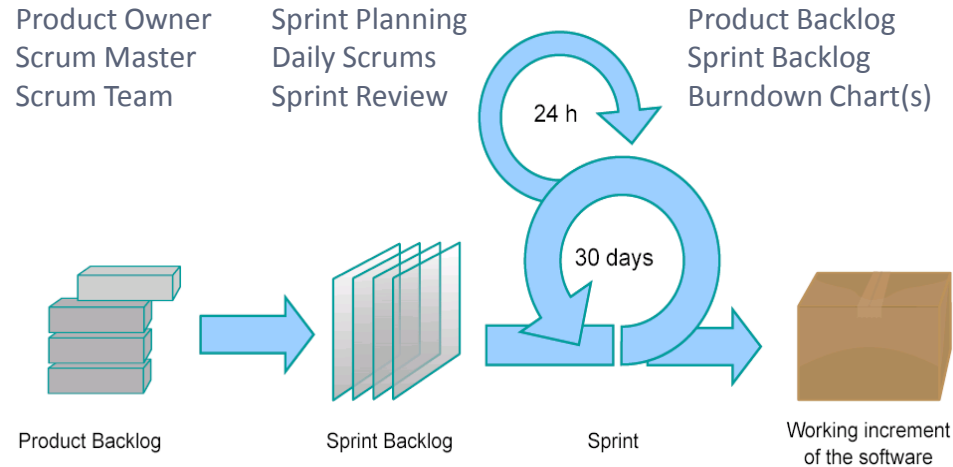
Working part of end-product usable by Customer; software, manuals, configuration, process, etc.

Scrum Board: Location to manage Project info (physical or electronic)

Velocity: features (tasks or points) per sprint

Abnormal Termination: cancel Sprint if unable to deliver & re-plan

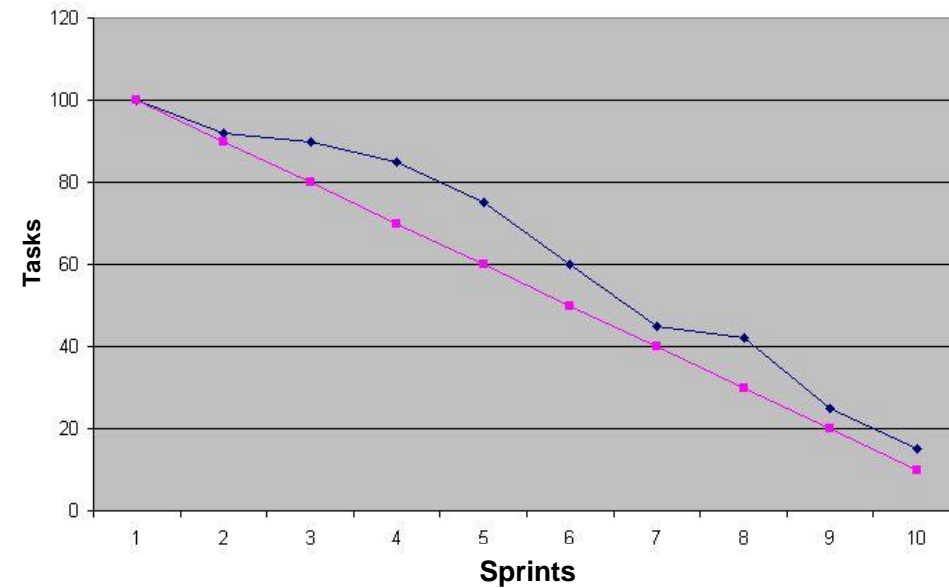
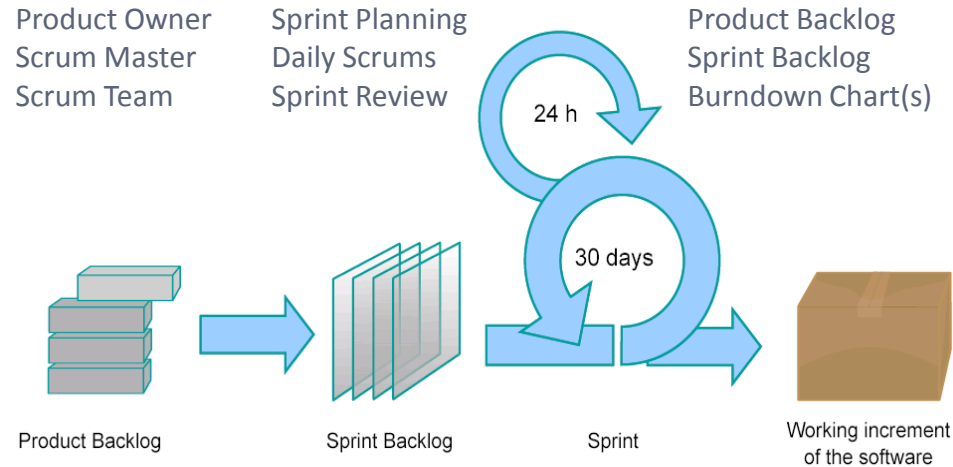
Guidelines: improve, adapt, & change practices as needed.



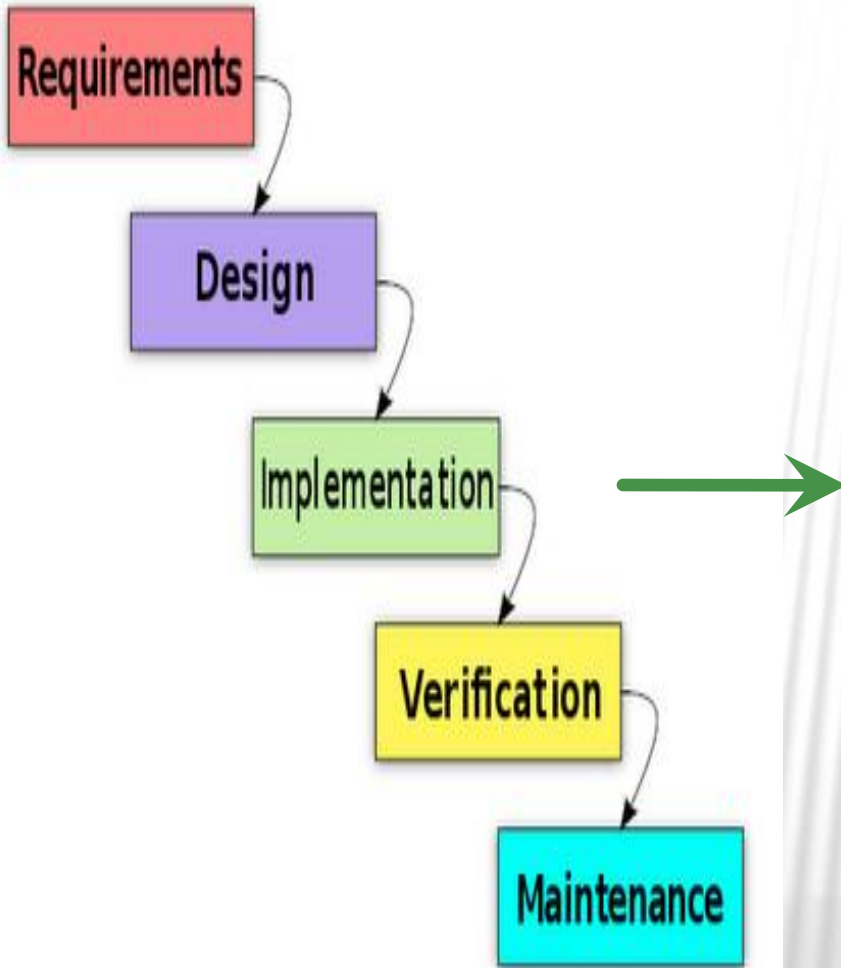
SCRUM – GLOSSARY (MORE TERMS)

- ✘ Product Burndown Chart
- ✘ Sprint Burndown Chart
- ✘ Release Burndown Chart
- ✘ Estimation – Planning Poker
- ✘ Release Plan
- ✘ “Done” criteria
- ✘ Story Cards
- ✘ Spikes
- ✘ Epics
- ✘ Just enough

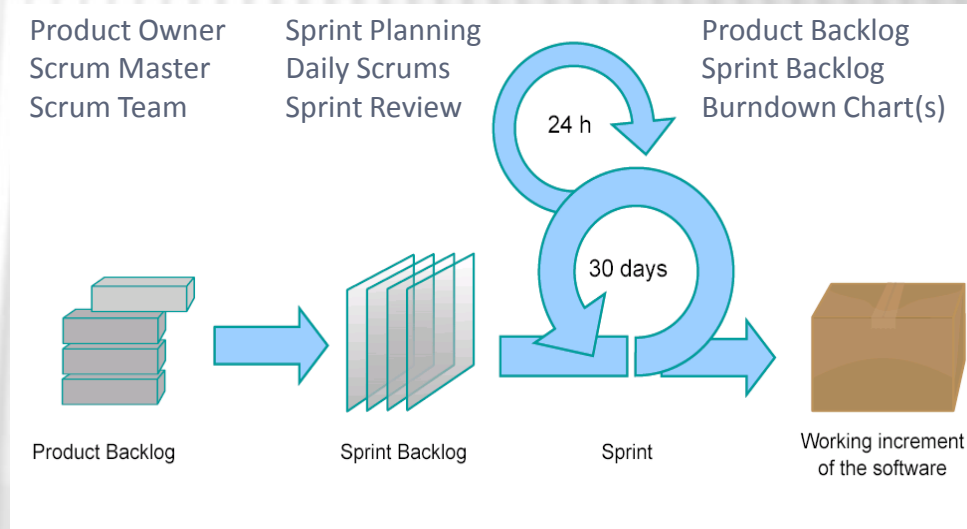
... what’s your favorite?



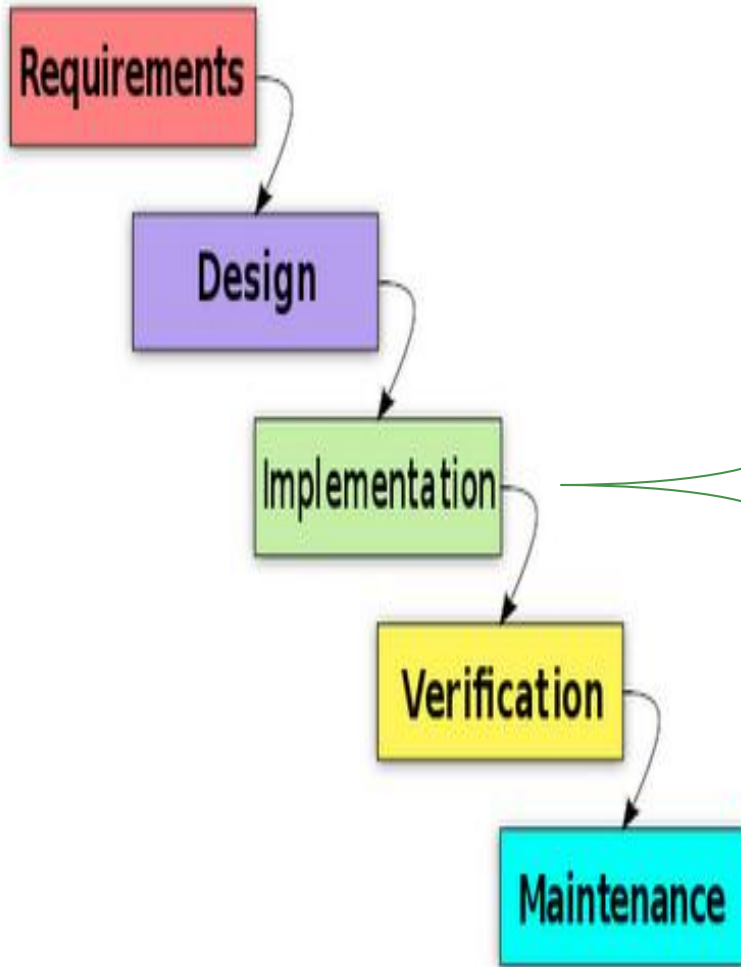
TRY SCRUM – SELECT PHASE



- ✘ Trial in controlled environment
- ✘ Select stable phase
- ✘ Select well-defined phase
- ✘ Map Phase to Scrum – Minimal



TRY SCRUM – MAP THE 3 ROLES



✘ Product Owner → maybe

- + Real Client (best)
- + Client Rep / BA
- + Product Manager
- + Project Manager

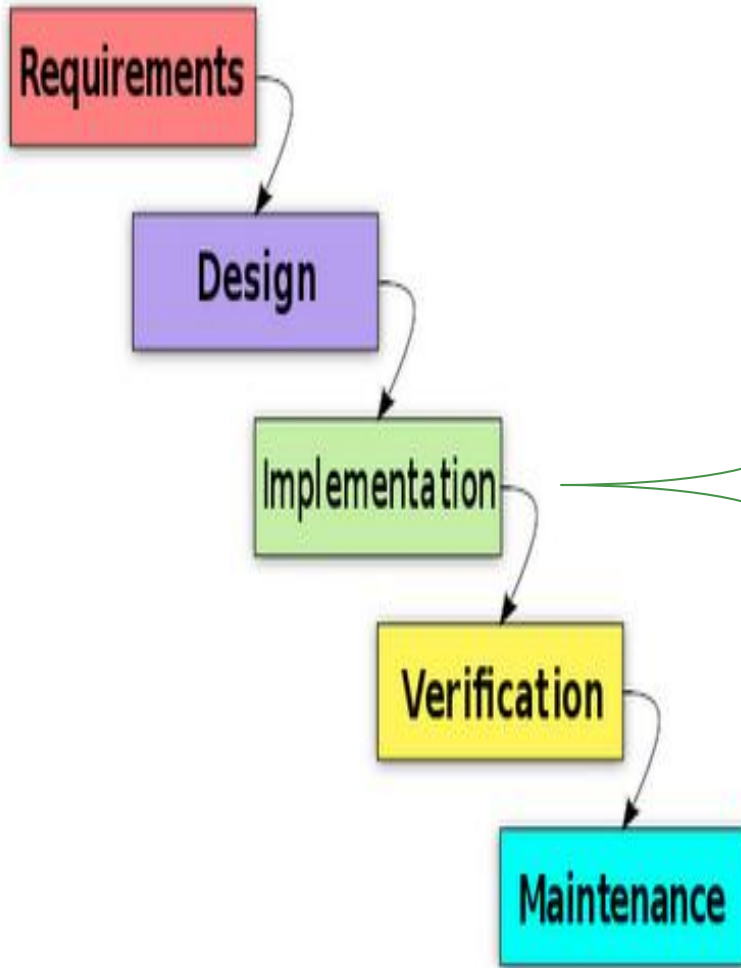
✘ Scrum Team

- + Workers, directly working in Phase
- + Everyone else → silent observers

✘ Scrum Master

- + You (for starters)
- + Let Scrum Team choose (later)

TRY SCRUM – MAP THE 3 ARTIFACTS



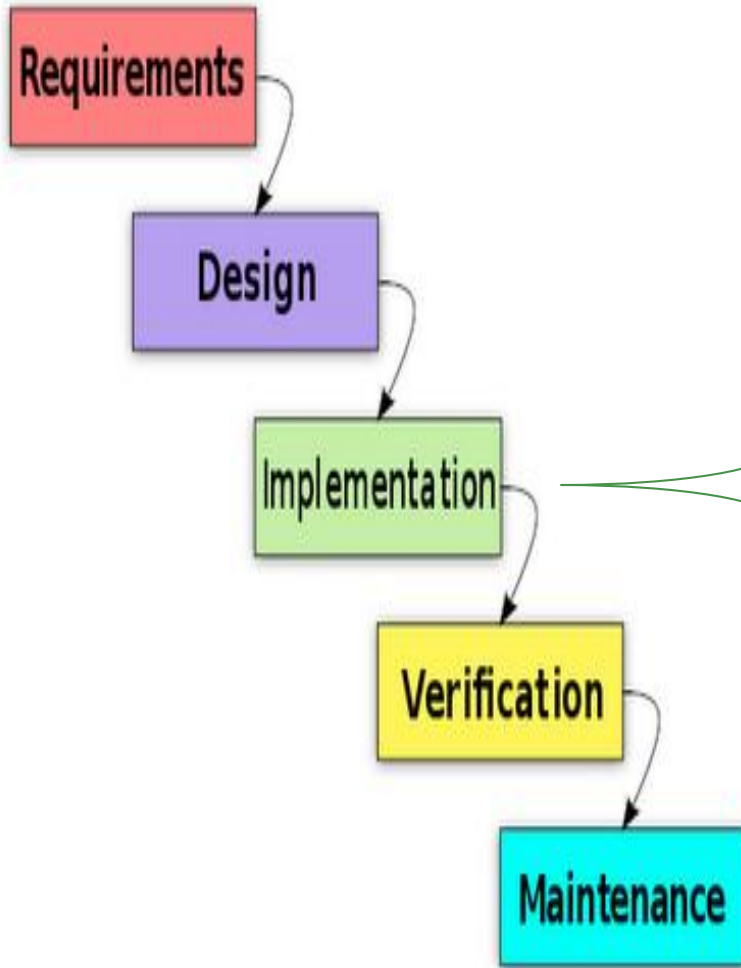
✘ Product Backlog →

*List Phase Deliverables
(Only Mandatory)*

- + Implementation Phase Plan(s)
- + Implementation Report(s)
- + Detailed Design(s)
- + Interface Definition(s)
- + Code Module(s)
- + Unit Test(s)

✘ Prioritize & Guesstimate Deliverables

TRY SCRUM – MAP THE 3 ARTIFACTS



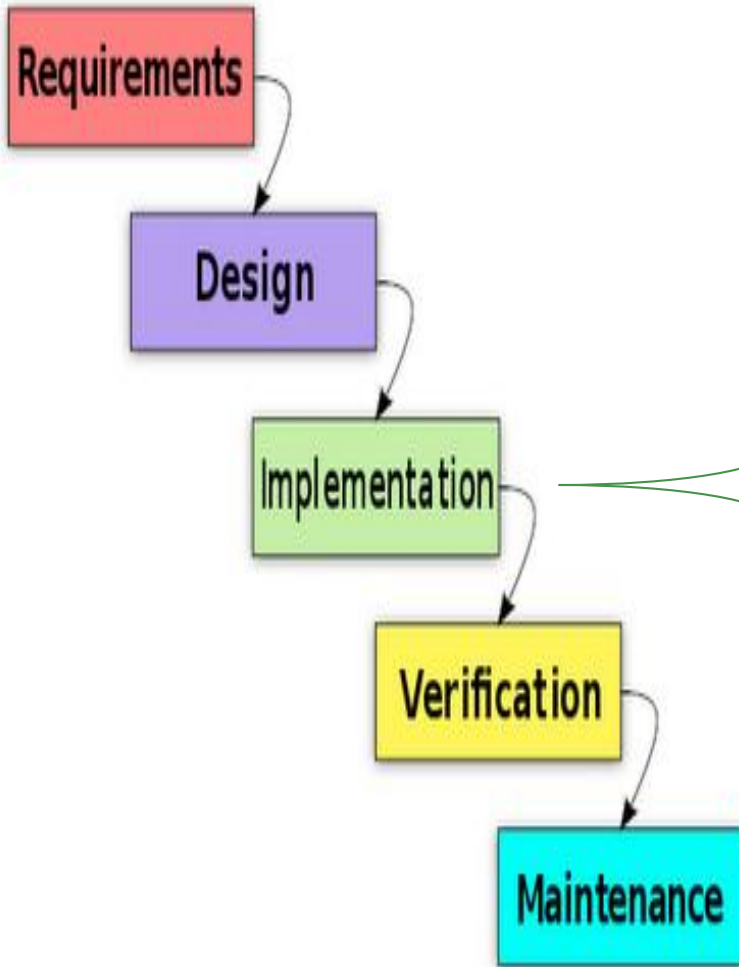
✘ Sprint Backlog →

*List Common Tasks
(Only Mandatory)*

- + Draft Deliverable
- + Peer-Review Deliverable
- + Rework/Finalize Deliverable
- + Approve/Publish Deliverable

✘ Prioritize & Guesstimate Tasks

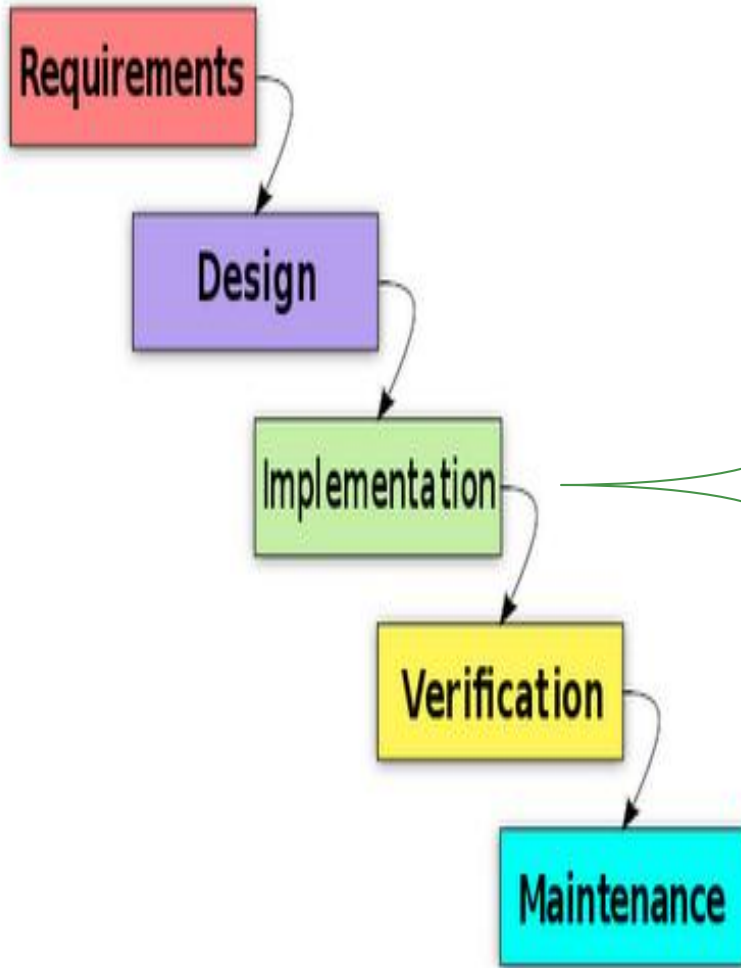
TRY SCRUM – MAP THE 3 ARTIFACTS



✘ Burndown Chart

- + Decide which Burndown to try
 - ✘ Project/Phase Burndown
 - ✘ Sprint Burndown
- + Consider if Burndown can replace any traditional Report(s)

TRY SCRUM – MAP THE 3 ACTIVITIES

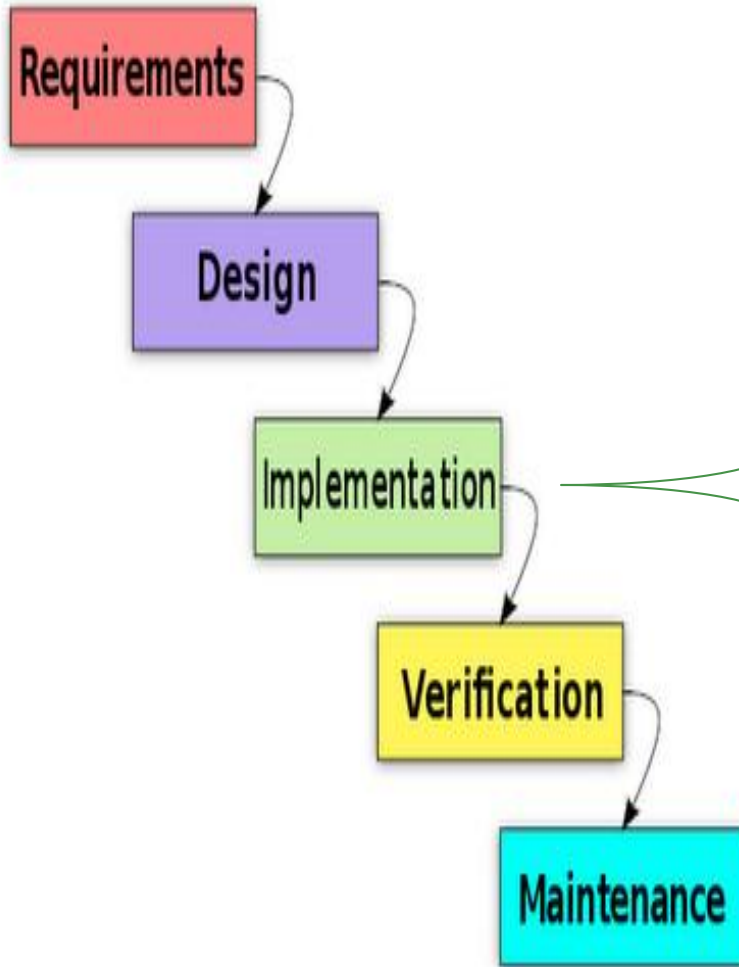


✘ Sprint Planning (1/2)

Pre-Planning - one time:

- + Consider Sprint-0 vs. Sprint-1
- + Map Scrum Roles
- + Id Product Backlog (Deliverables)
- + Prioritize Deliverables (rank order)
- + Guesstimate Deliverables
- + Id Tasks
- + Id Sprints - e.g. 6 at 2 weeks each
- + Id Time & Place for Daily Scrums

TRY SCRUM – MAP THE 3 ACTIVITIES

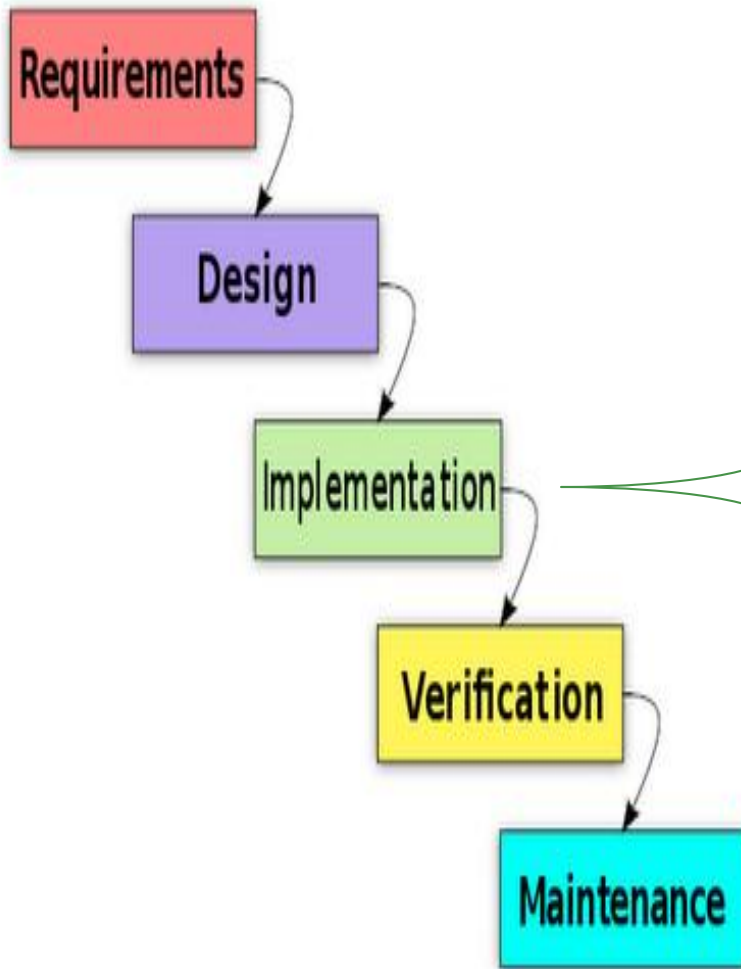


✘ Sprint Planning (2/2)

Regular Planning – each Sprint:

- + Select Sprint Backlog (Guesstimate)
- + Prioritize All Tasks (Rank order)
- + Guesstimate Specific Tasks (adjust)

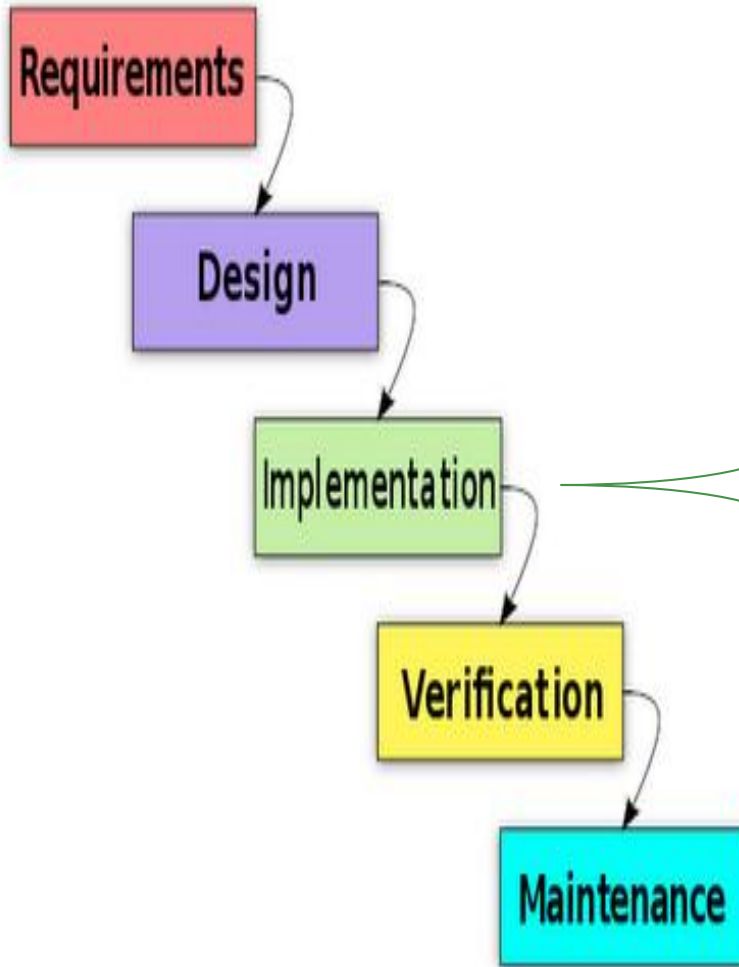
TRY SCRUM – MAP THE 3 ACTIVITIES



✘ Daily Scrums (<15min!)

- + Every Scrum Team member answers 3 Scrum Questions:
 1. What did you do yesterday?
 2. What will you do today?
 3. What issues do you face?
- + Members pick Tasks for next day
- + Scrum Master updates Burndown

TRY SCRUM – MAP THE 3 ACTIVITIES

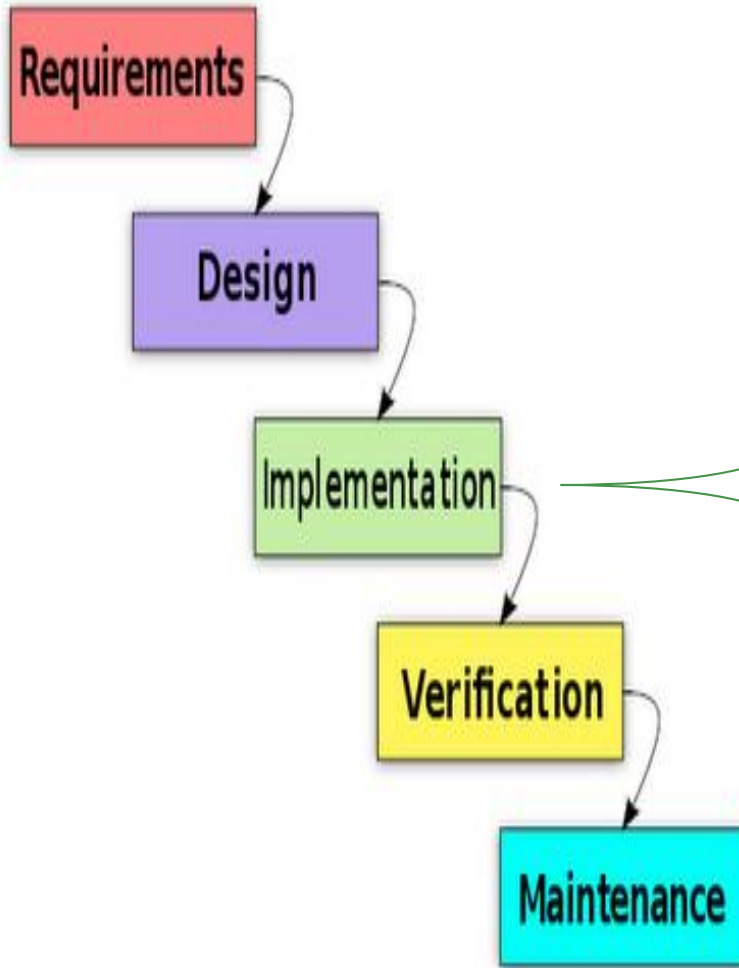


✘ Sprint Review (1/2)

The Demo – Team with Client(s)

- + Present Deliverable(s)
- + Review progress
- + Preview next-steps
- + Get feedback – pros & cons

TRY SCRUM – MAP THE 3 ACTIVITIES

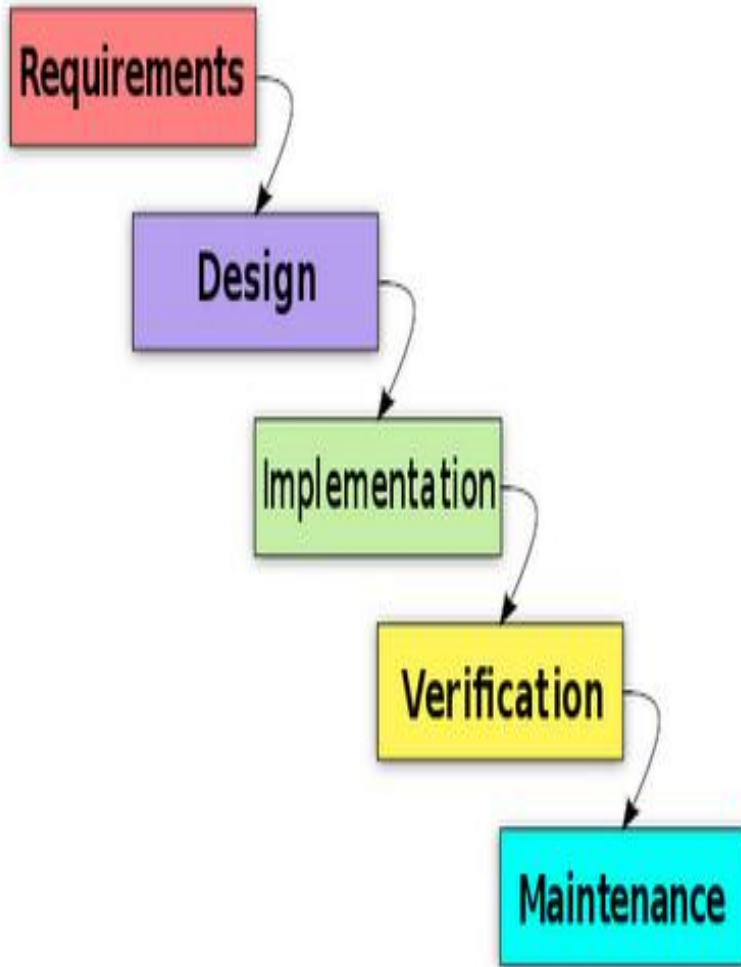


✘ Sprint Review (2/2)

The Retrospective – just the Team

- + Review progress
- + Review Client feedback
- + Identify improvements:
 - ✘ What to keep doing
 - ✘ What to stop doing
 - ✘ What to start doing

TRY SCRUM – EXPANDING & ALTERNATES



- ✘ Add a phase
 - + Design or Verification
- ✘ Try another phase
 - + Requirements or Maintenance
- ✘ Try an IT department
 - + QA CM PMO ...
- ✘ Try a Business department
 - + HR BA Sales Marketing

AGILE & SCRUM – MORE INFO

- ✘ Scrum Alliance

<http://www.scrumalliance.org/>

- ✘ Agile Alliance

<http://www.agilealliance.org/>

- ✘ APLN Chicago (Agile Project Leadership Network)

<http://www.aplnchicago.org/>

- ✘ Paul I. Pazderski (Software Process Consultant Inc.)

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Have fun with SCRUM!