SCRUM

A Case Study on Agile Processes in Curriculum Development at Red Hat

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Agenda

- Case Study
- What We Were Doing
- What We Wanted
- What We Did
- How It Worked
- Questions/Discussion

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Red Hat Training at a glance

- 50 courses between 3-4 days on average
- Delivery on 5 continents in ILT, VILT, self-paced, onsite
- Hands-on lab environment
- Translated into 9 languages
- Performance-based certifications
- Overall NPS 52
- Subscription generated 15% of overall training revenue in its first year

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Case Study

Improving the way in which Red Hat Training plans, designs, and develops commercial curricula
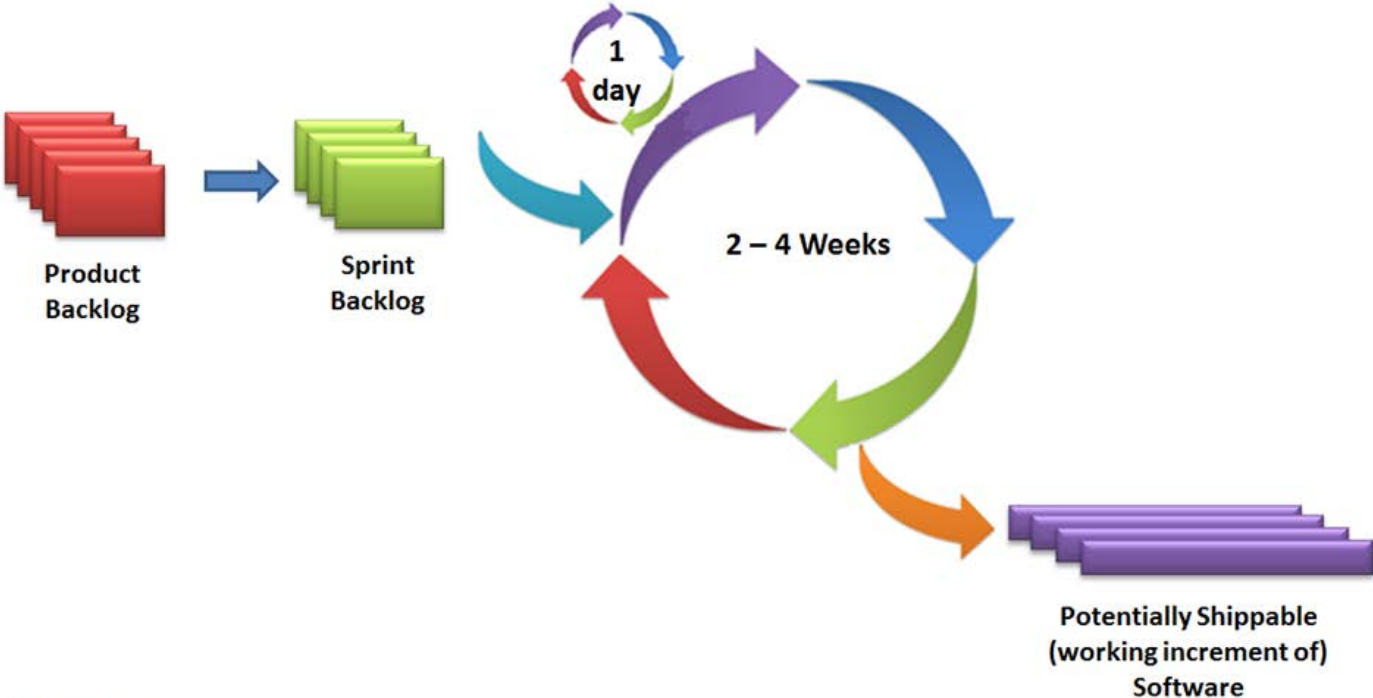
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The end result

- 100% visibility of status on a daily basis
- Continuous process improvement
- Accurate release planning
- Effective risk mitigation daily
- Improved developer engagement
- Inter-team communication improved

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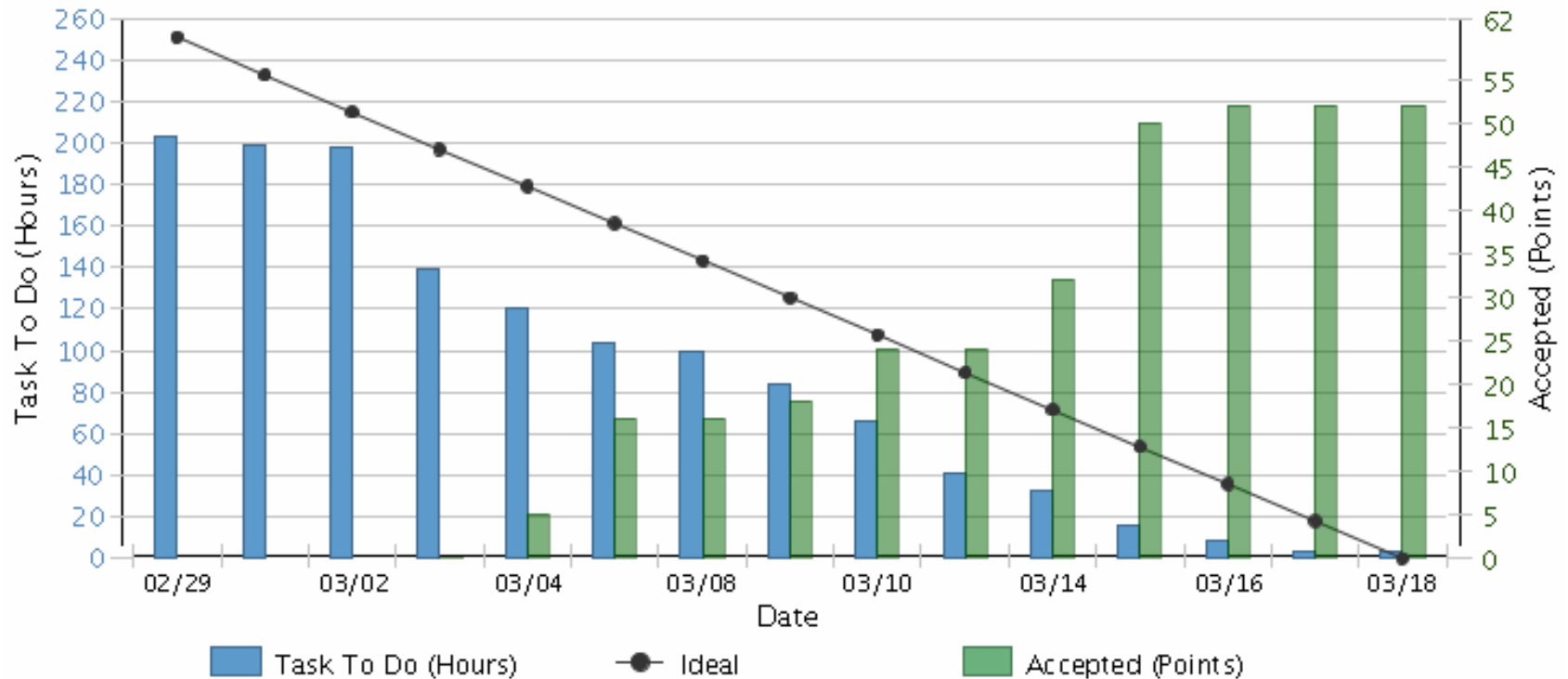# Agile (SCRUM) primer

- User stories and backlog
- Epics and features
- Sprints, sprint planning, and sprint review
- SCRUM meeting and burn down chart

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Agile methodology

Product Backlog

Sprint Backlog

1 day

2 – 4 Weeks

Potentially Shippable
(working increment of)
Software

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Burn Down chart

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What We Were Doing

- Waterfall
- Gantt-based Management
- Guessing at delivery dates

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Waterfall specifics

- 40:1 ratio was used for estimations
- Frequent slippages on newer technologies
- Estimation at a gross level
- Risks were identified late in the project
- Status meetings were weekly

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What We Wanted

- Effective project management
- Business agility
- Culture shift
- Improved quality
- Risk mitigation

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Project management

- Implement Rally for project management
- Improve tracking and sense of individual accountability
- Track work flow between sub-groups

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Business agility

- Compact development cycles (1-2 weeks)
- Change projects easily
- Clearer visibility:
  - Course development backlog
  - Priority
  - Progress
  - Release date prediction

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Culture shift

- Increase collaboration within the development team and across sub-groups
- Daily check-in (SCRUM meeting)
- Daily meetings facilitate a sense of connectedness for a team that is widely distributed geographically

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Improved Quality / Risk Mitigation

- Bi-weekly work progress review
- Constant process improvement
- Fast detection of blockers (daily)
- Quality assurance is "as we go"

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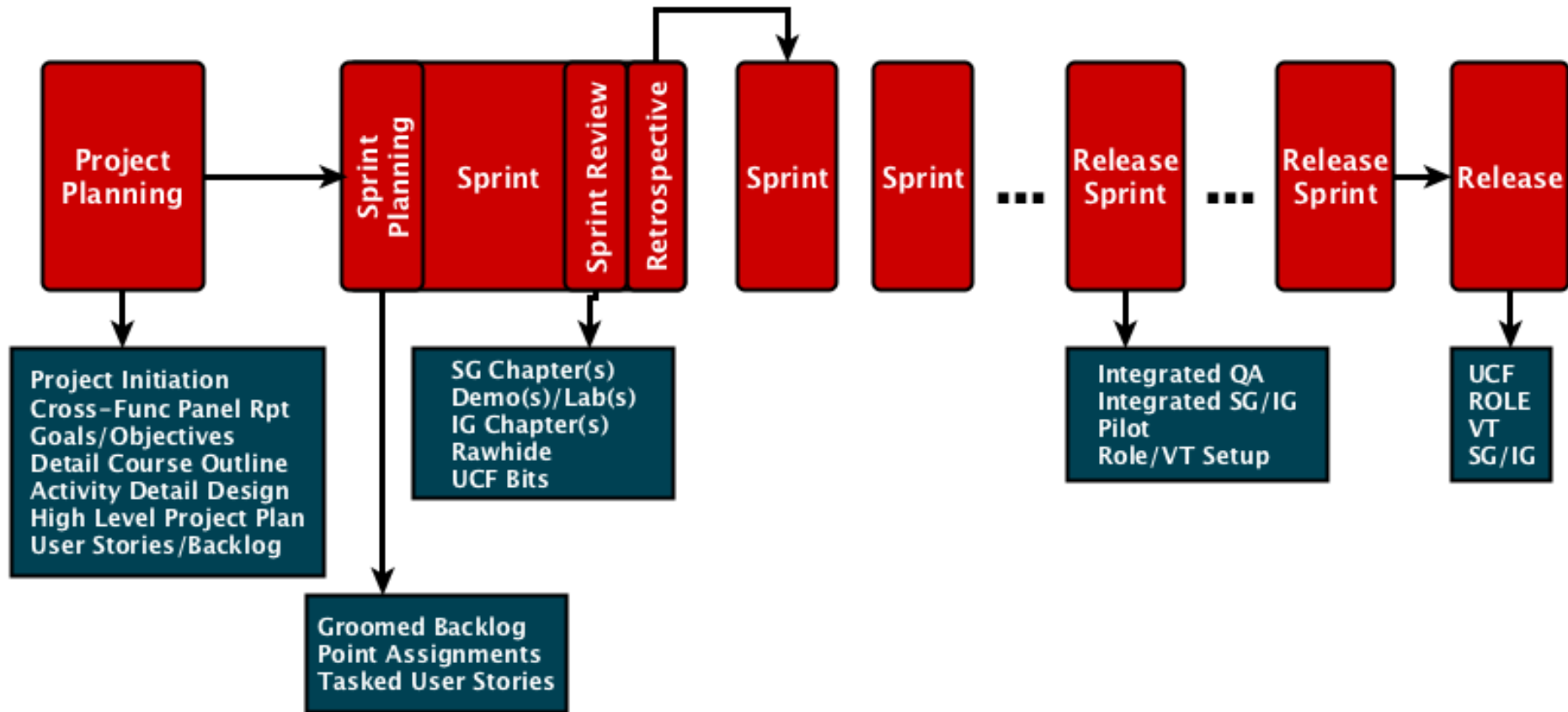# What We Did

- Mapped methodology
- Trained teams
- General adoption

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Mapped methodology

- How could Agile work for each sub-group?
- Mapping agile roles:
  - Stakeholder
  - Product Owner
  - Scrum Master
  - Team Member

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Project flow

Project Planning → Sprint Planning → Sprint → Sprint Review → Retrospective → Sprint → Sprint … Release Sprint … Release Sprint → Release

Project Planning:
Project Initiation
Cross-Func Panel Rpt
Goals/Objectives
Detail Course Outline
Activity Detail Design
High Level Project Plan
User Stories/Backlog

Sprint Planning:
Groomed Backlog
Point Assignments
Tasked User Stories

Sprint Review:
SG Chapter(s)
Demo(s)/Lab(s)
IG Chapter(s)
Rawhide
UCF Bits

Release Sprint:
Integrated QA
Integrated SG/IG
Pilot
Role/VT Setup

Release:
UCF
ROLE
VT
SG/IG

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Epics, features, and user stories

- CA Rally chosen as tracking tool
- Project as a course
- Epic as a course release (version)
- Features as course deliverables: student guide, instructor guide, labs, videos, etc.
- User stories as parts of a feature

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Trained teams

- "The Agile Pocket Guide" by Peter Saddington
- Presentations on how the publishing model was mapped onto a software engineering oriented Agile model
- Self-paced Rally tutorial videos
- Specific training on Rally use for our projects

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General adoption

- Pilot Project
- Adopted for each new course revision
- Re-trained as necessary
- Methodology expert available to consult with team
- Reviews of compliancy

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How It Worked

- Compliance
- Lessons Learned

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Compliance

- ALL projects using the methodology
- Consistent usage between projects
- Management and teams rely on the data provided by the tracking tool

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Lessons learned

- Defect Tracking - not too granular
- Expedient sprint planning
  - Pre-sprint assignment of user stories
  - Pre-estimation (story points)
- How to handle global time zones with respect to sprint begin/end

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QUESTIONS & DISCUSSION

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Thank you.

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