Agile Foundation

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- Agile & Lean Consultant and Coach
- Over 15 years experience across spectrum of industries including IT, financial, travel, data marketing, gaming, publishing and manufacturing
- Participated in a variety of roles from developer to Project/Program/Product to Director
- Expertise in applying Agile & Lean approaches since 2004
- Focus in helping companies achieve organizational agility beyond development teams

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Objective

- To learn about Agile
- To provide you with the context to start or continue your journey
- **ONLY EXPERIENCE, CONTINUOUS LEARNING, COLLABORATION, SHARING AND PERSISTANCE WILL PROVIDE YOU WHAT YOU NEED**

*Not just how, but **why***

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Organizing Tools

- Parking Lot
- How about some Ground Rules:
  - Be on time; we will start and end on time
  - One conversation at a time
  - Electronics used only by exception
  - Regular breaks
  - Others? What will improve your workshop experience?

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Introductions

- Name
- Any Scrum and/or Agile Experience
- Role on your Team
- One learning objective YOU have for the workshop
- Something unique or interesting about you

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Focus Areas

- Values and Principles of Agile
- Overview
- Roles
- Product Backlog
- Sprint Planning
- Sprint Execution
- Review & Retrospective
- User Stories
- Velocity
- Agile Estimating
- Tracking and Tools

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Why Agile?

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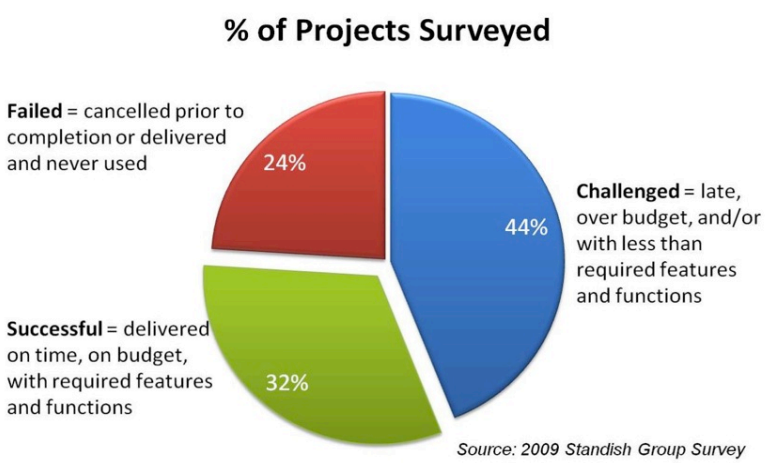
Projects have history of not being successful



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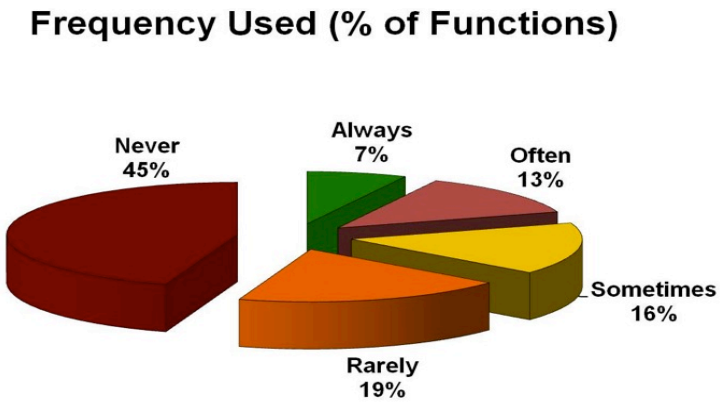
Features are built that aren't used



Source: Standish Group Study Reported in 2009 Chaos Report.

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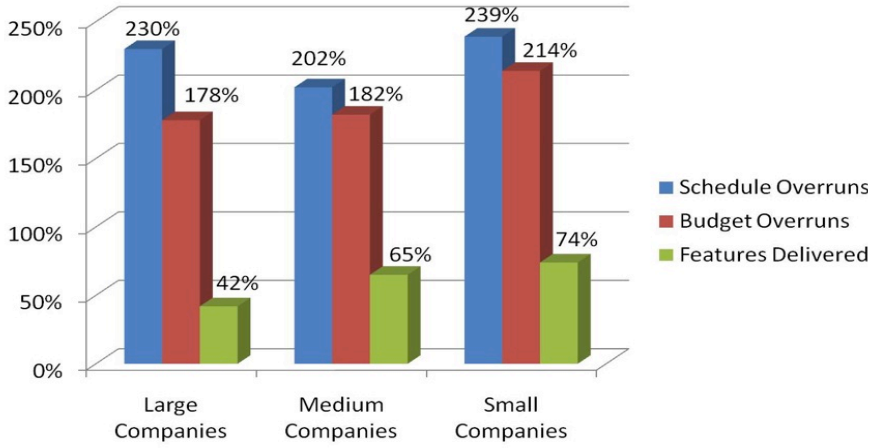
Over commit and under deliver



Source: 2009 Standish Group Survey

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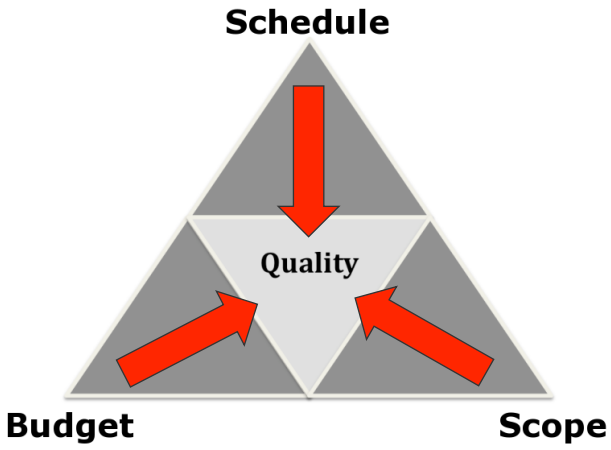
Constraints squeeze out quality



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Some contributing factors

- Project team members working on several different projects or have activities that compete for their time
- Highly skilled people (architects, DBA's, UX) are often unable to fully support projects
- Makes it harder to follow practices needed for sustainability
- Squeezes out time for creativity, innovation or improvements

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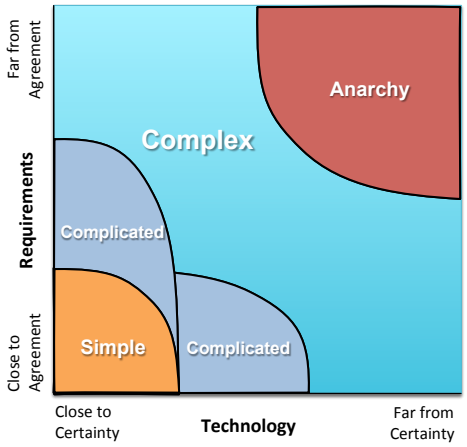
IT Projects have become more complex

Categorization of agreement versus certainty



Modeled from Stacey, Ralph D. (1999). Strategic Management & Organizational Dynamics: The Challenge of Complexity. Third Edition. New York: Financial Times Prentice Hall.

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Exercise: Discussion Questions

How has software delivery become more complex in the last decade?

What competitive pressures have made software delivery more challenging?

Agile Values & Principles

The Agile Manifesto

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."

Source: Agile Manifesto http://agilemanifesto.org/

The 12 Agile Principles

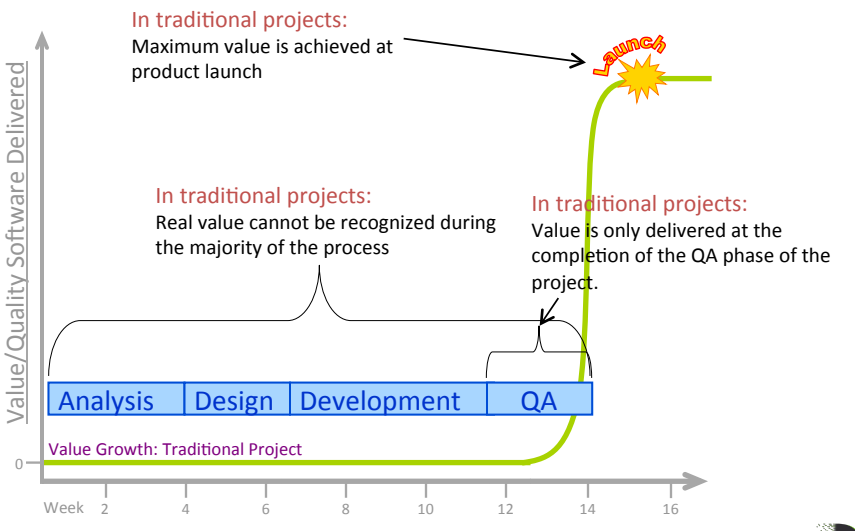
1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of 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.

Source: *Agile Manifesto* http://agilemanifesto.org/

Pocket Sized Principles

- In your groups, read and discuss the 12 agile principles. Then on a flip chart paper, write the numbers 1 through 12.
- In a 20 minute time-box, come up with **three words maximum** that effectively capture each of the twelve principles.
- Also as a team pick the three principle you feel are most valuable if you could only keep three.
- Share with the class some of your discussions and outstanding questions about the principles

Traditional Approach



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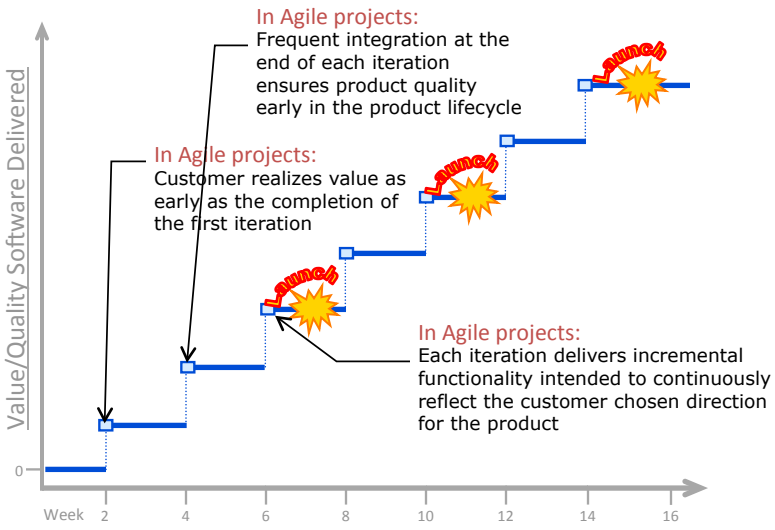
Agile approach – incremental releases



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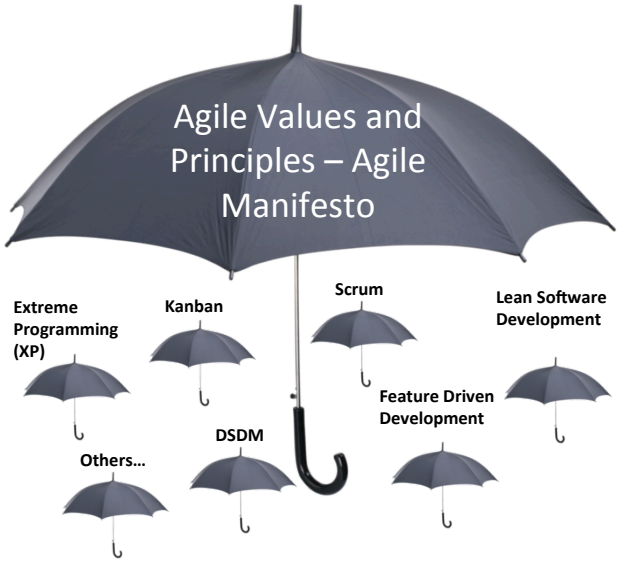
The Agile Umbrella



Agile Methods

Specific
- Practices
- Artifacts
- Ceremonies/Meetings
- Roles

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Exercise: Discussion Questions

Contrast the feedback loops in traditional software development methodologies (i.e. *waterfall*) with that of an iterative development approach (i.e. *Scrum*) in the following areas:

- Quality
- Project Status
- Customer Satisfaction

How do you see Agile providing more empirical (measurable) feedback loops in software delivery?

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Introduction to Scrum

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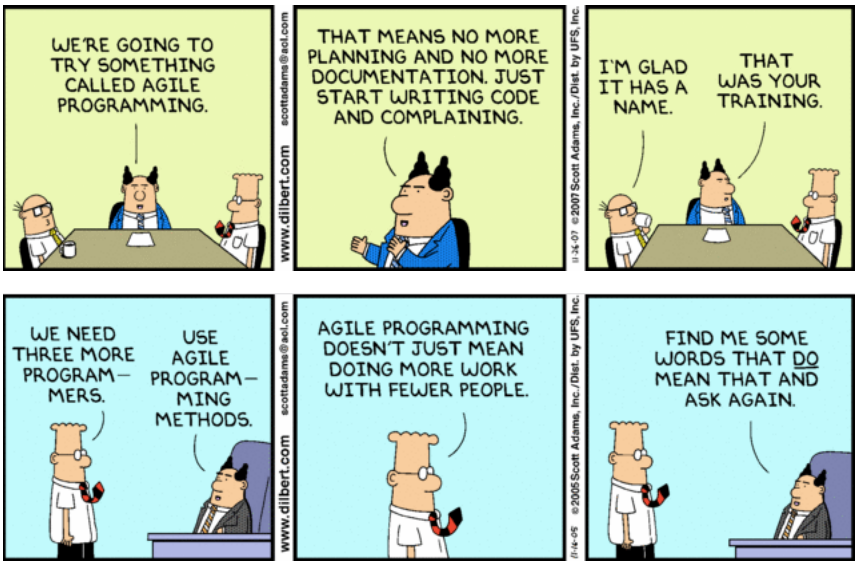
Agile Dilbert..?



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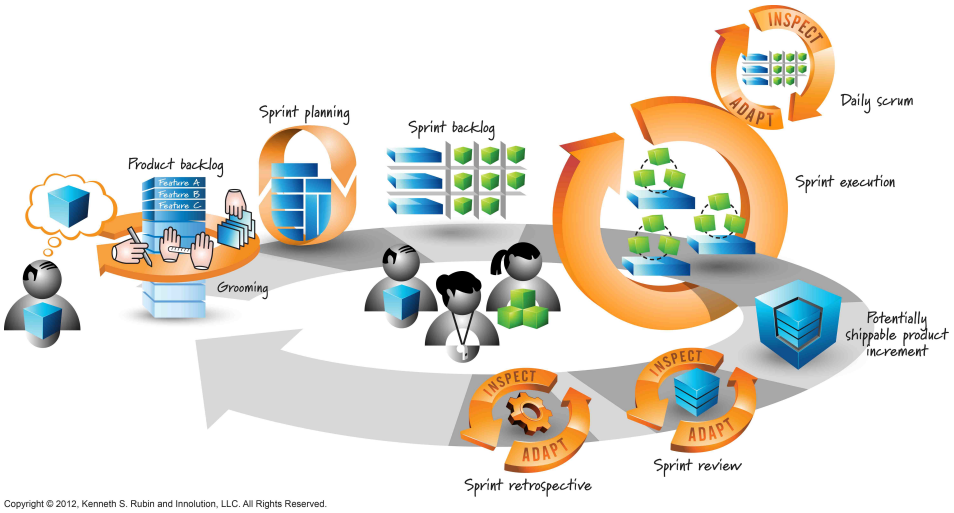
Scrum Framework Overview



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Scrum Influence: Time Box Everything

- ✓ Sprint length – one to four weeks
- ✓ Time to implement product backlog items (PBIs / User Stories) – within the sprint
- ✓ Sprint Backlog Tasks – hours
- ✓ Scrum meetings (ceremonies)
  - ✓ Sprint Planning - 2 hours per week of sprint duration
  - ✓ Daily Scrum (Daily stand-up) – 15 minutes or less
  - ✓ Sprint Review (Demo) – 30 mins per week of sprint duration
  - ✓ Sprint Retrospective – 1 hour per week of sprint duration
  - ✓ Product Backlog Refinement – time box it accordingly
- ✓ Anything else? Research? Time-box it

Roles on a Scrum Team

The Scrum Team

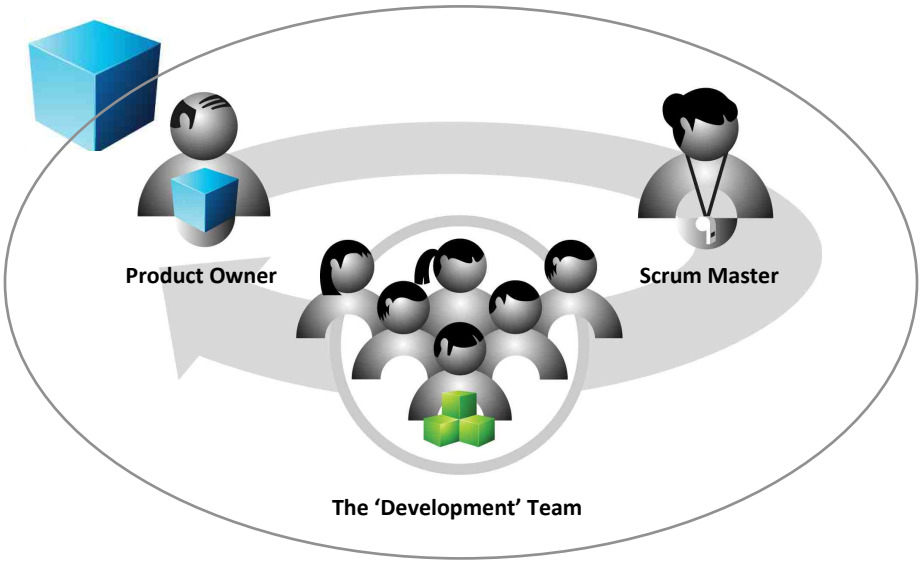

Image source:

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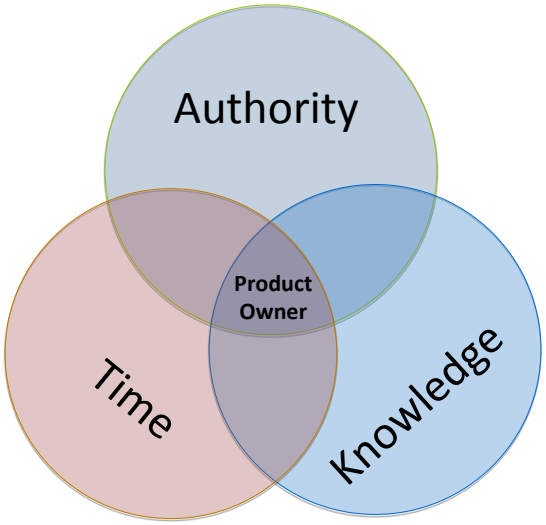
Essential Attributes of the Product Owner



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Product Owner

- Defines overall product vision and goals
- Member of the Agile Team
- Represents the users need or “business side” of the product
  - OWNS the Product Backlog
- Provides “one” voice to the team
- Grooms the Product Backlog to support the next level of planning
  - Release and Sprint planning
- Manages the economics and value outcomes
- Defines acceptance, accepts or rejects work results of the Sprint

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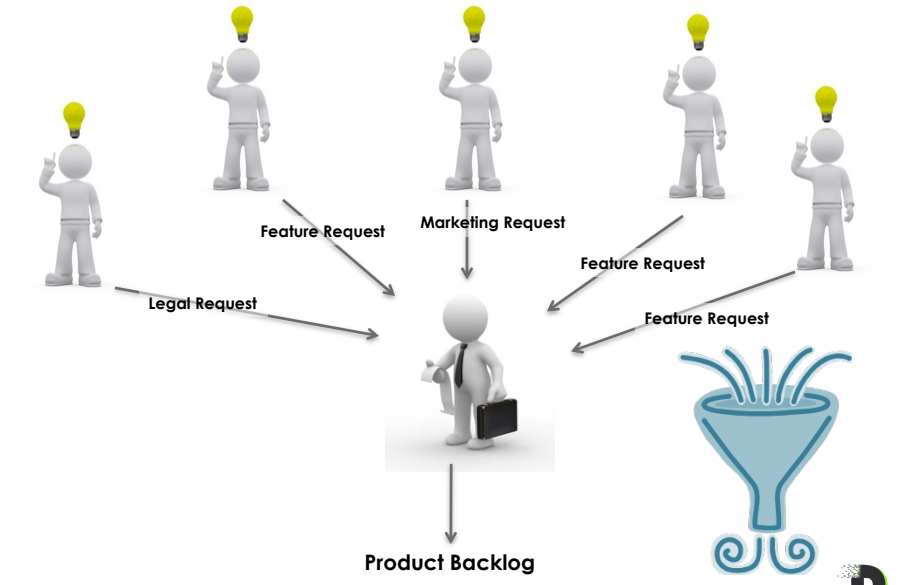
The Product Owner – the Stakeholder Funnel



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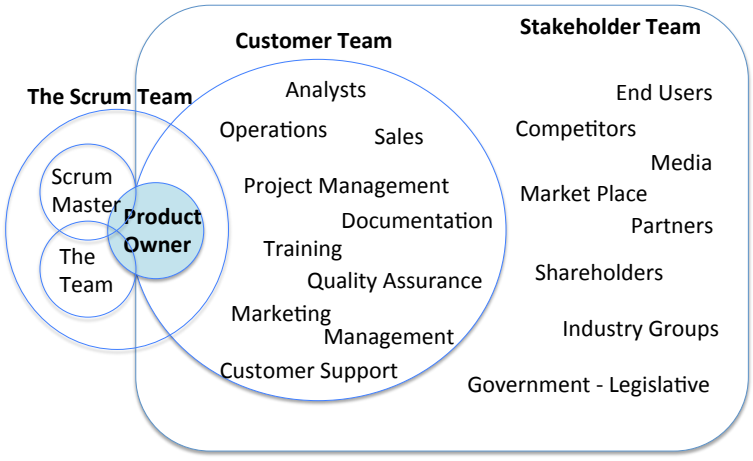
A Product Owner's view that is often not seen

A challenging balance between inward and outward focus



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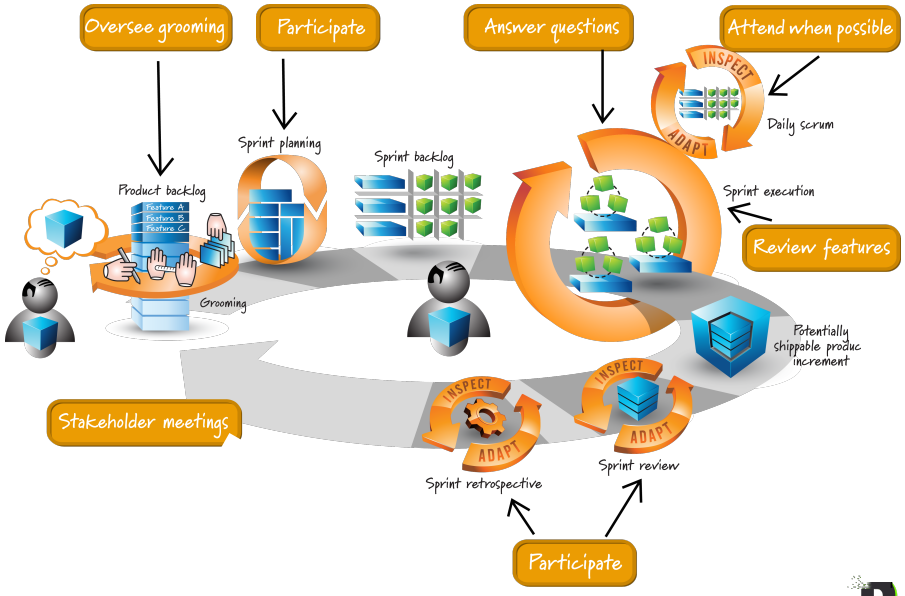
Product Owner Activities



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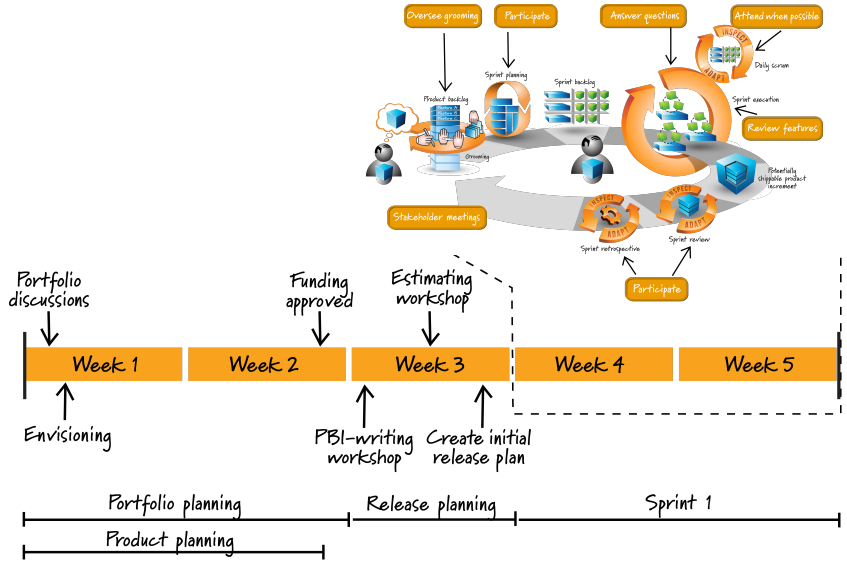
A Day in the life of the Product Owner



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Product Owner Highlights

- Responsible for drawing out the most valuable possible product by the desired date
- Maintains the product backlog and ensures that everyone knows what is on it and what the priorities are
- Is not solely responsible for everything - the whole Agile Team is responsible for;
  - Being as productive as possible
  - Improving their practices
  - Asking the right questions
  - Helping the Product Owner
- The Product Owner is typically the individuals closest to the "business side" of the project

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Exercise: Discussion Questions

What are the challenges to enabling the Product Owner?

Can the Product Owner be a part of the Development Team?

Can the Product Owner be a committee?

What are possible challenges for the Product Owner? How can she/ he overcome them?

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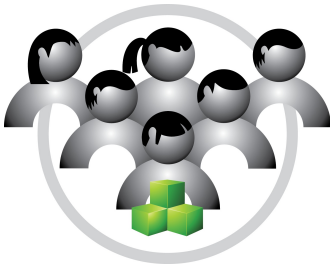
The Team



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The Team

- Manageable size (5-9 people)
  - Includes anyone needed to deliver the committed Sprint goal to their definition of done
- Works with the Product Owner to determine the next highest priority product backlog items to work on (what) and then specifies the work details (how)
- Commits to delivering the sprint backlog
- Organizes itself and its work within the boundaries of the product
- Collectively responsible for product quality
- "Demos" working product increments to the Product Owner
- Reflects on how to improve

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Self Organizing

- Skills that contribute to the success of self-organizing teams:
  - Leadership
  - Communication
  - Process improvement
  - Team dynamics
  - Project management
  - Conflict management
  - Consensus decision making
  - Peer coaching and feedback
  - Group problem solving
  - Interpersonal and diverse

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The Team – Highlights

Responsibilities

- Plan the sprint
- Own the "How"
- Execute the sprint
- Inspect and adapt each day
- Groom the product backlog
- Inspect and adapt the product and the process

Characteristics

- Self organizing
- Cross functional
- Focused and committed
- Communicative and transparent
- Work at sustainable pace
- Long lived
- T-shaped skills
- Diverse
- Right sized

Source; David Guest, 1991 The hunt for the Renaissance Man of computing
Source; Essential Scrum, Kenneth S Rubin

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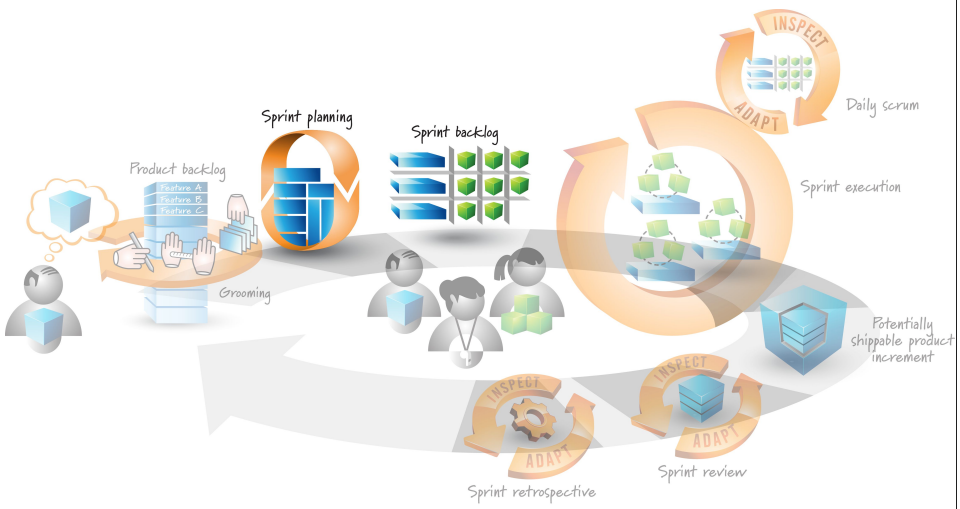
Participates in Sprint Planning



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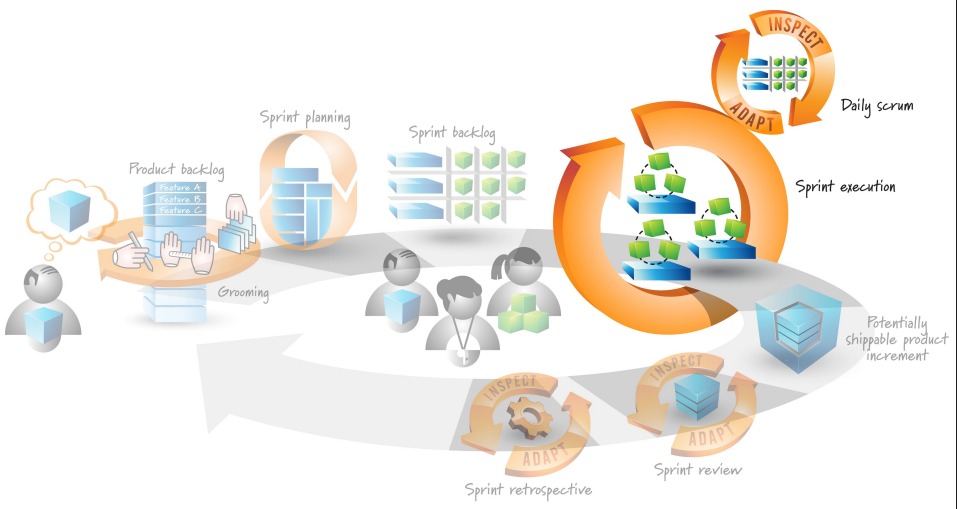
Participates in Sprint Execution



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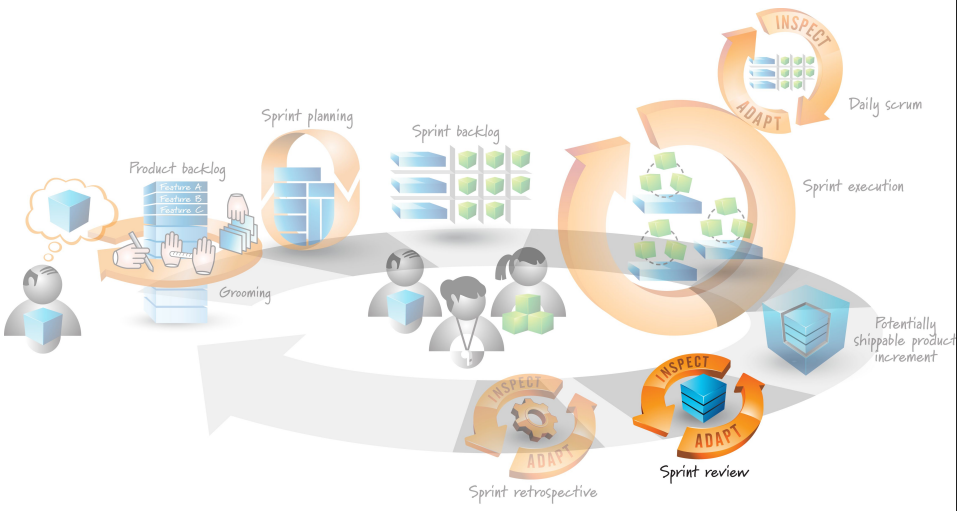
Participates in Sprint Review



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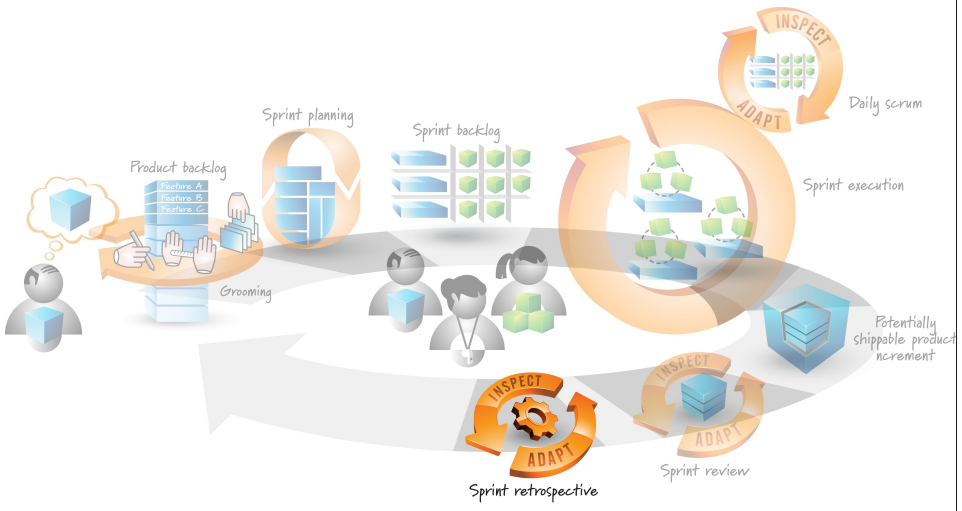
Participates in Sprint Retrospective



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Exercise: Discussion Questions

What does it mean to enable self-organizing teams?

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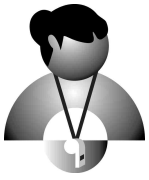
The Scrum Master



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Qualities of a Scrum Master

- **Listening** – "active listening", not only what is being said but what is not being said
- **Empathy** – the ability to understand what people are feeling
- **Awareness** – general awareness and self-awareness
- **Persuasion** – rely on persuasion rather than "positional authority"
- **Conceptualization** – understanding of the bigger picture
- **Foresight** - intuition
- **Stewardship** – greater good of the whole
- **Commitment to the growth of people**
- **Building community** – creating an atmosphere of teamwork

Characteristics of Servant-Leaders, Traits (Greenleaf, R.K. 2003)

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The Scrum Master

- Responsible for knowing the agile "readiness" of the team and the organization
- Coaches the Scrum Team in the agile values, practices, and rules
  - Educates the team and Product Owner on how to utilize the agile framework to build their product
  - Helps the team and the organization adopt agile
  - Educate others outside the team on the agile framework
- Helps the team become fully functional and productive
- Helps the agile team understand and use self-organization and cross-functionality
  - The Scrum Master does not "manage" the team; the agile team is self-organizing
- Helps the team remove impediments

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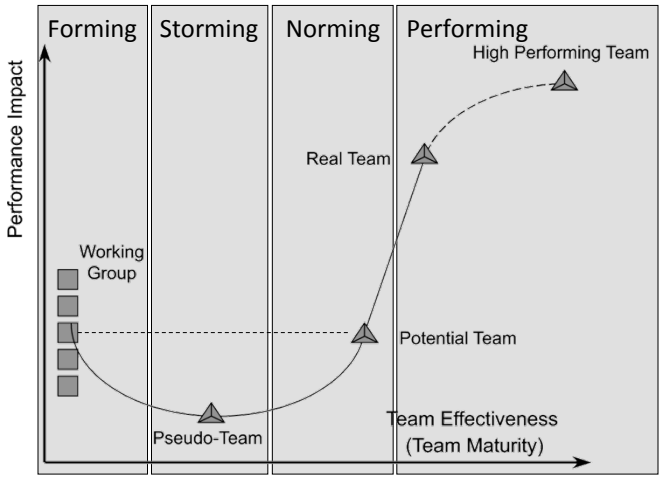
Helps the Team Form, Storm, Norm and Perform



Source: *The Wisdom of Teams: Creating the High-Performance Organization by Jon R. Katzenbach and Douglas K. Smith*

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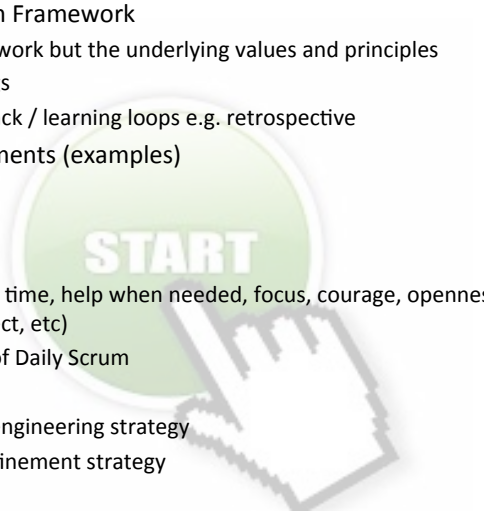
Forming - Helps the team get started

- Training on the Scrum Framework
  - Not only the framework but the underlying values and principles
  - Optimizing meetings
  - Value of the feedback / learning loops e.g. retrospective
- Team working agreements (examples)
  - Conflict
  - Decisions
  - Office hours
  - Team norms (be on time, help when needed, focus, courage, openness, commitment, respect, etc)
  - Time and location of Daily Scrum
  - Testing strategy
  - Development and engineering strategy
  - Product backlog refinement strategy
  - Definition of Done



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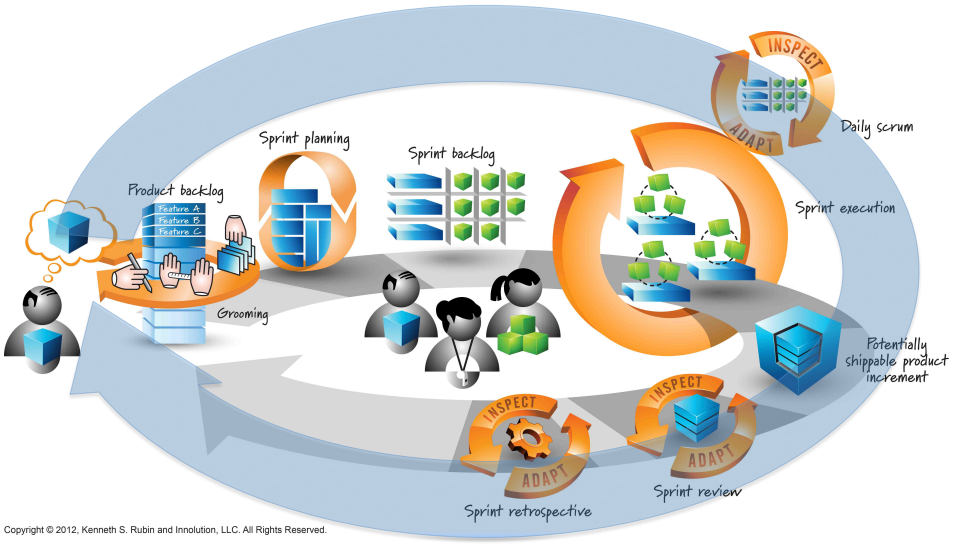
The Scrum Master



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Exercise: Discussion Questions

How does the role of Scrum Master differ from that of a Project Manager?

What are the challenges within in fulfilling the role of Scrum Master?

Why it is important understand what stage your team is in towards their quest to become a team?

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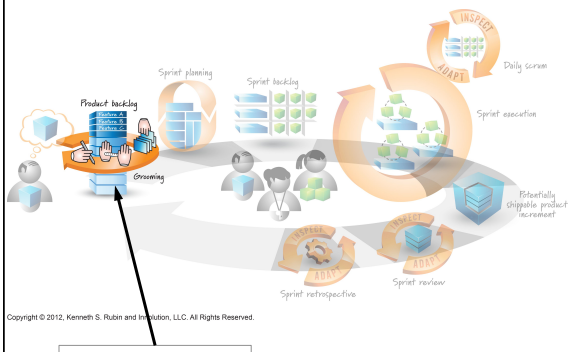
The Product Backlog

The Product Backlog

- A list of features, issues, analysis, non functional items, etc. that are required to deliver value outcome
- The appropriate level of detail should be included in the description of each item
- Highest priority items are at the top
- Emergent, prioritized and sized

Prioritized & Estimated



- Owned by the Product Owner but anyone can contribute
- Prioritized by value, cost, knowledge and risk
- Each product backlog item has an associated relative estimate provided by the team

This is a Prioritized Product Backlog

As a user, I want to A	3
As a user, I want to B	5
As a user, I want to C	2
As a user, I want to D	5
As a user, I want to E	3

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What are Product Backlog Items?

- Each PBI should be described in just enough detail that the team can complete it in one sprint
  - May attach things like:
    - User interface designs
    - Interface contracts
    - Business process workflow
    - Tests
- Remember, product backlog items (PBI) that are further into the future can be larger
- Strive to describe items as briefly as possible
  - User Stories are a good way to do this

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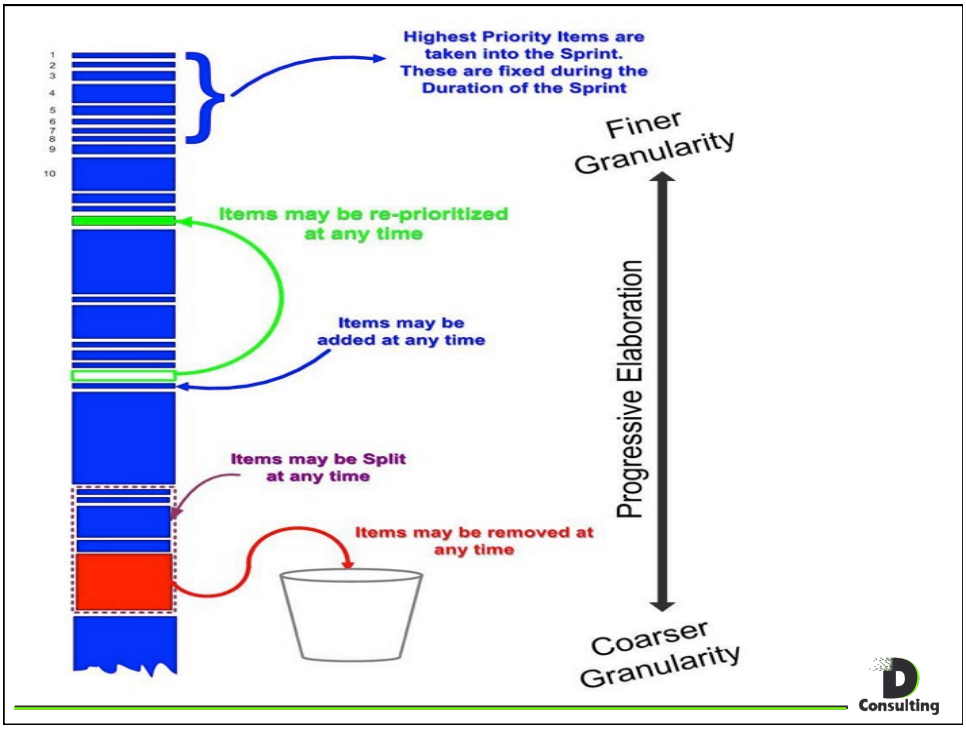

A good backlog is **DEEP**

Detailed appropriately

Estimated

Emergent

Prioritized

- More detail is known about the items that will be implemented sooner
- Some form of estimate has been given for each product backlog item
- Not everything is known upfront, we acknowledge that change will happen
- The backlog is prioritized and priorities are adjusted as we learn more

Source: Mike Cohn

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The User Story: The Fundamental Unit of Work in Agile

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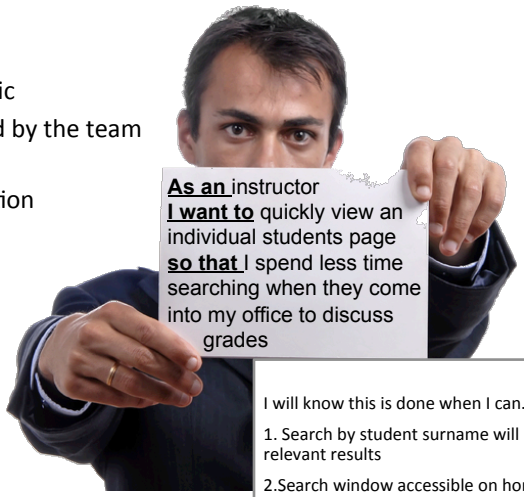
Anatomy of a user story

Best Practices:

- Technically agnostic
- Can be understood by the team and the customer
- Contain a justification



I will know this is done when I can…

1. Search by student surname will bring relevant results
2. Search window accessible on home screen
3. Selecting student name directs exactly to student page with no additional navigation

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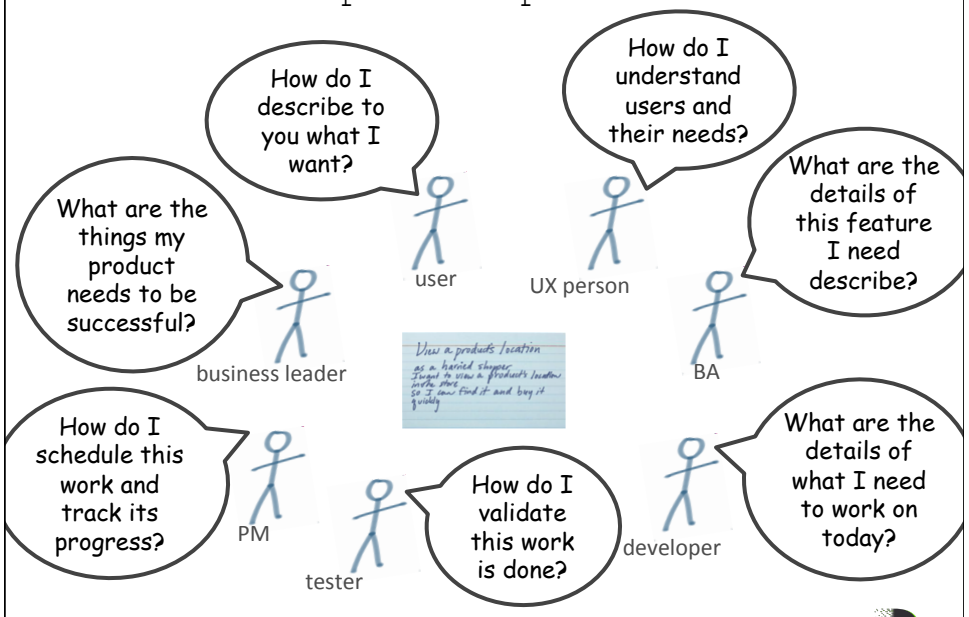
Multiple Perspectives



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Ron Jeffries' 3 Cs – 3 critical aspects

- A placeholder for a conversation
- Just enough to identify the requirement, a token
- Cards annotated with notes, estimates as required

Conversation

- Conversation between The Team and the user (or their representative)
- Underlying details emerge during conversation

Confirmation

- High level acceptance criteria to determine when the story is finished
- Confirm proper implementation
- Acceptance tests

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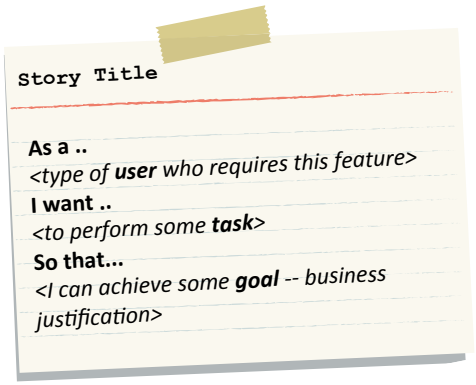
A Template for User Stories

Written from a user/business perspective to emphasize user goals, not system attributes. Usually expressed as follows:



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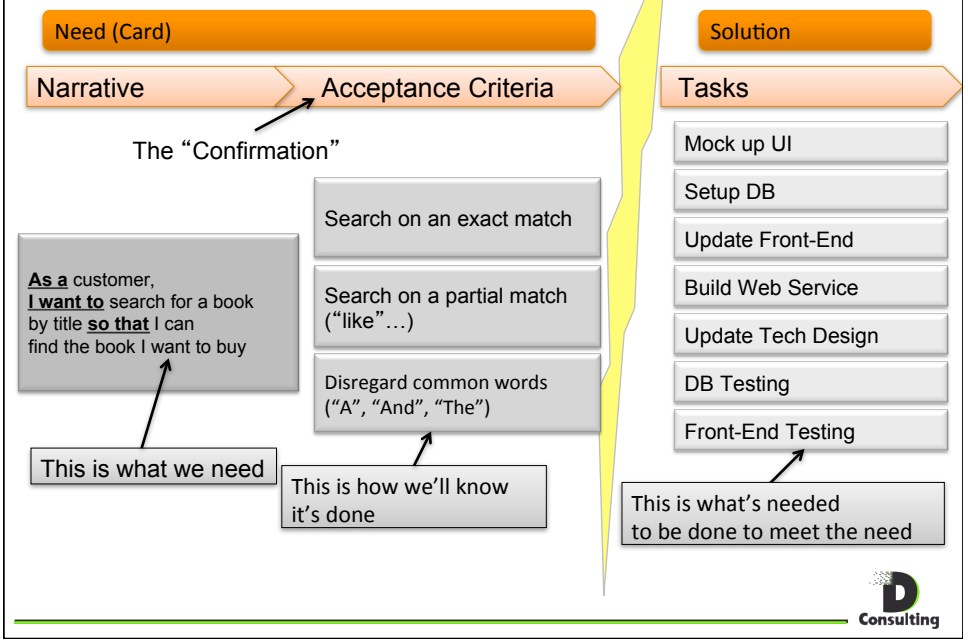
What level of story detail do we need?



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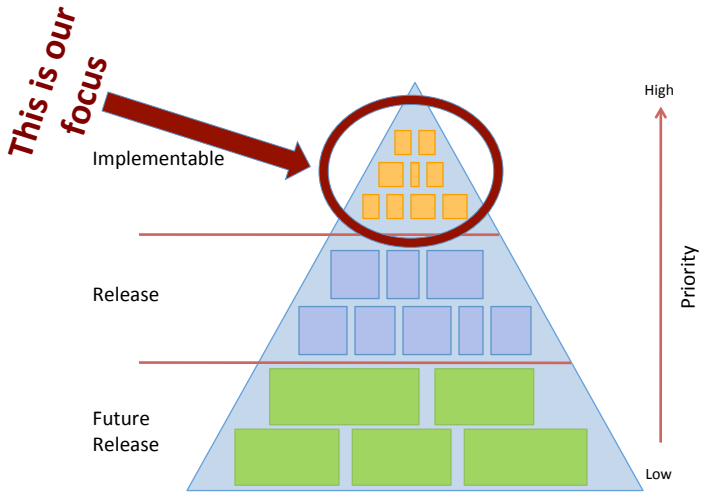
The Product Backlog Iceberg



Source: Mike Cohn, Mountain Goat Software

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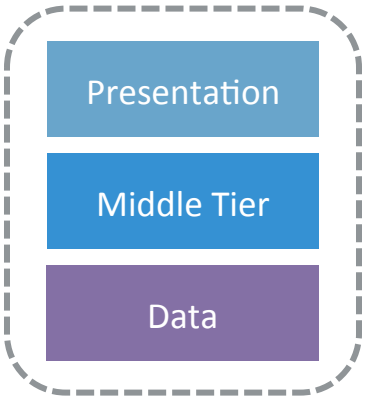
Strive for a Vertically Integrated Story

- All parts of the story are built together in a single Sprint
- Provides fast feedback
- Supports early deployment of functionality – if desired



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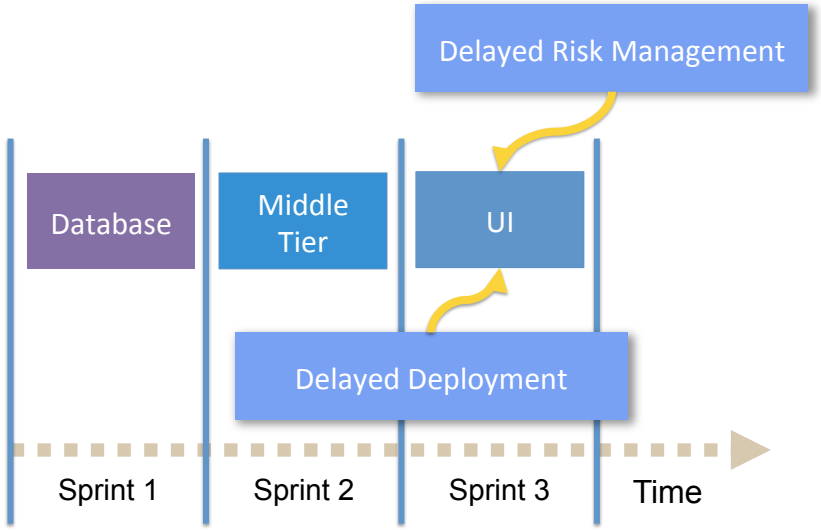
The Challenge of a Horizontal Approach



Consulting

What makes for a good story?

Follow the **I.N.V.E.S.T.** principle

independent

- Avoids dependencies
- Combine stories or split if there are dependent elements

negotiable

- Stories are not written contracts
- Flexible about implementation

valuable

- Should be written to emphasize business value

estimable

- Stories are elements of planning and have to be estimable (high level)
- need to be understood by the development team for estimation purpose

small

- Small stories are easier to estimate and plan
- Large stories don't fit well into time-boxes
- Must be executable within single sprint

testable

- Completeness can be objectively assessed
- Should not be vague

Consulting

Exercise: Discussion Questions

How does a User Story differ from a Use Case?

How are the details in a User Story conveyed to the Team?

Consulting

Velocity

Consulting

Velocity – rate of work completion

The amount of work the team completes in a Sprint

- Typically measured in story points

Potential factors that can impact velocity:

- Team stability (retention)
- Single versus multi-tasking (shared team members)
- Team skills (technical and domain expertise)
- Proximity to the Product Owner
- Co-located versus distributed teams
- Overall team size
- Working as individuals instead of as a team
- "Gold plating"

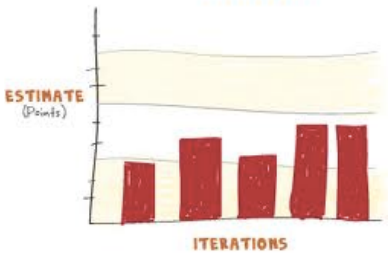
Consulting

Initial Velocity

Three ways to determine velocity:

- Use historical averages
- Wait until you run at least one sprint
- Forecast it

Express velocity in a range that matches your uncertainty in it



Consulting

Express Velocity as a range

- Forecasted velocity will unlikely be the actual velocity
- Put a range around your estimate

Known team and known domain	+5% -10%
↕	+10% -25%
Unknown team or unknown domain	+25% -50%

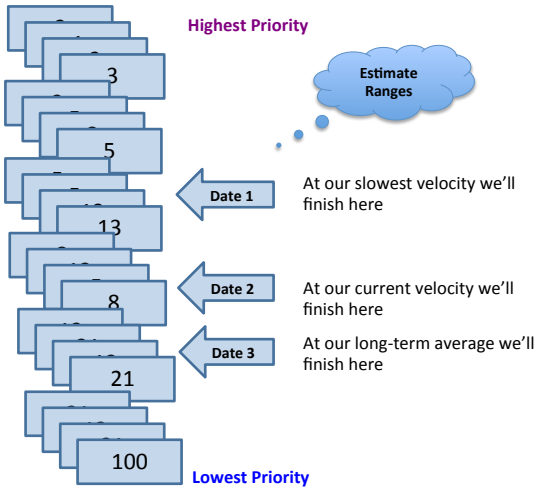
For example:
"*Right now, before we start this project, our estimated velocity is 18. Our best estimate is that it will take between 10-15 sprints.*"

Numbers based on PMI advice on progressive accuracy of estimates

Consulting

Separate Estimating from Committing

- Problem: Misconception that estimates and commitments are equivalent
- Good organizations learn to separate estimating from committing
- In order to make a good estimate, we need:
  - The size of the work to be performed
  - The team's expected rate of progress through their work



Consulting

Agile Estimating

Consulting

Absolute Estimating (Sizing)

How many floors does each building have?

How much does each person weigh?

How far away is each tree?

Consulting

Relative Estimating (Sizing)

Which building is taller?

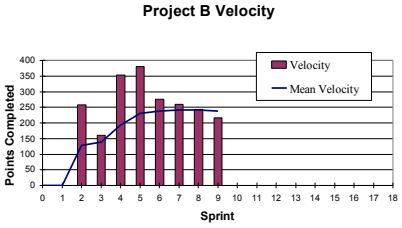
Which person weighs more?

Which tree is closer to us?

Consulting

Estimating using Relative Sizing methods

- People are naturally equipped to compare things. It is easy to assert, "Implementing this item will be a bigger effort than that one."
- ---ESTIMATE SIZE, DERIVE DURATION---
- Derive Duration using Velocity
- Velocity is a measure of the Product Backlog Items completed in a Sprint
- Combining Size and Velocity allows for Schedule planning. Even better, it eases re-planning.



Consulting

Story Points

- Sizing Sequence needs to be a geometric series: (e.g. 1,2,4,8,16,32…)
- Mike Cohn suggests the modified Fibonacci sequence (1,2,3,5,8,13,20,40,100)
- Advantages: Accuracy is less important than consistency, Numerical, Additive
- Disadvantage: Requires teams to educate others, Natural desire to apply duration to points (e.g. 1 point = 4 hours)

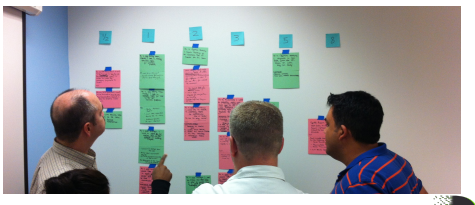
- The "bigness" of a task; influenced by
  - How hard it is
  - How much there is
- Relative values are what is important:
  - A login screen is a 2
  - A search feature is an 8

…

Consulting

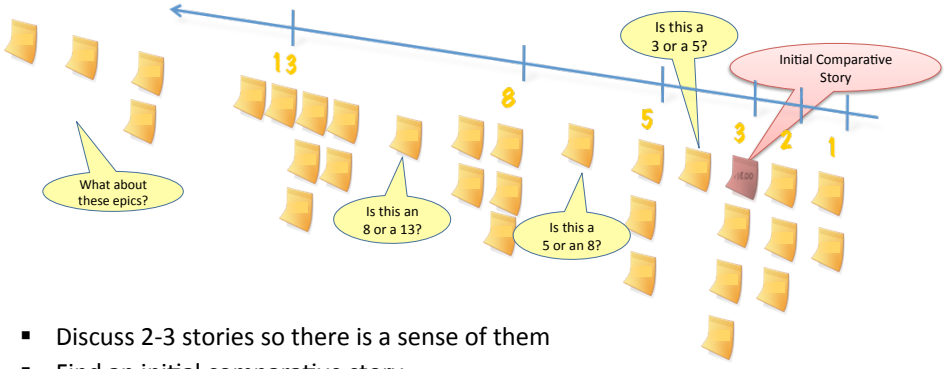
Estimate by Analogy

- Comparing an un-sized story to previously sized stories
  - "This story is like Story 'x', so it should have the same number of points"
- Triangulate
  - Compare the story to multiple previously sizes stories – not just one
  - "This story is the same size as Story A and Story B. Both A and B are 5 points, so this story is also 5 points"
  - Start with just columns and add numbers later if that is easier for the team



Consulting

Affinity Estimating

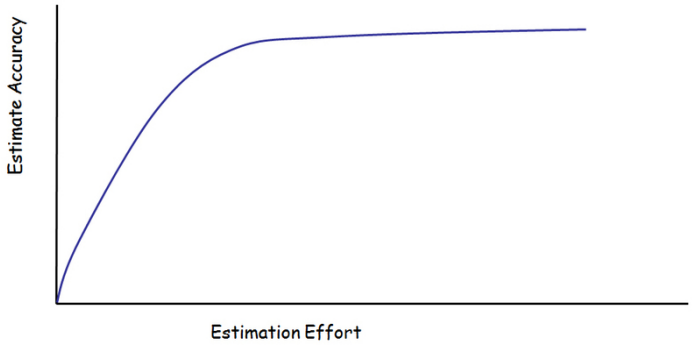


- Discuss 2-3 stories so there is a sense of them
- Find an initial comparative story
- Without conversation, the entire team puts all the stories on a big wall
  - Smallest at the right and largest on the left compared to initial story
  - Anyone can move anyone else's story position
- As activity subsides, put a scaled number line up
- Settle on estimates for boundary stories and epics

Consulting

How much time should we spend on estimating?

Diminishing Returns



Source: Agile Estimating and Planning by Mike Cohn

Exercise: Animal Points

Use “Animal Points” to size the following animals:

Lion
Kangaroo
Rhinoceros
Bear
Giraffe
Gorilla
Hippopotamus
Tiger

Suggestion
- Find 1 to use as your base and assign it a value based on your scale
- Estimate size of others by comparison/analogy

15 minutes and then share with class

D Consulting

Estimating - Planning Poker®

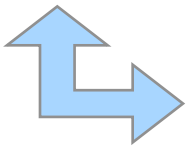
- The Product Owner presents each story and answers questions
- Each participant (team members) selects a card to present their estimate
- Cards are turned over at the same time for all to see
- Differences are discussed
- Re-estimate until convergence is reached

http://www.planningpoker.com

D Consulting

Planning Poker – an example:

As a user, I want to be able to have some but not all items in my cart gift wrapped



	Round 1	Round 2
Jill	3	5
Bob	8	5
Yang	2	5
Ann	5	8
Todd	5	5

Result: Story Size = 5 Points

Consulting

Why Planning Poker Works?

- Emphasizes relative estimating
- Focuses most estimates with an approximate one order or magnitude
- Everyone's opinion is heard
- Estimators are required to justify sizes
- It's quick
- It's fun

Source: Mike Cohn, Agile Estimation and Planning

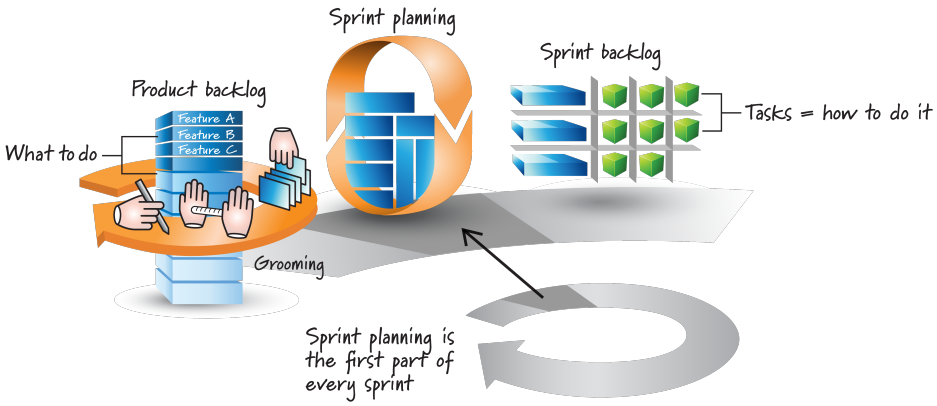
Consulting

Sprint Planning

Sprint Planning

Purpose

Create the Sprint Backlog: aka 'the plan' for this sprint



Sprint Backlog

Guidelines

- Take the highest priority story from the Release Backlog
- Identify all tasks for that story to be implemented
- Estimate hours for each task
- Team decides if it can take on the story
- Repeat for the next story

Consulting

Sprint Planning

Guidelines, cont.

- Whole team participates
- Estimate tasks collaboratively in hours
- Team decisions, team ownership
- Team forecasts how much they can complete
- Product Backlog Items plus tasks = The Plan
- Plan will be continually monitored and updated if necessary during the course of the sprint
- Business commits to leaving priorities alone during sprint

The Plan

Consulting

Sprint Planning: Capacity vs. Velocity

Capacity

- Consider any time needed for meetings, planned time off for any Team members, etc.

Velocity

- Amount of work that the Team is historically capable of producing based on data
- It is important for the Sprint length to remain consistent for the Team to establish a cadence and to be able to establish Velocity

Consulting

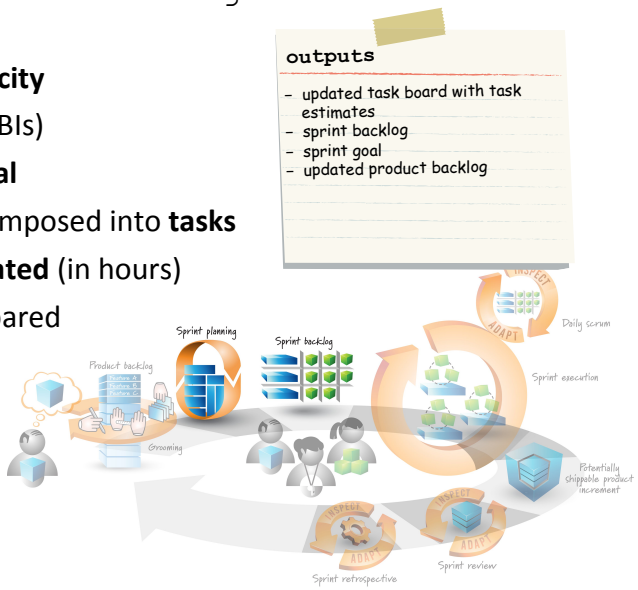
Group Discussion: Capacity

- Sprint Length
- Daily Scrum, Planning Meeting, Sprint Review and Retrospective
- Paid Time Off
- Other things that you can think of?

Consulting

Sprint Planning – Review

- Determine **capacity**
- Select **stories** (PBIs)
- Refine sprint **goal**
- Stories are decomposed into **tasks**
- Tasks are **estimated** (in hours)
- T**ask board** prepared



Consulting

Group Discussion: Sprint Planning

Sprint planning is taking a long time and there are many disagreements, not only about the scope of the product backlog items but how to implement them.

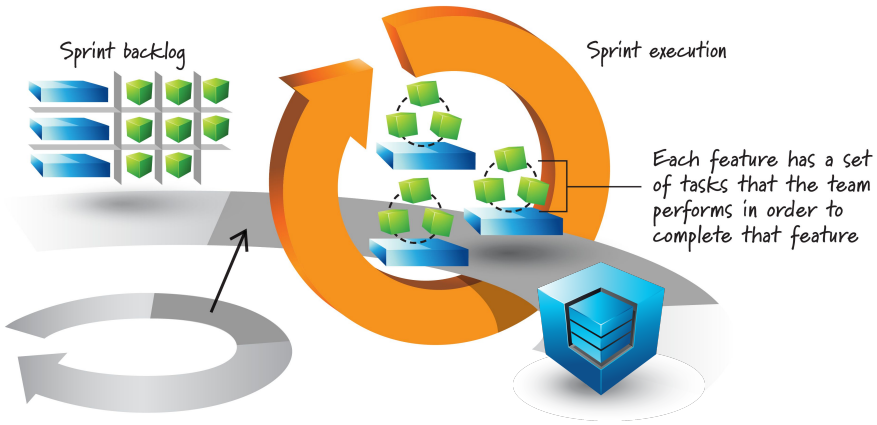
What could be some reasons for this?

Consulting

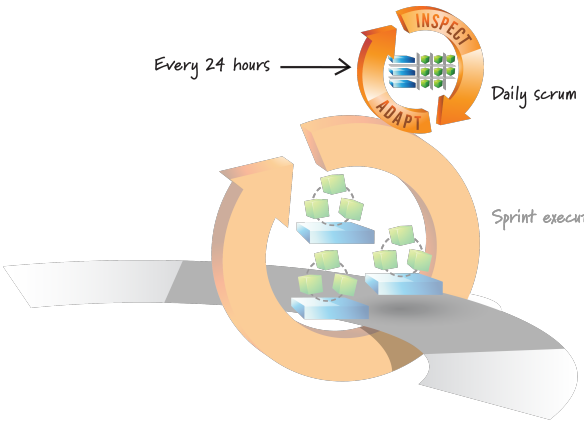
The Sprint

Sprint Execution

Sprint execution takes the majority of time spent in each Sprint



The Daily Scrum



Daily Scrum

- daily planning
- only team members may speak
- each team member addresses the following:
  - What did I work on yesterday?
  - What am I going to work on today?
  - What are my obstacles/issues?
- meeting lasts 15 minutes
- is not for problem resolution

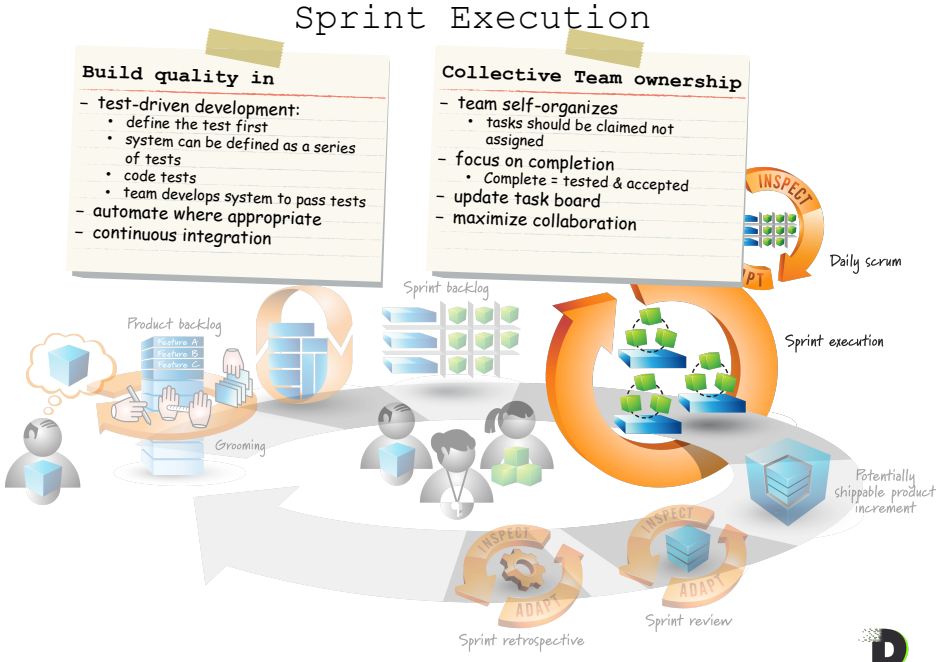
Consulting

Daily Scrum – Good Habits

- Have the meeting at the same time every day – determined by the team
- Stand up!
- Always start on time
- NO PROBLEM SOLVING
  - Capture items in a parking lot to address after the standup. Invite all that are interested or will be key participants
- Everyone is responsible for keeping to the agenda and time-box
  - Up to the team to point out problem solving and distractions
- Address one another, the focus should not be on the Scrum Master and Product Owner – this meeting is for YOUR benefit
- Focus on the task board, the burndown, and the teams Sprint commitment

Consulting

Sprint Execution



Consulting

Potentially Shippable Product

- How do we know that we're "done"?
- Has the work been coded?
- Has the work been verified?
- Has the work been accepted?
- Has the work been documented?

Consulting

Sample Definition of Done

STORY

- Unit Tests Passed
- Functional Tests Passed
- Acceptance Tests Passed
- Story and Task Status Updated
- Build System Compiles
- Code is Reviewed
- Code Meets Standards
- Code Implements Logging
- Code Comments Updated
- Published to DEV Server

SPRINT

- Product Owner Demo
- Past Acceptance Tests Passed
- Product Owner Acceptance
- No Compile Warnings in Code
- Demo Prepared
- Bugs Committed in Sprint Resolved
- Deployment Docs Updated
- Release Notes Updated
- Code Repository is Tagged

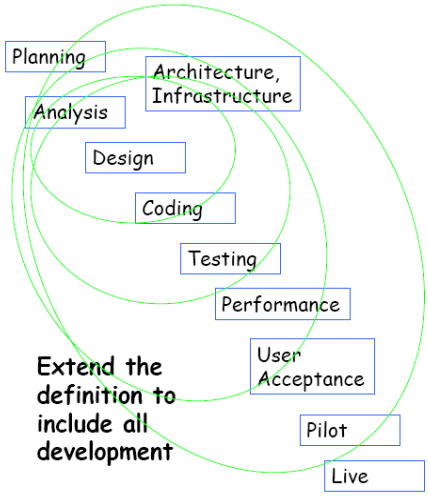
RELEASE

- Release to STAGE Server
- Deployment Testing Passed
- Deployment Docs Delivered
- Release Notes Delivered
- Infrastructure Change Notes Delivered
- Integrated Stress Testing Passed
- Build Requirements Met

Consulting

Comparing What is Done

- Definition of Done: Helps us build the thing right (deliverables)
- Acceptance Criteria: Helps us build the right thing (functionality)



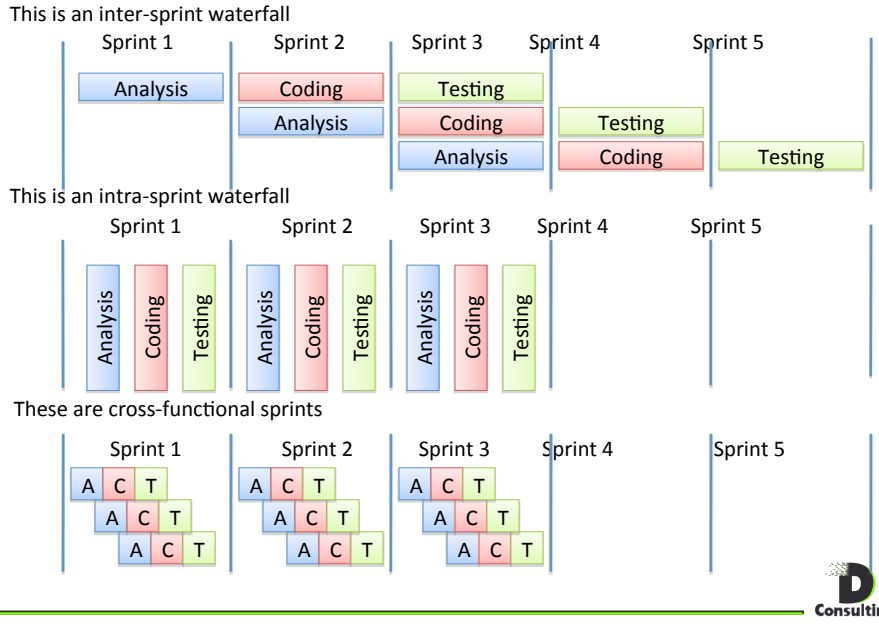
Story 14

As a customer, I want to check my order status online so that I can know when to expect my package

Acceptance Criteria
- View status as "waiting for pickup", "en route" or "delivered"
- Date of each step in route
- Estimated time of delivery

Consulting

Sprint Execution: Don't Waterfall Sprints



Consulting

Exercise: Discussion Questions

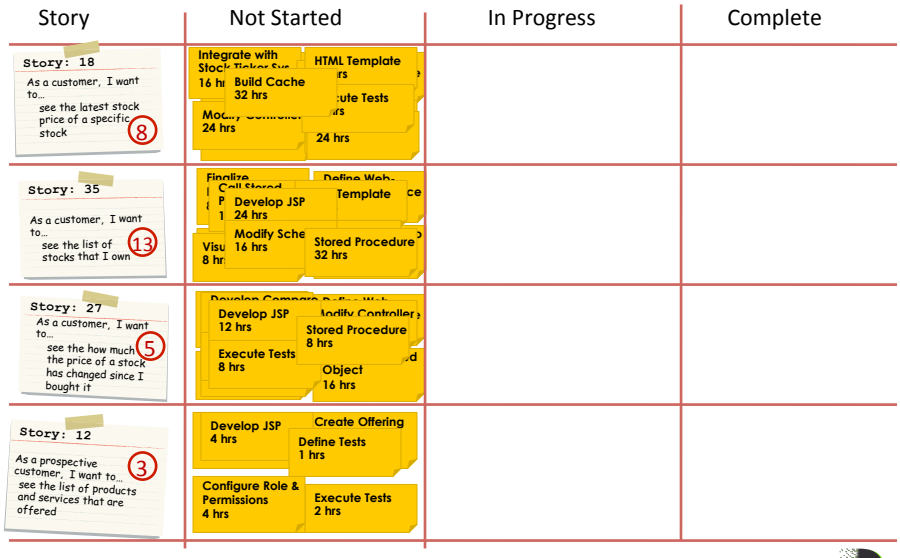
Is there a place for specialized Sprints within Agile (i.e. testing sprints or hardening sprints)?

Consulting

Task Boards and Tracking Progress

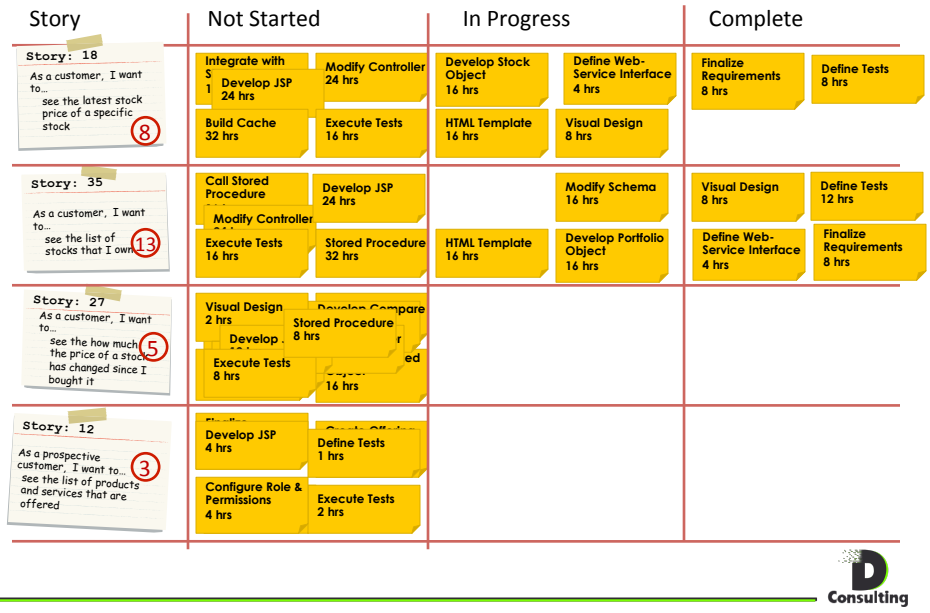
Consulting

The Task Board



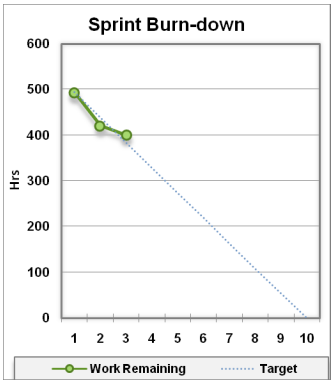
Consulting

Task Board Updated



Task List Updated

Story	Task	Status	hrs	Day 1	Day 2	Day 3
Story 18: See latest stock price						
	Finalize requirements	Complete	8	2	0	
	Define tests	Complete	8	2	0	
	Define Web Services Interface	In Progress	4	2	2	
	Develop Stock Object	In Progress	16	8	8	
	Integrate with Stock Ticker Service	Not Started	16	16	16	
	Visual Design	In Progress	8	2	1	
	Create HTML Template	In Progress	16	12	8	
	Modify Controller	Not Started	24	24	24	
	Develop JSP Page	Not Started	24	24	24	
	Build Cache	Not Started	32	32	32	
	Execute Tests	Not Started	16	16	16	
Story 35: Owned Stock List						
	Finalize requirements	Complete	8	1	0	
	Define Tests	Complete	12	2	0	
	Define Web Services Interface	Complete	4	2	0	
	Develop Portfolio Object	In Progress	16	8	4	
	Call Stored Procedure	Not Started	16	16	16	
	Visual Design	Complete	8	0	0	
	Create HTML Template	In Progress	16	12	10	
	Modify Controller	Not Started	24	24	24	
	Develop JSP Page	Not Started	24	24	24	
	Develp Stored Procedure	Not Started	32	32	32	
	Modify Schema	In Progress	16	8	8	
	Execute Tests	Not Started	16	16	16	
Story 27: Stock Price Change						
	Finalize requirements	Not Started	4	4	4	
	Develop JSP	Not Started	12	12	12	
	Execute Tests	Not Started	8	8	8	
	TOTAL:		493	420	400	

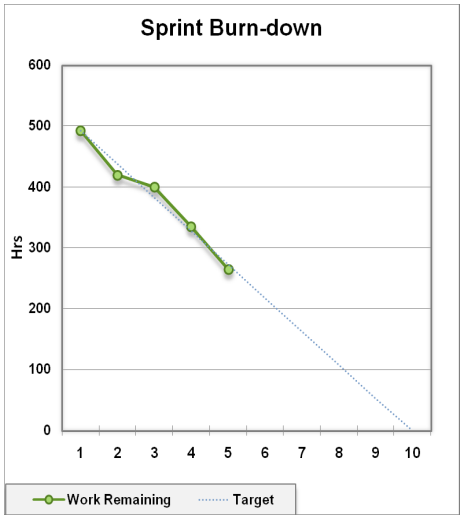


Consulting

Sprint Burn-down

Sprint Progress Reporting

- The team updates their estimated number of hours required to complete their tasks
- Daily sum of "hours remaining"
- Is the team on-track to complete planned sprint work?
- Which stories are at risk of not being completed?
- Do I need to add or remove stories from the sprint?



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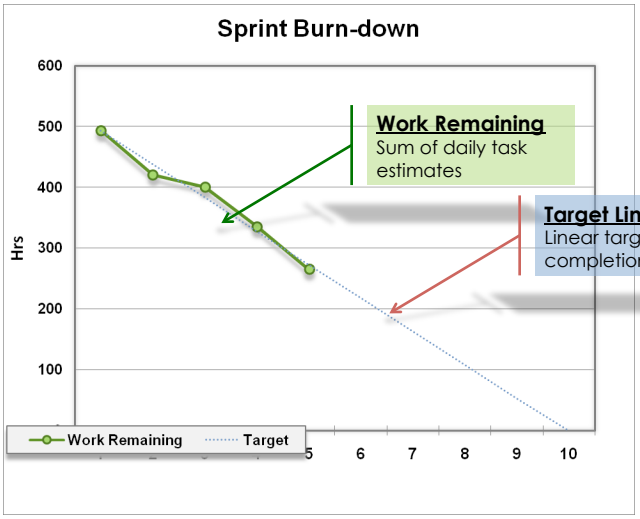
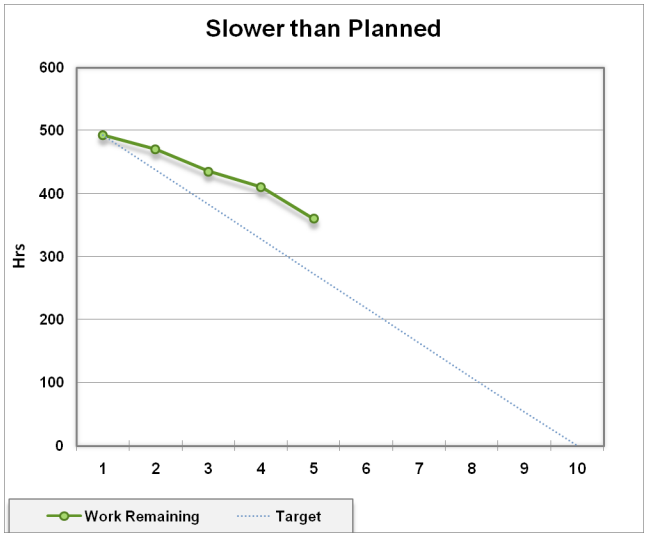
Sprint Burn-down



Consulting

Basic Sprint Burn-down Analysis



Consulting

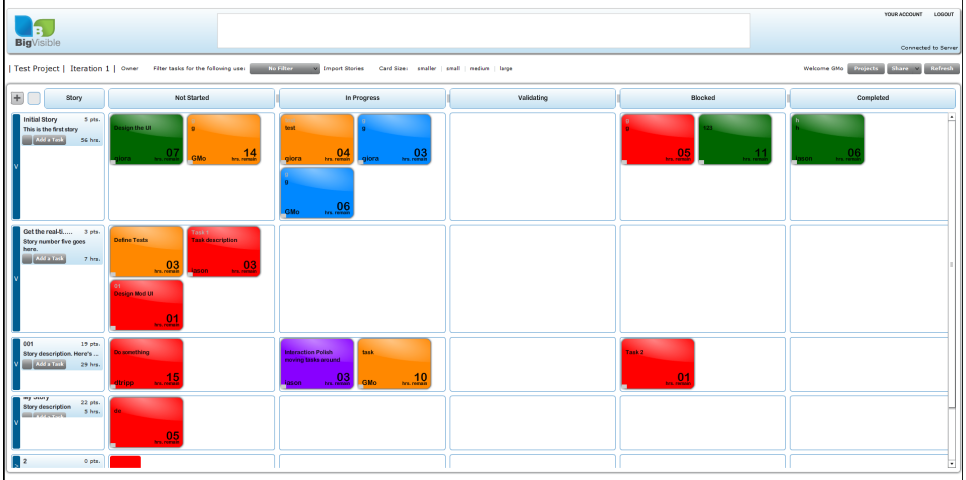
Basic Sprint Burn-down Analysis

Consulting

Sample Task Board

Consulting

A Sample Electronic Task Board



Source: https://www.seenowdo.com

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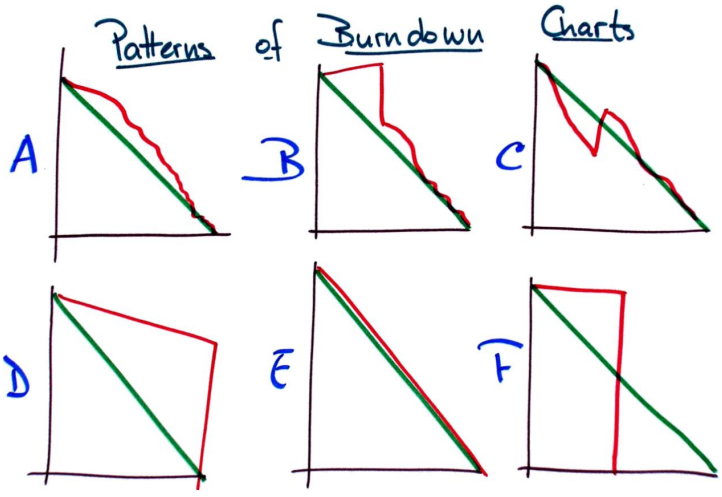
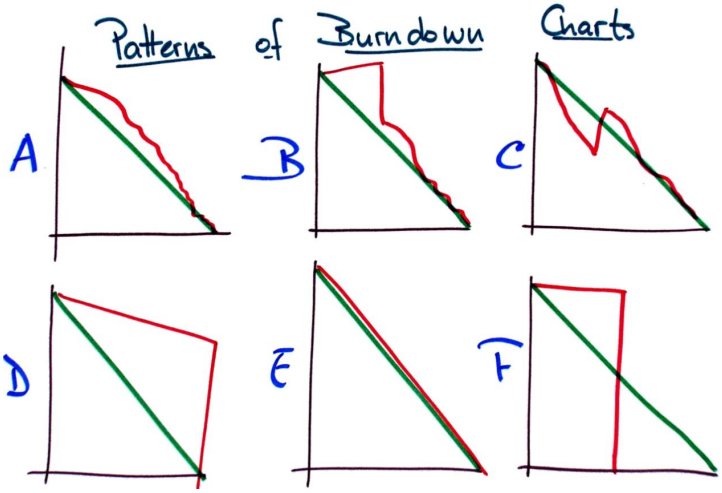


Ron Jeffries – xprogramming.com

D Consulting



__F__ Sprint Canceled
__A__ Normal burndown
__C__ New story added during the sprint
__C__ Remaining work estimates increase above original estimates
__E__ Team gaming the system
__B__ Team not ready to sprint, drops stories
__C__ Tasks added to a story
__D__ Team distracted by unplanned events throughout the sprint

Ron Jeffries – xprogramming.com

D Consulting

Exercise: Discussion Questions

Assume that it's the second to the last day of the Sprint. There is one story remaining in the sprint backlog that hasn't started yet.

What should the team do?

The team is seeing a pattern in their sprints that there are several stories still in QA towards the end of the sprint.

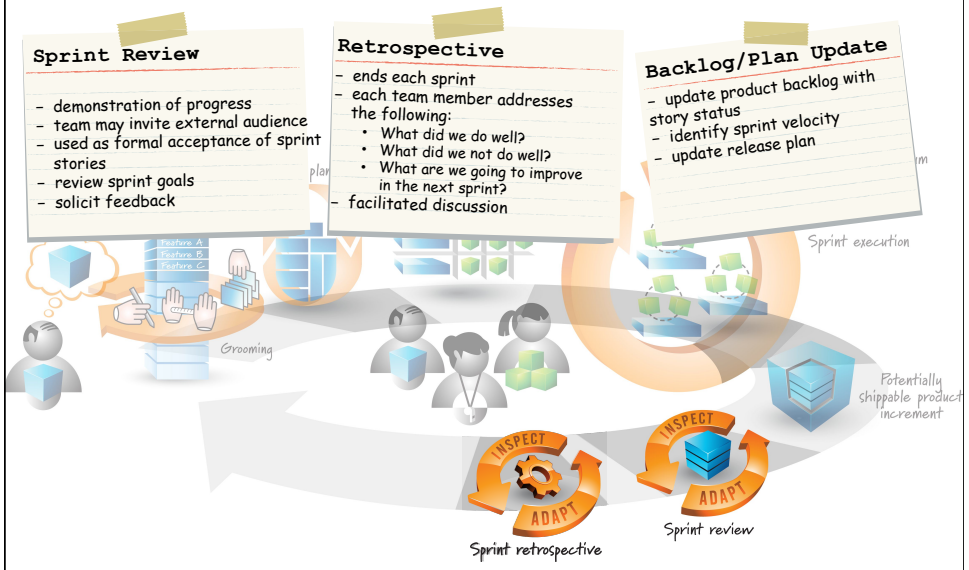
Why is this risky and what would you recommend for them to try next sprint?

Consulting

The Sprint Review & Retrospective

Consulting

The Sprint Review & Retrospective



Consulting

Your sprint review agenda

- What does the Product Owner want to see?
- Will the Product Owner invite stakeholders?
- How and where will you demonstrate working software?
- Who from the team will demonstrate the completed stories?
- What else do we want to review during the Sprint Review? Major events, highlights, metrics, budget, etc?

  TIP: *Allow time to prepare*

Consulting

The Sprint Retrospective

"At regular intervals, the Development Team reflects on how to become more effective, then tunes and adjusts its behavior accordingly."

(One of the Principles of the Agile Manifesto)

Consulting

Retrospectives

- Inspect and adapt mechanism for the Team to make adjustments to the process for the next Sprint
- Celebrate successes in addition to examining what did not go so well
- Team decides which items from brainstormed list to put into action for the next Sprint
- ScrumMaster facilitates

Consulting

Retrospectives Guide

- Open
  - Establish Trust, Honesty, Openness
- Gather Data
- Generate Insights
- Decide What to Do
- Close
- Debrief

Consulting

The Prime Directive...

"Regardless of what we discover, we understand and truly believe that everyone did the best job they could, given what they knew at the time, their skills and abilities, the resources available, and the situation at hand"

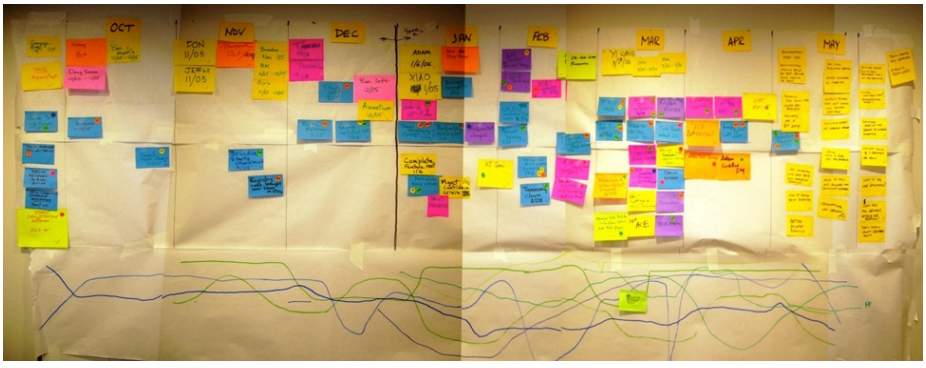
(from Norman Kerth, author of "Project Retrospectives: a handbook for team reviews")

Consulting

A Sample Retrospective

Consulting

Larger Retrospective



Consulting

Group Discussion: Retrospectives

The Sprint Retrospective is getting routine and the Team is not finding value any more.

What could be some reasons for this?

Consulting

A Scrum Can Expose Mess

Consulting

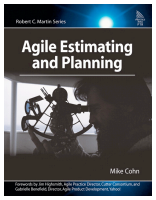
Closing Activities

- Parking lot
- Recommended reading list and discussion groups

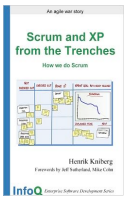
Consulting

Recommended Reading

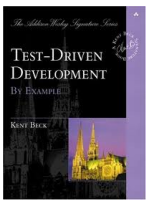
Agile Estimating and Planning
By Mike Cohn



Scrum and XP from the Trenches
By Henrik Kniberg

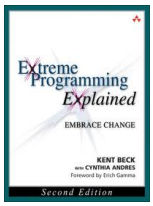


Test-Driven Development
By Example
By Kent Beck

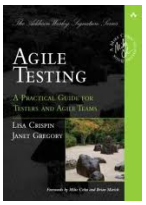


User Stories Applied
By Mike Cohn

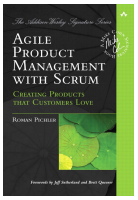
Extreme Programming Explained
By Kent Beck



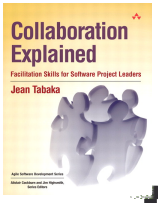
Agile Testing
By Crispin Gregory



Agile Product Management with Scrum
By Roman Pilcher



Collaboration Explained
By Jean Tabaka



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Other Notable Books

- *Essential Scrum*, Kenneth Rubin, Addison Wesley, 2012.
- *Joy, Inc.* Richard Sheridan, Portfolio Hardcover, 2013.
- *Fearless Change: Patterns for Introducing New Ideas*, Linda Rising, 2004.
- *Innovation Games*, Luke Hohmann, 2007.
- *Lean Software Development*, Poppendieck and Poppendieck, Addison Wesley, 2003.
- *Agile Project Management with Scrum*, Ken Schwaber, Microsoft Press, 2004.
- *Agile Retrospectives: Making Good Teams Great*, Esther Derby and Diana Larsen, Pragmatic Bookshelf, 2006.
- *Agile Software Development with Scrum*, Ken Schwaber and Mike Beedle, Prentice Hall, 2002.
- *Project Retrospectives*, Norman Kerth, Dorset House, 2001.
- *The Enterprise and Scrum*, Ken Schwaber, Microsoft Press, 2007.

Other Resources

- Scrum Gatherings – see Scrum Alliance
- Agile Conference – see Agile Alliance
- Find Agile Meetups at http://www.meetup.com/
- Scrum Guide http://ww.Scrum.org
- Scrum Alliance http://www.scrumalliance.org
- Agile Alliance http://www.agilealliance.org
- Agile Manifesto http://www.agilemanifesto.org
- Mike Cohn http://www.mountaingoatsoftware.com
- Jeff Patton http://www.agileproductdesign.com
- Jeff Sutherland http://www.JeffSutherland.com

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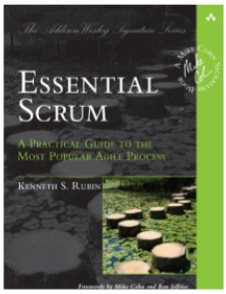

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