

Scrum

Alexander Yanakiev

-
- ▶ It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is adaptable to change.

Charles Darwin

Core of Agile

- ▶ Timely, regular and reliable delivery of business value through short sprints (iterations)
- ▶ Delivery of the highest priority functionality through the Product Owner and the Delivery Team
- ▶ Continuous process improvement through feedback



Aim Aim Fire!



Vs.

Fire Aim Aim!

Incremental vs Iterative



1



2



3



1



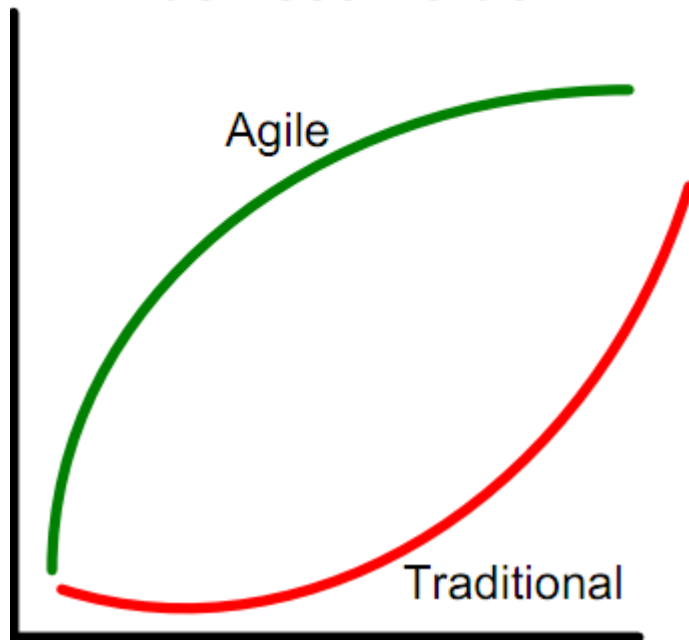
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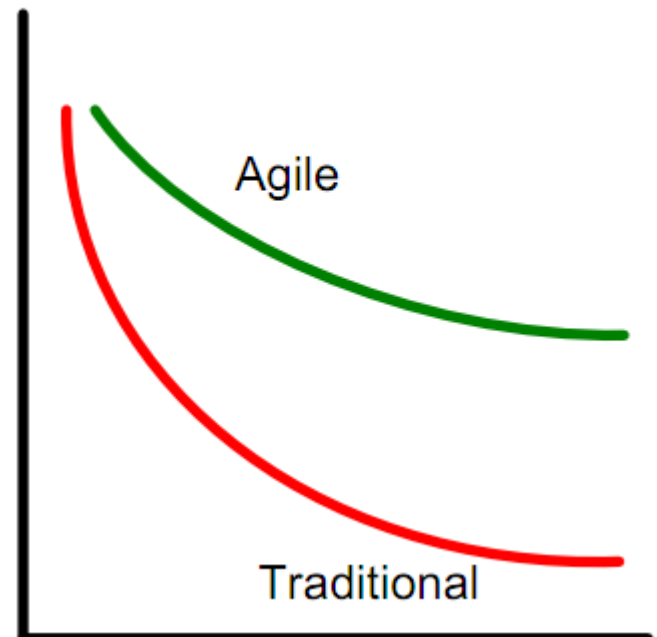
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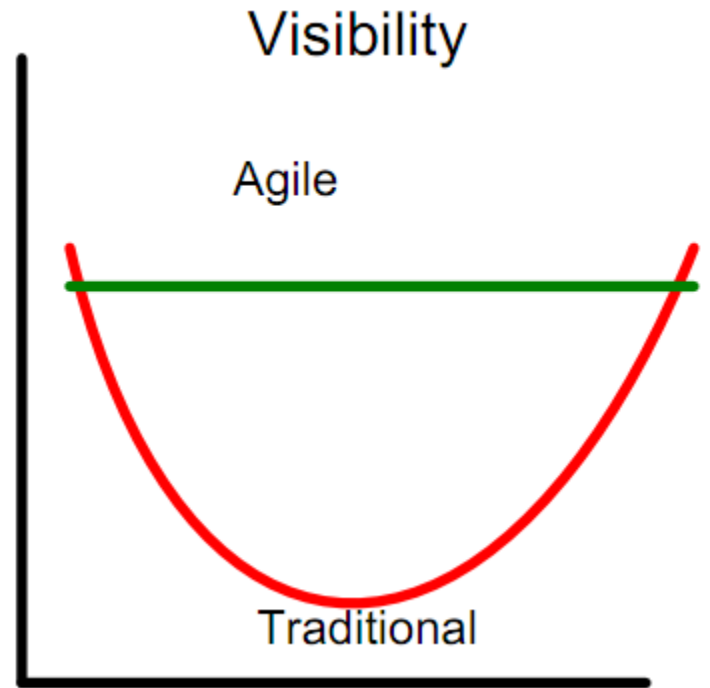
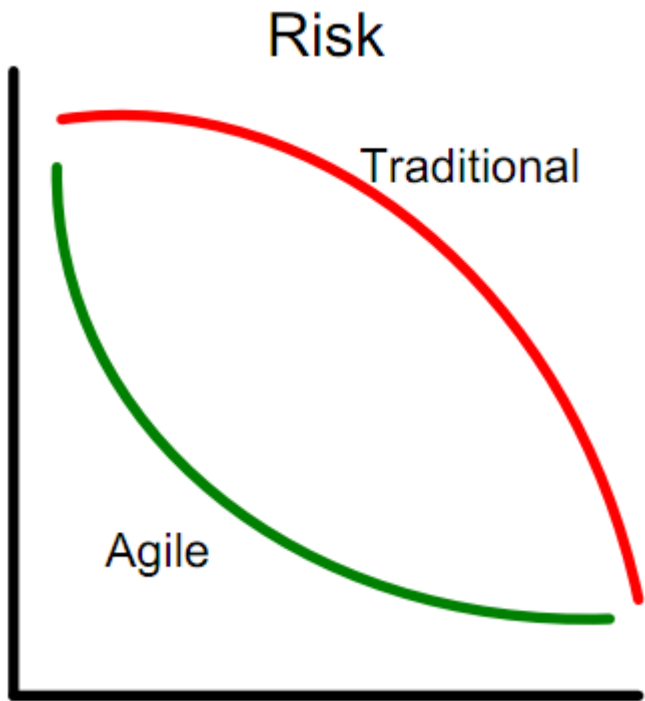


Business Value



Adaptability







NOKIA
Connecting People

Google

Microsoft

ORACLE

IBM

YAHOO!

B | B | C



The Scrum Framework





Vision

Vision

Aim of the project
With an owner



Product Backlog

Release Planning Meeting

Product Backlog
Prioritised features
desired by customer

Backlog tasks
expanded by the
team

Sprint Backlog

Sprint Planning Meeting

Review Product Backlog
Estimate Sprint Backlog
Commit to 30 days



Potentially Deployable Increment



Roles

- ▶ Product Owner
- ▶ Scrum Master
- ▶ Team

Product Owner

- ▶ Defines the features of the product, decides on release date and content
- ▶ Is responsible for the profitability of the product
- ▶ Prioritizes features according to market value
- ▶ Can change features and priority every 30 days
- ▶ Accepts or rejects work results

Scrum Master

- ▶ Ensures that the team is fully functional and productive
- ▶ Enables close cooperation across all roles and functions and removes barriers
- ▶ Shields the team from external interferences
- ▶ Ensures that the process is followed. Invites to daily scrum, iteration review and planning meetings

Team

- ▶ Cross-functional, seven plus/minus two members
- ▶ Selects the iteration goal and specifies work results
- ▶ Has the right to do everything within the boundaries of the project guidelines to reach the iteration goal
- ▶ Organizes itself and its work
- ▶ Demos work results to the Product Owner

What change does Scrum introduce?

- ▶ Business partners and therefore the business have control over priorities through continuous collaboration
- ▶ Faster delivery of business benefits through iterative delivery
- ▶ Reduced risk through more frequent and early delivery
- ▶ Higher quality of deliverables through continuous testing
- ▶ Greater visibility and more accurate reporting through delivery of working product
- ▶ Improved teamwork and morale
- ▶ Adaptive process through continuous learning and improvement
- ▶ Enhanced ability to change through iterative planning and constant communication

The Vision





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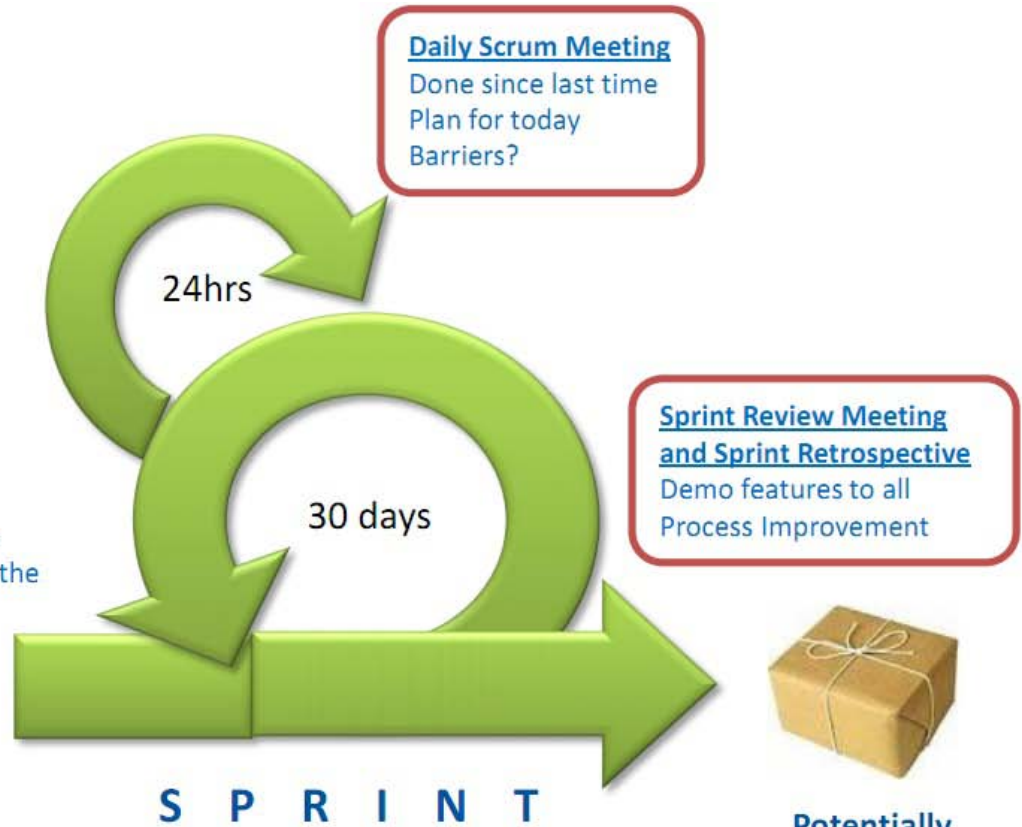
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Daily Scrum Meeting

Done since last time
Plan for today
Barriers?

Sprint Review Meeting
and Sprint Retrospective

Demo features to all
Process Improvement



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Vision

- ▶ What are we doing?
- ▶ Why?
- ▶ Who are we doing it for?
- ▶ What will be different at the end?
- ▶ Where does the value come from?
- ▶ How will we know we are done?

Release planning – the product backlog





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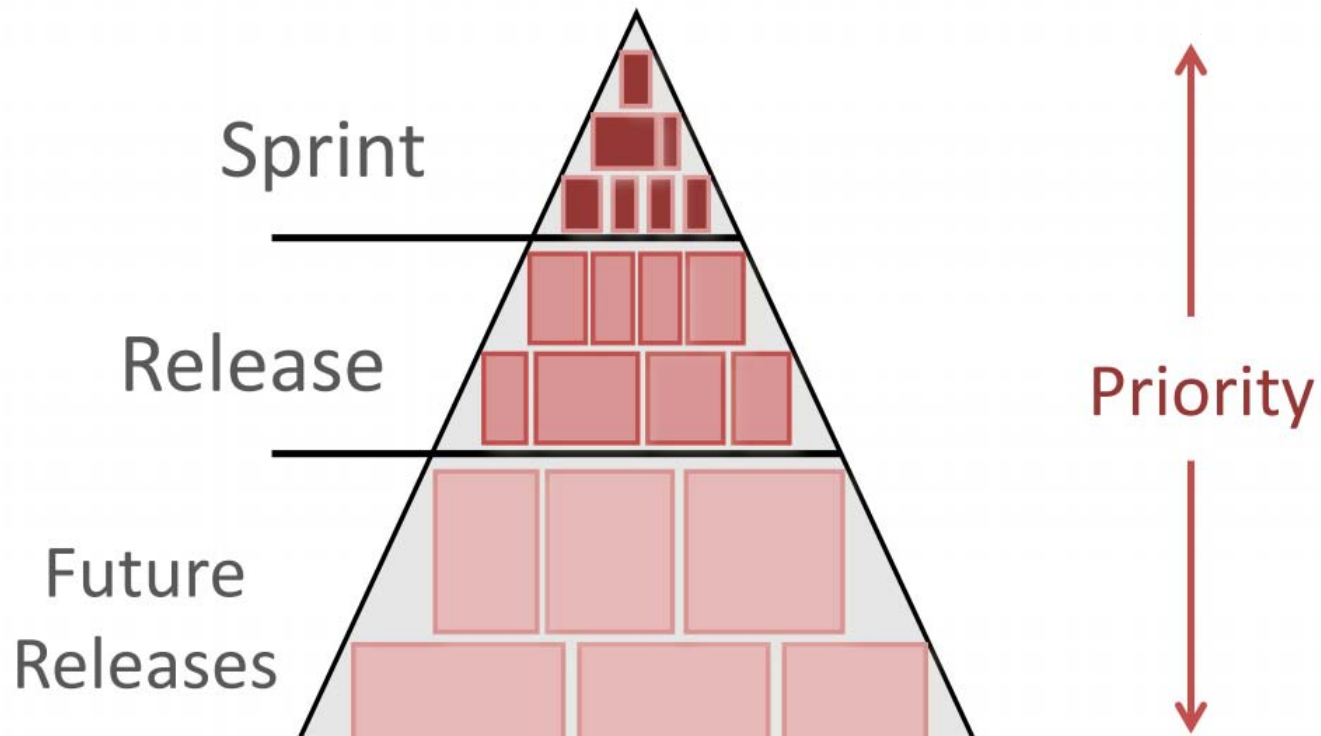
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The product backlog consists of...

- ▶ List of functionality, technology, issues
- ▶ Issues and placeholders that are later defined as work
- ▶ Emergent, prioritized, estimated
- ▶ More detail on higher priority backlog
- ▶ One list for multiple teams
- ▶ Product Owner responsible for priority
- ▶ Anyone can contribute
- ▶ Maintained and posted visibly
- ▶ Derived from Business plan or Vision Statement



Release planning

- ▶ Product owner explains vision and goal for release
- ▶ Product owner explains highest priority items (not in-depth)
- ▶ Team asks questions for clarification
- ▶ Conditions and satisfaction explained
- ▶ Discussion around “what is done”
- ▶ Relative estimates are placed on items
- ▶ Timeboxed meeting (4 hours)

Release Plan

Sprint 1



Sprint 2



Sprints 3-6

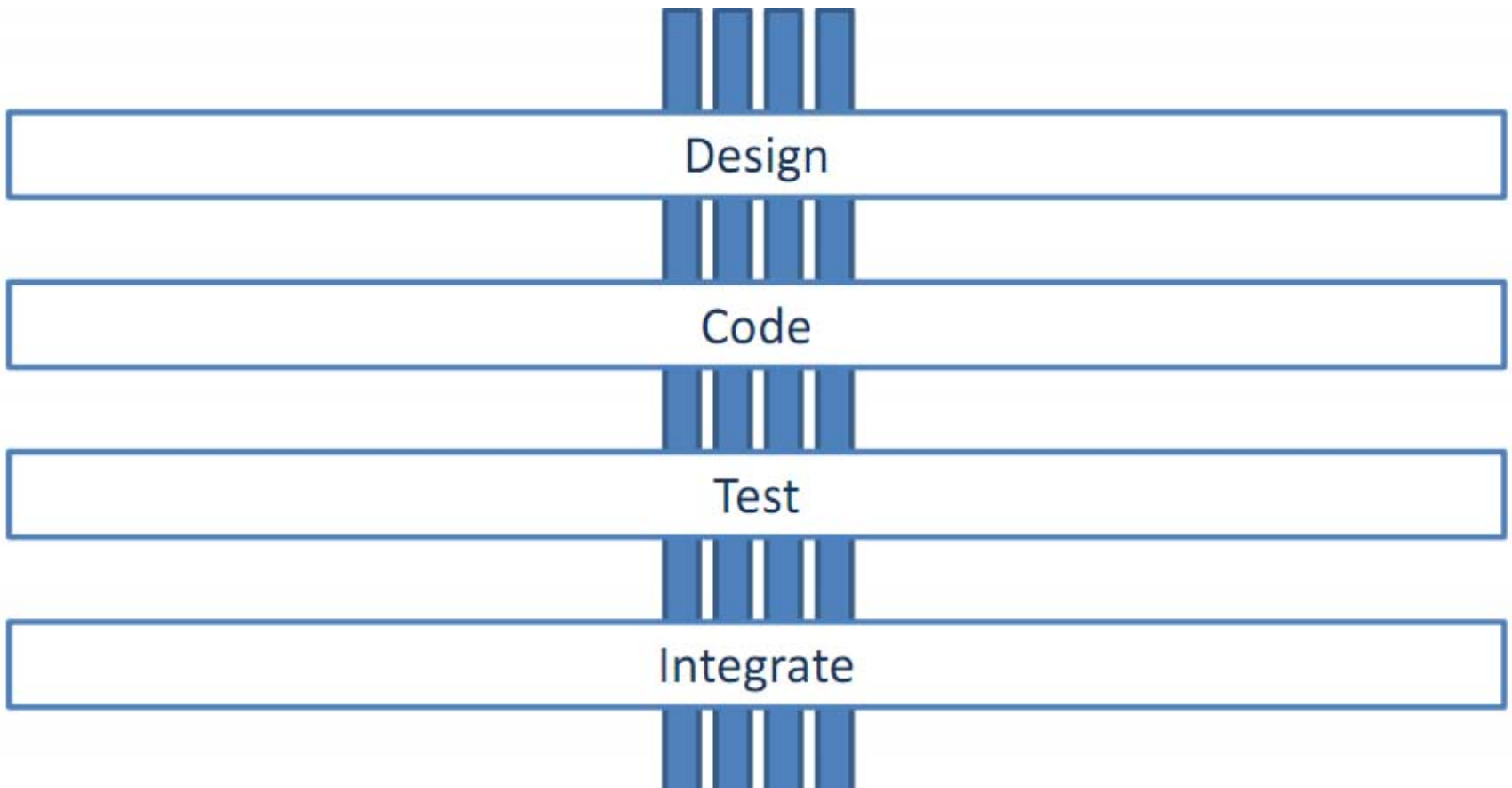


Velocity

- ▶ How much work we have done
- ▶ Not a prediction of exactly how much we will have done in a particular sprint
- ▶ Long-term measure of capacity
- ▶ Not comparable across teams
- ▶ Based on estimates of size
- ▶ Teams will develop a signature

What is **DONE**?

- ▶ Agree the acceptable level of quality at the start of the project.
- ▶ On a feature level, the acceptance criteria should be agreed up front **BEFORE** code is written
- ▶ User Stories help capture this by setting the rationale behind the feature and the tests on the back of the card.
- ▶ This is scaled up as well and needs to be agreed in advance by teams of teams and that Scrum
- ▶ Master ensures it's known and adhered to.



Estimating size

- ▶ In Agile we estimate by **size**, not by **time**
- ▶ Story points are just a number
- ▶ Story points do not decay
- ▶ Story points are a pure estimate of size
- ▶ Estimating in story points is faster
- ▶ My ideal days are not your ideal days
- ▶ Story points are more collaborative

Planning Poker

- ▶ Iterative approach to estimating
- ▶ Steps:
 - ▶ Each estimator is given a deck of cards, each card has an estimate on it
 - ▶ Customer/Product Owner reads a story and it's discussed briefly
 - ▶ Each estimator selects a card with their estimate
 - ▶ Cards turned over together
 - ▶ Discuss the differences (especially outliers)
 - ▶ Re-estimate until estimates converge



Planning poker benefits

- ▶ Showing cards at the same time allows everyone free say
 - avoids domination by influential people
- ▶ Encourages questions
- ▶ Collaborative approach, emphasises the team
- ▶ Avoids one persons view of time with the team's view of size
- ▶ Everyone's opinion is heard
- ▶ Quick
- ▶ Information is shared
- ▶ Keeps within good range

Prioritization

- ▶ Responsibility shared among the whole team, but effort let by the product owner
- ▶ Use prioritization themes to help prioritise groups of stories or features
- ▶ Can become difficult with multiple product owners – but prioritization can expose and help alleviate this



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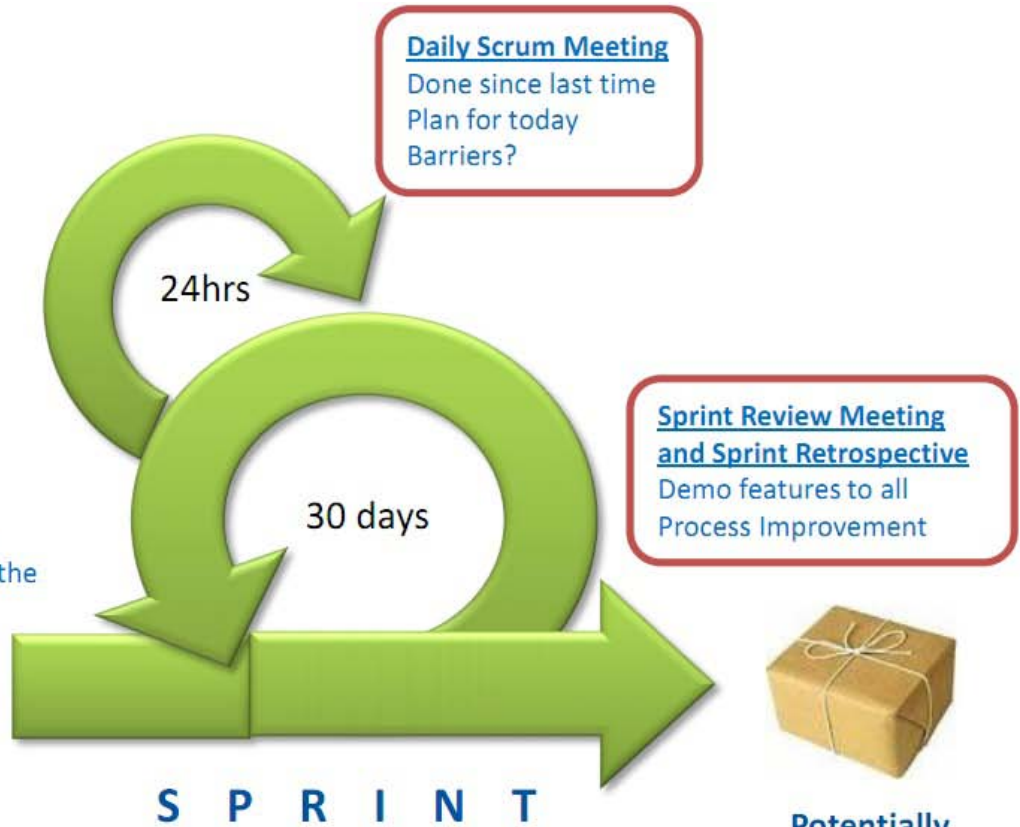
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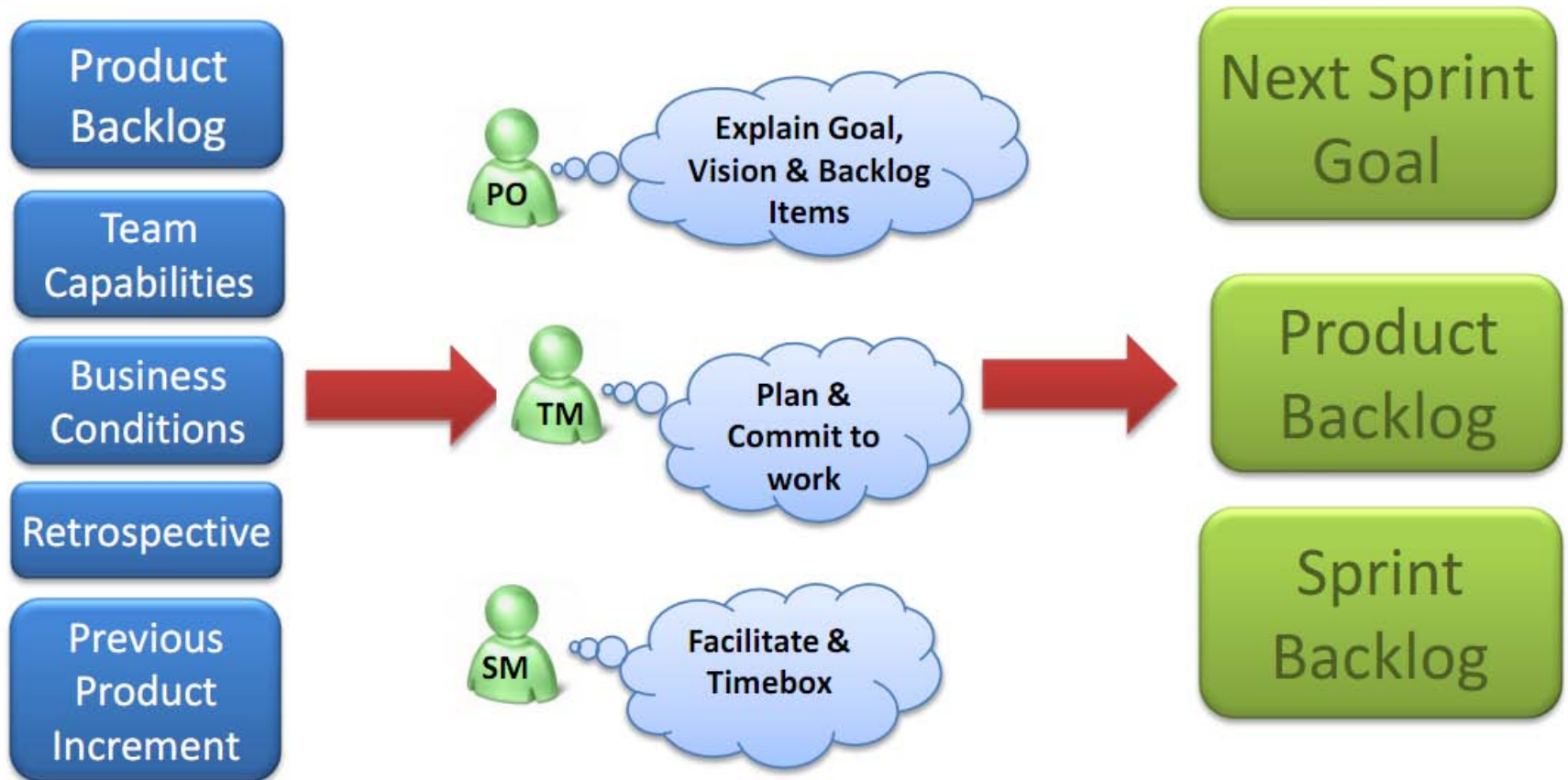
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Sprint Planning Meeting



Sprint Backlog

- ▶ Tasks to turn product backlog into working product functionality
- ▶ Tasks are estimated in hours, usually 1-16
- ▶ Tasks with more than 16 hours are broken down later
- ▶ Team members sign up for tasks, they aren't
- ▶ Estimated work remaining is updated daily
- ▶ Any team member can add, delete or change the Sprint Backlog (theirs or new)
- ▶ Work for the Sprint emerges
- ▶ If work is unclear, define a Sprint Backlog with a larger amount of time
- ▶ ... break it down later.
- ▶ Update work remaining as more is known, as items are worked

The Scrum Master's Responsibilities

- ▶ Removing the barriers between development and the customer so the customer directly drives development;
- ▶ Teaching the customer how to maximize ROI and meet their objectives through Scrum;
- ▶ Improving the lives of the development team by facilitating creativity and empowerment;
- ▶ Improving the productivity of the development team in any way possible;
- ▶ Improving the engineering practices and tools so each increment of functionality is potentially shippable.
- ▶ Guardian of the process
- ▶ Ensuring quality isn't compromised

The Product Owner's Responsibilities

- ▶ Define a Product Development Roadmap – indicates the focus (theme) and timing of the next releases
- ▶ Facilitate discussion on prioritization of features in the Product Backlog and take ownership of the outcome
- ▶ Be prepared to present your vision to the development team
- ▶ Maintain enough detail of each feature in anticipation of the next level of planning
- ▶ Be open to the negotiations that will occur
- ▶ Sharing the success of the project with the rest of the team

The Product Owner's Responsibilities

- ▶ Voice of the customer
- ▶ Defines customer value and the features of the product
- ▶ Is responsible for the profitability of the product ROI
- ▶ Manages stakeholders and interests
- ▶ Accepts or rejects work results
- ▶ Being product owner is often a full-time job



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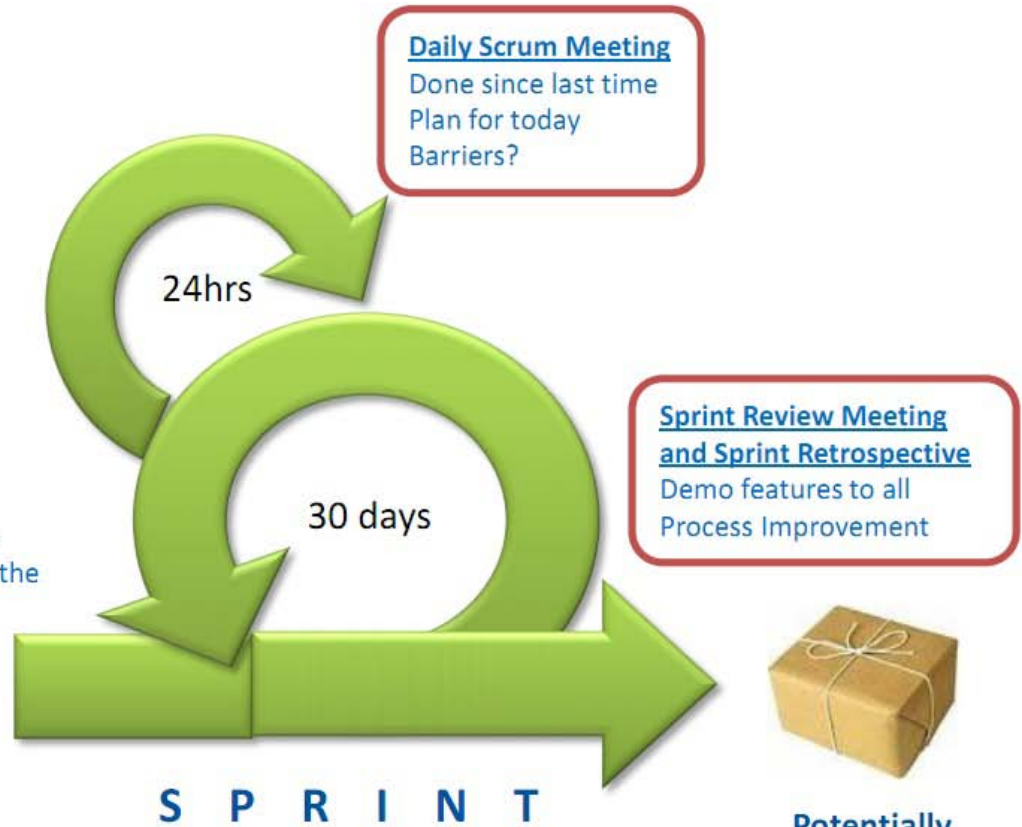
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Pigs and Chickens

- ▶ A Scrum team only consists of the Team Members, Product Owner, and Scrum Master.
- ▶ **Nobody** else is on the team.
- ▶ There will be other “stakeholders” or “interested parties”. These are chickens not pigs!



The Daily Scrum



The Daily Scrum

- ▶ Daily 15 minute status meeting
- ▶ Same place and time every day
- ▶ Standing up, facilitated by Scrum Master
- ▶ Chickens and pigs
- ▶ Three questions
 - ▶ What have you done since last meeting?
 - ▶ What will you do before next meeting?
 - ▶ What is in your way?
- ▶ Impediments
- ▶ Decisions

Some Daily Scrum Best Practices

- ▶ **Timescale, Stand up**
 - ▶ Keep it short, no story telling
- ▶ **Same Place, Same Time**
 - ▶ The team should have ownership of the stand-up
- ▶ **Signal The End**
- ▶ **Time The Meetings**
 - ▶ The Team should know how organized it is
- ▶ **Take it Offline**
- ▶ **Last Arrival Speaks First**
- ▶ **Pass The Token/Take a Card**

Some Daily Scrum Bad Practices

- ▶ Reporting to the leader
- ▶ People are late
- ▶ Observers interrupt
- ▶ I can't remember..
- ▶ Story telling
- ▶ Problem solving
- ▶ Obstacles are not raised
- ▶ Obstacles are not removed

Scrum Smells

- ▶ Talking chickens
- ▶ Missing Pigs
- ▶ Scrum Master Assigns Work
- ▶ Daily Scrum is for the Scrum Master
- ▶ Repeating the same tasks



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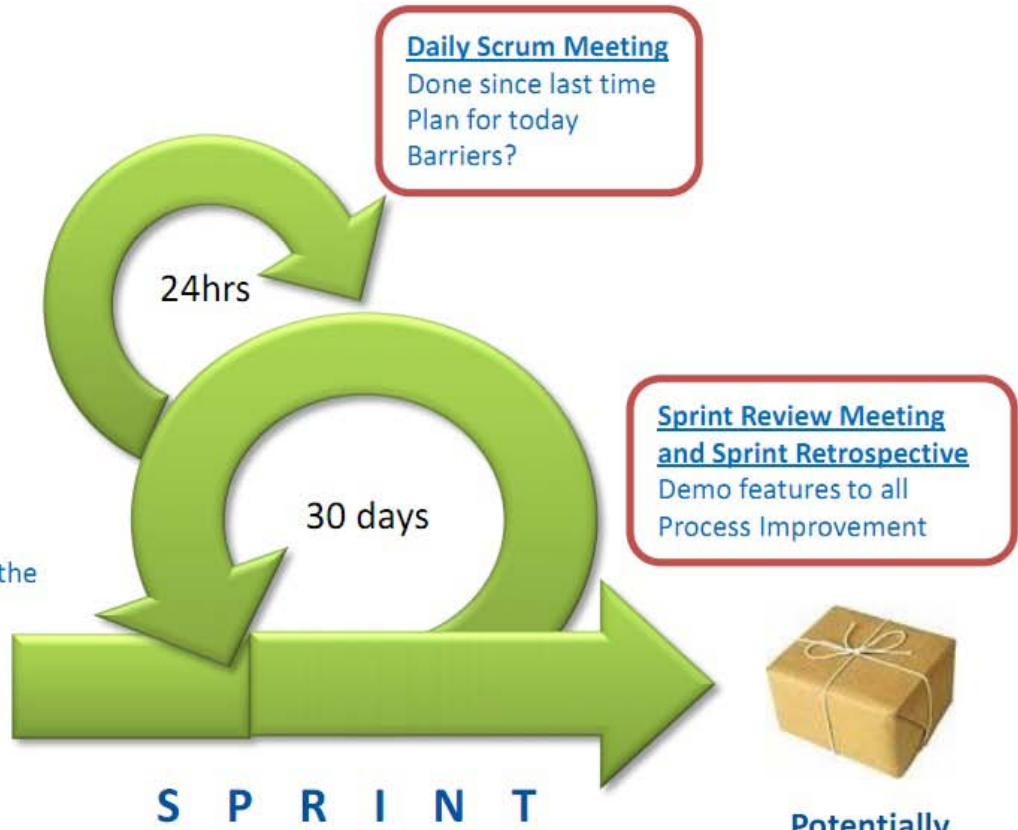
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Sprint Review Meeting

- ▶ Show and tell – but not just a demo
- ▶ Review product backlog
- ▶ Process improvement at end of every Sprint
- ▶ Facilitated by Scrum Master
- ▶ What went well, what could be improved.
- ▶ Team devises solution to most vexing
- ▶ problems

Scrum Retrospective Meeting

- ▶ Follows The Review Meeting
- ▶ Between the Team and the Scrum Master
- ▶ Topics include:
 - ▶ 😊 What we did well
 - ▶ 😞 What should we do differently next time?
 - ▶ ✨ What did we learn
 - ▶ ? What puzzles us

Burndown Charts

- ▶ Tracks work remaining against the estimated total
- ▶ Backlog updated daily
- ▶ Chart can be produced automatically
- ▶ Very simple graph of outstanding work v time left
- ▶ Big Visible Charts good for feedback, reducing interruptions and showing progress
- ▶ Need to be honest!



Questions?

