An Introduction to Scrum

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We're losing the relay race

"The… 'relay race' approach to product development…may conflict with the goals of maximum speed and flexibility. Instead a holistic or 'rugby' approach—where a team tries to go the distance as a unit, passing the ball back and forth—may better serve today's competitive requirements."

Hirotaka Takeuchi and Ikujiro Nonaka, "The New New Product Development Game", *Harvard Business Review*, January 1986.

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Scrum in 100 words

- Scrum is an agile process that allows us to focus on delivering the highest business value in the shortest time.
- It allows us to rapidly and repeatedly inspect actual working software (every two weeks to one month).
- The business sets the priorities. Teams self-organize to determine the best way to deliver the highest priority features.
- Every two weeks to a month anyone can see real working software and decide to release it as is or continue to enhance it for another sprint.

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Scrum has been used by:

- Microsoft
- Yahoo
- Google
- Electronic Arts
- High Moon Studios
- Lockheed Martin
- Philips
- Siemens
- Nokia
- Capital One
- BBC
- Intuit

- Intuit
- Nielsen Media
- First American Real Estate
- BMC Software
- Ipswitch
- John Deere
- Lexis Nexis
- Sabre
- Salesforce.com
- Time Warner
- Turner Broadcasting
- Oce

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Scrum has been used for:

- Commercial software
- In-house development
- Contract development
- Fixed-price projects
- Financial applications
- ISO 9001-certified applications
- Embedded systems
- 24x7 systems with 99.999% uptime requirements
- the Joint Strike Fighter

- Video game development
- FDA-approved, life-critical systems
- Satellite-control software
- Websites
- Handheld software
- Mobile phones
- Network switching applications
- ISV applications
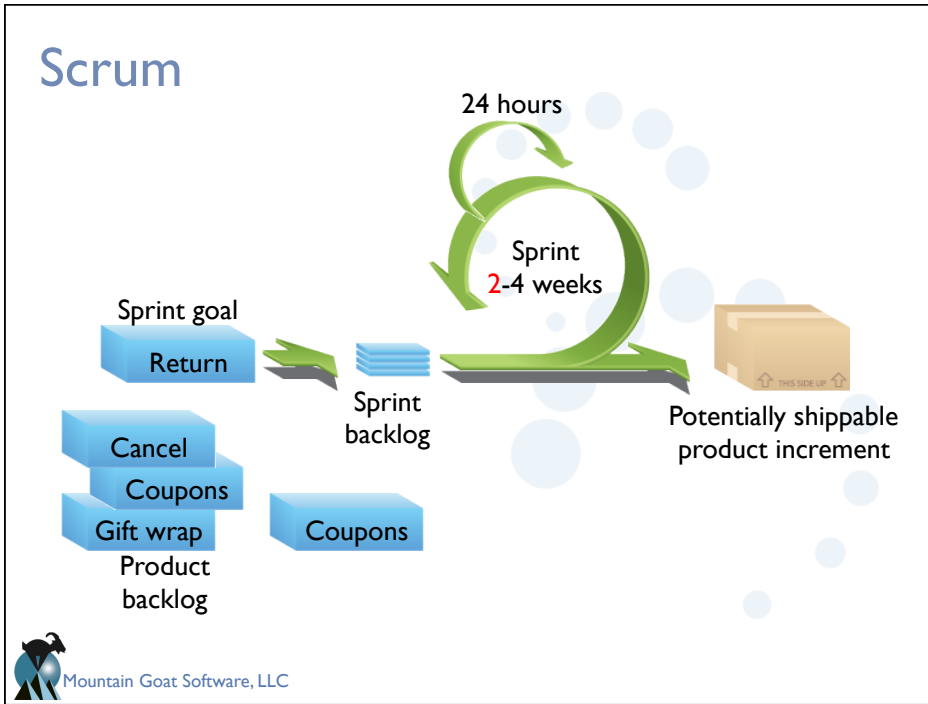- Some of the largest applications in use

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Characteristics

- Self-organizing teams
- Product progresses in a series of ~month-long "sprints"
- Requirements are captured as items in a list of "product backlog"
- No specific engineering practices prescribed
- One of the "agile processes"

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Scrum

24 hours

Sprint
2-4 weeks

Sprint goal

Return

Sprint
backlog

Cancel

Coupons

Gift wrap

Coupons

Product
backlog

Potentially shippable
product increment

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Putting it all together

DAILY SCRUM
MEETING

24 HOURS

PRODUCT
BACKLOG

SPRINT
BACKLOG

2-4 WEEKS

POTENTIALLY
SHIPPABLE
PRODUCT
INCREMENT

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Sprints

- Scrum projects make progress in a series of "sprints"
  - Analogous to Extreme Programming iterations
- Typical duration is 2–4 weeks or a calendar month at most
- A constant duration leads to a better rhythm
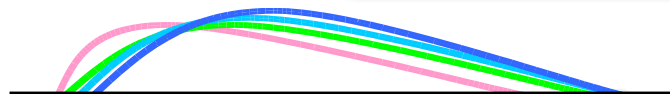- Product is designed, coded, and tested during the sprint

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Sequential vs. overlapping development

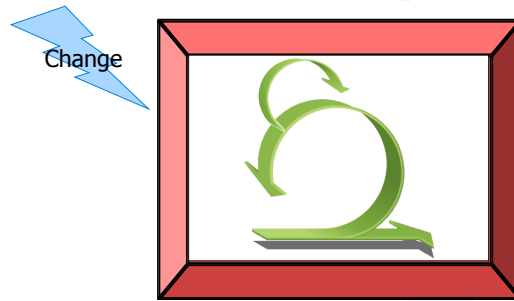| Requirements	Design	Code	Test

Rather than doing all of one thing at a time...

...Scrum teams do a little of everything all the time

Source: "The New New Product Development Game" by Takeuchi and Nonaka. *Harvard Business Review,* January 1986.

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No changes during a sprint

Change

- Plan sprint durations around how long you can commit to keeping change out of the sprint

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