

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 has been used by:

- Microsoft
- Yahoo
- Google
- Electronic Arts
- IBM
- Lockheed Martin
- Philips
- Siemens
- Nokia
- Capital One
- BBC
- Intuit

- Apple
- Nielsen Media
- First American Corelogic
- Qualcomm
- Texas Instruments
- Salesforce.com
- John Deere
- Lexis Nexis
- Sabre
- Salesforce.com
- Time Warner
- Turner Broadcasting

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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
- Uses generative rules to create an agile environment for delivering projects
- One of the "agile processes"







Sprints

- Scrum projects make progress in a series of "sprints"
- 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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sample product ba	cklog
Backlog item	Estimate
Allow a guest to make a reservation	3
As a guest, I want to cancel a reservation.	5
As a guest, I want to change the dates of a reservation.	3
As a hotel employee, I can run RevPAR reports (revenue-per-available-room)	8
Improve exception handling	8
	30
	50



Managing the sprint backlog

- Individuals sign up for work of their own choosing
 - Work is never assigned
- Estimated work remaining is updated daily
- Any team member can add, delete or change the sprint backlog
- Work for the sprint emerges
- If work is unclear, define a sprint backlog item with a larger amount of time and break it down later
- Update work remaining as more becomes known



A sprint backlog

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Tasks	Mon	Tues	Wed	Thur	Fri	
Code the user interface	8	4	8			
Code the middle tier	16	12	10	4		مسمعهم
Test the middle tier	8	16	16		8	
Write online help	12					
Write the foo class	8	8	8	8	8	
Add error logging			8	4		



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Scalability Typical individual team is 7 ± 2 people Scalability comes from teams of teams Scalability comes from teams of teams Factors in scaling Type of application Team size Team dispersion Project duration Scrum has been used on projects of over 1,000 people





A Scrum reading list

- Agile Estimating and Planning by Mike Cohn
- Agile Game Development with Scrum by Clinton Keith
- Agile Product Ownership by Roman Pichler
- Agile Retrospectives by Esther Derby and Diana Larsen
- Agile Testing: A Practical Guide for Testers and Agile Teams by Lisa Crispin and Janet Gregory
- Coaching Agile Teams by Lyssa Adkins
- Essential Scrum by Kenneth Rubin
- Succeeding with Agile: Software Development using Scrum by Mike Cohn
- User Stories Applied for Agile Software Development by Mike Cohn





Upcoming courses in Oslo

Date		Course		
3–4 September		Certified ScrumMaster		
5–6 September		Certified Scrum Product Owner		
3–4 December		Certified ScrumMaster		
5–6 December		Certified Scrum Product Owner		
Information and		Information and		
registration at		registration at		
www.programutvikling.no		v.programutvikling.no		

