

Scrum理论介绍

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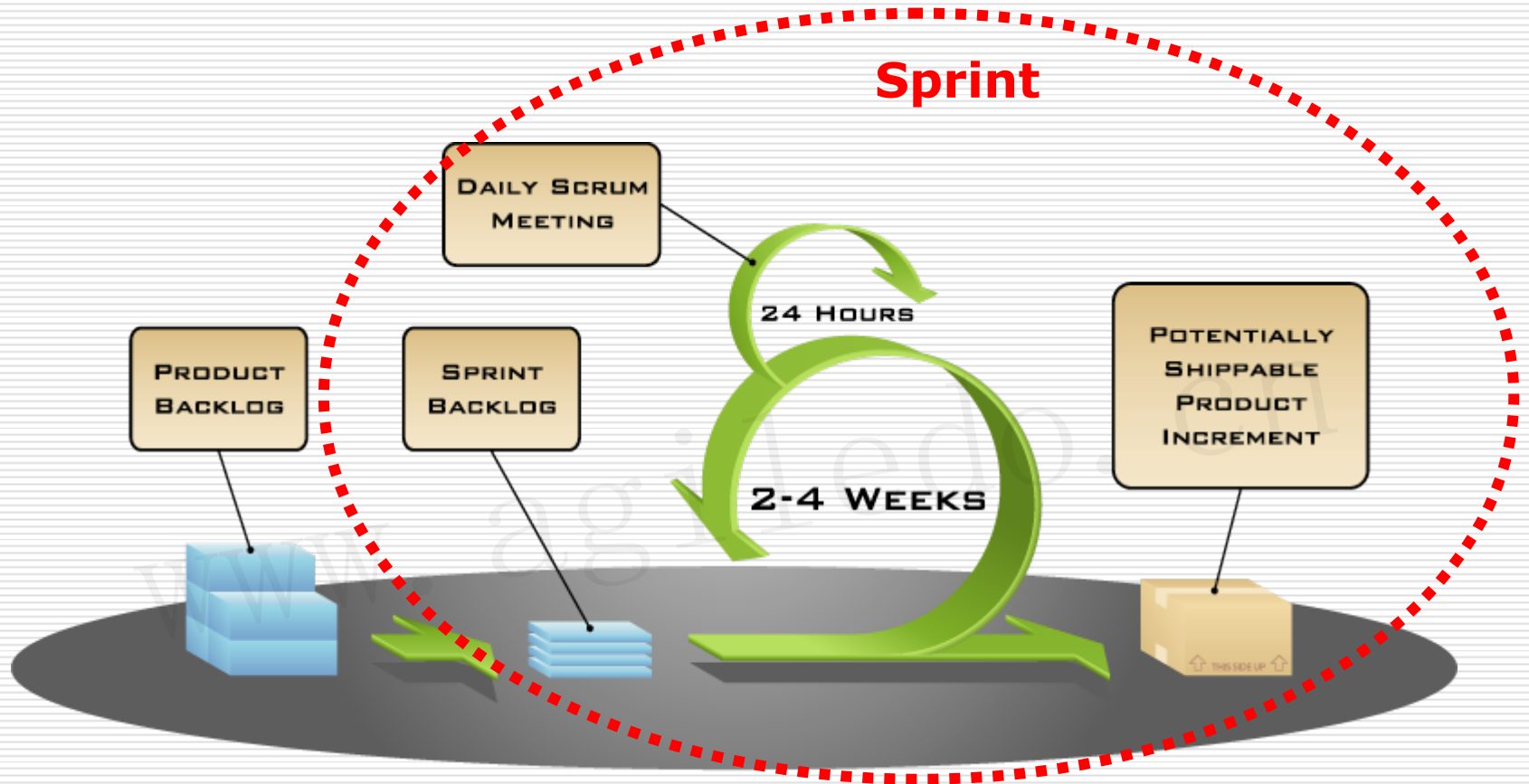
- Scrum Overview
- Scrum Roles
- Scrum Activities
- Scrum Work Products

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- ❑ Scrum Overview
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- ❑ 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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- ❑ A fixed period within 30 days to develop a deliverable product
- ❑ The Sprint includes design, coding, testing, and documentation
- ❑ Once a Sprint has started only the Scrum Team can add or remove items in Sprint backlog
- ❑ Abnormal termination of Sprint is called for when the Sprint Goal no longer makes sense

- ❑ Self-organizing teams
- ❑ Product progresses in a series of two- to four-week “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”
- ❑ No changes during a sprint

- 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

- Scrum has been used by
 - Microsoft
 - Yahoo
 - Google
 - Electronic Arts
 - Lockheed Martin
 - Philips
 - Siemens
 - Nokia
 - IBM
 - Capital One
 - BBC
 - Intuit
 - Nielsen Media
 - First American Real Estate
 - BMC Software
 - John Deere
 - Lexis Nexis
 - Sabre
 - Salesforce.com
 - Time Warner
 - Turner Broadcasting
 - Océ

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□ Product Owner

- represents the interests of all stakeholders

□ Scrum Master

- responsible for making sure a Scrum team lives by the values and practices of Scrum.

□ Scrum Team

- builds the product that the customer is going to consume

□ Responsibility

- Define the features of the product;
- Decide on release date and content;
- Be responsible for the profitability of the product (ROI);
- Prioritize features according to market value;
- Adjust features and priority every 30 days, as needed;
- Accept or reject work results.

□ Assignment Approaches

- A single person dedicated the project - must be available to answer the team's questions
- An extended member of the team that participates in sprint planning and sprint review meetings
- Typically someone from a Marketing role or a key user in internal development
- Can be a customer representative or a customer proxy

□ Responsibility

- Represents management to the project (liaison);
- Is responsible for enacting Scrum values and practices;
- Runs The Daily Scrum meetings;
- Removes impediments;
- Shields the team from external interferences;
- Ensures that the team is fully functional and productive;
- Enables close cooperation across all roles and functions.

□ Assignment Approaches

- is typically filled by a project manager or a technical team leader but can be anyone

□ Key Considerations

- is not the project manager but a facilitative team leader and Scrum process manager
- monitors sprint tasks to ensure sprint success but does not create/assign tasks (the team creates/assigns tasks)
- is part of the team: he shares responsibility with the other team members
- must regularly, physically meet the other team members

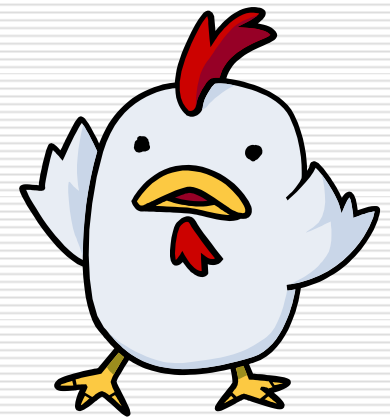
□ Main Description

- Is cross-functional, with seven (plus/minus two) members;
- Selects the Sprint goal and specifies work results;
- Has the right to do everything within the boundaries of the project guidelines to reach the Sprint goal;
- Organizes itself and its work;
- Demos work results to the Product Owner.

□ Assignment Approaches

- Members should be full-time but there may be exceptions (e.g. database administrator);
- Members should change only between sprints;
- "cross-functional" - it includes all the expertise necessary to deliver;

- ❑ Members of Scrum Team are known as **Pigs** because they are **committed** to delivering Sprint Goal
- ❑ People who are **involved** but not dedicated to the project are known as **Chickens** - they attend Scrum meetings as observers



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- ❑ Release Planning
- ❑ Prioritizing the Backlog
- ❑ Estimating the Product Backlog
- ❑ Sprint Planning Meeting
- ❑ The Daily Scrum
- ❑ Sprint Retrospective
- ❑ Sprint Review Meeting

□ Purpose

- level-set expectations (internal and external) and to proactively uncover needs and dependencies

□ Key Inputs

- The prioritized Product Backlog
- The estimated velocity
- Any hard and fast to-market dates the Product Owner must satisfy

□ To address

- The number and duration of the sprints
- How many people or teams should be on this project
- The number of releases
- The value delivered in each release
- The ship date for the releases

□ Purpose

- ensure that the team builds the right product

□ Description

- it is continuously updated by the Product Owner based on feedback from the end-user (as they are exposed to new product increments) and also in response to the evolving technical and business landscape.
- the team provides the Product Owner with sizing estimates for the Product Backlog items to enable the Product Owner to balance business need with the estimated cost of implementation.

Guideline

- Scrum does not prescribe how the Product Backlog is prioritized. Some techniques are:
 - Kano Analysis
 - Theme Screening
 - Theme Scoring
 - Relative Weighting

□ Purpose

- Enables the Product Owner to make prioritization decisions

□ Measure unit

- Estimations are relative and are measured in “points” rather than real-world units of effort
- “Story Point”: A story point is a relative estimate of the "size" of the work compared to other work on the project

□ Guideline: Estimation Techniques

- Scrum does not prescribe specific estimation techniques.
- Planning Poker is a popular iterative approach to estimating. Here are the steps:
 - Each estimator is given a deck of cards, each card has a valid estimate written on it
 - The Product owner reads a story and it's discussed briefly
 - Each estimator selects a card representing his or her estimate
 - The cards are turned over so all can see them
 - Discuss differences (especially outliers)
 - Re-estimate until estimates converge

□ Purpose

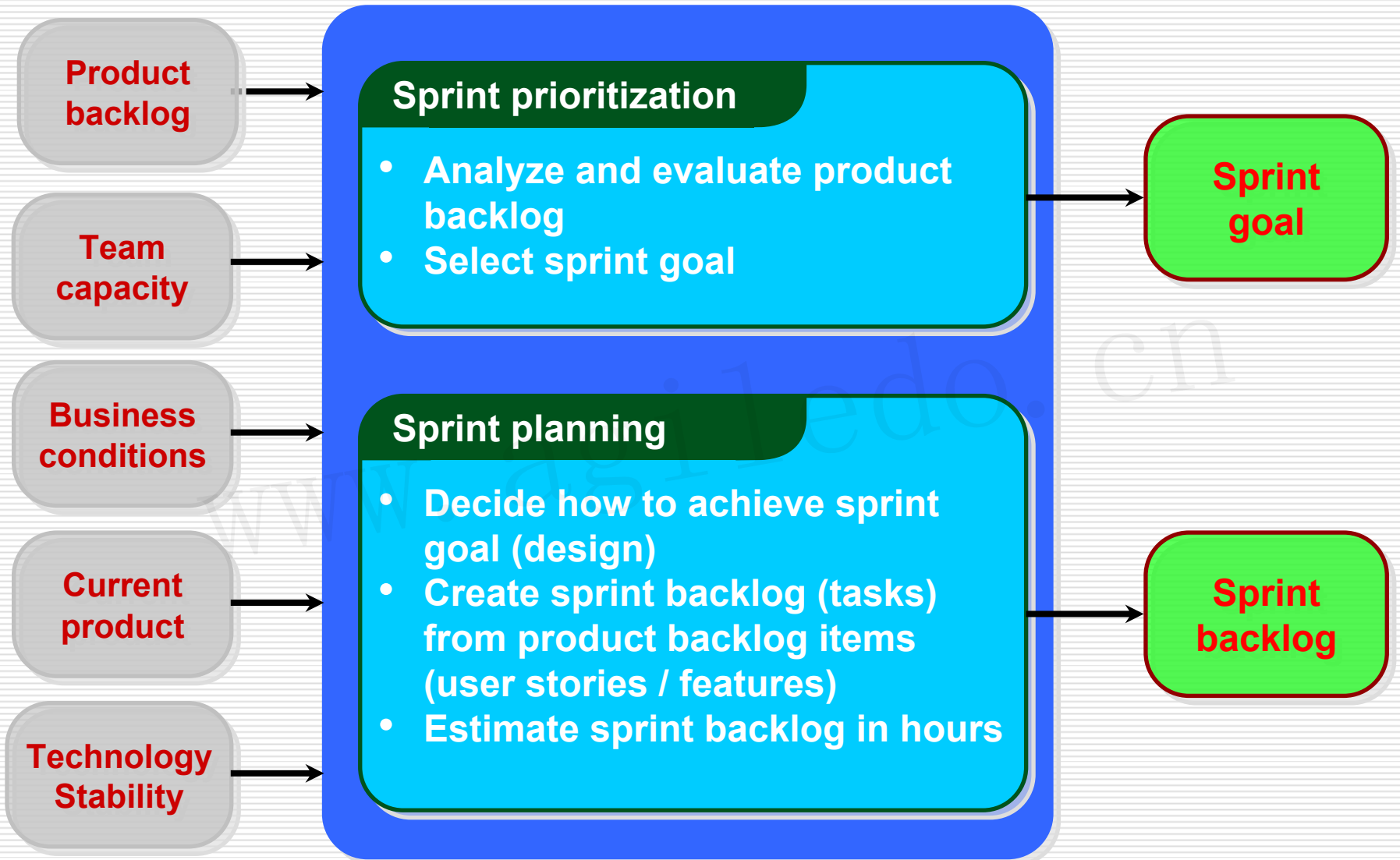
- the Scrum Team and Product owner determine which features and tasks will be attempted in the upcoming sprint

□ Attendee

- the Product Owner, Scrum Master, the entire Scrum Team, and any interested and appropriate management or customer representatives

□ Input: Product Backlog

□ Output: Sprint Backlog



A short statement of what the work will be focused on during the sprint

Financial services

Support more technical indicators than company X with real-time, streaming data.

□ The meeting is

- Daily 15 minute status meeting
- Team **stands** in a circle facing each other
- team members make commitments to each other

□ The meeting is not

- problem-solving or issue resolution meeting
- boss is collecting information about who is behind schedule

□ Attendee

- All team members (including SM,PO) are required to attend the daily scrum and talk.
- Anyone else (for example, a departmental VP, a salesperson, or a developer from another project) is allowed to attend but is there only to listen.

□ Time and Location

- in the same location and at the same time each day. Ideally the daily scrums are held in the morning as they help set the context for the coming day's work.

□ Typical impediments are:

- My _____ broke and I need a new one today.
- I still haven't got the software I ordered a month ago.
- I need help debugging a problem with _____.
- I'm struggling to learn _____ and would like to pair with someone on it.
- I can't get the vendor's tech support.
- Our new contractor can't start because no one is here to sign her contract.
- I can't get the _____ group to give me any time and I need to meet with them.
- The department VP has asked me to work on something else "for a day or two."

□ Purpose

- the project is assessed against the sprint goal and get feedback from stakeholders

□ Attendee

- the Product Owner, the Scrum team, the Scrum Master, management, customers, and engineers from other projects

□ When to be hold

- At the end of each sprint

□ How to do

- the Scrum team shows what they accomplished during the sprint (new feature or underlying architecture)
- Powerpoint presentations are forbidden!

□ Purpose

- main mechanism for taking the visibility that Scrum provides into areas of potential improvement, and turning it into results.

□ Attendee

- The Scrum Team, the Product Owner, and the Scrum Master will all attend, and a neutral outsider will facilitate the meeting.

□ When to be hold

- Following the Sprint Review

□ How to do (one approach)

- Start doing
- Stop doing
- Continue doing

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- Potentially Shippable Product Increment
- Product Backlog
- Release Burndown Chart
- Sprint Backlog
- Sprint Burndown Chart
- Task Board

- Responsible by Scrum Team
- The increment must consist of
 - tested code that has been built into an executable
 - the user operation of the functionality is documented either in Help files or user documentation

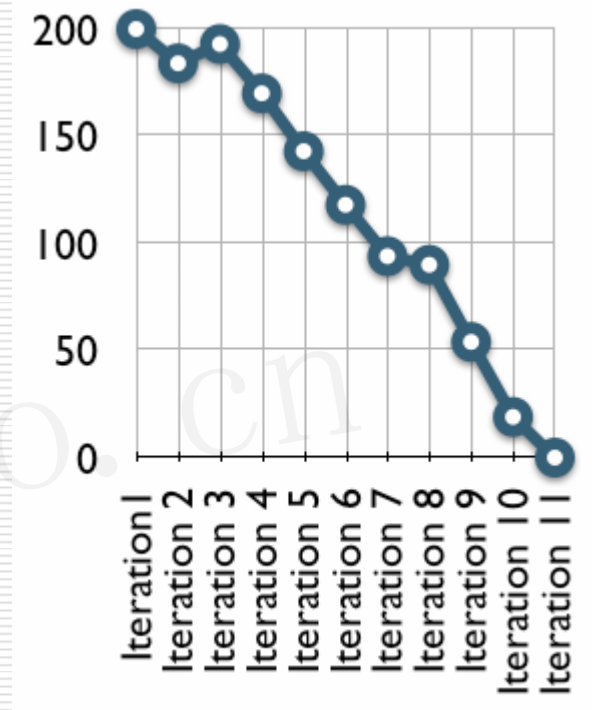
- difference between "potentially shippable" and "shippable"
 - Mike Cohn states: "potentially shippable" and "shippable" are not the same thing. Some large or complex projects will require the use of "release sprint" or "hardening sprint" at the end of a release cycle (say 6 two-week sprints then a 2-week release sprint). The release sprint is not a dumping ground for sloppy work; rather it is a place where some hardening of the system can occur.
 - One thing is clear Scrum teams need to agree on their definition of "potentially shippable" and "shippable" and to come to a shared understanding with the Product Owner.

- ❑ Prioritized list of work to be performed on a product
- ❑ Product Backlog includes:
 - user-centric
 - technical tasks
- ❑ Anyone can contribute backlog items
- ❑ Product Owner responsible for prioritisation
- ❑ Reprioritized at the start of each sprint
- ❑ A popular expressing form: User Story

	Item #	Description	Est	By
Very High				
	1	Finish database versioning	16	KH
	2	Get rid of unneeded shared Java in database	8	KH
		- Add licensing	-	-
	3	Concurrent user licensing	16	TG
	4	Demo / Eval licensing	16	TG
		Analysis Manager		
	5	File formats we support are out of date	160	TG
	6	Round-trip Analyses	250	MC
High				
		- Enforce unique names	-	-
	7	In main application	24	KH
	8	In import	24	AM
		- Admin Program	-	-
	9	Delete users	4	JM
		- Analysis Manager	-	-
		When items are removed from an analysis, they should show up again in the pick list in lower 1/2 of the analysis tab		
	10		8	TG
		- Query	-	-
	11	Support for wildcards when searching	16	T&A
	12	Sorting of number attributes to handle negative numbers	16	T&A
	13	Horizontal scrolling	12	T&A
		- Population Genetics	-	-
	14	Frequency Manager	400	T&M
	15	Query Tool	400	T&M
	16	Additional Editors (which ones)	240	T&M
	17	Study Variable Manager	240	T&M
	18	Haplotypes	320	T&M
	19	Add icons for v1.1 or 2.0	-	-
		- Pedigree Manager	-	-
	20	Validate Derived kindred	4	KH
Medium				
		- Explorer	-	-
		Launch tab synchronization (only show queries/analyses for logged in users)		
	21		8	T&A
	22	Delete settings (?)	4	T&A

□ How to show:

- The horizontal axis shows the sprints
- the vertical axis shows the amount of work remaining at the start of each sprint
- Work remaining can be shown in whatever unit. the team prefers--story points, ideal days



□ What is Sprint Backlog

- a list of tasks that defines a Team's work for a Sprint.

□ Main Description

- Contains tasks to turn product backlog into working product functionality
- Tasks are estimated in hours, usually 1-16
- Any team member can add, delete or change the Sprint Backlog tasks (theirs or new)
- Only the team can add items to the Sprint backlog
- Estimated work remaining is updated daily

High-Level Design is considered

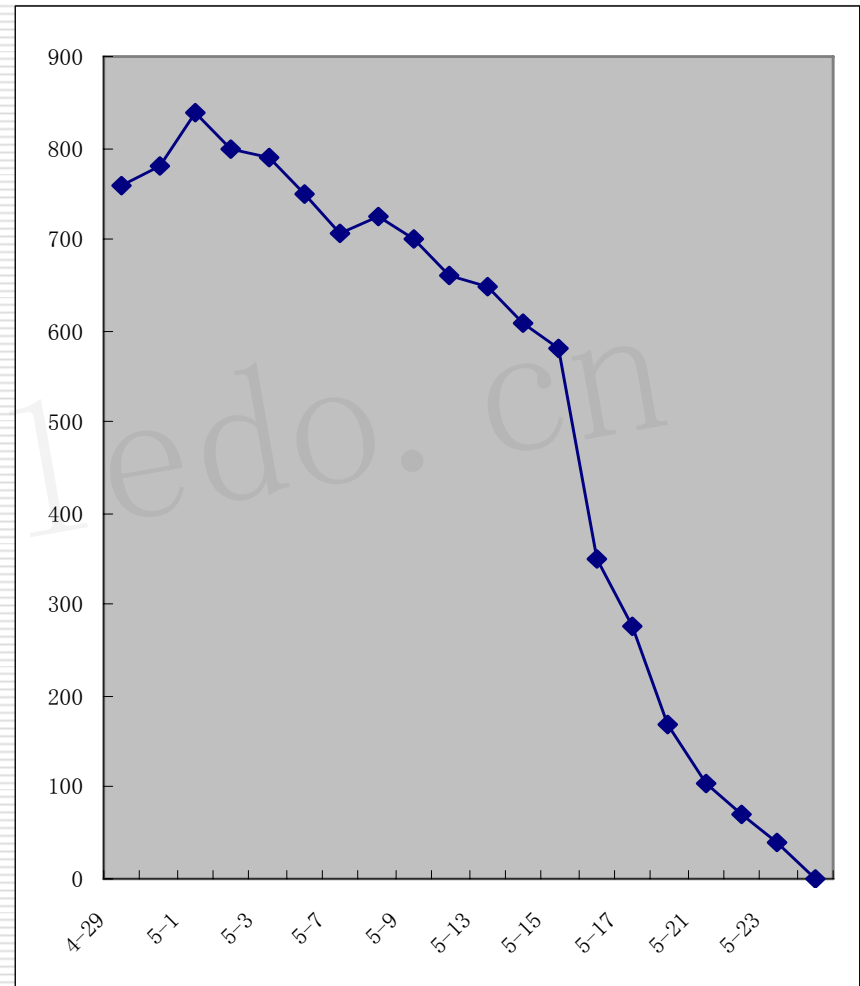
As a
Enterprise
user, I
want to
send SM
one by one
on the
website.



Code the user interface	8H
Code the middle tier	16H
Test the middle tier	16H
Test the user interface	8H
Add error log	4H
Write the online help	2H

□ How to show

- The estimated work remaining in the sprint is calculated daily and graphed
- The vertical axis displays the hours of effort remaining for the Sprint
- The horizontal axis displays the days of the Sprint.



- Purpose: shows all the work the team is doing during a sprint.
- Updated continuously throughout the sprint
 - Someone think of a new task
 - Estimate is changed
 - Either during or before The Daily Scrum
- Presentation
 - Co-located teams may use a wall
 - Distributed teams will use some kind of tool

Story	To Do	In Process	To Verify	Done
<p>As a user, I... 8 points</p>	<p>Code the... 9</p> <p>Code the... 2</p> <p>Test the... 8</p>	<p>Test the... 8</p> <p>Code the... DC 4</p> <p>Test the... SC 8</p>	<p>Test the... SC 6</p>	<p>Code the... D</p> <p>Test the... SC 8</p> <p>Test the... SC</p> <p>Test the... SC</p> <p>Test the... SC 6</p>
<p>As a user, I... 5 points</p>	<p>Code the... 8</p> <p>Code the... 4</p>	<p>Test the... 8</p> <p>Code the... 6</p> <p>Code the... DC 8</p>		<p>Test the... SC</p> <p>Test the... SC</p> <p>Test the... SC 6</p>

- 迅思威尔 — 专注在敏捷和精益（Scrum、AUP、XP、Kanban等）的公开课、内训、咨询
 - <http://www.agiledo.cn>，这里有我们部分的实践分享以及解决方案的下载。
- 袁斌（Andy Yuan，工学硕士，MBA）
 - Scrum、AUP、Agile modeling、XP、Kanban等的实践者
 - 咨询总监。10余年中就职于全球性公司从事软件和产品开发。曾任Anoto产品中国区开发总监和Mino中国区软件开发总监，利用Scrum成功实现产品快速交付，在onshore/offshore的Scrum开发，Scrum团队建设，Scrum在小型、大型团队的应用等方面积累了丰富的经验。
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课程名称	最适合的人群 / 阶段
敏捷开发帮助团队降低成本，高效开发	决定是否要实施敏捷之前被问题困扰没有解决方案
Scrum项目周期管理最佳实践	在试点项目中实施敏捷的整体思路
敏捷开发核心工程实践	
如何进行敏捷测试	实施敏捷阶段的关键要素
打造成功的Scrum团队	
敏捷开发如何管理需求	
敏捷的估算与计划	
如何成为优秀的Scrum产品负责人	
实施敏捷的经验和教训	
企业实施Scrum的系统化策略	
CMMI的环境中如何实施敏捷	您正在实施CMMI
PMP如何做敏捷项目管理	您正在应用PMBOK
AUP实施精要	您正在应用RUP
敏捷在离岸项目中的应用	您是外包企业
ScrumMaster 认证	您需要认证
Scrum Product Owner 认证	

□ 为什么选择迅思威尔的企业内训

- Scrum的理论和中国的现状有很多的冲突，迅思威尔积累了在中国实践Scrum的丰富解决方案；
- 迅思威尔服务了众多的行业用户，深知不同行业特点需要调整Scrum实践的侧重点以及如何和其它敏捷方法结合；
- 迅思威尔提供专业的“敏捷实施效果评估”以及“敏捷实施技术支持”服务，解除客户“参加培训后仍然不能实施Scrum”的后顾之忧。