

# RefineM

## Business Requirements and Backlog Grooming for Agile

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# Agenda

1. Introductions and Expectations
2. Business Requirements and Backlog Grooming for Agile
  - a) Requirements Gathering in Agile vs. Waterfall
  - b) Forms of Agile Business Requirements
  - c) Techniques for Agile Requirements Gathering
  - d) Role of BA in Agile vs. Waterfall
  - e) Backlog Grooming Best Practices
3. Summary / Q&A

# RefineM's Virtual Lunch & Learn

This is a monthly webinar delivered during the lunch hour in the first week (Wednesdays) of every month.

It's designed to help you learn while you eat lunch, providing a relaxed environment to enhance your experience.

The monthly webinars will cover a variety of Project Management / Agile topics.

# Your Expectations

What are your expectations from this webinar?

Why are you here today?

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# NK Shrivastava

## PMP, RMP, ACP, CSP, SPC4

- CEO/Consultant since Dec 2011
  - Agile Transformation/Coaching/Adoption
    - Enterprise Agile Coach @ IBM
  - Project Management/Process Improvement Consulting and Training
  - Products for Project Professionals
    - Essential Gear for Project Managers
    - PMP Exam Simulator
    - PMP Videos at Vimeo
- 20+ years of successful project leadership
  - Successfully led hundreds of projects of all sizes
  - Recovered many projects, saved millions of dollars
  - Implemented numerous process improvements
  - Coached/mentored hundreds of PMs and executives
  - Board member of SWMO PMI Chapter (2008-2014)

Helping organizations  
turn their project  
management capability  
into a *competitive  
advantage*

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# What's New at RefineM

Webinar Title	Date
The Recipe for Successful Project Delivery ( <i>ProjectManagement.com</i> )	Jul 3
Sprint Planning	Aug 7

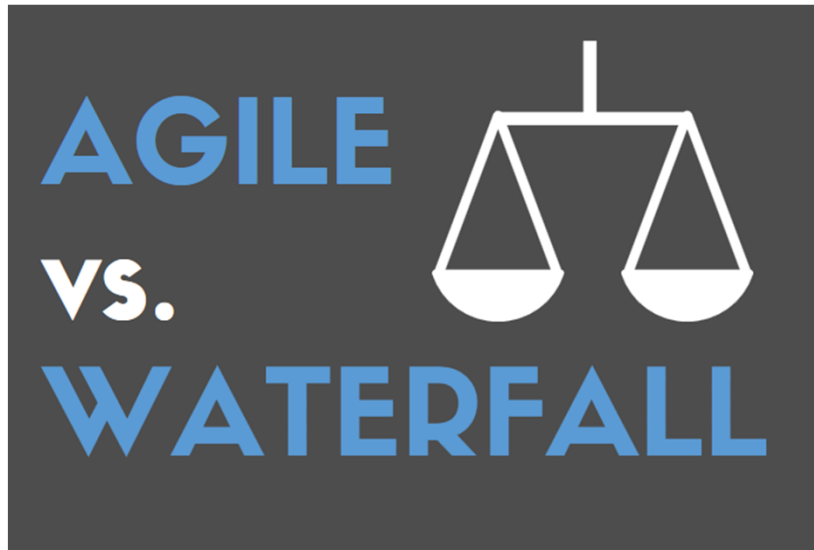
- New Training and Outreach
  - Several in-person and virtual PMP classes in 2018
  - New BA classes – Business Analysis Fundamentals and Business Requirements Gathering for Agile Projects
  - New Agile class – Kanban Fundamentals / Kanban 101
- [PMP Exam Prep Test Simulator](#) -- **2-day free trial available now.**
- [Agile, PMP, Business Requirements Gathering](#) Videos at Vimeo

# Business Requirements and Backlog Grooming



- Requirements Gathering in Agile vs. Waterfall
- Forms of Agile Business Requirements
- Techniques for Agile Requirements Gathering
- Role of BA in Agile vs. Waterfall
- Backlog Grooming Best Practices
- Summary / Q&A

# Requirements Gathering: Agile vs. Waterfall





# Requirements Gathering: Agile vs. Waterfall

Waterfall	Agile
Requirements gathered upfront	Requirements gathered just-in-time
Requirements can only be changed with a change request	Requirements can be reprioritized or added/changed between sprints
Requirements captured using requirements documentation (BRD)	Requirements captured in backlog as epics and user stories
Delivered at the end of the project	Delivered at the end of each sprint
Managing scope creep is an issue	Flexible scope - no scope creep

**Are there other differences you can think of?**

<https://www.blackpepper.co.uk/what-we-think/blog/agile-vs-waterfall-requirement-gathering>

# Forms of Agile Business Requirements



- User Stories
- EPICs

# User Stories

- A User Story is a requirement (business function) that adds value to the user
  - ✓ Scenario (clear and adds value)
    - “As a loan officer, I want to know a credit rating, so that I can approve a loan”
  - ✓ Captured on a Story Card

# User Stories

- **Story Cards**

- ✓ A user story card has 3 parts:
- ✓ **Card:** A written description of the user story for planning purposes and as a remainder
- ✓ **Conversation:** A section for capturing further information about the user story and details of any conversations
- ✓ **Confirmation:** A section to convey what tests will be carried out to confirm the user story is complete and working as expected

## Story Format

As A...

[Reference the role or user for whom this story is valuable]

I want to ...

[Describe the action taken, information provided]

So that...

[Expected result or business value/enabler]

# Epics

- **Epics**

- ✓ An Agile Epic is a group of related User Stories.
- ✓ It is unlikely to introduce an Epic into a sprint without first breaking it down into its component User Stories to reduce uncertainty

# Techniques for Agile Requirements Gathering



- Brainstorming
- Wireframes
- Interviews
- Questionnaires
- Observation
- Story-Writing Workshops

# Brainstorming

- **Brainstorming**

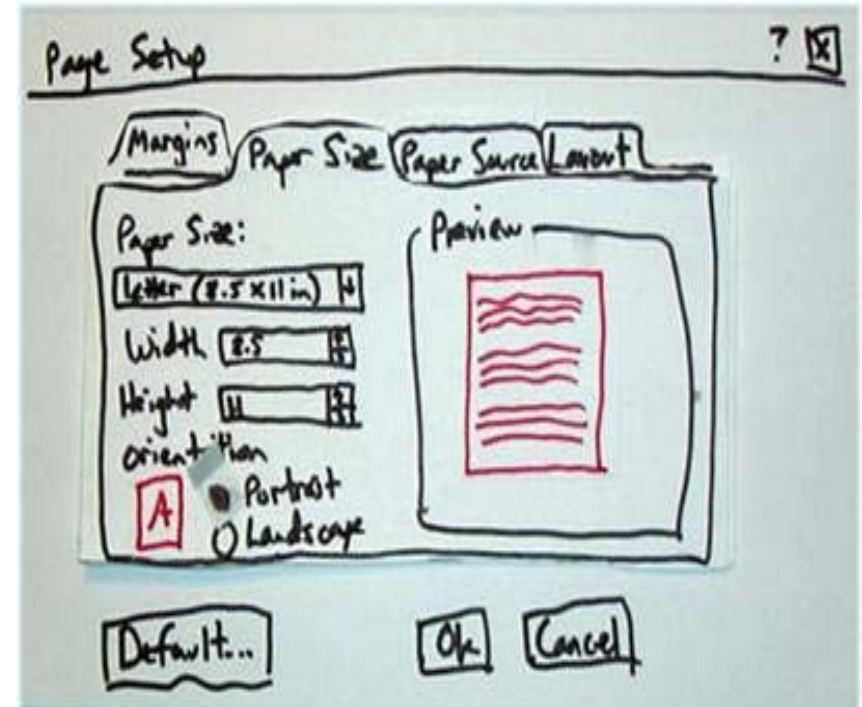
- ✓ Getting input from many participants in a rapid fire round allowing people to speak when they have an idea until all the ideas are captured
- ✓ Fosters creativity, and involves the entire team.
- ✓ Ideas are evaluated based on merit and not based on who suggested it.



# Wireframes

- **Wireframes**

- ✓ The wireframe is usually:
- ✓ black and white,
- ✓ accompanied by some annotations to describe the behavior of the elements, their relationships and their importance,
- ✓ often put in context within a storyboard (a sequence of screens in a key scenario),
- ✓ refined again and again, and
- ✓ used as a communication tool serving as an element of conversation and confirmation of "agile" user stories.





# User Interviews

- **User Interviews**

- ✓ Talking to people who will use the software is a common method for gathering information about requirements.
- ✓ Avoid vague questions, like “What does it need to do?”
- ✓ Prefer open-ended, context-free questions
  - Example: What areas of the software need the fastest performance?
  - The purpose is to avoid a simple “yes” or “no” and instead get a more expanded idea of what the user has in mind.

# Observation

- **Observation**

- ✓ Observation entails watching someone who is using the product.
- ✓ Advantages:
  - Direct feedback
  - Unscripted feedback
  - Find areas that might not have been exposed otherwise
- ✓ Disadvantages
  - Difficult to set up sometimes

# Story-Writing Workshops

- ✓ In story-writing workshops, the customer team gets together to write user stories. There is no evaluation at this time, just writing.



# Questionnaires

- Questionnaires should be avoided as a means of gathering requirements, but can be used to refine requirements later on.
- Why should questionnaires be avoided?
  - ✓ One-way communication
  - ✓ Too closed-ended: yes or no, or scale of 1-5
  - ✓ Cannot receive timely feedback from everyone who needs to provide it

# BA's Role in Agile Requirements



# BA's Role in Agile

- **Story writing with/for the Product Owner (PO)**
  - ✓ Work closely with the PO
  - ✓ Write clear User Stories that explain what the PO wants
  - ✓ Elicit the requirements
  - ✓ Document Acceptance Criteria and Condition of Satisfaction (COS)
  - ✓ Ensure stories have sufficient details
  - ✓ Can be at a high level and can be detailed
  - ✓ Help developers to understand what they are supposed to be building

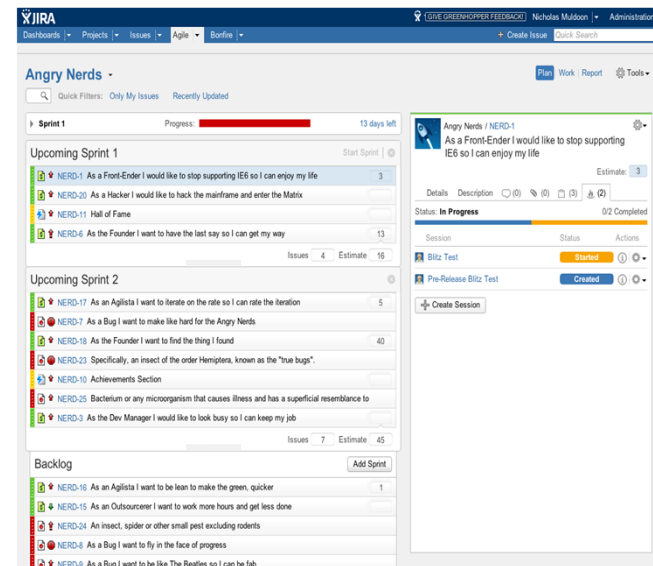
# BA's Role in Agile

- **Develop Wireframes**

- ✓ Rough sketch/presentation of functional flow
- ✓ Not actual visual design
- ✓ Low-fidelity UI prototype
- ✓ Can be created in the following formats –
  - Microsoft Visio
  - Adobe Photoshop
  - MS PowerPoint
  - MS Excel
  - Paper sketch

# BA's Role in Agile

- **Maintaining and updating the Product Backlog**
  - ✓ Stories that do not provide sufficient details and need update
  - ✓ Stories need to be broken down into smaller stories
  - ✓ May develop one-liner descriptions of the feature
  - ✓ Getting ready for the next sprint or even next two sprints
  - ✓ Working closely with the PO and update if required
  - ✓ Prioritize or help PO prioritize items in the backlog





Traditional Business Analyst	Agile Business Analyst
Focuses on completing all requirement upfront and spends time in ensuring the requirement is unambiguous (everything in black and white) and has all the details.	Focuses on understanding the problem and being the domain expert so that s/he can answer questions from the development team swiftly and decisively.
Focuses on getting a ‘sign off’ on the requirements.	Focuses on ensuring the requirements meet the current business needs, even if it requires updating them.
Often there is a wall between the BA/Business and the Development team.	Agile BA is usually part of the team.
Tends to get into implementation details or dictate solutions	Has to remain in the problem domain, leaving the development team ‘space’ to explore different solutions.
Long turnaround	Quick turnaround.
Focus on being very specific and detailed in the requirements (construed as inflexible)	Leave room for negotiation (and be flexible) as long as the problem is solved.

**Are there other differences you can think of?**

Source: Business Analyst Times

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# What is a Backlog?

- **A backlog is:**
  - ✓ A list of requirements, features, and enhancements, bugs, tasks ....
  - ✓ Prioritized by Product Owner with input from team, customer
  - ✓ Crucial to ensure that the customer gets the highest value
  - ✓ Broken down to three levels in most Agile / Scrum projects
    - Product Backlog: Highest-level backlog for whole product
    - Release Backlog: Chunk of product backlog to be done in a release
    - Sprint / Iteration Backlog: Chunk of product backlog for a sprint / iteration

Source: Scrum Guide. ©2014, Scrum Inc. Creative Commons Licensed.

<http://www.scrumguides.org/docs/scrumguide/v1/scrum-guide-us.pdf>

# Agile Backlogs

- **Product Backlog contains**

- ✓ **Themes**- very top-level requirements or objectives e.g. A new website
- ✓ **Epics** – very large user stories e.g. A new website section
- ✓ **User Stories** – an **Independent, Negotiable, Valuable, Estimatable, Small, Testable (“INVEST”)** piece of functionality
- ✓ As items rise to the top of the product backlog i.e. become higher priority, the Product Owner will work with the team to break Themes and Epics into User Stories
- ✓ Once broken down into User Stories, the Team will provide delivery estimations and commit to delivering a number of these stories (in line with pre-defined priorities) in the following sprint.
- ✓ The Product Owner will then begin to define, prioritize and add additional User Stories to the backlog in preparation for the next sprint – this might include new requirements or changes emerging from the previous sprint.

# Levels of Backlog

Product Backlog

Release 1 Backlog

Release 2 Backlog

Sprint

Sprint

Sprint

Sprint

Sprint

Sprint

Sprint

# Product Backlog Example

RefineM		Sample Product Backlog					
<u>ID</u>	<u>Features / User Stories</u>	<u>Impacted Application</u>	<u>Approach</u>	<u>Effort (Hours)</u>	<u>Priority</u>	<u>Release</u>	<u>Status (Active/ Done)</u>
CHART-1	Display results in a bar chart.			12	1	1	
EXPL-1	Generate explanations of results.			8	2	1	
AREA-1	Display Success Areas.			4	3	2	
IMPR-1	Display Areas of Improvement			4	4	2	
RESC-1	Display resources with results.			4	5	2	
EMAIL-1	Send the results in an email.			12	6	3	
PDF-1	Offer a PDF version of results.			20	7	3	

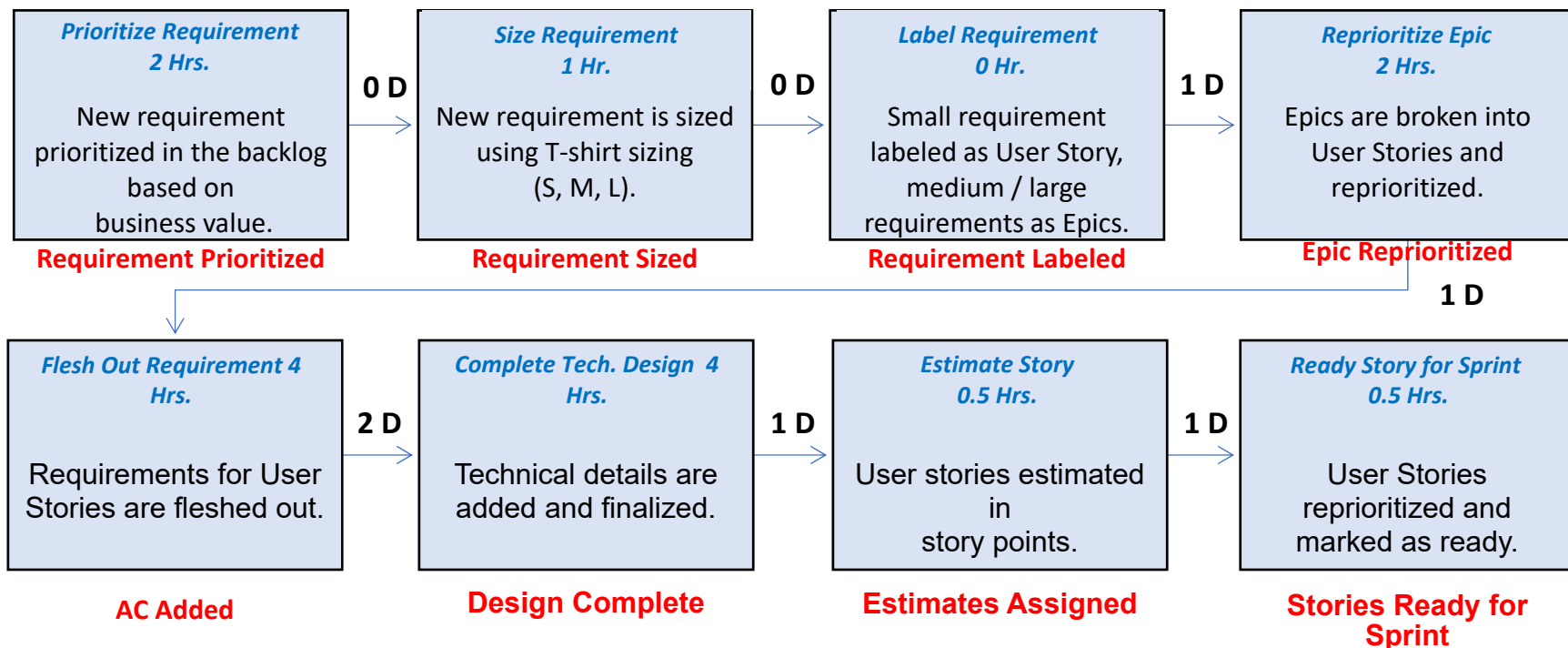
# Sprint/Iteration Backlog

- The Sprint Backlog is the output of the sprint planning meeting.
- It is essentially the list of tasks that the Scrum team needs to complete during the sprint in order to turn a selected set of product backlog items into a deliverable increment of functionality.
- During a sprint, new tasks may be discovered and adjusted. This is The Scrum team simply adds them to the sprint backlog to be prioritized in the next sprint.
- The sprint backlog shows the Scrum team members what is complete and what remains. This data will help team members run an effective daily scrum meeting.

# Backlog Grooming / Refinement Steps

- **Steps in Backlog Grooming/Refinement**
  1. New requirement goes into the backlog prioritized based on business value
  2. New requirement is sized using T-shirt sizing (S,M,L)
  3. Small requirement is labeled as a User Story, medium and large requirements are labeled as Epics
  4. Epics are broken into User Stories and reprioritized
  5. Requirements for User Stories are fleshed out; details and acceptance criteria are added
  6. Technical design completed
  7. User Stories are estimated in story points
  8. User Stories are reprioritized based on story points and value and marked as ready for Sprint.

# Steps/Value Stream Map for Backlog Grooming



**Activity Time (AT): 14 hours**

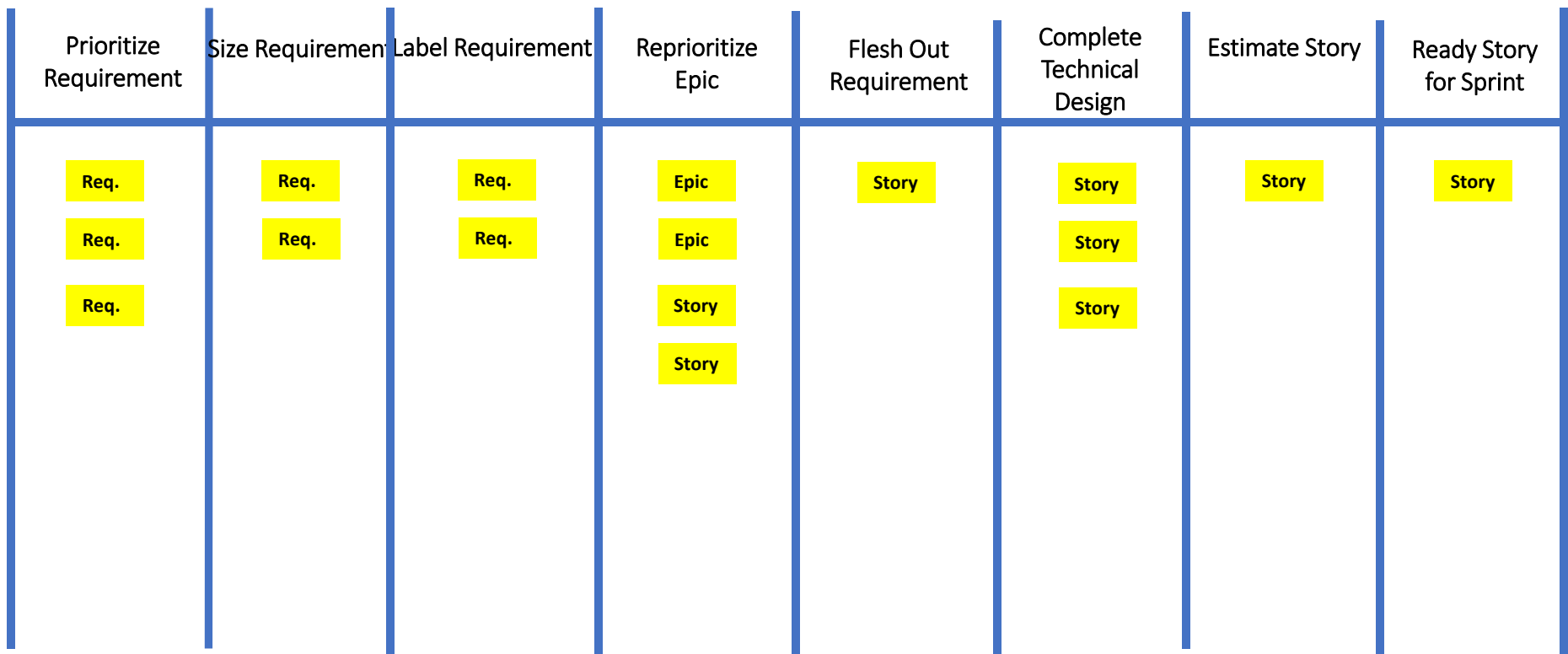
**Wait Time (WT): 48 hours**

**Cycle Time (CT): 62 hours**

**Process Efficiency (PE) = AT/CT = 23%**



# How to Implement Backlog Grooming

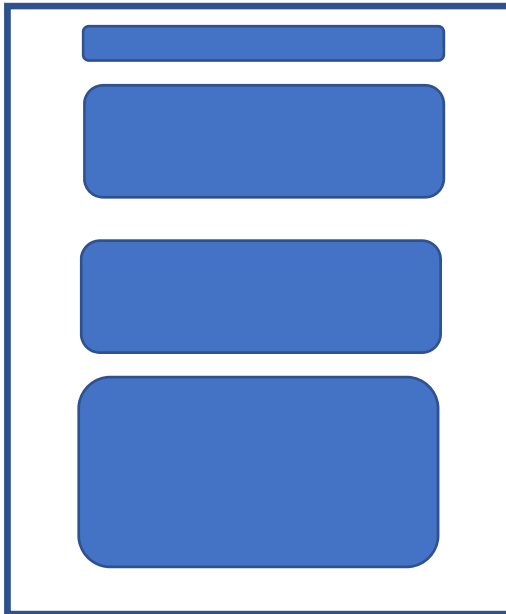


# Coarse-Grained vs. Fine-Grained

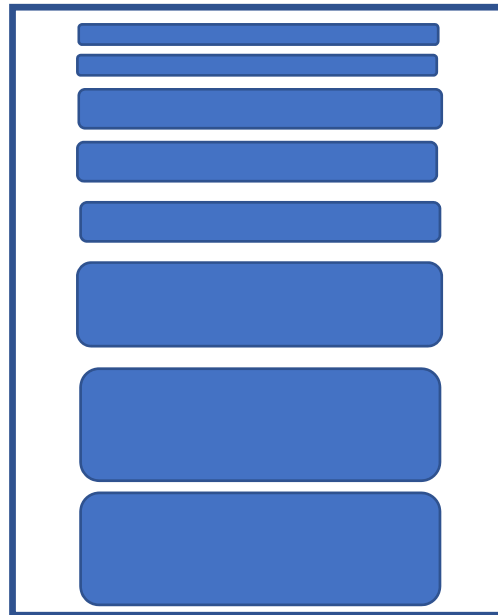
- What is the difference between coarse-grained and fine-grained requirements?

Coarse-Grained	Fine-Grained
High-level summary of <i>what</i> needs to be delivered	Low-level details, likely including more of <i>how</i> the requirement is delivered
Likely to receive a higher story estimate such as 20 or above (or XL in t-shirt)	Likely to receive a lower story point estimate such as 8 or 13 (or S,M in t-shirt)
Difficult to assign a time estimate	Easy to assign a time estimate
Likely at the bottom of the product backlog because it is not ready for refinement	Likely at the top of the product backlog because it is ready for refinement

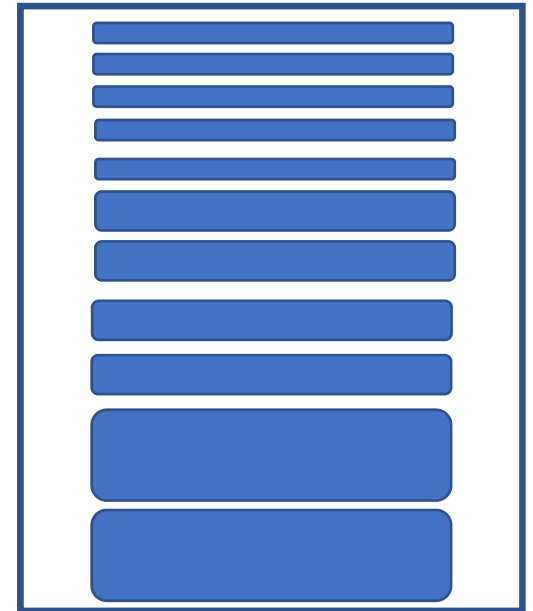
# Coarse-Grained vs. Fine-Grained



Pre-Grooming



1<sup>st</sup> round Grooming



2<sup>nd</sup> round Grooming

# Grooming / Refinement Best Practices

- PO should work with customer and development team
- Should be done on regular basis (may be weekly)
- Consider basing priority on one/more of the following:
  1. Customer priority: what does the customer want and when?
  2. Cost of delay
  3. Urgency of feedback: how important is the feedback?
  4. Size: time the dev team will take to implement?
  5. How backlog items are related
    - E.g. if A is important for B and C, then do A first
  6. Functionality: What parts are needed to go live?

Source: The Product Backlog: your ultimate to-do list. <https://www.atlassian.com/agile/backlogs>

# Conclusion

- Effective Requirements gathering on Agile projects requires different techniques than on Waterfall projects
- It is still possible to achieve results with requirements gathering techniques on an Agile project, just like Waterfall.
- Backlog grooming is more important on Agile projects to keep your teams ahead of the game

**Utilize both sets of techniques for Agile success**

# Next Lunch and Learn

- ***The Recipe for Successful Project Delivery***
  - ✓ What is the recipe for project success?
  - ✓ How can you adapt this recipe to your own project's needs?
  - ✓ How can this approach help you streamline project management in your organization?
- ***Wednesday, July 3, 12:00-1:00 PM Eastern – ProjectManagement.com***

**Register Today - Don't wait for the last Minute**

# Next Training Course

## Backlog Grooming for Agile Requirements



**July 31, 2019, Raleigh, NC.  
Early bird price - \$295 until July 17,  
\$400 afterwards.**

***Strengthen your Agile team's results by utilizing backlog grooming.***

**<https://refinem.com/backlog-grooming-for-agile-requirements/>**

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# RefineM's Agile Products

[Agility Assessment:  
https://Agility.RefineM.com](https://Agility.RefineM.com)

## Features

- Quick 7-question test
- Bar chart of results
- Ability to email results
- Follow-up for more insight on your results

[https://vimeo.com/ondemand  
/refinemagile/](https://vimeo.com/ondemand/refinemagile/)

## About the Series

- Four core modules and supplemental 1-hour videos cover Agile principles and mindset, planning and estimation, project execution, and more
- Over 9 total hours of videos
- **\$49.99/month** for access to all videos



# RefineM's PMP Exam Prep Products

<https://Examprep.RefineM.com>

- **2-day free trial now available**

<https://vimeo.com/ondemand/refinempmpexamprep/>

## Subscriptions (USD)

Level	Duration	Price
Bronze	2 weeks	\$30
Silver	1 month	\$50
Gold	2 months	\$75
Platinum	3 months	\$100

## About the Videos

- Covers all knowledge areas to help you prepare with confidence.
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- **\$29/month** for individual videos.

Contact@RefineM.com

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# How to Earn 1 PDU for this Webinar?

1. Log in to [ccrs.pmi.org](https://ccrs.pmi.org) and Click on “Report PDUs” link.
2. Click “Courses and Training” and Input the following:

Activity Name	“Business Requirements and Backlog Grooming for Agile” <i>(complete before selecting provider)</i>
Provider	“RefineM LLC” <i>(key in the Provider name)</i>
Date Started	June 5, 2019
Date Completed	June 5, 2019
Contact Person	NK Shrivastava
Contact Phone	(417) 763-6762
Contact Email	<a href="mailto:Trainings@RefineM.com">Trainings@RefineM.com</a>
PDUs	1.00 Technical.

3. Check “I agree this claim is accurate” box and then Submit.

# Questions?

**NK Shrivastava, MBA, PMP, RMP, ACP, CSP, SPC4**  
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# Training Opportunities from RefineM

Name	Online	SGF	KC	Raleigh
<a href="#"><u>PMP® Exam Prep</u></a>	Jul 29- Aug 6	Aug 13-16	Aug 27-30	Sept 10-13
<a href="#"><u>Recipe to Deliver Projects Successfully</u></a>	Aug 3 Sept 14	Jul 15	Jul 22	Jul 29
<a href="#"><u>Agile Fundamentals / Agile 101</u></a>	Jul 9-10		Jul 23-24	Aug 6-7
<a href="#"><u>PMI-ACP® Exam Prep</u></a>	Jul 9-11		Jul 23-25	Aug 6-8
<a href="#"><u>Agile for Waterfall/Operational Work</u></a>	Aug 24	Jul 13	Jul 27	Aug 10
<a href="#"><u>Backlog Grooming for Agile</u></a>	Sept 28	Jul 17	Jul 24	Jul 31
<a href="#"><u>Kanban Fundamentals / Kanban 101</u></a>	Jun 22 Aug 17			
<a href="#"><u>Business Requirements for Agile</u></a>	Sept 21	Jul 16	Jul 23	Jul 30
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Click [here](#) for more details.

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