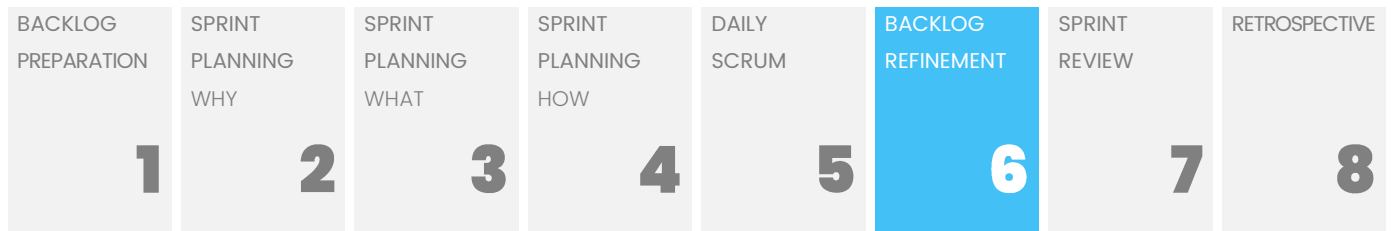


YIN AND YANG

A Backlog Refinement pattern for agile teams



YIN AND YANG



Yin and Yang is a Pattern for Backlog Refinement. It uses two points of collaboration during the Sprint to gather the Scrum Team to understand scope boundaries of upcoming work, assumptions, risks, and then asks Scrum Team to validate those assumptions and share their findings at the next Backlog Refinement session.



PURPOSE

Product Backlog refinement is the act of breaking down and further defining Product Backlog items into smaller more precise items. This is an ongoing activity to add details, such as a description, order, and size. Attributes often vary with the domain of work.

Time-box: Scrum Teams often spend around 10% of the Sprint engaged in Backlog Refinement activities.



WHO ATTENDS?

Role

Scrum Team – Product Owner, Scrum Master, Developers (people in the team developing the product)
Subject Matter Experts (SMEs)
Interested stakeholders



KEY ARTEFACTS

- **Product Backlog** – The Product Backlog is an emergent, ordered list of what is needed to improve the product and achieve the product's goal. It is the single source of work undertaken by the Scrum Team. Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.



AGENDA 1: "Yin"

Scrum Master

- Introduces the agenda.
- Clarifies the rationale for the session.
- Indicates the time-box for the session.

Product Owner

- Presents the objectives for the upcoming Sprint and how it relates to the Product Goal.
- Introduces changes and new additions to the Product Backlog, including any customer or user feedback.
- Relates any information regarding changes to budget, timeframes, milestones, and other information that clarifies the state of the Product Backlog.

Developers

- Discusses the new Product Backlog items.
- Discusses the work needed by the team on the item to achieve the Definition of Done.
- Estimates each of the Product Backlog items in turn using techniques like Planning Poker.
- Discusses any points of divergence in relation to the estimate of effort, risk and complexity for each Product Backlog items
- Breaks-down the Product Backlog items into smaller pieces, through collaboration with the Product Owner, to ensure that each item can be committed to for completion within a single Sprint.
- Communicates to the Product Owner any consequence relating to what is being asked for and its rank-order for delivery, including any technical or design debt that may be incurred as a result.

SMEs and other interested stakeholders

- May participate in estimation and discussion of the what through prior negotiation with the Scrum Master and the Product Owner to assist with increasing transparency.

Scrum Master

- Facilitates the conversation.
- Supports and encourages self-management within the guide rails of Scrum's rules.



KEY OUTCOMES for "Yin"

- Scope boundaries are clarified for each addition to the Product Backlog.
- When work contains "unknowns", assumptions are listed regarding what they "might be".
- Assumptions and the confidence about those assumptions are listed.
- Risks are noted, including impact and likelihood.
- Any assumptions with less than an 80% confidence should then subject to further investigation.
- Investigations, experiments and research activities are outlined – ones that will directly improve the level of confidence about the assumptions listed. Each experiment is an hypothesis – that the actions presented and any associated plans will improve the level of confidence about an assumption. The outcome of the test of this hypothesis will be discussed at the "Yang" Backlog Refinement session.
- Timeboxes are set for every experiment, with an outcome to be reached for discussion at the "Yang" session.
- Product Backlog items are estimated and further detail is added to them that will assist their delivery by the Developers.
- A time for the "Yang" session is agreed on – occurring before the end of the Sprint.



KEY CONSIDERATIONS

If there are Patterns that can be used for the delivery of the PBI, these are identified and brought to the next session. Where there are specialist skills that are required to deliver the PBI that the Team do not possess, these are listed and tasks identified to elicit that expertise in coordination with the Scrum Master and the Product Owner.

Where there are artefacts to deliver with the PBI, tasks are identified to locate templates or source existing documents that can be modified.

Knowledge building

- Clear goals are identified regarding what the research will uncover over what tasks will be done. What is considered best practice in the industry? What do immersion activities hope to reveal? How much will knowledge improve and time to make decisions decrease when these activities are completed this Sprint? How will this knowledge help to improve delivery of an Increment for future Sprints?

User and market research

- Metrics are identified for the user research activities, e.g. identify the completion rate of a process, user pain points for a part of an existing process, the current levels of user satisfaction, whether a UI is easy to use by users.

Software development

- Experiments are defined that verify the code works in the assumed way.

Architecture for systems and data

- Tasks are identified to draft the architecture, defining likely vertical slices over defining the entire logical layers of systems – data, security, API, etc.

Business rules

- Where business rules are involved, tasks are identified to either locate where the existing business rules are documented, or a workshop scheduled to elicit a better understanding of them from stakeholders. Business rules typically form acceptance criteria for PBIs.

Interaction and user-experience design

- Sketches and wireframing of concepts with other Team members is recommended, with validation with internal standards, as well as identify the components/architecture of the product needed to support the intended UI.
- Where user behaviour is concerned, methods to verify that users behave in this way are listed and then executed, data collected and observations noted. Lightweight user research is one such activity. It may take several Sprints before user behaviour can be verified to a level of confidence that enables a Team to proceed with delivering related PBIs.

Testing

- Where test coverage is involved, tasks are identified to gather existing tests that can be re-used or how existing tests can be modified?

AGENDA 2: “Yang”

Scrum Master

- Introduces the agenda.
- Clarifies the rationale for the session.
- Indicates the time-box for the session.
- Facilitates a conversation with the Development Team and the Product Owner regarding the outcomes of their experiments defined in the “Yin” session.

Developers

- Discuss the experiments and investigations that were run.
- Discuss the findings from those activities.
- Relate whether the confidence in the assumptions increased and its effects on the risk of likely failure of delivery should the Team commence delivery of the item next Sprint.

- Re-estimates the PBI based on the findings of the experiments, investigations and research.

Product Owner

- Asks questions to help clarify the outcomes of the experiments.



KEY OUTCOMES for “Yin”

- Experiments, research and draft design activities improve the confidence of solutions just-in-time for the next Sprint.
- Delivery risk is reduced.
- Team plans for delivery are clearer.
- Unknowns are clarified or sliced out of upcoming PBIs so that only “known knowns” are delivered in the upcoming Sprint.



COMMON OBSTACLES TO AVOID

- The Scrum Team uses Backlog Refinement as an opportunity to do upfront design. Avoid this at all costs. Design is part of the delivery of work during the Sprint.
- UX practitioners end up working a Sprint ahead or separately from the rest of the Team (Genius Designer Anti-Pattern).
- Team members work in isolation rather than collaborating on activities. The more Team members that collaborate on a Backlog Refinement activity, the more knowledge the whole Team gains and the greater the ownership of evolving solutions or approaches.
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