Sprint Retrospective

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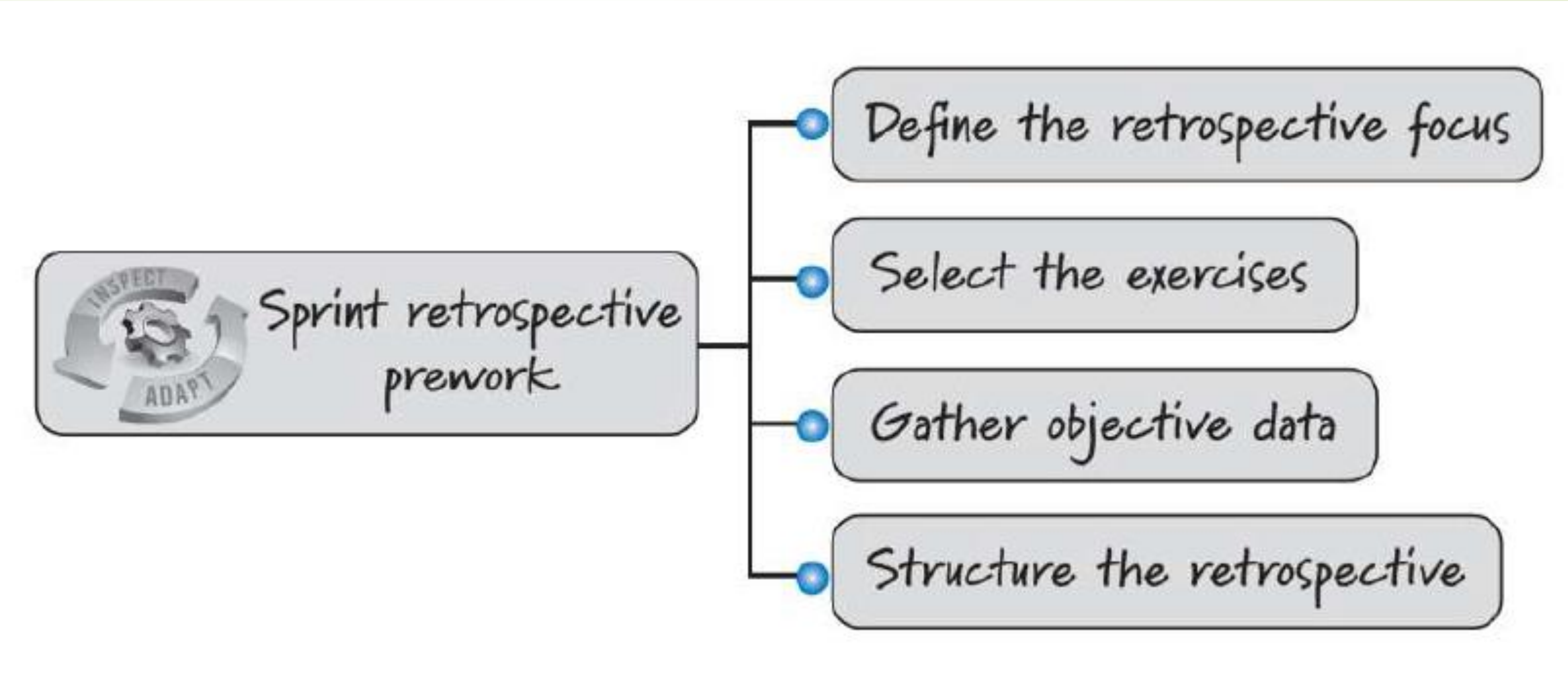
Sprint Retrospective

- An informal meeting where **teams analyze the way they work**, **identify ways to improve**, and **make plans to implement these improvements**.
- Anything that affects how the team creates the product is open to scrutiny:
  - Processes, practices, communication, environment, artifacts, tools, and so on.
- It can be as simple as the Scrum team members coming together to discuss questions such as:
  - What worked well this sprint that we want to continue doing?
  - What did not work well this sprint that we should stop doing?
  - What should we start doing or improve?
- **When?** At the end of each sprint cycle, typically after sprint review.

Sprint Retrospective: Participants

- **Development Team:** Their diverse perspectives are essential for identifying process improvements from multiple points of view.
- **Scrum Master:** The Scrum Master is an integral part of the process and the process authority for the Scrum team.
  - The Scrum Master does not tell the team how to change its process.
  - The Master points out where the team is not adhering to its own agreed-upon process and acts as a valuable source of knowledge and ideas for the team.
- **Product Owner:** The product owner is critical to achieving fast and flexible flow of business value, and is therefore a key element of the process.
  - If speaking candidly is not comfortable for team members, the product owner will not attend until the Scrum Master can create a safer environment.
- Due to safety considerations, stakeholders or managers who are not on the Scrum team will attend only if invited by the Scrum team.

Sprint Retrospective: Prework



Prework Activities: Define the Retrospective Focus

- 1. The default focus is to **review all relevant aspects of the process** the Scrum team used during the current sprint.
- 2. However, a team might select a different retrospective focus based on what is currently important to the team and where improvement is required.
  - For example: Focus on how to improve our skills with TDD.
- 3. Establishing the focus allows the team to determine if any non-Scrum team members should be invited, and sets the stage for the rest of the pre-work.

Prework Activities: Select the Exercises

- Exercises help participants to engage, think, explore, and decide together; typical
- exercises include:
  - 1. Create and mine a sprint event timeline.
  - 2. Brainstorm insights.
  - 3. Group and vote on insights.

Prework Activities: Gather Objective Data

- Because a sprint retrospective is performed in a focused, short period of time, any legwork to collect needed data should be done before the retrospective begins.
- Objective data is hard data (not opinions), such as: What events happened and when, or the burnup chart for the sprint illustrating the flow of completed work.
  - Hard data, also known as **factual data** or **quantitative data**, **is proven** and **methodologically acquired information**. It **is based on facts**, can be objectively measured, and is typically numerical.
- At this point we are not organizing or analyzing any data; we are just collecting it so that it is available during the retrospective.

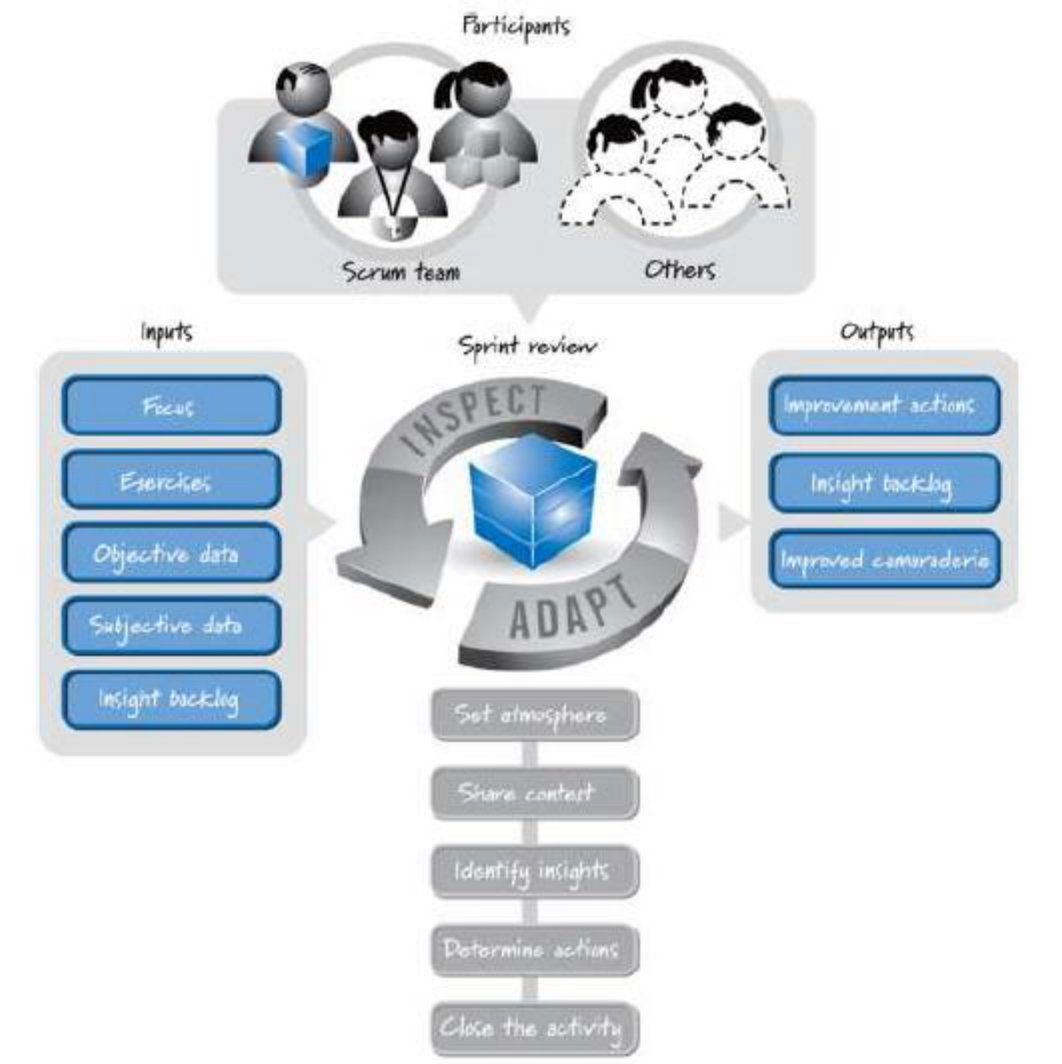
Prework Activities: Structure the Retrospective

- **Duration:** Influenced by factors such as how many people are on the team, how new the team is, whether any team members are located remotely, and so on.
  - Budget about 1.5 hours for the sprint retrospective when using two-week sprints, and proportionally more when using longer sprints.
- **Facilitation:** The Scrum Master is usually assigned as the facilitator, but a skilled, neutral, outside facilitator can be assigned as well.

Sprint Retrospective: Process

- **Inputs:** Focus, Exercises and materials, Objective data, Subjective data (brought by individual attendees), Insight backlog (produced in previous retrospectives).
- **Activities:** Set the atmosphere, Create a shared context, Identify insights that can lead to improvements, Determine improvement actions for the next sprint, and Close the retrospective.
- **Outputs:** Improvement actions (to be performed in the next sprint), Backlog of insights (collected during the current retrospective for future sprints), and Improved camaraderie

Sprint Retrospective: Process



Sprint Retrospective Activities: Set the Atmosphere

- A good way to start the retrospective is to establish an atmosphere that makes people feel comfortable participating.
  - People must feel it is safe to express their opinions without fear of retribution.
  - It is helpful to make clear that the focus is on the organizational system and process, not the individuals, thus making it safe to explore what went wrong.
- The retrospective is not the place to solve them.
  - The retrospective is about improving the Scrum team’s process, not about assigning blame or reprimanding individual behavior.
  - When setting the atmosphere, set ground rules which reinforce the concept of a blame-free environment.
- It is important to encourage active participation.

Sprint Retrospective Activities: Share Context

- It is important to establish a shared context: The participants must align their diverse individual perspectives into a shared team perspective.
  - Team members can all experience the same event and yet interpret it differently.
  - If individual perspectives are allowed to dominate, the retrospective could degrade into a session of opinion debate rather than a focused session.
- You first ground the retrospective in an objective, big-picture view of the sprint.
  - Share objective data, such as committed PBIs, PBIs completed, number of defects, and so on (based on the retrospective focus.)
  - Allow relevant subjective data to be exposed and discussed.
- Two Common exercises that can be used to develop a shared context of objective and subjective data: **Event Timeline** and **Emotions Seismograph**.

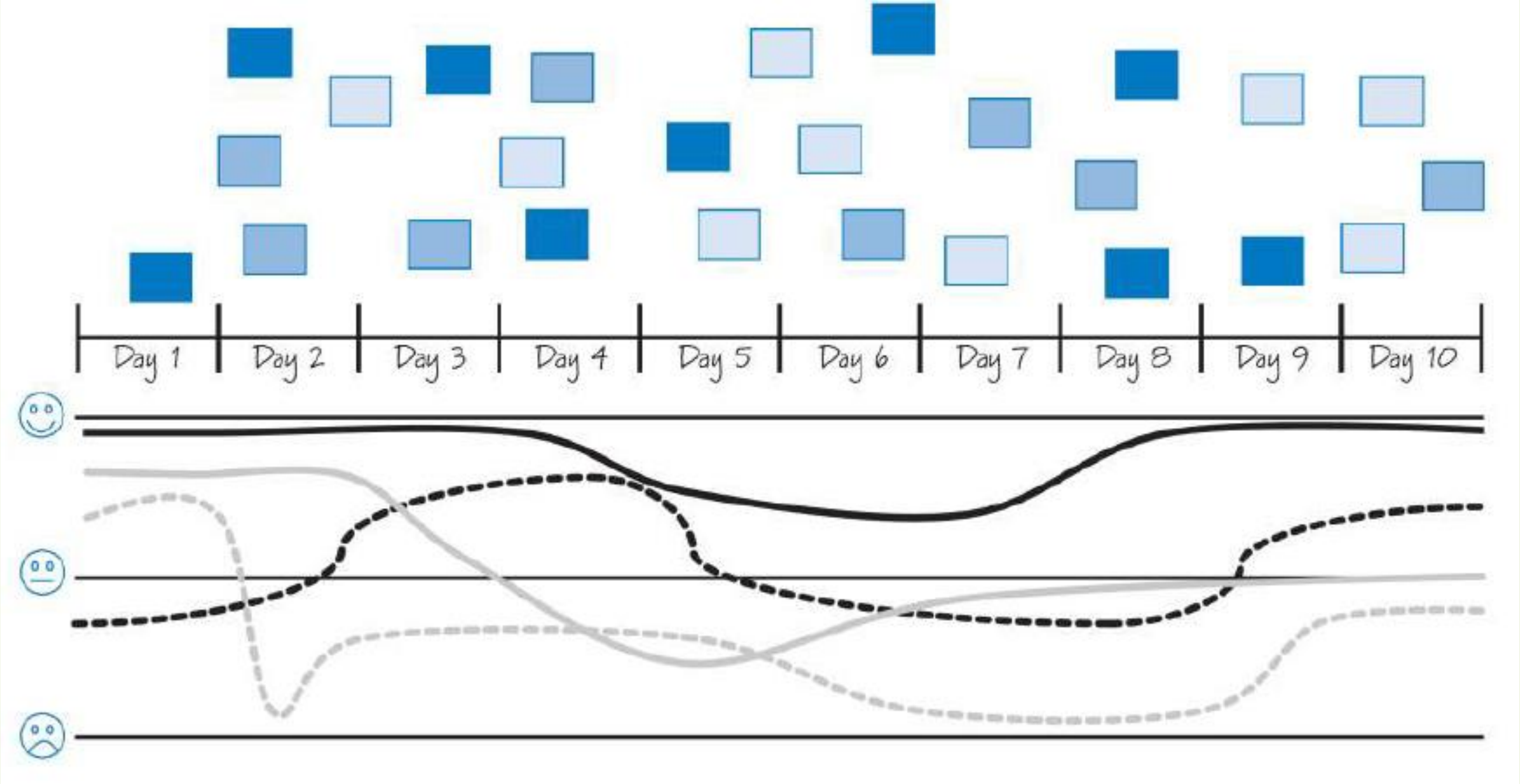
Share Context: Event Timeline

- The event timeline is a shared artifact that visually represents the flow of events during a sprint.
  - Events could include “Busted the build,” or “Interrupted to fix production failure,” or “Salina returned from holiday.”
- Draw a timeline on a wall or whiteboard and have the participants put cards (or sticky notes) on the timeline, representing meaningful events that occurred during the sprint.
- To help visually categorize events, use colored cards:
  - To represent different event types (for example, green is a technical event, yellow is an organizational event, red is a personal event); or
  - to represent feelings or energy levels (for example, green is a positive event, yellow is a neutral event, and pink or red is a negative event).

Share Context: Emotions Seismograph

- The emotions seismograph is a graphical representation of the emotional ups and downs of the participants over the course of the sprint.
  - Usually created as a complement to the event timeline.
  - Helps expand the shared context beyond the objective data (what happened) to include some subjective data (how the team felt about it).
- Each participant is invited to draw a curve showing how they felt or what their energy level was like over the course of the sprint.
  - It is frequently convenient to draw the seismograph directly under the event timeline so that the two sets of data can be visually correlated

Share Context: Event Timeline and Emotions Seismograph



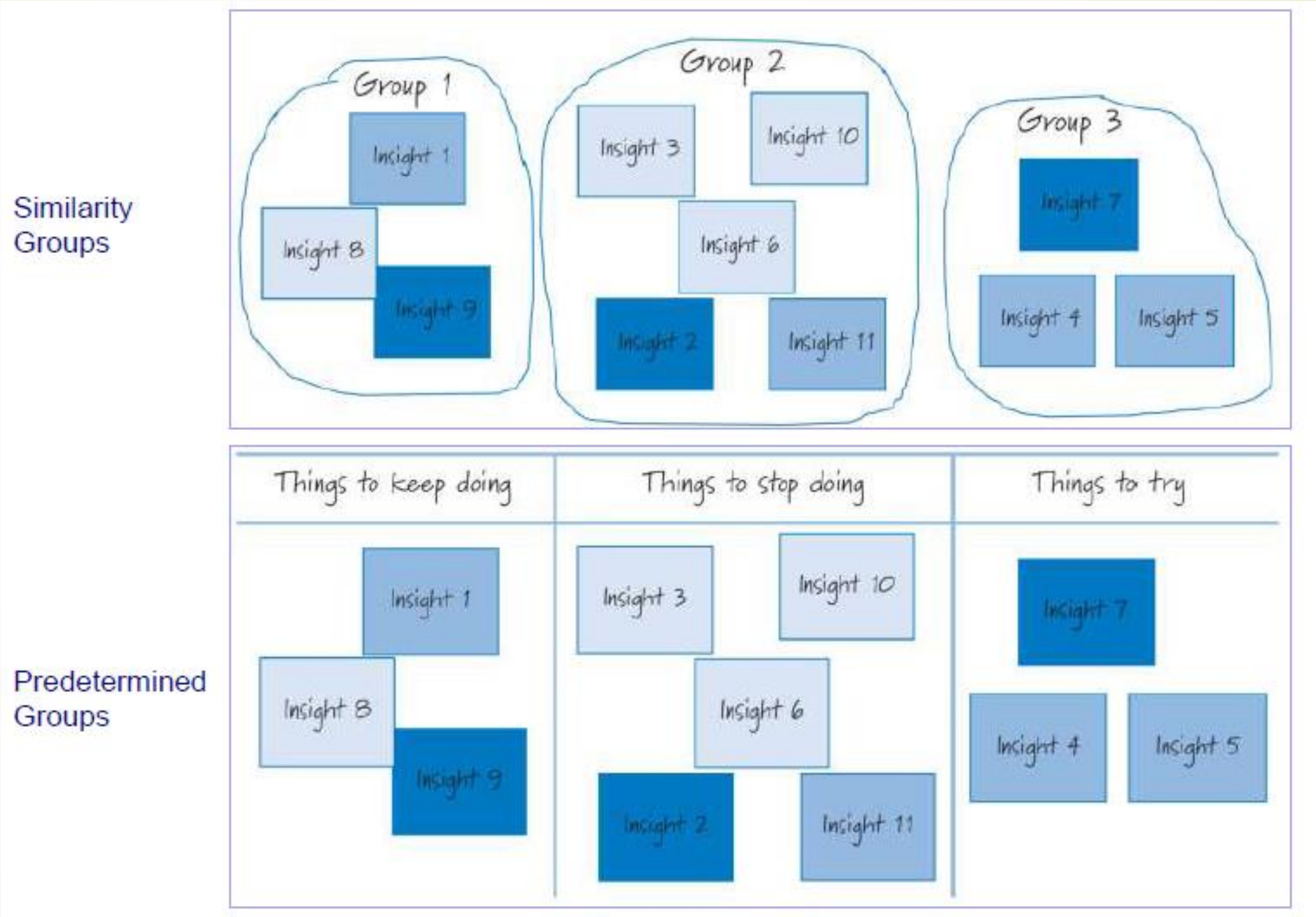
Sprint Retrospective Activities: Identify Insights

- Once a shared context has been established, the participants can examine, understand, and interpret the data to identify process improvement insights:
- 1. Participants should start by mining the shared context data; they can look at the timeline and seismograph and ask the following questions:
  - What worked well?
  - What did not work well?
  - Where are some opportunities to do things differently?
- 2. Participants brainstorm insights, capture them on cards and place them on a wall or any other surface so that everyone can see them.
- 3. Another source for insights might be the team's insight backlog, a prioritized list of previously generated insights that have not yet been acted upon.
  - Participants mine this backlog to see which insights should be included in the current retrospective, represent them by cards and place them on the wall.
- 4. Participants cluster the insights into meaningful groupings to indicate similar or duplicate cards.

Identify Insights: Grouping Insight Cards

- **Silent grouping:** A time efficient and effective grouping technique during which people collaboratively create the groupings without verbal discussion.
- The clusters can be emergently determined during the grouping activity; they are in fact similarity groups.
- Alternatively, you can divide the wall into predetermined category areas (such as things to keep doing, things to stop doing, things to try) before the retrospective.
- Some of the insights might lead to discussions among the participants to better understand underlying causes, or important patterns or relationships.

Identify Insights: Grouping Insight Cards



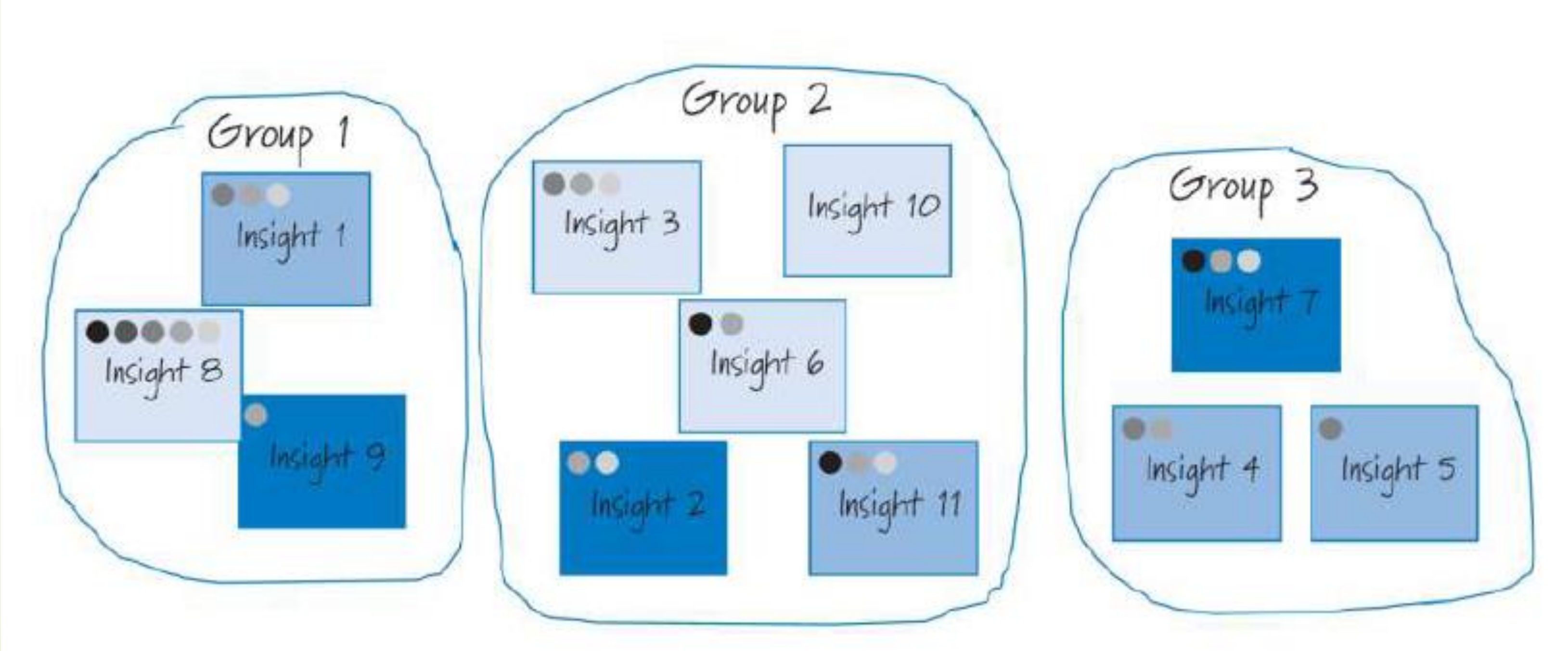
Sprint Retrospective Activities: Determine Actions

- **Insights** are our ideas or perceptions of things that can be improved.
- To extract long-term value from these insights we need to move from discussing them to taking demonstrable **Actions** to leverage them.
- The participants should also take time to review what happened to the
- improvement actions from the last retrospective.
  - If those actions have not been completed (or even started), the participants need to know why before they start addressing new insights.
  - They might choose to carry forward previous actions or prioritize them against the new insights they have just identified.

Determine Actions: Select Insights

- Participants first need to determine which improvement insights to act on immediately and which to defer.
- Retrospectives frequently identify many more improvement insights than the Scrum team and organization can digest and act on in a short period of time.
- **Dot Voting:** A practice for prioritizing insights:
- 1. Each participant is given a small number (perhaps three to five) colored dots.
- 2. The participants then simultaneously place their dots on the improvement insight cards that they feel are the highest priorities to address.
  - A person can put all the dots on one card or spread them over several cards.
- 3. Once everyone has voted, the cards with the greatest number of votes should be considered first.
- The number of selected insights depends on how much capacity the participants are able to dedicate to the insights over the next sprint.

Select Insights: Dot Voting



Determine Actions: Decide on Actions

- Most actions should be broken down into specific tasks that one or more Scrum team members will perform during the upcoming sprint.
- Some actions do not require specific task-level work; for example, “People should make the effort to show up at the daily scrum on time.”
- Sometimes the actions represent impediments that the Scrum Master must resolve, perhaps through collaborating with the organization.
- Sometimes it is not possible to immediately address an insight; we might need to explore the insight before we can actually make an improvement.
  - In such cases, the proper action might be to investigate and collect data during the next sprint so that we can better understand the problem.

Sprint Retrospective Activities: Close the Retrospective

- Close by recapping what actions the team has decided to take based on what the participants learned.
  - This might be as simple as describing each committed action item and who is going to work on it.
- Closing is also a good time to appreciate people and their participation.
  - Each participant should say a few kind words of appreciation regarding the contributions made by others.
  - Be sure to also recognize any non–Scrum team members who took time out of their busy schedules to participate in the retrospective.
- It's a good idea to spend a few minutes asking the team for suggestions to improve the team's approach to performing a retrospective.

Sprint Retrospective: Follow Through

- To ensure that what happens in the sprint retrospective does not just stay in the sprint retrospective, the participants should follow up on the actions.
  - Some actions (such as that everyone shows up on time for daily meetings) need only to be reinforced by the team members and the Scrum Master.
  - Others will need to be addressed during the forthcoming sprint-planning activity.
- The easiest way to handle the improvement actions is to populate the sprint backlog with tasks corresponding to each action before adding new features.
  - The team's available capacity to work on new features would then be adjusted downward by the estimated time these improvement tasks will take.
- Warning: One approach that does **not** work is to have an "improvement plan" for the team that is separate from the work it will do each sprint.
  - This approach will almost always lead to the improvement plan being subordinate to the typical feature-driven sprint plan.

Reference

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