

The
Pragmatic
Programmers

Agile Retrospectives

Making Good Teams Great



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Chapter 5

Activities to Gather Data

Gathering data creates a shared picture of what happened during the iteration, release, or project. Without data, the team is speculating on what changes and improvements to make. These activities help the team view and integrate different types of data.

5.1 Activity: Timeline

Use this to gather data in a longer iteration, release, or project retrospective.

Purpose

Stimulate memories of what happened during the increment of work. Create a picture of the work from many perspectives. Examine assumptions about who did what when. See patterns or when energy levels changed. Use this for “just the facts” or facts and feelings.

Time Needed

Thirty to ninety minutes, depending on the size of the group and the length of the increment of work.

Description

Group members write cards to represent memorable, personally meaningful, or otherwise significant events during the iteration, release, or project and then post them in (roughly) chronological order. The retrospective leader supports the team to discuss the events to understand facts and feelings during the iteration, release, or project.

Steps

1. Set up the activity by saying “We’ll fill in a timeline to create a fuller picture of this iteration/release/project. We want to see it from many perspectives.”
2. Divide the team into small groups, with no more than five in a group. Keep people who worked closely with each other together (affinity groups). It’s better to have two small groups representing one affinity than one big group.

Hand out markers and index cards or sticky notes.

Make sure each person has a marker. Although it sounds school-marmish, you do need to remind people to write legibly, so people can read the cards.

3. Describe the process.

Ask people to think back over the iteration/release/project and remember all the memorable, personally meaningful, or significant events and write them down, one per card or sticky note.

Remind the group that the point is to see many perspectives—so they don't arrive at a consensus of what was memorable, meaningful, or significant. If it was any of those to one person, that's enough.

Tell them they have ten minutes for this activity.

If you are color coding (see “Variations”) explain what the colors mean and post a legend.

Remind people to write legibly.

4. Monitor the level of activity as people start talking about events and writing cards. If people haven't started writing cards after half the time has elapsed, remind them to start writing. When the groups have a stack of cards, invite people to start posting them (see Figure 5.1, on page 54).
5. When all the cards are posted, invite the team to walk by the timeline and see what others have posted. It's OK for people to add new cards at this point as they remember more events.
6. Allow a break or take lunch before analyzing the timeline.

Variations

We have collected several variations on the timeline activity. We use index cards, sticky notes, markers and dots in a number of ways to pull out both fact and feelings data. For example: For example:

Color Coding Feelings To gather both facts and feelings, use colors to represent emotional states. For example:

- Blue = sad, mad, bad
- Red = challenged, stalled
- Green = satisfied, successful, energetic
- Yellow = cautious, confused
- Purple = fun, surprise, humor
- Salmon = fatigued, stressed

Color Coding Events Use colors to represent types of events. For example:

- Yellow = technical or technology related
- Pink = people or team related
- Green = organization related

Color Coding Functions Use colors to represent functions. For example:

- Blue = developers
- Pink = customers
- Green = QA and testing
- Yellow = technical writers

Color Coding Themes If the team wants to focus on particular matters, use colors to identify events related to specific themes. For example:

- Yellow = team communication
- Blue = equipment usage
- Pink = relationships with customers
- Green = engineering practices

You can pick your own color scheme based on the cards and sticky notes available to you.

Functional Swim Lanes Draw rows lengthwise along the backdrop for the timeline (assuming you aren't planning to post cards directly on the wall—then use ribbon or tape to demarcate the rows). Make a row for each department or function. That group will place their cards only in that swim lane.

In/Out Swim Lanes Draw one line that divides the backdrop in half lengthwise. Use one half for cards for team events and the other half for participants who were involved in the project but weren't part of the core team.

On/Off Use some special shape to represent the people on the project—stars or people-shaped cutouts are good. Ask people to represent when they started on the project by posting a star/people cutout on

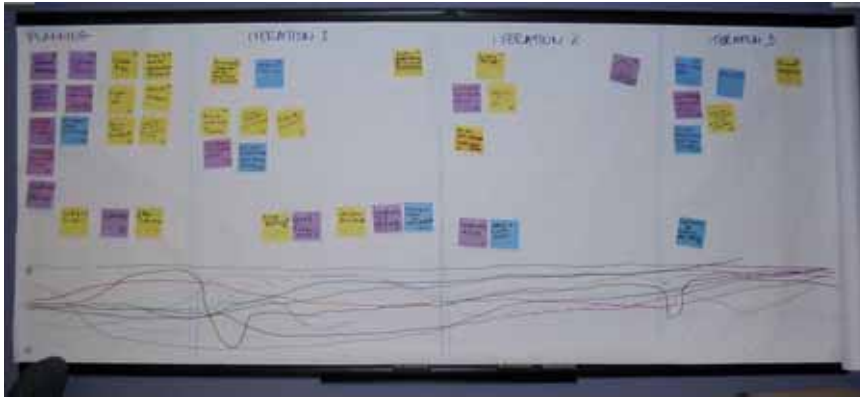


Figure 5.1: A timeline for a retrospective that looked at three iterations. The team was just starting retrospectives and wanted to look back further than just one iteration.

the timeline. Add a star or cutout for people who are no longer on the project or who aren't in the retrospective.

Materials and Preparation

Markers. Index cards or sticky notes. Drafting dots or some other movable tape that allows people to reposition event cards. Painter's tape or tacky stuff to paper the wall.

Backdrop. Cover a long wall with paper to serve as a backdrop. You can overlap flip chart pages or use roll paper. A stretch 6 feet long and 30 inches high is about right for a one-week iteration. For a longer project, you may need 30–60 feet long by 4–6 feet high.

Paper the wall before the retrospective starts.

(For a release or project, prep the timeline with a few time markers such as project milestones, months, or seasons.)

Example

A timeline can display many levels of data about the iteration, release, or project. It can be a simple, chronological listing of events on white index cards. It can also be an extravaganza of data including color-coded themes, cards arranged high or low for meaning, swim lanes for

different functional areas, dots to show positive and negative events, and a space at the bottom with a graph for the ongoing emotional ups and downs. It's easy to get carried away with the possible variations and ask teams to create a timeline with more data than they have time or mental energy to discuss.

When you have only an hour or so for the entire retrospective session, choose a timeline variation that will help to display just enough data. Include both facts and feelings, for sure, but no more than one kind of each. Consult the retrospective goal as a guide for what's most important this time. Keep it simple.

5.2 Activity: Triple Nickels

Use this to gather data or as part of the Decide What to Do phase in an iteration, release, or project retrospective.

Purpose

Generate ideas for actions or recommendations. Uncover important topics about the project history.

Time Needed

Thirty to sixty minutes, depending on the size of the group.

Description

Form small groups. In the groups, each person has five minutes to brainstorm and write down ideas individually. At the end of five minutes, each person passes the paper to the person on his or her right. That person has five minutes to write down ideas that build on the ideas already written on the paper. Repeat until the paper returns to the original writer.

Steps

1. Set up the activity by saying “In this activity, our goal is to generate as many ideas as we can about [topic].” Then explain the process (see the brief description earlier).
2. Divide the team into small groups, with no more than five in a group. Hand out paper for people to write on. Make sure each person has a pen or pencil. Remind people to write legibly so the next person can read the ideas.
3. Describe the process: In the first round, each person will have five minutes to write down ideas related to the topic. Aim for at least five ideas. In subsequent rounds, each person writes ideas that are sparked by the already written ideas or builds on them in some way.
4. Time the group. After five minutes, ring a chime and tell the group to pass the paper to the right.
5. Ask each person to read the ideas listed on the paper.
6. Debrief using these questions:

- What did you notice while you wrote ideas?
- What surprised you? What met your expectations? How?
- What is missing from these lists?
- What ideas and topics should we examine further?

Segue into the next activity where the team will use the ideas generated.

Materials and Preparation:

Paper. Pens or pencils.

Variations

If there are seven or fewer people in the group, don't divide into small groups; do the activity as whole group. Pass the paper only five times.

Examples

With a team of mostly reticent developers and one or two outspoken individuals, an activity like Triple Nickels can allow team members time to think privately yet participate in a process that develops whole-team understanding. It also prevents the few people who are comfortable talking in a group from dominating the discussion. In Triple Nickels, everyone gets the chance to contribute equally to developing the data set, and by the time the data is out, even the more reticent folks usually have something to say about what they wrote or read.



To help the five members of an internal business applications team gather data about their iteration, Aswaria, the retrospective leader, introduced the Triple Nickels activity. She divided the ten people on the team into two groups and passed out paper tablets and pens.

"I'll give you each five minutes to write down five important events that happened during our iteration. Record things you saw or heard during the past fifteen days. Write legibly; make sure someone else can read it."

At the end of five minutes, she said, "Now pass your papers to the right. Read what you get. You have five minutes to add detail to the items there or add new, related events."

The team kept passing the papers until each member received their original paper back to read. Some team members laughed at comments; others were shaking their heads. To maintain the theme of “fives,” Aswaria debriefed with questions such as the following: “What five things stand out for you about what you’ve read?” “What five events produced the strongest reactions?” “What are the five most significant events?”

After they finished the discussion, she handed out sticky drafting dots and invited people to post the papers on an area of the wall that she had labeled “Iteration History.”

5.3 Activity: Color Code Dots

Use this in conjunction with a timeline to gather data about feelings in a longer iteration, release, or project retrospective.

Purpose

Show how people experienced events on the timeline.

Time Needed

Five to twenty minutes.

Description

Team members use sticky dots to show events on the timeline where emotions ran high or low.

Steps

After all the events are on the timeline and the team has done a quick review, individuals use colored dots to show where their energy was high or low (see Figure 5.2, on the next page).

1. Set up the activity by saying “Now that we’ve seen the facts, let’s see how it was to be doing this work.”
2. Provide each individual with dots in two colors. Start with seven to ten dots per person but have more available. Explain which color indicates high energy and which indicates low energy.
3. Ask each person to use the dots to show where energy was high and where energy was stalled, flagging, or at low ebb.

Materials and Preparation

Sticky dots 1/2 to 3/4 inches in diameter in two colors.

Decide which color will indicate high energy and which will indicate low energy.

Variations

Instead of using dots to indicate high or low energy, use dots to indicate positive or negative events.

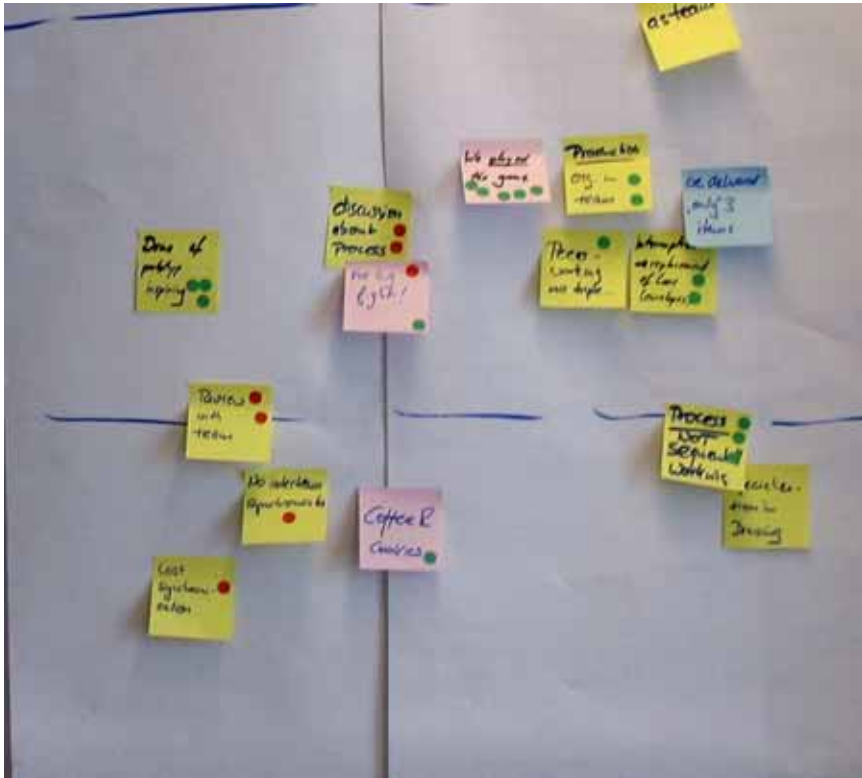


Figure 5.2: A timeline with color-coded dots.

Examples

When you have limited time, this technique filters topics for discussion:

1. Investigate events that have many high energy or positive dots to learn what factors create that state.
2. Investigate low energy/negative events to learn what precipitated the event, and how the team resolved the situation.
3. Look at areas where there's a split (as with Carly's card in Chapter 1) to learn about the different perspectives.

5.4 Activity: Mad Sad Glad

Use this to gather data about feelings in an iteration, release, or project retrospective.

Purpose

Get the feeling facts out on the table.

Time needed

Twenty to thirty minutes, depending on the size of the group.

Description

Individuals use colored cards or sticky notes to describe times during the project where they were mad, sad, or glad.

Steps

Introduce the activity by saying “Let’s look at how we were feeling during this iteration/release/project and discover whether we can track down some of the sources of both satisfying and dissatisfying times.”

1. Draw attention to three posters labeled “Mad”, “Sad”, “Glad” and sample color-coded cards. Put out colored cards/sticky notes where everyone can reach them. Provide markers.
2. Describe the process, and give the time limit.
 “Take __ minutes to write down the times/events on this iteration/release/project where you were mad, sad, or glad. Write one event or incident per card. Write legibly.”
3. Give notice when time is up, and invite people to post their cards on the appropriate poster. It’s OK to add more cards as people remember more events.
4. Cluster the cards on each poster. Go to the first poster, pick one card, and read it. Then hold it next to another card and ask, “Are these cards about the same thing?” The group will tell you which other card it is like. Continue this until all the cards are clustered on each poster.
5. Ask the group to name each cluster. Use another card to write the title. Differentiate the title by drawing a box around the outer edge of the card or using a different color card.

6. Debrief using these questions:

- What stands out for you as you look at these cards?
- What is unexpected about these cards? What was difficult about this task? What parts felt positive?
- What patterns do you see in the clusters? What do those patterns mean for us as a team?
- What does this suggest for us as next steps?

Materials and Preparation

Flip chart pages or some other surface for the posters. Three posters, labeled “Mad”, “Sad”, and “Glad”. If your group has more than ten people, you may need two flip chart pages for each category poster.

Three colors of index cards or sticky notes. Make a sample card for each color so people can see the color-coding scheme. You can do this with one color of card, but the visual impact is greater with different colors.

Markers.

Variations

Rather than use the emotion words, make one poster labeled “Prouds” and another labeled “Sorries.” Ask team members to write cards that represent events and interactions from the iteration that they feel proud about and events and interactions they feel sorry about.

Examples

This activity uncovers the emotional content of the retrospective. It’s somehow easier to write down a “Mad” card about an event than say the words “I was angry when so-and-so happened.”

Shift to “Prouds” and “Sorries” when there has been hurt feelings or conflicts. It’s easier to write a card that indicates a person is sorry about an event than to articulate a direct apology or admit fault. But somehow writing the card communicates the intention of regret without assigning blame or admitting wrongdoing... and works better for group relationships in the long run.

5.5 Activity: Locate Strengths

Use this to gather data about facts and feelings on longer iteration, release, and project retrospectives. Follow with the Identify Themes activity to generate insights.

Purpose

Identify strengths so the team can build on them in the next iteration. Provide balance when an iteration, release, or project hasn't gone well.

Time Needed

Fifteen to forty minutes for the Locate Strengths activity, depending on the number of questions in the interview. Allow twenty to forty more to identify themes. The total for the two activities is thirty to ninety minutes.

Description

Team members interview each other about high points on the project. The goal is to understand the sources and circumstances that created those high point [WM01].

Steps

Introduce the activity by saying “We learn by asking questions. We learn the most about the things we ask the most questions about. Since we want to learn about having successful iterations (release/projects), let's take time to ask each other questions about high points.”

1. Form pairs. If it's possible, pair people who don't know each other's job well or don't work together often. If there's an odd number, have one trio. Hand out the interview questions.
2. Explain the interview process:
 - Stay curious.
 - Give the speaker your full attention.
 - Take notes to remember key points.
 - Listen for stories and quotes to share.
 - This isn't a conversation—the interviewer asks questions and listens without interjecting his or her own story.

When the first interview is finished, switch roles.

3. Have the pairs choose who will interview first. Monitor the time, and ring a chime or make an announcement when half the time has elapsed. Say, “If you haven’t started your second interview, start it soon.”
4. At the end of the interviews, segue to the Identify Themes activity.

Materials and Preparation

Prepare questions ahead of time, and make enough copies for each person to have one.

Questions follow this format:

- Ask about what attracted the person to his or her profession or to the company.
- Ask about a high point on the iteration/release/project where the person was at his or her best.
- Ask what made it a high point.
- Ask who else was present and what the circumstances were.
- Ask about wishes for future projects.

Examples

Here’s an example of an interview:

“Tell me about what attracted you to this company.”

“In every release (iteration or project), there are high points when things just click. Think back over our last release. (Pause.) Tell me a story about one of your highlight moments.”

“What were the circumstances?”

“Who else contributed?”

“If you had three wishes to make our next [iteration, release, project] better, what would they be?”

A short interview like this one will take about fifteen minutes per person. Adding more questions adds to the interview time. If you do add questions, follow the same general outline, probing for more detail about the high point situation.

This is a good activity when people are feeling downtrodden. It helps them remember that even dismal iterations have good moments. Focusing on high points helps people become conscious about re-creating the circumstances behind them. The problems will still come out, but they come out with less depression and rancor.

5.6 Activity: Satisfaction Histogram

Use this activity to set the stage and/or gather data in an iteration retrospective.

Purpose

Highlight how satisfied team members are with a focus area. Provide a visual picture of current status in a particular area to help the team have deeper discussions and analysis. Acknowledge differences in perspective among team members.

Time needed

Five to ten minutes.

Description

Team members use a histogram to gauge individual and group satisfaction with practices and process.

Steps

1. Introduce the activity by saying “Today we’ll create a baseline measure of our level of satisfaction with the way we work together. We can repeat this activity in future iteration retrospectives to track our progress.”
2. Show the flip charts to the team, read the definitions, and hand out index cards or other identical small slips of paper, one to each team member.

“Please write a number on your card that tells your level of satisfaction on the team right now. Then fold the card, and put it in a pile here.”
3. Stir the pile of cards, and ask for a volunteer to color in the graph as you read them. Read the number on each card. Wait for the tally before going on to the next.
4. Read the results from the graph. Ask for comments.

You may comment on the data yourself: “It seems we have three people who are very satisfied on this team and two who aren’t, and the rest of us are somewhere in the middle. As we continue with our retrospective, we can keep these results in mind as we choose

experiments for the next iteration. We'll check back to remeasure in a few iterations."

Materials and Preparation

Prepare two flip charts. On one flip chart write numbers 1 through 5 in descending order with the following definitions, or your own variations (see Figure 5.3, on the following page). On the other flip chart, write numbers one through five down the left margin with rows of boxes to fill in as you tally the votes (see Figure 5.4, on page 69).

Variations

Process is just one possibility for a satisfaction histogram. Some other possibilities are quality of the product, interactions outside the team, or engineering practices.

Where We're At Variation Use this variation to set the stage for a retrospective. Change the five definitions to ask about the overall level of satisfaction with the iteration or ask about team member's satisfaction with how the day has started.

For example:

- "5 = The way this day has started, it may be the best day of my life. I'm extremely satisfied."
- "4 = I've had a good start to the day. I'm quite satisfied with it so far."
- "3 = This day has started okay. I'm moderately satisfied with it."
- "2 = This day started slightly worse than most days. I'm only a little satisfied with it."
- "1 = I got up on the wrong side of the bed and nothing has gone right yet. I am not satisfied with how the day has started."

Examples

This activity is a quick and painless way to uncover emotional data without the *F* word. It can be interesting to use two histograms on different factors, such as satisfaction with the product and satisfaction with process. One group we worked with was highly satisfied with their process but not satisfied with the resulting product. Another team was

- How Satisfied Are We?
Teamwork
- 5 = I think we are the best team on the planet! We work great together.
- 4 = I am glad I'm a part of the team and satisfied with how our team works together.
- 3 = I'm fairly satisfied. We work well together most of the time.
- 2 = I have some moments of satisfaction, but not enough.
- 1 = I'm unhappy and dissatisfied with our level of teamwork.

Figure 5.3: Post the definitions for the satisfaction rating.

the opposite: satisfied with the product but unsatisfied with the way they achieved a good result with the product.

In the first case, team members had been hiding their dissatisfaction with the product to avoid hurting feelings. After seeing the histogram, the team had frank discussions about how they avoided conflict. Over the next few iterations, they were more direct with each other. When the team rechecked their satisfaction two months later, they were more satisfied on both measures.

The second team (satisfied with product, dissatisfied with process) examined their engineering practices and how they contributed to defects and extra work. They identified experiments to improve engineering practices.

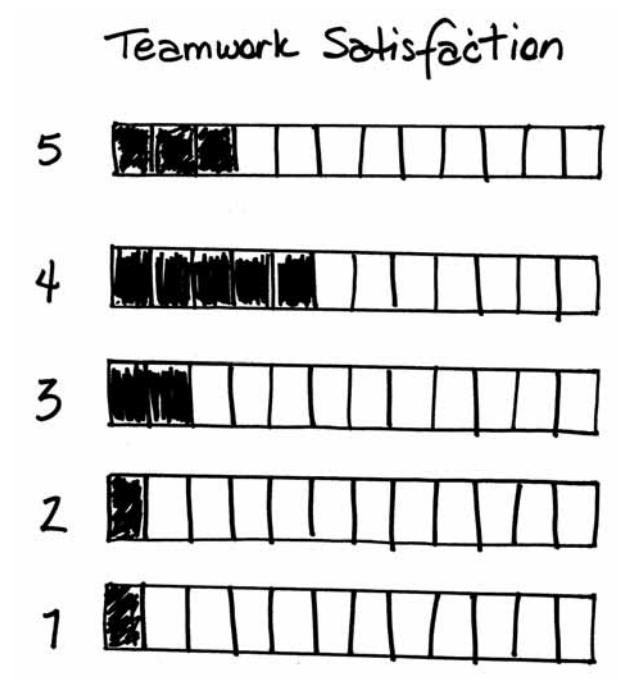


Figure 5.4: The data shown on this histogram creates an opportunity for the team to discuss different perceptions of how well they are working together.



5.7 Activity: Team Radar

Use this to gather data in an iteration, release, or project retrospective.

Purpose

Help the team gauge how well they are doing on a variety of measures, such as, engineering practices, team values, or other processes.

Time Needed

Fifteen to twenty minutes.

Description

Team members track individual and group ratings for specific factors about process or development practices they want to examine.

Steps

1. Introduce the activity by saying “We agreed on these [fill in the factors] as important to our work. Let’s assess how well we are doing with them, using a scale of 0–10. Zero means not at all, and 10 means as much as possible.”
2. Post the flip chart with the blank radar graph. Ask each team member to approach the chart and place a dot or some other mark that shows their rating for each factor.
3. Lead a short discussion about how the factors affect the work of the team. Consider asking questions such as the following:
 - Where do you see us following these [fill in factors]?
 - Where do you not see us following these [fill in the factors]?

Use the short discussion as a segue to generating insights.

4. Save the completed flip chart graph. Run the activity again two or three iterations later. Compare the two charts as a progress measure.

Materials and Preparation

Flip chart or white board. Markers.

If you know ahead of time what the team will measure using the radar chart, draw the spokes and label them ahead of time (See Figure 5.5

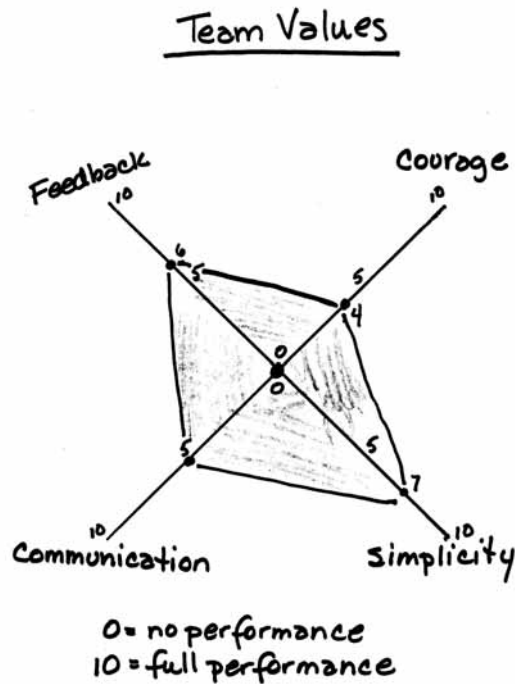


Figure 5.5: This team used the Group Average Radar to gauge how much they were following their team values.

). If the team will brainstorm the measures during the retrospective, draw the radar chart during the retrospective.

Variations

You can use this activity to measure many different factors, such as, engineering practices, team values, working agreements, methods, and so forth.

Group Average Radar This variation is an ongoing measure of progress on a particular measure. Use the radar chart but instead of collecting individual responses, calculate the group average for each measure.

Hand each team member a set of colored cards, one for each factor measured. Ask each person to rate each factor from 0–10 and hand the

card to you. Shuffle the cards (within colors) as you receive them so it's not clear which card came from a particular team member.

Recruit a team member to help with calculating averages. Post the averages on the radar arms. Connect the dots, and color in the area under the line (optional).

Prepare a set of index cards in different colors for each team member. Write the name of one measure on all the cards of a single color. So if you are measuring team values (as in Figure 5.5, on the page before), all the green cards would have "Communication" written on one side, all the blue cards would have "Courage", and so on. Each team member receives a set of cards that includes each factor measured.

Examples

Team Radar is a subjective measure that's intended to generate discussion. This is especially useful when you suspect there's no common definition or criteria to measure against.

For example, one team used a radar to examine how team members perceived their use of a number of engineering practices, including refactoring. One team member rated their refactoring 8; another rated it at 3. During the discussion that followed, it became clear that each had different ideas on when to refactor. Further, the team member who rated her refactoring low was upset with the team member who rated his refactoring high because he was "slacking off by not refactoring enough." By the end of the retrospective, the team arrived at a common definition. Over the next few iterations, the team was more consistent in when they refactored, and resentment faded.

5.8 Activity: Like to Like

Use to gather data during an iteration, release, or project retrospective.

Purpose

Help team members recall their experiences during the iteration (release or project), and hear that others may have perceived it differently.

Time Needed

Thirty to forty minutes.

Description

Team members take turns judging which events or factors about their iteration are the best fits for quality cards. As the cards are evaluated, team members learn about each other's perspective on the same events or conditions.

Steps

1. Ask each team member to write at least nine index cards for playing the Like to Like game: three or more cards with things to stop doing three or more cards with things to keep doing and three or more things to start doing. While team members are writing, shuffle the deck of colored "quality" cards and lay the pile face down on a table.
2. When the game cards are ready, invite the team to stand around the table. Choose one person to start as "judge." The "judge" turns over a "quality" card from the pile and puts it face up on the table. All other team members look in their game cards for the one that most closely matches the "quality" card and place their cards face down. The last card down is disqualified and returns to its owner's hand. This keeps the game moving.
3. The "judge" stirs the players' cards, turns them over one at a time, and reads them. He or she chooses the card that makes the best match with the "quality" card. The author of that card wins the "quality" card.

4. The role of “judge” passes left to the next person, and another “quality” card is turned over. After six to nine rounds (or whenever everyone runs out of cards), the game ends. The person with the most “quality” cards wins.
5. Debrief the activity with the four-step method.

Materials and Preparation

Buy or borrow an Apples to Apples game, and play it with your friends or family to get the idea of Like to Like.

Blank index cards for the participants (at least nine for every person).

Prepare a set of approximately twenty “quality” cards on yellow (or other color) index cards. Write one word on each card. These cards have the words *Fun*, *On Time*, *Clear*, *Meaningful*, *Affordable*, *Integrated*, *Educational*, *Talented*, *Smooth*, *Cool*, *Speedy*, *Collaborative*, *Awesome*, *Trustworthy*, *Dangerous*, *Frustrating*, *Creepy*, *Nasty* or others. Include some “serious” words like *on time*, and some “fun” words like *cool* or *nasty*. It keeps the game less predictable, more insightful and more enjoyable.

Variations

For XP projects, combine this game with the Industrial Logic¹ XP cards. Deal the XP cards, and let people play them instead of writing their own cards, in the sense of “The way we did X embodies this quality” (so a team member might play “Planning Game” on “Frustrating” if that week’s session went poorly, but wouldn’t play “Integrations take too long” if they didn’t.)

Example

A storage solutions software team played the *Like to Like* game in their release retrospective. Team members discovered that game cards about communication and lab procedures were consistently matched with undesirable quality cards. As the “judges” considered their choices and team member advocated for game cards, they told stories about how decisions got made and communicated.

In planning action items for the next release, team members listed their top three priorities: improve communication with the core team about

¹www.industriallogic.com

expectations, increase contact with internal customers, and bring new team members up to speed more quickly. They also made a recommendation to their managers to start new distributed project teams with an initial face-to-face meeting.

Chapter 6

Activities to Generate Insights

Generating insights makes time for the team to evaluate their data and make meaningful information from it. These activities help the team interpret the data, analyze it, generate insights, and uncover the implications for change.

6.1 Activity: Brainstorming/Filtering

Use this to generate insights in an iteration, release, or project retrospective.

Purpose

Generate a large number of ideas and filter them against a defined set of criteria.

Time Needed

Forty to sixty minutes.

Description

Team members generate ideas using traditional brainstorming, then test whether each idea is applicable to the current situation.

Steps

1. Introduce the activity by saying “Because we need to push beyond our usual thinking, we’re going to spend the next chunk of time brainstorming. Once we’ve generated new approaches, we’ll filter the ideas to find the ones that fit best for our situation.”
2. Describe the guidelines for brainstorming (Figure 6.1, on page 80).
Challenge the group to come up with fifty ideas, and set the time limit, usually ten to fifteen minutes.
3. Brainstorm using one of three methods:
 - Brainstorming Method 1: Free-for-all. People call out ideas at random.
 - Brainstorming Method 2: Round-robin. Pass a “talking token” around the circle. Only the person holding the talking token can talk. It’s OK to pass when your turn comes.
 - Brainstorming Method 3: Give people five to seven minutes to silently and individually generate and write down ideas. When the time is up, use Brainstorming Method 1 or 2.
 - Monitor time, and call when the time has run out.

4. Ask the group what filters they should apply to the ideas. Accept four to eight suggestions, discuss, and then vote using a show of hands on the top four. Write the four selected filters on a separate flip chart page or on the white board.
5. Apply the filters one at a time to the ideas on the brainstorm lists. Cross out items that don't pass the filters. Mark ideas that pass each filter. Use a different color for each filter.
6. Look for ideas that pass all four filters.
7. Ask for comments on the ideas. Ask the group which ideas they want to carry forward. Ask whether anyone feels strongly about taking responsibility for any of the ideas. If someone feels strongly, it's a good bet to carry forward. Otherwise, use the simple majority vote.
8. Carry the selected ideas into the next phase, Decide What to Do.

Materials and Preparation

Flip chart with brainstorming guidelines. Blank flip chart pages or white board for capturing ideas. Markers.

Examples of possible filters.

Choose ahead of time which method of brainstorming will work best with your team.

Examples

Brainstorming has been around for years, and many people have heard of it. The problem with traditional brainstorming (Brainstorming Method 1) is that it favors people who are comfortable thinking aloud. It also favors people who are comfortable shouting out their thoughts in a group. That leaves out many smart, creative people.

Brainstorming Method 2 helps people who aren't comfortable shouting out in a group participate and leaves an escape (saying "pass") to people who haven't thought of anything... yet.

Brainstorming Method 3 helps people who need time to gather their thoughts (like Esther) time to do that, and then they're ready to participate in Brainstorming Method 1 or 2.

A fourth variation on the activity is to take the ideas generated in Brainstorming Method 3 and write them on cards. After Brainstorming

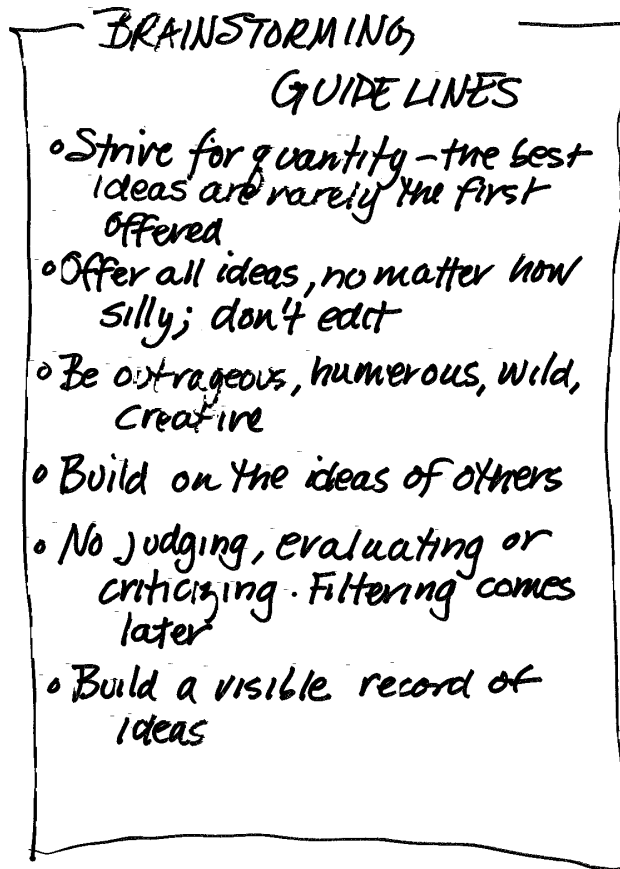


Figure 6.1: Typical guidelines for brainstorming.

Method 3, people write their ideas on cards and then hand them to the retrospective leader, who posts them and reads them. Even the quietest person can write his or her idea on a card for someone else to read.

6.2 Activity: Force Field Analysis

Use this in conjunction with an activity that suggests possible changes while generating insights for a release or project retrospective. Use this as part of a planning exercise while deciding what to do.

Purpose

To examine what factors in the organization will support a proposed change and which will inhibit the change.

Time Needed

Forty-five to sixty minutes depending on the complexity of the issue and the size of the group.

Description

The team defines a desired state they want to achieve. Small groups work to identify the factors that could either restrain or drive the change they want. The factors are listed on a poster; then the group assesses the strength of each supporting factor relative to the other supporting factors and repeats the process for inhibiting factors. The team discusses which factors they can influence—either by increasing the strength of a supporting factor or by reducing the strength of an inhibiting factor.

Steps

1. Introduce the activity by saying “If we want this change to succeed, we need to understand more about the factors that will support or inhibit the change.”
2. Describe the process.

Break into small groups (no more than four).

“Each group works for __ minutes to identify factors that will drive or support the change.”

“We’ll do a round-robin report of what you discover and post the results. Then we’ll repeat the process for restraining or inhibiting factors.”

“After we’ve listed both sets of factors, we’ll assess their relative strength and discuss what course of action would be most helpful for implementing the change we want.”

3. Monitor time and the activity level.

While the groups are working, prepare a flip chart like the one pictured in Figure 6.2, on the next page (but don’t fill in the factors yet).

4. When the group is finished with the first task (identifying supporting or driving factors) collect the information the small groups have generated in round-robin fashion, asking for one factor at a time. There’s no need to repeat duplicates; collect only the unique factors.
5. Repeat for restraining or inhibiting factors.
6. Bring the whole group back together, and examine each factor and gauge its strength relative to the other factors. Draw a line toward the center arrow indicating relative strength. Do this first for driving and then for restraining factors.
7. Examine the factors for most effective actions:
 - Ask the group how they can strengthen driving factors or mitigate restraining factors.
 - Ask the group whether enhancing driving factors or reducing restraining factors is more likely to achieve the desired state.

Materials and Preparation

Flip chart paper or a white board. Markers.

Identify an issue to analyze, perhaps from a list of proposed improvements or another generating insights activity, such as Five Whys or Fishbone.

Example

Force Field Analysis is another tool to ensure that the changes your team identifies in their retrospective actually happen. Combine creating the Force Field Analysis graph with a discussion of influence and control. What can the team directly control to make a change? What can’t they control, and where are their points of influence in the situation? Most teams have more ability to influence conditions than they

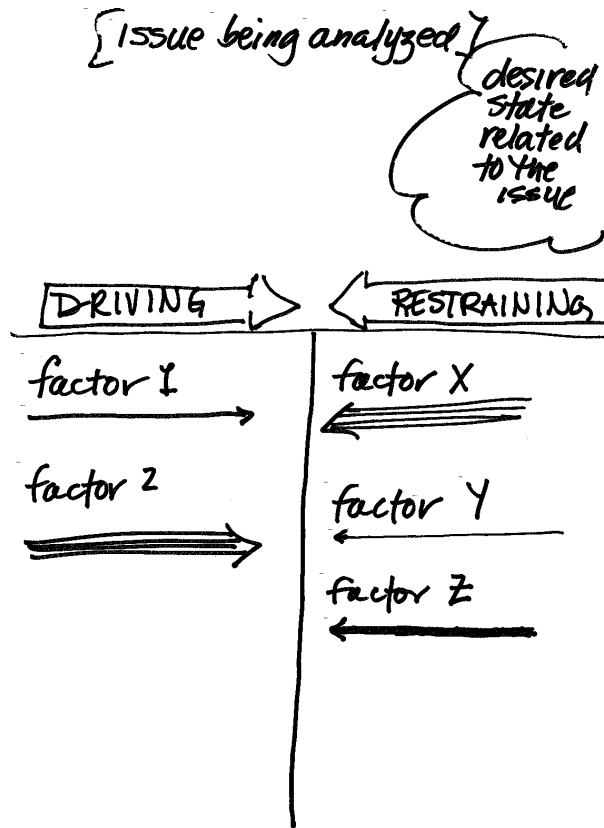


Figure 6.2: Force Field analysis helps the team look at factors affecting a proposed change.

realize; however, a team needs to think about the most effective ways and times to use their influence. Force Field Analysis can help them discern points of greatest leverage and, sometimes, help them see that changing a situation may require more effort than the outcome they desire will be worth. Other times, they may see the forces allied against them and decide to tackle the issue anyway.

One team came into their retrospective wanting to change the way they interacted with the product owner. They were dissatisfied with the limited contact and communication that occurred during the iteration. The product owner answered questions, but only after several days had passed.

Before they analyzed the situation by drawing a Force Field Analysis poster, they understood that the product owner's travel schedule and times of availability were outside their control. Afterward, they also saw they could exert influence best by explaining their concerns to the VP of Marketing, another person with a crazy travel schedule.

They decided that tracking down the VP would take more team effort than they could afford. Instead, they made plans to get the most out of the few product owner contacts available to them.

6.3 Activity: Five Whys

Use this to generate insights in an iteration, release, or project retrospective.

Purpose

Discover underlying conditions that contribute to an issue.

Time Needed

Fifteen to twenty minutes.

Description

Team members work in pairs or small groups to look at issues. They ask “Why?” five times to get beyond habitual thinking.

Steps

Introduce the activity by saying “Now that we know what’s happened, let’s look at why it happened.”

1. Review the issues and themes that the team has already identified.
2. Divide the team into pairs or small groups (no more than four to a group). And explain the process.

“One person asks the other(s) why an event or problem occurred.”

“In response to the answer, the questioner asks why that happened.”

“Record the responses that come out of the fourth or fifth ‘Why?’”

3. Monitor the time, and ring a chime or otherwise announce when the time is up.
4. Have the groups report what they discovered.
5. Use this information as input into the next phase, Decide What to Do.

Materials and Preparation

Use this in conjunction with an activity that generates themes or a list of potential problems, for example Patterns and Shifts.

Examples

Here's an example. Say the issue is that the iteration review meeting never starts on time.

Q1: Why did we start our review meeting late on Thursday?

A: The room wasn't available.

Q2: Why wasn't the room available?

A: We forgot to put it on the meeting schedule.

Q3: Why did we forget to put it on the meeting schedule?

A: Charlie was out sick, and he always schedules the room.

Q4: Why does just Charlie schedule the room?

A: Because we didn't think it would matter.

Q5: Why didn't we think having the room scheduled mattered?

A: We didn't understand how much of our time it would waste. But we understand now. We could add it to our review preparation checklist.

6.4 Activity: Fishbone

Use this to generate insights in a longer iteration, release, or project retrospective.

Purpose

Look past symptoms to identify root causes related to an issue. Look for reasons behind problems and breakdowns.

Time Needed

Thirty to sixty minutes.

Description

The team identifies factors that are causing or affecting a problem situation and then looks for the most likely causes. After they've identified the most likely causes, they look for ways they can make changes or influence those factors.

Steps

1. Draw a fishbone diagram (see Figure 6.3, on the following page) and write the problem or issue at the fish's head. Include the five W's—What, Who, When, Where, and Why. Label the “bones” of the fish with categories.

Typical categories are as follows:

- Methods, Machines, Materials, Staffing (formerly known as Manpower)
- Place, Procedure, People, Policies
- Surroundings, Suppliers, Systems, Skills

You can use these in any combination, or the team can identify their own categories.

2. Brainstorm factors within each category. Prompt by asking “What are the [fill in a category name here] issues causing or affecting [fill in the problem here.]” Repeat this for each category. Write the issues along the bones, or have people write them on small sticky notes and stick them to the fishbone diagram.

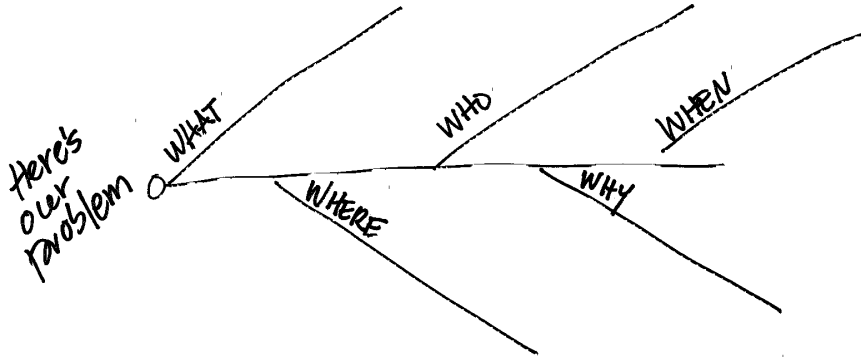


Figure 6.3: Fishbone is a way to look at root causes.

3. Continue asking “Why is this happening?”

Add more branches off the bones as needed.

Stop when the causes are outside the team’s control or influence.

4. Look for items that appear in more than one category. These may be the most likely causes. Engage the group in looking for areas where they can make a difference.

Use the results in the next phase, Decide What to Do.

Materials and Preparation

Markers, sticky notes.

Define the problem statement. Include the five W’s— What, Who, When, Where, and Why—to the extent they are known. Draw the fishbone diagram on a flip or white board. Make a list of the sample categories.

Examples

Use a Fishbone activity to dig into the root causes of a problem, but don’t stop there. A fully branched and labeled diagram is not a deliverable of the retrospective.

If you suspect that a lot of what will come up in the retrospective may be due to issues outside the team’s control, digging into all the problem sources may drain the team’s energy. Choose a different method.

When the issues are more local to the team and under their direct control, the team may be energized by tackling the fishbones.

For example, during a two-week iteration, the build broke five times. The retrospective leader knew the team was frustrated by it, and the broken build would be a prominent topic in the retrospective. He introduced the Fishbone activity with bones labeled “Skills”, “Systems”, “Surroundings”, and “Staffing”.

Two or three team members worked in small groups to focus on writing sticky notes for each bone. They covered the “fish” with scales of notes.

When they stepped back to read the notes, they saw two root causes—inexperienced team members working alone (showed up in both Skills and Staffing) and writing new code while waiting for the build to compile (showed up in both Systems and Surroundings). Everyone immediately agreed on a commitment to mentor and pair with newer team members. They identified the second cause as needing more attention and decided to include it as a topic of action planning.

6.5 Activity: Patterns and Shifts

Use this in conjunction with a visual data-gathering activity (e.g., Timeline or Mad, Sad, Glad) to generate insights in an iteration, release, or project retrospective.

Purpose

Look for links and connection between facts and feelings. Analyze the data about the iteration/release/project. Guide the group in recognizing and naming patterns that contribute to current issues.

Time Needed

Fifteen to sixty minutes, depending on the size of the group and the amount of data.

Description

After gathering data, facilitate a discussion to analyze the data, looking for patterns of events, behaviors, or feelings. Also look for times when there has been a shift; for example, everything was going smoothly, and then the energy dropped. Capture insights on flip charts or, if you're using a timeline, right on the timeline.

Steps

1. Introduce the activity by saying “Now that we’ve created a picture of our iteration/release project, let’s see what patterns and information we can find in our data.”
2. Invite the group to examine the display, if they haven’t already.
3. Focus on section at a time, and ask the group what they notice about the data. Write notes about what they say on the display or on a separate flip chart. Go through section by section.
4. Now look at the entire display. Ask the group:
 - Where do you see connections and links between events?
 - Where do you see a pattern? What would you name that pattern?
 - Where do shifts occur? What would you name the shifts?

Again, make notes on the display or on a separate flip chart.

5. Review the patterns and shifts. Ask the group the following questions:
 - How do these patterns contribute to our current issues?
 - What do these shifts tell us about our current issues?
6. Ask which ones are most important to address in the next phase of the retrospective, Decide What to Do.

Materials and Preparation

Markers and flip chart paper or cards.

Use this after a visual data gathering exercise such as Timeline or Mad, Sad, Glad.

6.6 Activity: Prioritize with Dots

Use this in the Generate Insights or Decide What to Do phase in an iteration release or project retrospective.

Purpose

To gauge how the group prioritizes a long list of candidate changes, proposals, etc.

Time Needed

Five to twenty minutes depending on the number of options and the size of the group.

Description

Team members prioritize the top issues, ideas, or proposals.

Steps

Introduce the activity by saying “We have a great list; we can’t pursue all of the items, so let’s see what the group views as the top priorities.”

1. Give each team member ten 1/2" or 3/4" colored sticky dots. Post a legend allocating the dots as follows:
 - #1 priority receives four dots.
 - #2 priority receives three dots.
 - #3 priority receives two dots.
 - #4 priority receives one dot.

Read the dot allocation scheme. Review the items under consideration.

2. Allow a few minutes for people to place their dots next to the items under consideration (see Figure 6.4, on page 94).
3. Count the number of dot on each item. Write the number next to the item.
4. When there are clear winners, ask the group whether they want to proceed with these items.

When there’s a tie at the top (four or more items receive the same number of dots) and it’s not feasible to pursue all the top issues,

ask the group to discuss why they see each one as a top priority, and then revote (preferably with a different colored dots).

Variations

Rather than provide ten dots per person with an allocation scheme, give each team member a number of dots roughly equal to $1/3$ to $1/2$ the total number of items. Team members can allocate their dots as they choose—all dots on one item, one dot per item, or anything in between.

To constrain the selection, offer fewer dots.

Materials and Preparation

Sticky dots— $1/2$ "– $3/4$ " in diameter. Have two colors in case you need to revote.

You can have people put check marks by the items, but dots are more fun and easier to count.

Example

Dot voting is not scientific. Don't try to make it scientific. It's a way to winnow down a long list of possibilities.

We've found that we get very different results depending on how we phrase a question. Here are some variations to consider:

- Which is the most important to work on?
- Which will have the greatest impact?
- Which do you want to work on most?

If no one wants to work on the "most important" or "greatest impact" items, it's a moot point. People can think an item is important and still not want to work on it. Go with the energy. You want action and decisions the group will support. The best choice is the one the team will do something about.

- Ideas for Team Experiments
for Next Iteration
- Start brownbag-lunch & learn
 - Increase pairing time to
5 hrs/day or 25 hrs/week
 - Write more unit tests
before coding
 - Measure time spent in
"slack" activities
 - Institute late penalty/fee
for daily stand-up meetings
 - Contact customer at least
2X a week
 - More celebrations!
 - More furniture for better
communication flow
 - More white board space

Figure 6.4: Prioritizing with dots helps a group winnow down a long list of items.

6.7 Activity: Report Out with Synthesis

Use this in conjunction with a small group analysis activity to generate insights in an iteration, release, or project retrospective.

Purpose

Share thinking and ideas from small groups with the whole group. Find common threads, and look for ideas that energize the whole group.

Time Needed

Twenty to sixty minutes, depending on the number of small groups and the amount of time allowed for reports.

Description

Each small group shares the result of their work with the whole group. The retrospective leader keeps a progress bar to help the reporter stay within time. After the final report, the group looks for common threads and themes and identifies those they want to work on.

Steps

1. Introduce the activity by saying “It’s time for the teams to report their findings to the whole group. In order to hear from everyone, we can allow each group n minutes. I’ll help you stay on track by keeping a progress bar. I’ll mark off each minute, and when you see $n-1$ bars, you’ll know it’s time to wrap up. We’ll have n minutes for questions after each report. I’ll keep a progress bar for that, too.”
2. Time carefully. Monitor time, and make a bar for each minute that passes. If someone is going over, at n minutes announce, “Time is up. Please take a minute to conclude.”
3. After the last group report, ask the group to review any flip chart, or think back over what they’ve heard. Ask for common threads. Write those ideas on a flip chart.
4. After the group has identified common threads, ask these questions:
 - Which ideas to you have energy to tackle?
 - What is it about those items that you have energy for?

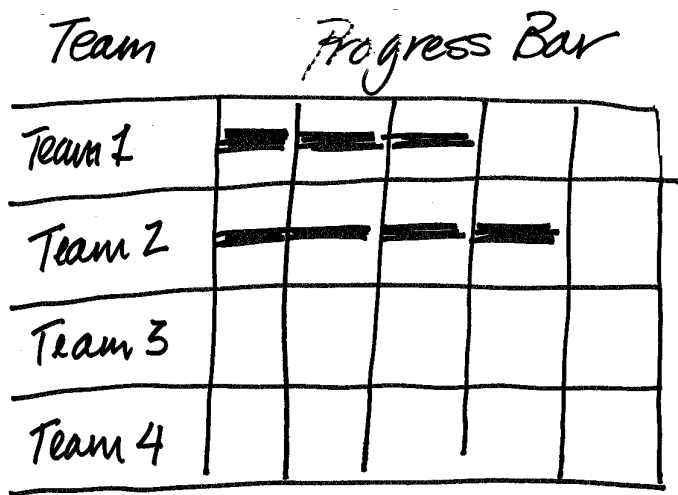


Figure 6.5: A visible progress bar helps the person reporting keep it brief.

- Which ideas have the greatest chance of success?
 - What's your overall impression of these ideas?
 - Which ideas do you want to take on in the next iteration?
5. Take the prioritized ideas into the next phase, Decide What to Do.

Materials and Preparation

Flip chart page prepared to track progress bars for all groups (see Figure 6.5). A marker, but *not* a black marker. People have too many bad associations with having a black mark next to their name or team name. This is one time we like to use dark pink or orange markers.

Examples

Some people do go on. We've found that helping people monitor their own time helps them stay on track, stay on point, and finish on time. Actually, when people know they'll be timed, they tend to organize their thoughts more and often say what they need to say with time left over.

6.8 Activity: Identify Themes

Use this after locating strengths to generate insights in a longer iteration, release, or project retrospective.

Purpose

Find common threads from Locate Strengths interviews. Discern compelling ideas for experiments, changes, and recommendations.

Time needed

One to two hours.

Description

After Locate Strengths interviews, the interview pairs form groups and report what each learned as they interviewed the other person. As they report the high points, team members listen for common themes and compelling ideas. After the identifying themes, the group clusters all the cards. Small groups self-select to further define the ideas contained in the cluster.

Steps

1. After the interviews are complete, put two or three interview pairs together to form a group of four or six. Keep interview pairs together.
2. Explain the process.

“Each interviewer will report on what he or she heard during the interview. Don’t worry about reporting the interview verbatim or covering all the points. Report on memorable themes, stories, and quotes heard in the interview.”

“After all the stories have been recounted, discuss the common themes that came up in more than one interview. Make a note of compelling ideas—even if they came up in only one report.”

“Write each idea on a large index card. Write legibly so others can read the card. One idea per card.”
3. Each group reports on the themes they heard and posts their cards on a wall or spreads them out on the floor.

4. After all the groups have reported, the entire group sorts the cards in like clusters.
5. Ask people to select a cluster that they want to work on refining. It's if no one chooses some of the clusters.
6. Small groups work on further defining steps for building on the strength themes.
7. Groups report on their work, which will become candidates for further planning, experiments, and recommendations in the Decide What to Do phase.

Materials and Preparation

This activity follows the Locate Strengths interview activity.

Large index cards and markers. Repositionable tape or tacky stuff to do the sorting on the wall.

Examples

A while back, we worked with a large group who were looking at how to make changes in their organization. One part of the group insisted that the best approach was to list all the problems and then identify solutions. Rather than fight with them, we let them go their way and worked with the rest of the group using interviews and identifying themes.

After two hours, the problem-solving group was drained, depressed, and ready to give up the whole enterprise.

Our group was energized and hopeful.

Coincidence? You decide.

6.9 Activity: Learning Matrix

Use this to generate insights in an iteration retrospective.

Purpose

Help team members find what's significant in their data.

Time Needed

Twenty to twenty-five minutes.

Description

Team members look at four perspectives on their data to brainstorm a list of issues quickly.

Steps

1. After discussing the data, show the flip chart (see Figure 6.6, on page 101). Tell the team they can fill out the quarters in any order as thoughts come to them.
2. As team members think of ideas to add to the chart, write them in the corresponding section. Stick to writing the words they use as closely as possible. If you need to shorten a statement, ask the team member to paraphrase, "Could you please say that again using fewer words, so I can get it on the chart?"

Variation: Give every team member a stack of sticky notes to write their ideas, one per sticky note. Each team member puts his or her notes in the appropriate quarter of the chart. The retrospective leader reads all the notes and sorts them into natural clusters.

3. When the flow of ideas slows down, review the comments on the chart. Ask the group, "Is there anything missing from this list? What haven't we written down that will be important to going forward?" Lead a brief discussion, and make additions, if needed.
4. Hand out strips of six to ten dots. "Place your dots to vote for the items that you believe have the highest priority to get attention during the next iteration." (Or you can use the honor system and give each person a marker to make a limited number of check marks.)

5. Use the prioritized list as an outcome to segue into your Decide What to Do phase.

Materials and Preparation

Prepare a flip chart (see Figure 6.6, on the following page) in quarters with icons for the four sections: a “smiley” for, what did we do well that we want to continue? a “frowny” for, what would we like to change? a “light bulb” for, what new ideas have come up? and a “bouquet” for, who do we want to appreciate?

Prepare strips of dots, six to ten, depending on what’s easy to cut from the page. (Variation: Substitute other kinds of stickers for dots. Children’s stores, stationery, scrapbooking, and office-supply stores carry a variety of styles and kinds.)

Examples

We introduce the Learning Matrix whenever we are pressed for time to generate insights. This can happen in sixty to ninety-minute retrospectives where the data gathering turns into a longer discussion than we expected. We still want a rich discussion, but we have to get it as efficiently as possible.

The lines demarcating the four quadrants of the poster tend to serve as natural “brakes” on the discussion for each section. People fill up all the quadrants and stop offering ideas when they get to the lines or the bottom of the flip chart sheet. Then, ask, “What one additional idea about [what went well] should we include?” and write it around the title area. This ensures that the best ideas are not lost and you can stick to the timebox.

In the same way, when we are short of time, we use the Learning Matrix to gather feedback on the retrospective in the Close the Retrospective phase. Focus the four quadrants on the team’s experiences during the retrospective—what went well, what do we want to do differently, new ideas, and appreciations.

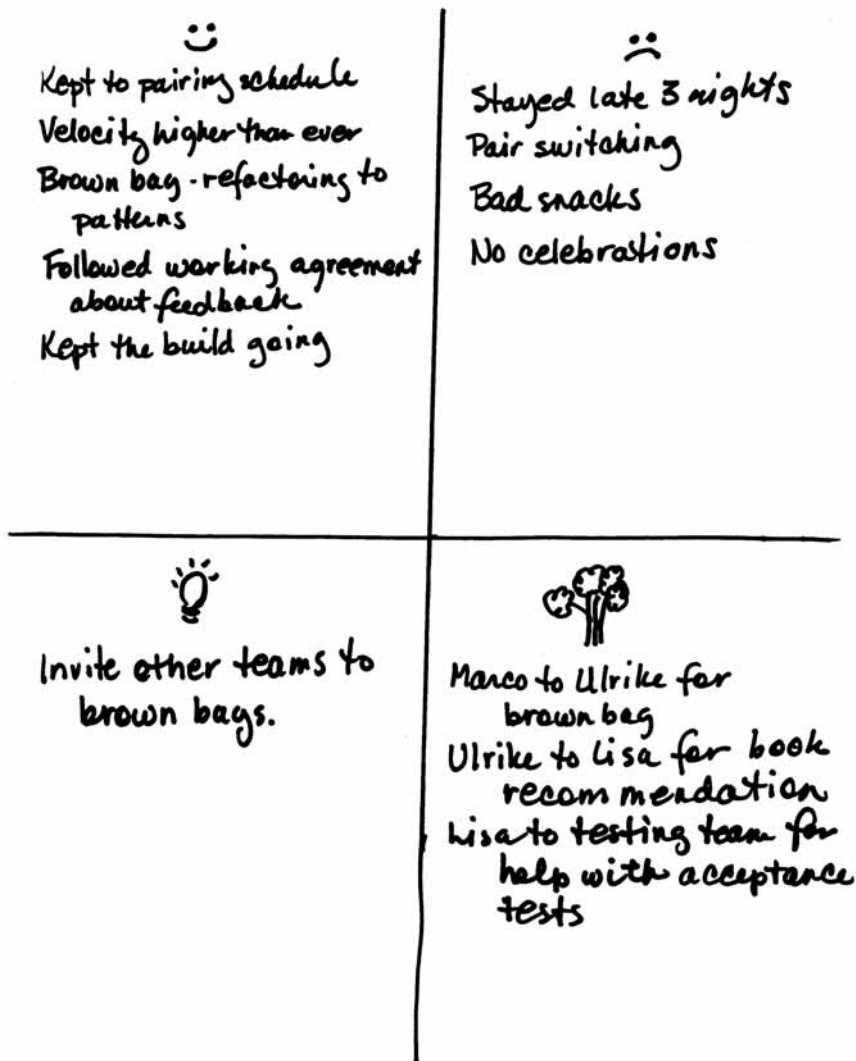


Figure 6.6: Learning Matrix is a quick way to capture insights.

Chapter 7

Activities to Decide What to Do

Deciding What to Do moves the team's focus to the next iteration. In these activities the team members develop proposals for action, identify the highest priority actions, create detailed plans for experiments, and set measurable goals to achieve the results.

You can also use Triple Nickels on page [56](#) to generate ideas for action.

7.1 Activity: Retrospective Planning Game

Use this to develop action plans in Deciding What to Do in a release, or project retrospective.

Purpose

Develop detailed plans for experiments or proposals.

Time needed

Forty to seventy-five minutes depending on the number of experiments and the size of the group.

Description

Team members work individually or in pairs to brainstorm all the tasks necessary to complete an experiment, improvement, or recommendation. After brainstorming, team members eliminate redundant tasks and fill in gaps. The task are arranged in order, and team members sign up for tasks they will complete.

Steps

1. Introduce the activity by saying, “We’re going to work on generating all the tasks needed to have our experiment/improvement/recommendation succeed.” Then recap the experiment (improvement, or recommendation).
2. Describe the process:
 - Work individually or in pairs to generate all the tasks.
 - Form pairs of pairs to compare tasks, eliminate duplicates and fill gaps.
 - Cluster the tasks and again check for duplicates and gaps.
 - Order the tasks.
3. Form pairs (or not, if there are fewer than eight people do this individually). Hand out sticky notes or index cards and markers.
 - Ask the group to write one task per card or sticky, leaving the bottom half blank. Show an example (see one below).

4. Form pairs of pairs (or pairs if the previous step was done individually). Reiterate the instruction: Compare tasks, eliminate duplicates and write any new tasks you realize are missing. It's okay to re-write or consolidate as needed.

If the group is larger than 16, have the groups of four form groups of eight and do another round of comparing, adding, and eliminating duplicates before proceeding to the next step.

5. Invite the group to post and cluster the tasks on a whiteboard or wall. If they've used cards, they can cluster them using a table. Once again, compare, look for duplicates, and add any new tasks that the team realizes are missing.

Leave room on the left side of the wall or whiteboard. The team will use this in the next step when they order the tasks.

6. Order the cards. Start by asking: "Which task must be done first?" Move that task to the extreme left of the working surface. Then ask, "Are there any tasks that can be done simultaneously with this task?" Place those above or below the first task.

Ask which task needs to be done next. Place that to the right of the first task.

7. Invite team members to sign up for tasks by writing their names on the bottom half of the task cards. Or if it's more appropriate, bring the tasks into the next iteration planning meeting.

Materials and preparation

Sticky notes or index cards. Markers. A wall, whiteboard, or other flat working surface.

If your team hasn't done this kind of planning before, prepare an example of a task card.

Example

The Retrospective Planning Game activity helps teams take vaguely stated goals for improvement and turn them into concrete tasks and action steps.

In the retrospective for their second release, a team developing software for scanners decided to work on new ideas for reviewing their 1400 automated tests. Their current approach was too slow and stalling

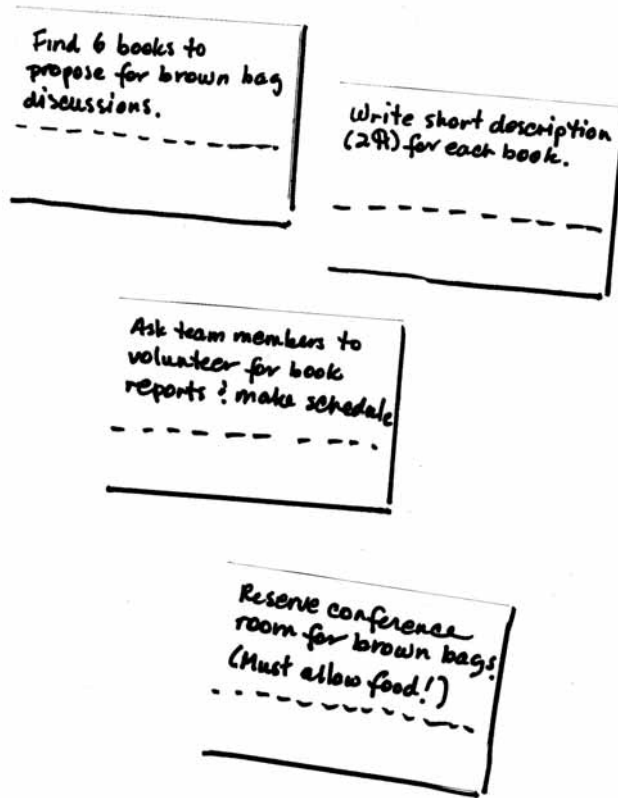


Figure 7.1: Task cards for the Retrospective Planning Game

team progress. They brainstormed and determined a few possible approaches. The retrospective leader invited team members to choose which approach interested them the most. Groups of two or three interested volunteers worked to identify action steps and wrote one action each on several large sticky notes.

They put the sticky notes on the wall for sorting. The retrospective leader asked them to look for duplications or missing steps or tasks. When the whole team agreed the right set of actions were on the wall, they began to look for dependencies between tasks. They used lengths cut from a ball of yarn and bits of tape to make a visual link between dependent tasks.

They discussed which actions were the best fit with their next iteration plan, which would make the most difference and what risks they could anticipate.

The team left the retrospective with a clear idea about what tasks to include in planning the next release. They had created manageable actions out of a huge improvement goal and knew what they had to do to reduce the risks.

7.2 Activity: SMART Goals

Use this to Decide What to Do in an iteration, release, or project retrospective.

Purpose

Translate ideas into priorities and action plans. Develop specific measurable actions.

Time needed

Twenty to sixty minutes depending on the size of the group.

Description

Focus the team's attention on developing goals that are Specific, Measurable, Attainable, Relevant, and Timely. Goals that have these characteristics are more likely to reach fruition.

Steps

1. Introduce the activity by leading a short discussion on the importance SMART goals. Point out that goals that aren't specific, measurable, relevant, and timely tend to fizzle.
2. Point to the SMART characteristics written on a white board or flip chart. Offer an example of a SMART goal: "Our goal is to pair program at least 5 hours a day starting next Monday. We'll rotate pairs daily. We'll create a chart with the pairing schedule, and review it at our next retrospective." Contrast a non-SMART goal: "We should pair more." Note: choose an example that isn't related to the experiments or improvements the team is working on.
3. Form groups around the items that the team prioritized to work on. Ask each group to develop a SMART goal for the initiative, and identify 1–5 action steps to accomplish the goal. Monitor activity.
4. Ask each group to report their goal and plan. After each report, confirm with the rest of the group that the goals are, in fact, SMART. Invite the group to offer refinements.

Materials and preparation

Flip chart paper or a white board. Markers. A flip chart listing the characteristics of SMART goals (see below).

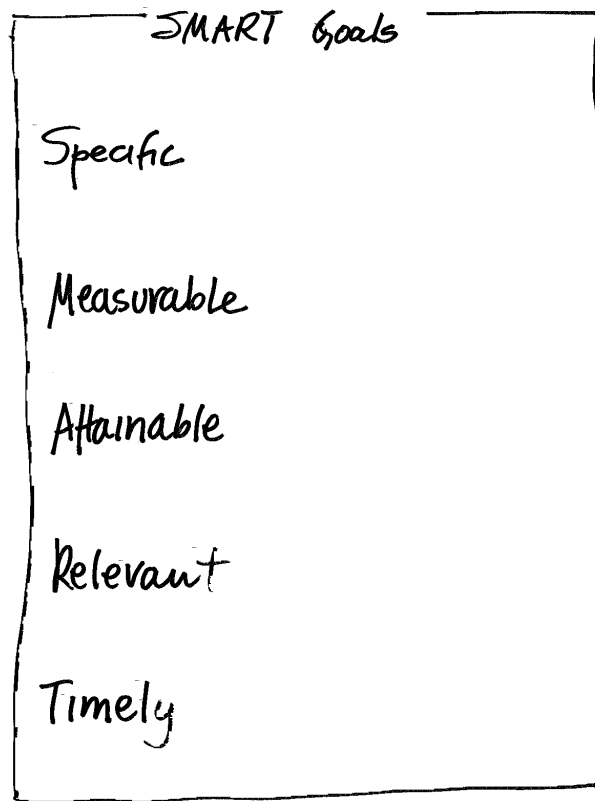


Figure 7.2: List the characteristic of SMART goals. Goals that don't meet these criteria don't get done.

Example

Time and time again, we see the difference between groups who have only a vague idea of what they want to accomplish and those who have detailed goals. The groups that formulate goals to meet these criteria accomplish their goal (at least most of the time). The other groups don't. Sometimes the other groups don't even start because the goal is too vague to generate forward momentum.

7.3 Activity: Circle of Questions

Use to Decide What to Do in an iteration, release or end of project retrospective.

Purpose

Help team choose an experiment or action steps for the next iteration, particularly when team members need to listen to one another.

Time needed

Thirty+ minutes, depending on team size.

Description

Team members engage in a question asking and answering process to reach consensus on next steps.

Steps

1. Invite team members to sit in a circle. Introduce the activity. "Sometimes the best way to find answers is to ask questions. We'll ask questions to find what we want to do as a result of what we've learned in this retrospective. We'll go around the circle until we are satisfied with our answers or until at least [timebox] minutes have passed."
2. Turn to the person on your left and ask a question. You might start with "From your perspective, what is the highest priority for us to try in the next iteration?" The team member answers, from his or her perspective, to the best of his or her knowledge and ability. Then that team member becomes the questioner, turning to the person on his or her left to ask a question that extends the previous discussion or starts a new one.

The new respondent answers and, then in turn, asks a question and so on around the circle until the group is satisfied that their questions about the topic have been heard and considered, and a consensus for action has emerged.

Materials and preparation

Set chairs in a circle with no table in the middle. Have a flip chart nearby for recording outcomes.

Examples

When leading Circle of Questions in a team, we stop the activity only at a point when the whole circle has been completed at least twice. Whether you go around two, three, four (or more) times, continue until each person has had the chance to ask and answer a question. Stopping short of completing the circle sends a message that some folks' views are more important than others.

Powerful insights and direction for action emerge from this activity. Encourage everyone to pause for a few seconds before asking or answering a question. The experience of focused attentive listening, and being listened to by the team, provokes team members' best ideas.

Trust is an important factor on self-organizing, Agile teams. The Circle of Questions activity can be one of the few times that a team devotes equal attention to each of its members. Honoring each other's words this way helps to build trust in team working relationships.

7.4 Activity: Short Subjects

Use to Decide What to Do in an iteration retrospective.

Purpose

Help to discover differing perspectives on how the team is doing and provide variety in very short retrospectives.

Time Needed

Twenty to thirty minutes.

Description

The team brainstorms lists of ideas for action, in response to prompts on the 2–3 flip charts. Titles may include:

- What Worked Well/Do Differently Next Time, a.k.a. as WWDD
- Keep/Drop/Add
- Stop Doing/Start Doing/Keep Doing (a.k.a. StoStaKee)
- Start/Stop/Stay
- Smiley/Frowny
- Mads/Sads/Glads
- Prouds/Sorries
- Plus/Delta (on the iteration)

Steps

1. Post the flip charts. Give team members 3–5 minutes to reflect privately on the iteration and write notes.
2. Lead a brainstorming and record ideas. Keep going until all the comments team members think are important have been posted on the charts. Remember to wait through one or two silences for the next burst of comments.
3. Ask the team to identify the top 20% of the items—those items they believe have the potential for the greatest benefit. Lead a short open discussion, then vote with dots. (See Priority Dots.)
4. If there are more than 2–3 high priority items, reduce the remaining number of issues for action to a manageable few.

5. Keep the brainstormed lists for historical review at subsequent iteration retrospectives to help identify areas of persistent issues.

Materials and Preparation

Prepare a flip charts with titles for discussion, changing the titles from iteration to iteration. As the team becomes over-familiar with one format, move on to another.

Variations

Use any of these in Closing to reflect on the retrospective processes and outcomes.

Give sticky notes to team members to fill out and stick on the corresponding chart instead of brainstorming lists. Sort notes into clusters of like ideas and name the clusters.

Examples

Teams have an unfortunate tendency to: a) choose one of these schemes and use that activity as the only activity in their retrospectives, or b) choose one and use it time after time. It's a fine activity in its place, but doesn't provide rich ideas when used as a stand alone retrospective.

We've heard iteration retrospectives referred to as "heartbeat" retrospectives—part of the regular rhythm and lifeblood of the project team. Listening to a heartbeat or taking a pulse gives indicators about the health of a person, and iteration retrospectives diagnose the health of the team. That said, listening to heartbeats, even our own, can become monotonous.

When you're holding retrospectives iteration after iteration, particularly when the iterations are short, one or two week increments, teams get bored when the same activities or approaches to discussion show up week after week.

Use the variety provided by Short Subjects to change the perspective on discussions. Add your own flavor. Make up categories that fit for the team. (Continue, Integrate, Refactor?)