

Debriefing Facilitation Guide

Leading Groups at Etsy to Learn From Accidents

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Introduction

"The purpose of an investigation is to understand how things usually go right as a basis for explaining how things occasionally go wrong."

-Erik Hollnagel, Safety-I and Safety-II

Most traditional accident investigations tend to focus on discovering things around an event that never actually happened. In an attempt to prevent future accidents, there is an underlying assumption (Shorrock, 2014) for this somewhat peculiar emphasis, which is:

Someone did not do something they should have, according to someone else

Through this lens, what generally surfaces in investigations are "findings" about what people did not do (pay attention, make the right decision, etc.) rather than what they actually did. Without anyone really noticing, these items get labeled as "human error" and through a seductive and convenient contortion of logic, an event that never actually happened is deemed after the fact as the "cause" of the accident. Perhaps unsurprisingly, this results in an obvious recommendation for the future:

"Next time, do what you should."

Unfortunately, this approach does not result in the safer and improved future we want.

The perspective now known as the "New View" on accidents and mistakes flips this thinking around, providing a different path to improvement and learning (Dekker, 2002). We wholeheartedly believe in this approach at Etsy. We've invested in operationalizing it on an organizational level (Allspaw, 2010) and have shared our perspective publicly:

"Adaptability and learning. We learn through honest, blameless reflection on lessons and surprises. We believe that traditional root-cause analysis makes learning from mistakes difficult. Our blameless post-mortem process is a widely-cited technique that we believe is becoming best practice among organizations that value innovation. Blameless postmortems drive a significant percentage of our

development as we analyze what about our production environment was less than optimal and rapidly make corresponding adjustments." (Etsy, Inc., 2015)

How a postmortem¹ debriefing (hereafter "debriefing") is done (in whatever form it takes) is at the core of the approach, and therefore hinges on the expertise of the debriefing facilitator. Over the years, we have developed an internal course at Etsy focused on building a strong bench of debriefing facilitators. At the time of writing, this course is comprised of:

- Three seminars covering the theoretical and empirical foundations of accident models, historical case studies, topics of "Just Culture" and Safety-I/II (with readings and written exercises)
- An interactive workshop for facilitators to practice core skills
- Shadowing and feedback for new facilitators
- Regular follow-up discussion groups

This guide is intended to be a lightweight set of techniques and tactics distilled from the full course, designed to help facilitators develop and sharpen their debriefing facilitation skills.

¹ Postmortem in this sense could be seen as an 'after-action review' or 'incident review.' The term is unfortunately inaccurate and confusing across domains (such as medicine), but is nevertheless part of the software domain lexicon at the current time.

What Brought Us to Write This

Modern businesses critically rely on software, and that reliance will continue to grow more critical. This is not a revelation. We believe, along with a growing number of organizations, that the current and prevailing paradigm of accident investigation in software-rich environments is fundamentally flawed, confused, and dangerous in the long term.

In Etsy's corner of Internet commerce and marketplaces, we believe we can contribute to an emerging dialogue about what "safety" is really made of: the presence of people's expertise, not simply the absence of accidents.

We first began practicing and developing expertise in facilitating debriefs within the Engineering group at Etsy. Over the years, as we have evolved our understanding of this work and its value, the greater organization (beyond the technical side) became interested in this new source of learning. As a result, we have adapted what was originally custom-made for an engineering audience to be a more generalized and accessible set of materials. We think this has been successful; to date, more non-engineers than engineers have taken the course at Etsy, and some of the most insightful debriefings have been facilitated by non-engineers.

After four years of developing and evolving the internal course, we considered that other organizations might benefit from what we've put together. While we have attempted to make the material as generalizable as possible, we do acknowledge that it has been developed on the job and we are a company that operates an online business, which influences what we have produced here. Nevertheless, we very much hope that other organizations (online and offline) find it useful.

Who This Guide Is for

This guide is intended to serve as a starting point for debriefing facilitators in organizations that rely on the successful design and operation of software. It has been written with the assumption that multiple non-technical stakeholders are involved in the dialogue around understanding and improving the use of tools, processes, and practices in the organization.

Influences and Inspiration

As the original Code As Craft blog post (Allspaw, 2012) reveals, we have come to these ideas, concepts, practices, and techniques through the expertise and assets of the psychology, cognitive systems engineering, and safety science communities. The text that we use in the internal course is **The Field Guide to Understanding Human Error** by Sidney Dekker. We reference a number of passages in these texts as well:

- **Behind Human Error**, by David Woods, Sidney Dekker, Richard Cook, Leila Johannesen, and Nadine Sarter
- Pre-Accident Investigations: An Introduction to Organizational Safety, by Todd Conklin
- Safety Differently, by Sidney Dekker
- Engineering a Safer World, by Nancy Leveson
- Safety-I and Safety-II: The Past and Future of Safety Management, by Erik Hollnagel
- Normal Accidents: Living with High-Risk Technologies, by Charles Perrow
- The Challenger Launch Decision, by Diane Vaughan
- Working Minds: A Practitioner's Guide to Cognitive Task Analysis, by Beth Crandall, Gary Klein, and Robert Hoffman

Many of the techniques and approaches to interviewing and debriefing facilitation in this guide can be seen as a specific translation of the **Critical Decision Method**, which is a cognitive task analysis method designed to draw out how people make decisions; how they pick up and understand cues in their environments; and how they judge whether their actions are likely to be fruitful or not. Essentially, it's a semi-structured interview approach using targeted questions, focusing on decision making and cognition with people trying to solve problems. Scenarios are broken down into critical junctures, and we ask questions about those. Developed by Gary Klein and his colleagues in the late 1980s, we have found it to be an invaluable foundation for facilitators when they approach a debriefing.

Why We Focus on Facilitation Skills

Because there are stories to uncover

A key idea in the 'New View' perspective is that people do (notice, pay attention, act on, solve, etc.) what makes sense to them at the time, given their experience and familiarity with their tools, and their understanding of the current situation.

The facilitator's job is not to discover the things that people **didn't** do, but what they actually **did**, and how they perceived their world at that time.

Productive debriefing facilitation is about getting people to tell their stories. A facilitator does this by asking pointed, open-ended questions that help to draw out descriptive details from people that they might not otherwise say out loud. The debriefing exists to hear (and ask about) people's **descriptions**, not their **explanations**.

In other words: As facilitators, we are not looking for causes.

Finding cause is easy, and we don't need a group interview to find it. In contrast, finding all the things people actively do to keep the system running effectively is quite difficult, so an accident provides a unique opportunity for these underlying factors to be revealed.

Because each story is essential

Like the parable of the blind men and the elephant (see below), there is no singular, omniscient perspective on an event involving work in complex systems. There are only multiple perspectives, sometimes overlapping and sometimes not.

The parable of the blind men and the elephant

Six blind men were asked to determine what an elephant looked like by feeling different parts of the elephant's body. The blind man who feels a leg says the elephant is like a pillar; the one who feels the tail says the elephant is like a rope; the one who feels the trunk says the elephant is like a tree branch; the one who feels the ear says the elephant is like a hand fan; the one who feels the belly says the elephant is like a wall; and the one who feels the tusk says the elephant is like a solid pipe.

None of them is wrong, but at the same time, none of the descriptions alone are sufficient to describe an elephant holistically.

For example: In an outage or otherwise surprising scenario, it's clear that a network engineer will likely have a different view of the event than an engineer familiar with the application code, a database engineer, a customer support agent, a product manager, a security engineer...the list could go on. The facilitator's challenge is to gather these diverse perspectives and construct an aggregate narrative of how an event unfolded.

That being said, our goal as facilitators is not to consolidate different accounts into a unified story of cause and effect.

It's very tempting (and quite easy) to take the perspectives that people provide in a debriefing to create a singular, omniscient, and comprehensive view of the accident, which we can (from our comfortable and hindsight-driven seats) use to reveal precisely where people went wrong. However, even if such an account could be constructed, it would be an inherently inaccurate reflection of the complex realities in which the people existed at the time, and will continue to find themselves in as work continues and new incidents take place.

As facilitators, we are not looking to somehow merge these multiple perspectives into a single story. Quite the contrary—the value in gathering multiple narratives is to ask questions that shed light on the contrasting and complementing parts of the different accounts shared in the debriefing.

Because everyone truly is an expert

When we ask people for descriptions of their work, we hear about their expertise. We hear about the tips and tricks they've developed over their careers, like the shortcut shell aliases, special bookmarks, one-liner scripts, and the go-to graphs they always look at when diagnosing certain problems.

We hear about the procedures they always follow, and the ones they sometimes skip because if they followed them blindly and to the letter they'd have a bad day, guaranteed. We hear about what they usually do when that alert goes off and everything is fine again. When "this" and "that" happens, they do "these things," but only in certain circumstances. We coax out the hidden nuances underlying their actions, decisions, and rationales.

A debriefing is where you learn how the mechanic can just lift the hood of the car, listen to that faint hum of the engine, and intuit that it needs new valves.

A debriefing is where you discover what makes people's work difficult, and what makes them good at it, despite the difficulty.

The Benefit to Others: Vicarious Experiences

Expertise develops in large part from having a diverse knowledge-base to lean on when trying to solve problems under time pressure (such as diagnosing and resolving an outage). In our domain, this means that part of getting good at handling incidents that have a high degree of uncertainty depends largely on how many different types of incidents you've been exposed to in your career.

One way to accelerate or augment training is through what Gary Klein and Robert Hoffman called "vicarious experiences"—the shared and explored stories of perspectives (Klein, G. & Hoffman, 1993). When we're facilitating a debriefing, one of the primary benefits is the emergence of these "thick" descriptions, which provide a rich source of learning for others in the company, and can help fill a gap in their training that can't otherwise be filled.

We know this to be true, as "war stories" told at conferences or in the hallways of successful companies are always very compelling. The sharing of these stories is critically important, and we tend to remember them quite well.

What Klein and Hoffman (and others) strongly suggest is that these descriptions **in and of themselves** can serve as training materials for staff, which means that debriefing documents
should be made available, searchable, and shareable.

The question then becomes: How does a facilitator get good at eliciting these descriptions?

The Goal Is to Learn, Not to Produce Remediation Items

"The problem comes when the pressure to fix outweighs the pressure to learn."

-Todd Conklin, Pre-Accident Investigations

When we ask software engineers to think about how to make their environments "safer", we cannot be surprised that their response is to adapt existing software, or build new software.

In some cases, this can indeed help, but employees should capture the rationale for it and validate when it's a constructive thing to do, while being open to the idea that it might not be.

Our experience at Etsy is that identifying new tools (or modifying existing ones) to "fill in the gaps" is one of the many outcomes from a debriefing, and perhaps not always the most important one.

In particular, it's important to be wary of the "dashboard trap", where the outcome of your debriefing simply adds another graph to an ever-increasing number of graphs on yet another dashboard someone needs to check before they can feel confident about taking an action, like pushing code. The introduction of more input on a dashboard will ultimately make it difficult for people to discern signal from noise (making their jobs harder), so this is an example of a superficial solution. If you find yourself falling into the dashboard trap, take it as a sign that now's the time to dig deeper.

The goal of a debriefing is not to produce recommendations or remediation items. Yes, you read that right. As we mentioned before, the goal is not to find the cause of an accident. The goal is to seize the opportunity for an organization to learn as much as they can, in a relatively short period of time, about how people normally perceive and perform their work. Because the people involved were doing their normal work on a normal day when the event in question happened.

To reach these learnings we ask questions that allow us to understand the myriad ways the organization prevents this sort of event from happening all the time, not by asking what made the event happen this one time. That prevention is taking place, even if we're not aware of it. But we should be.

Structure and Preparation

We believe that organizational learning from accidents comes from gathering data about the accident, constructing a timeline, and bringing people involved into a group discussion led by a skilled and neutral facilitator. While it's tempting to simply send a form for people to fill out over email, we've found that approach to be void of the context and dialogue necessary for real improvement. It's important to gather in a room together and make the learning dynamic, rather than static.

That being said, there are a few key elements of structuring and preparing for your debriefing.

Familiarize Yourself With the Timeline in Advance

Before the debriefing, facilitators need to get a sense of the flow of events, without forming opinions about what happened. You'll want to gather whatever objective data² is available and construct a timeline of events.

The initial timeline should be created by the people closest to the event. Generally, they are responsible for coming up with the basic structure of a timeline, which helps determine the boundaries of the event being discussed. You'll want to review this document to get an initial idea of where the interesting communication patterns, decision points, observations, and actions occurred so you can sketch out where to dive deeper in your debrief.

Prepping is mostly about setting yourself up to best manage your focus and the group's mental cycles during the debriefing itself. A big part of this is being keenly aware of how meeting time is spent. The time set aside for the debriefing meeting will always be arbitrary and it will never be enough to cover everything. Learning can always go on forever! Reading through the initial timeline beforehand will let you structure the meeting and guide the discussion in a way that ensures you'll get through everything.

^{2 &}quot;Objective Data is directly observable: Able to be seen, heard, touched, smelled, tasted, counted, or measured (does not contain conjecture, conclusion or opinion)." - (USDA Forest Service, 2014)

Some logistical suggestions to set you up for success as a facilitator

- Don't facilitate alone. Ideally, you'll have a co-facilitator to shadow and support you during the debriefing, and to give you feedback after it.
- The facilitator should not be someone who was directly involved in the event. If you
 were close, or even on the periphery, of what happened, you should ask a neutral,
 outside party to facilitate.
- Find someone (in advance) to be a dedicated note-taker for the debrief.
- Make sure to invite everyone mentioned in the timeline to the debriefing. Ideally, any team mentioned would have at least one representative attend as well.
- Scope out the logistics of the room beforehand. Is it big enough for everyone? Is anyone dialing in? Prepare yourself and the space (video equipment, chair layout, etc.) accordingly.

Unearth More Objective and Subjective Data

The timeline provides widely accepted observations to use as a skeleton for the debriefing. Additional data that can help construct the timeline might include chat transcripts capturing the dialogue between people attempting to coordinate and respond to an event, dashboards, graphs or logs that people observed, the timestamped actions people took during the event, etc.

As the debriefing progresses, you'll use the timeline and the artifacts within it to develop questions to ask. We'll talk more about these questions in the next section, but they represent prompts to gather subjective data that will build context around the actions and decisions that took place. Subjective data includes the opinions, judgments, assumptions, beliefs, and individual statements that will come to light during the debriefing.

The key idea is that when somebody says "X happened" you take the opportunity to ask questions that provide context for X. Not everyone in the discussion will come to the meeting knowing that context, so it's important not to skip over details as you walk through the timeline in the debriefing.

You'll want to make sure that everyone involved in this incident, especially representatives with diverse perspectives, are invited to the debriefing and that you talk to key stakeholders in advance.

Whom you deem as "key" is specific to your organization. If you're not sure, you should ask, because that is also useful data! The person who requested or is organizing the debrief is definitely key. The people closest to the action in the incident are also key. Those folks also know the most

about what was really going on, and therefore might fear being blamed for it, if they haven't already blamed themselves. Your job as facilitator here is to make sure they feel safe sharing their story. You want to get a sense of what they're worried about, and what they'd like to explore further, before you walk into the debriefing together.

Talking to the People Who Would Usually Be Blamed Is Really Important

It's crucial to establish a sense of trust with all participants up front. Find out if they've been to a debriefing before. Try to gauge how much fear or anxiety they're feeling. You'll want to tread with more sensitivity here. Some of this might feel like therapy, and that's OK. You want to set everyone up for success in the debriefing, which means helping them feel at ease and reminding them that feeling anxious or embarrassed is what makes them the best teachers for their coworkers, who will almost certainly find themselves in similar situations in the future.

Remind them that hindsight and all our after-the-fact knowledge of the outcome is what makes their decisions or actions feel embarrassing.

Remind them that before the unexpected occurred, they were just doing normal work on a normal day.

Come up With Some Initial Questions

Think a little bit about the sorts of things you might want to talk about (based on your reading of the timeline and your discussions with those involved). Focus on open questions—ones that don't have "yes" or "no" answers. Make notes in the margin about what seem like important pivot points in the timeline, and jot down questions that might draw out additional context from people involved. Doing this in advance can help you stay on track and attentive during the debriefing itself.

Documentation

One of the most important outcomes from any debriefing is the annotated timeline of how the events during the incident happened, as agreed on by everyone in the room. To this end, it is important to have a dedicated note-taker. You as the facilitator will be plenty busy guiding the discussion, digging deep on interesting events, and coming up with the questions that get the room to understand what was really going on.

Etsy has created a tool called Morgue (Etsy, 2013) to aid us with the documentation process. It's a simple web application that allows for adding a lot of metadata about an incident, as well as a timeline, graphs, images, and chat logs related to what was going on. The format that will work

for you is largely dependent on what fits your organization best. Wiki pages or Google docs can work just fine. Etsy's debriefing documentation started as pages on our internal wiki, but over time we built Morgue to better accommodate our unique needs. We even built a "request a facilitator" button, and have added Google Calendar integration so that scheduling the debriefing itself is part of the tool's workflow.

However you document the debriefing and related artifacts, it must be available and accessible to everyone in the company. You need to make it very clear before, during and after the facilitation that a debrief is a collaborative process that benefits from everyone's input.

Note: Not every organization will be comfortable with open access to debriefing data. While this document cannot cover the complex dynamics of what constitutes a "Just Culture"³, we believe this access is critical to the process.

Setting Expectations

In order to make sure everybody in the room understands the importance and goals of a debrief, the introduction you give at the beginning of the meeting is key.

You have the job of simultaneously setting the agenda for the next hour or so, while also getting people into the mindset for learning, which means making the atmosphere feel as safe and welcoming as possible. One of the hardest parts is making everybody understand that we are not coming together to prevent a future event from happening. The things you are about to look into and find may very well happen again. Preventing the future is not the goal—learning is. And to that end, learning needs to be the focus of the whole debrief.

As mentioned before, there is a powerful tendency to try to find a single simple solution that explains what happened. In the search for a cause of an accident we tend to, in the words of Nietzsche, stop by "the first interpretation that explains the unknown in familiar terms" and "to use the feeling of pleasure... as our criterion for truth." (Hollnagel, 2009)

So as the facilitator, you need to counter this most human urge to find a single explanation and single fix for the incident. You can do this by giving a brief introduction in the debrief to remind participants what you are all there for: a semi-structured group interview. Nothing more.

³ Sidney Dekker has produced a set of short seminars that we recommend as an introduction to this topic: https://www.youtube.com/watch?v=PVWjgqDANWA

Your introduction is meant to set up the paradigm within which everyone will operate for the duration of the debrief. Here is some sample introduction language:

"Who has never been to a debrief before? Welcome! As a quick reminder for those of you who have done this before, and as an introduction for anyone who is experiencing this for the first time...

The goal for our time together today is to recreate the event, talking through what happened for each person at each stage in order to create as robust a portrait as possible of what happened, and what the circumstances in play were at each juncture (when decisions were made, and actions were taken) that made it make sense for people to do what they did in the moment. If one of you gains an insight into the complexity of another person's role, this was an hour well spent.

Throughout the duration of this debrief, we will all focus on being utterly blameless, to ourselves and to others. We will be focusing on the **HOW** of what happened, not the **WHY**.

I'm facilitating, which means I'll be keeping track of time, making sure we get through the whole timeline, and asking a ton of questions. I've met with a few of you separately to build a basic timeline of events which will help me keep the discussion on track. I'd like to invite anyone else to ask questions as they arise, and chime in if you have more information or context to add at any time. I'll be taking notes and reconstructing out the timeline during this meeting and will share it and my notes with all of you afterward. Who has questions?"

Structure of the Discussion

One of best ways to ensure you are following a path of exploration (instead of looking for a single fix) is by sticking closely to the timeline. This makes sure you get a representation of the past that everyone in the room agrees is as close as possible to what really happened. Any remediation items based on a less accurate version of how things went down will be less effective or even obstructive.

Because reconstructing the timeline is your main task, you should focus the majority of time in the debrief on doing just that, addressing remediation items afterward. For a 60-minute meeting this can easily be 35–40 minutes of discussion.

There will be many people who suggest remediations or fixes before the group has finished walking through the timeline. This is inevitable, but these contributions are less effective during this part of the debriefing. Your job as the facilitator is to encourage people to write down any ideas for improvement (sometimes known as "remediations") that come up during the timeline reconstruction, so they can bring them up later, are the timeline is complete. More often than not, the unfolding of events in the timeline render those initial remediation items moot when the full (or at least fuller) context becomes clear. So let the room know there will be a time for remediation items and to hold onto them until then.

After you have established the timeline, you want to make sure everybody agrees that it is accurate and comprehensive. This means asking the room what's missing, if there's anything you haven't talked about, or if anything happened differently than described so far.

Your next step is to pivot the conversation toward what the group learned from going through the timeline, and to discover more perspectives that can clarify or add additional context what's been written down. This is also when you'd invite everyone in the room to start thinking about the learning points from the event. These can include recommendations for remediation items, but shouldn't be limited to them.

When you begin discussing learning points, encourage everyone to speak up if anything comes to mind and to not censor themselves. You want the initial phase to be more of a brainstorm. Nothing more, nothing less. Anything goes, because we are looking for improvements to the current system, and trying to unearth innovative ways to underpin the learnings from the meeting. However, you must resist the urge to turn them into actionable tickets just yet. These learning points are likely to come from all directions and appear haphazard. Some might be very specific, others very broad, and some might apply to different systems altogether.

Ultimately, you want to create remediations that are specific, measurable, achievable, relevant and time-bound⁴, but don't dismiss ideas that don't conform to that criteria right off the bat. Instead collect all the ideas as a brainstorming list. Then choose a small set of people from the meeting who were close to the incident and are familiar with the systems mentioned, tasking them with taking the brainstorm list and dwelling on it for a bit.

The idea behind dwelling on the recommendations for some time and developing remediation items after the fact is to just be aware of them as suggestions and keep them in the back of your mind to let them marinate. Then two or so (work) days later, bring that group into a room to

⁴ For more information, see p. 81 (Dekker, 2014)

discuss the viability of those remediation items. This way, what results are tasks that are effective and logical and stand the test of time, rather than action items created in a rush during the final moments of the debrief. The idea here is to give everybody "soak time" to process the ideas that were brought up. The effect of suddenly realizing the solution to a problem while you are distracted by something completely unrelated is a well-documented phenomenon (Smith, 2016). Generally, insights appear when we aren't forcing them and we're allowed to gain some perspective over the issue at hand. And this is how you're going to make sure the remediation items that make it into the ticket queue are effective.

You might also want to remind everyone involved that having remediation items is not a requirement for a good debriefing. If what a group learns during a debriefing results in new ideas on how to make mistakes and accidents less likely, that's great. However, our experience at Etsy reveals that it can be easy to generate ideas for remediations in an effort to satisfy the urge to "do something" in the wake of a painful incident. But what's often downplayed is how the recommended fix might needlessly complicate, or even **increase**, the likelihood of new types of accidents in the future.

The Art of Asking Questions

"...and you better believe we're going to look into it—and we're gonna be hearing many stories. Not just the story you're telling, but many stories."

-(Orange Is the New Black, 2016)

Keep Your Ultimate Goal in Mind

The day of the debriefing has arrived. There are probably a lot of people in the room and countless thoughts swimming around in your head.

Once you welcome people into the room and set expectations about the mindset they should be in for the duration of the meeting (blameless), as well as the outcome they can expect to walk away with (learning), there's really only one thing for you to focus on: discovering the story behind the story. That is your north star.

It's All About the Questions You Ask

So how do you make sure what needs to happen in the debriefing happens? Here's the secret: The power lies in the questions, not the answers.

You are like a traffic conductor, holding up a stop sign to things like blame and judgment, while giving behaviors like genuine, thoughtful inquiry and active listening the green light. Instead of traffic signs or flares, however, your tools are the types of questions you ask, and when you ask them.

As the facilitator, you have the obligation (and privilege) of persistently advocating for widespread understanding. You are in a leadership position of modeling a dynamic where mutual understanding is ensured at every step of the way, and you won't proceed until everyone in the room is clear on what exactly is expected of them. This is a fairly radical state of mind, because access to information tends to be associated with hierarchical or organizational power. Make no mistake: Leveling this playing field can be uncomfortable for people. The questions you ask are the key to this leveling and to making people feel at home while you are doing it.

Remember to Look for Descriptions, Not Explanations

As we've gotten more experienced with debriefings at Etsy, we've found facilitators wanting even more guidance and practice with forming questions. It has become clear that some questions are better than others, and some questions are downright hazardous to the entire process. One rule of thumb as you facilitate is to steer clear of asking people "why" and substitute "how" instead. Asking "how" enables us to hear other people's stories. Asking "why" creates a story of our own and tends to elicit only the evidence that supports our story.

Getting at the "how" and not the "why" of what happened will help you create a picture of all the things that were happening around the incident, as opposed to a fabricated cause-and-effect chain that gets created after the fact by virtue of hindsight.

This simple substitution will help you discover descriptions instead of explanations from participants. This is important because explanations tend to be reductive or defensive and usually scare the learning away. While they can be messy and involve confusion or incongruity, descriptions are necessary for building the rich context for the event, which is the reason why everyone is gathered together in the first place.

In general, you want to ask questions that reveal:

- Cues that lead people to make **observations**
- · Context for assessments or judgments
- Rationales for choices or decisions
- Things that people **know** (and might assume are common knowledge)
- People's states of mind at the time
- Mental models for how things "should" work
- Factors that led people to take a specific action
- · Signals that bring people to ask for help

Here's what this can look like:

Someone makes an observation	Ask about the cues they picked up
"It seemed a little off."	 What specifically made you think that it seemed off? What were you seeing/hearing/ smelling at the time?

Someone makes an assessment or judgment about now or the future	Ask about how they arrived at that
"It was broken."	 How could you tell? When did you first notice? What tipped you off?

Someone explicitly made a choice or decision	Ask about any options they considered
"So I decided to page the person oncall."	 What brought you to that decision? Have you ever done this in the past? Have you ever NOT made this decision in the past under similar circumstances?

Someone says "I knew"	Ask them how they knew it
"I knew that I had to get it fixed before I left work for the day."	 How did you know? Was this something you had been told, or had happened in the past? Have you seen other people stay late to fix similar issues?

Someone mentions something about their state of mind	Ask them what other external factors were in play at the time
"It was frustrating that I couldn't find the password for the account."	What else was going on to make you feel frustrated?When did you first notice feeling frustrated?

Someone explains their mental model for how things usually happen	Ask them to talk about what normal work looks or feels like
"Usually when I press this button, the machine turns on."	 Do you always turn on the machine that way? What usually happens next, or right before? Are there other ways to turn the machine on?

Someone talks about an action they took	Ask them about alternatives
"I pushed this bit of code that would take things offline while we figured out a more long-term solution."	 Were there other courses of action available to you at the time? What sorts of pressure were you under at this time?

Someone mentions asking for help	Ask them about the point at which they decided to ask for help
"After about twenty minutes, I paged the database team"	 Was there something that brought you to page the team then, specifically? How did you know that was the team you needed to page? Is there some guide you use? Some rule of thumb?

Probe for the Invisible Parts of Expertise

"Experts in making diagnoses are not necessarily experts in explaining their process of diagnosis." (Michalski & Chilausky, 1980, p. 63)

What people notice, investigate, focus on, dismiss, or discover before, during, or even after an event is not always apparent to others, or even themselves. They'll make judgments about these things they notice: Is it abnormal? Is it worth paying more attention to? Will it become more or less important later? When it comes to reacting to the information they take in, some of those reactions are part of their "muscle memory."

In fact, a great deal of what comprises expertise is tacit knowledge. Our role as facilitators is to help draw out whatever bits of this "invisible" mental space as we can from participants.

A rich way of unearthing this tacit (or hidden) knowledge that people have is to target their assumptions, expectations, and judgments with your questions:

How Do They "See" Typicality?

When we find a point where people were surprised, we can try to understand what their expectations were before they encountered the surprise. This means we need to get at what "normal" looks like for them. Some questions that are useful here are:

- "How did you judge that this situation was 'normal?"
- "When did you first notice that things didn't look right to you?"
- "In your gut, did this feel just about right?"
- "At this point, do you remember feeling confident about what was happening?"

How Do They "See" Distinctions?

Another hallmark of expertise also includes the ability to perceive specific differences in seemingly identical scenarios. When experts are looking through multiple sources of data (logs, graphs, observations relayed by their colleagues, etc.) they can sometimes see things that others might not. Questions that can be helpful in this vein are:

- "What was it about that metric that brought you to look closer at the issue?"
- "Is there something special about this error log that others might not know?"
- "What things do you look for when you suspect that this type of failure mode is in play?"

How Do They "See" the Future Unfolding?

Another primary component of expertise is the ability to mentally simulate the state or picture of a changing process, and consider what pitfalls or opportunities might lie ahead. Some questions that can help people describe this might be:

- "Tell me how you think about which change to make when you see these errors."
- "Did you try out different options in your mind about what to do? What were they?"
- "Can you draw a diagram (hand them a dry-erase marker) about what you remember thinking the system was doing, and what you thought your options were to change it?"
- "How do you anticipate if the situation is getting worse, requiring you to take some action?"

Ask Dumb Questions

When in doubt, or if you get lost, you can always ask dumb questions. In fact, asking dumb questions is part of your job. You are in a unique position of not risking ridicule by jumping in and asking someone to explain what they mean by "database sharding" or "full stack."

Plus, there is a huge side benefit of the dumb question tactic: It puts the person doing the explaining into a position of showcasing their expertise, which is a nice place to be. It also provides insight to the entire group about the tacit knowledge wrapped up in something that we might talk about or interact with all the time but have very different ideas of what it actually means.

The art of debrief facilitation revolves around taking turns leading and following what's happening in the room. You are looking to create the conditions that essentially transport people back in time so they can speak honestly about what was going on inside and around them when they did what they did.

"The perspective from the inside of the tunnel. This is the point of view of people in the unfolding situation. To them, the outcome was not known (or they would have done something else). They contributed to the sequence of events because of what they saw on the inside of the unfolding situation. To understand 'human error,' you have to take this perspective." (Dekker, 2014)

Your goal is to create a space for people to understand the incident from a different perspective, and to gain a deeper understanding of how other people do their work on account of the diverse contexts in which we all operate.

For all the participants in the room listening, the sheer act of witnessing these perspectives enables them to empathize, making them better teammates and contributing to the wider organizational expertise.

When to Dig in More

One of the most challenging and nuanced components of debrief facilitation is sorting out the narrative threads in a discussion and determining which one to tug in order to help the whole story unravel.



As the group walks through a timeline and questions are asked and descriptions given, the facilitator has to decide when to go deeper into a particular area ("zoom in") and when to pull back to the greater timeline context ("zoom out").

A solid cue that digging deeper with questions might be valuable is when a participant alludes to part of a description that they believe is "common knowledge." For example:

"...of course I didn't want to pull it from the load balancer that way, obviously."

When you get an answer like, it's a great signal to ask what brings them to think the judgment they made was obvious. Gauge the rest of the group:

"Is making this call not to pull it from the load balancer that way obvious to everyone?"

Remember that your role as a facilitator is to get people to say things out loud that they normally might not. If someone believes a decision to be obvious, that's a great opportunity to validate their belief with the group.

You'll also be presented with moments where it's necessary to do the opposite: to zoom out and ask about connections between perspectives. This can happen when the discussion is veering too much into the weeds and away from what you've identified as crucial points in the timeline. In these instances it can be useful to ask people to step back from the day-to-day and consider the hand-off moments, where work is transitioned between people or teams, and where the potential for misunderstanding is high. You can do this by asking something like:

"How much of this is new information for people in the room?"

"How many of you in the room were aware of all the moving pieces here?"

Approaching your debriefing with a true "beginner's mind" will enable all the people in the room with you to follow suit.

Make no mistake: Knowing when to "zoom in" or "zoom out" is challenging. The good news: It gets easier with practice.

How Do You Know If You've Succeeded?

We have come to think about two very basic success metrics when it comes to facilitating debriefings: the acquisition of new information that affects future work; and attendees' willingness to participate in future debriefings.

In order to collect some sort of evidence of these metrics, we have put the following thresholds in place:

- Did at least one person learn one thing that will affect how they work in the future?
- Did at least half of the attendees say they would attend another debrief in the future?

If the answer to both of these is yes, then the facilitator can consider it a job well done.

Pro Tip: Pause at intervals during debrief discussions and ask people to raise their hands if they have learned something they didn't know before. Invariably, hands will raise, eyes will look around, and heads will nod. This exercise can serve as proof positive of the meaningful experiences created in that room.

There are two factors at play when it comes to creating widespread perception that debriefings are time well spent. The first is the values and culture of your organization, and the second is what happens in the room. Perception of both factors is crucial, and as a facilitator you have the power to affect them both with the questions you ask. You are there to give the people doing the work a voice, but in order for them to speak candidly, they have to feel safe—not just in the room, but in the community. Fear of retribution or punishment (even the subtle social kind) will silence participants. Without this⁵, it is nearly impossible to have effective debriefings.

There is never one right question, and your inquiry skills will develop over time and with practice. It's important to rely on what is at play in the room (Are there confused looks? Was that an eyeroll?), as well as your gut. As Klein says, "Curiosity should be your geiger counter."

⁵ Because this document focuses on practical instructions for facilitation, we are not delving into the "Just Culture" concept, but you can read all about it in Sidney Dekker's book Just Culture: Balancing Safety and Accountability. http://www.betterworldbooks.com/just-culture-balancing-safety-and-accountability-id-9780754672678.aspx

Conclusion

At Etsy, we believe that when failures happen, we have a simple choice to make:

- Do we want to react to this failure from a place of hindsight and judgment of people's actions and decisions taken out of context?
- Or do we want to truly learn from the event by giving voice to the diverse perspectives and stories of the people closest to the work?

It should be obvious at this point, but we choose the latter option.

We hope this guide can help you develop the capacity to support that choice in your organization too. By doing so, you'll build a container for learning that enables people to bear witness to the complexity of the work being done around them every single day. By making the effort to facilitate effective debriefings, you are providing countless, invaluable opportunities to learn and develop expertise within your organization. Thank you for making that effort.

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