

The **CONCLUSION TRAP**

Four Steps To Better Decisions



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Hi.

I'm Dan Markovitz, the author of *The Conclusion Trap*.

I wrote that book to help people avoid the inherent and unavoidable tendency to jump to solutions before they really understand the problem they're dealing with. I believe that it's important for people to know how to take two steps back before they take one step forward—even in our increasingly fast-paced world.

If you've read the book already, you probably a bit more sensitive to what conclusion jumping looks like. And you have a good idea of the four steps that I recommend to help you counteract that tendency.

I've written this accompanying workbook to help you practice those four steps. I mean, it's all well and good to tell you to "go and see," but what precisely should you do when you go and see? What should you look for? And even when you know what to do, it would be nice to have a chance to practice those ideas on something simple before you tackle the complex challenges in your workplace.

So after you read each section in *The Conclusion Trap*, I encourage you to read the accompanying section in the workbook. Each section provides the following:

- Reiteration of the key points from the book
- Questions for you to consider and answer
- Practice exercises for the core concept
- Opportunity to apply to the real issues you're dealing with at work.

If you're fortunate enough to be reading this in a book club, even better—do the exercises and discuss them together.

My hope is that you become more attuned to the nearly invisible tendency to conclusion jump that plagues everyone in the human race; that you become more disciplined in your own approach to problem solving; and that the solutions you eventually generate will be effective and sustainable.

Good luck!





Overview

It's easy to jump to conclusions when you don't have a clear picture of what's actually happening. That's why it's essential to get the facts by seeing the actual situation for yourself.

Facts are different than data. Spreadsheets, reports, and anecdotal accounts are not facts. They're data. They're two-dimensional representations of complex reality.

Data without facts gives you an anemic, two-dimensional, black and white view of the world. Data can tell you how often a machine breaks down on an assembly line, but facts—direct observation—show you that the machine is dirty, covered in oil, and hasn't been cleaned and maintained in a long time.

Data is a hospital report showing you that patient satisfaction scores are low, because patients complain about noise interrupting their sleep. Facts—direct observation of the ward—tell you that nurses keep the volume on the TVs in patient rooms very high AND that they keep the room doors open, making the noise unbearable.

Gathering facts comes from close observation of people, of objects, of spaces at the “crime scene.” The crime scene is where the work gets done, and where the problems occur.

Key Points to Remember

1. Suspend judgment when getting the facts. Be a neutral observer.
2. Approach people with humility. Don't ask questions to which you already know the answer. Seek to learn and understand, not just confirm your preconceptions.
3. Don't try to solve the problem while you're at the crime scene. Take your time. Be prepared to go back several times to ensure that you understand what you're seeing and hearing.

Practice Exercise

Think of the hospital story (“At Least It Wasn’t Shag Carpeting”) on page 20 in *The Conclusion Trap*. The CEO who insisted on laying carpeting to deal with patient complaints about noise clearly didn’t get the facts by going and seeing for himself.

If you had been the CEO, what would you have done? Be specific about where you’d have gone, what you’d have looked for, who you’d have talked to, what questions you’d have asked, etc.

APPLICATION

Now, let's apply the go and see principle to a real problem you're dealing with at work.

1. Describe the problem (i.e., what's the problem statement)

2. Pre-Visit Assessment

How well do you think you understand the facts of the problem?

1	2	3	4	5
Vaguely				Totally

3. Some Questions to Answer

What's the physical environment like? Is it hot or cold, noisy or quiet, comfortable or unpleasant?

Do people have what they need for their jobs—the right tools, the right computers and monitors, the right access to information?

Can people focus on their work, or are they continually interrupted by colleagues or email/text messages?

Watch people do one of their regular tasks—are they struggling/frustrated, or is it easy for them?

Do people know where their work fits into the overall workflow—how it gets used by the downstream person?

How often does the problem happen? When does the problem happen? Are there any commonalities or trends?

Now, stand in one place for 30 minutes and just watch the work get done. (Really.) What else do you see? What other observations or learnings can you make?

4. Post-Visit Reflection

Now how well do you think you understand the facts of the problem?

1	2	3	4	5
Vaguely				Totally

5. If you have a revised problem statement, write it here:

Psychological Safety

Emotional safety is critical to making your visit to the crime scene worthwhile. Think of all the cop shows on TV where the locals don't want to talk to the police because they're afraid of getting in trouble with their neighbors or the police themselves.

If people don't feel emotionally safe in the workplace, they won't tell you the truth about what's happening. They'll either underplay the problems they're facing, or they'll hide them completely. It's your job to create and reinforce a safe environment.

I. Watch and reflect

Please watch these two videos about psychological safety:

- Rich Sheridan, CEO of Menlo Innovations:
https://www.youtube.com/embed/0LKbH_8jrYE?autoplay=1
- Amy Edmondson, Harvard Business School professor (TEDx talk):
<https://www.youtube.com/watch?v=LhoLuui9gX8>

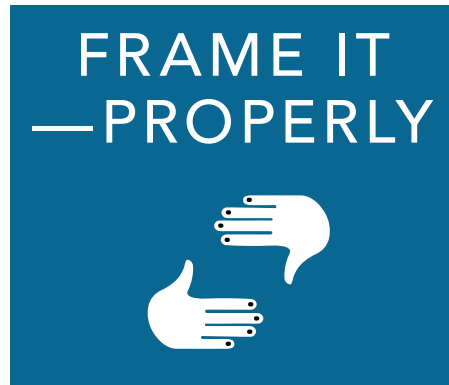
2. Some Questions to Answer

How safe do you think people in your company/department feel?

1	2	3	4	5
Not at all				Totally

If you didn't score a 5, what do you think is causing feelings of insecurity?

What could you do to increase feelings of safety?



Overview

Framing the problem properly is the first step on the road towards finding the right solution. However, problem statements are deceptively difficult to get right. It's easy to mistake the symptoms for the underlying problem. It's also easy to embed the solution into the problem statement.

A well-framed problem statement opens up avenues of discussion and options. A bad problem statement closes down alternatives and quickly sends you into a cul-de-sac of facile thinking.

Don't be afraid to iterate on your problem statement. As you think more deeply about the situation, you'll almost certainly modify your first version—that's a sign that you understand more about the situation.

Key Points to Remember

1. If you see that your problem statement has only one solution, rethink it. Reframing the problem can help you avoid conclusion jumping.
2. Begin with observable facts, not opinions, judgments, or interpretations. Describe what's actually happening. Try to answer questions like, "How much/How many/How long/How often."
3. Avoid generalities ("employee morale is poor"). Be specific ("the average morale score for people in the finance department is 2.6, compared to 8.1 in all other departments").
4. The phrasing of the problem statement influences the trajectory of your investigation. Compare "Customers abandon their online shopping carts 25% of the time," and "Our online sales are 15% lower than forecasted." Similarly, be aware of what the *subject* of the problem statement is: will you focus on the product, the process, or the people? Also pay attention to how you're measuring the current condition—for example, do you measure innovation by the number of new products you bring to market, or by the revenue those products generate?

Some Questions to Answer

Does the problem statement include observable data or other conditions? ☐ Yes ☐ No

Does the problem statement provide room for multiple possible solutions? ☐ Yes ☐ No

Does the problem statement avoid assumptions or judgments? ☐ Yes ☐ No

Is the problem statement concise? ☐ Yes ☐ No

Does the problem statement avoid blaming a lack of time? ☐ Yes ☐ No

Does the problem statement avoid blaming a lack of money? ☐ Yes ☐ No

Does the problem statement avoid blaming a person? ☐ Yes ☐ No

Examples

Bad	Good
The problem is, I don't have a sales manager I can trust.	The problem is, my sales manager promises delivery dates that are impossible for us to meet.
We need a safe and effective vaccine for COVID-19.	We need to keep people from dying while we wait for a COVID-19 vaccine.
Our engineers don't have time to review each change order carefully.	Errors in change orders create confusion on the manufacturing line.

Practice Exercise I: Dealing with Drugs

- The abuse of heroin, cocaine, and marijuana is called “drug abuse.” In 1971, the U.S. government declared a “war on drugs.”
- The abuse of opioids is called the “opioid crisis” or “opioid epidemic.” In 2017, the U.S. government declared a “public health emergency” to address it.

Question 1: What are the ramifications of these frames? How does it affect the way you approach the problem?

Question 2: How else could you frame each problem?

Question 3: What alternative solutions does this new problem statement open up? What are the ramifications of your framing?

Practice Exercise 2: Just-in-Time Inventory

The Wall Street Journal

A Key Strategy of Japan's Car Makers Backfires

By Amy Chozick

Updated July 20, 2007 12:01 am ET

TOKYO -- For want of a piston ring costing \$1.50, nearly 70% of Japan's auto production has been temporarily paralyzed this week.

Blame it on kanban, the just-in-time philosophy of keeping as little inventory on hand as possible. The strategy keeps inventory costs down and ensures quality. It generally works because Japan's auto makers have long prided themselves on the almost familial relationships they have with a handful of suppliers of custom parts that deliver several times a week or even daily.

The strategy also has a downside, as became evident after the 6.8-magnitude earthquake that hit central Japan on Monday damaged Riken Corp. Riken, which supplies all major Japanese car makers, makes the sought-after \$1.50 piston ring but has been unable to make deliveries. And because piston rings and other key parts are made specifically for each car maker and little inventory is kept in hand, it is nearly impossible for auto makers to simply switch to another supplier at the last minute.

"It's very difficult [for Japanese auto makers] to hedge any risks," says Hirofumi Yokoi, a Tokyo-based manager at auto-industry consultancy CSM Worldwide. "Just-in-time manufacturing is the culprit in this case."

What's more, Riken, which has 1,500 employees and had revenue of \$631.3 million in the year ended March 31, is one of the few suppliers focusing on such specialized parts as piston rings, which fit around the head of the piston to create a seal that traps combustion gases and minimizes oil burning. With market share of more than 50%, Riken has a reputation for quality and a close relationship with many car makers, making them all vulnerable to the earthquake-induced damage.

The Riken closure has forced Toyota Motor Corp., the nation's No. 1 car maker by sales, to cease production for at least a day and a half at all 12 of its domestic plants, causing a loss of output of at least 25,000 vehicles, about 60% of which are made for export. Honda Motor Co. said it would close a plant that produces the popular Civic and Fit models today, resulting in the loss of 2,000 vehicles. Nissan Motor Co. also will halt operations on several production lines at three of its plants today and will shut down all four of its plants tomorrow and Monday. Mitsubishi Motors Corp., Mazda Motor Corp., Suzuki Motors Corp. and Fuji Heavy Industries Ltd., which makes the Subaru brand of vehicles, also have stopped or slowed down production.

It's not clear what impact the disruption at Riken will have on U.S. production of Japanese cars. "We are investigating and communicating with our colleagues in Japan

to see whether or not there will be an impact," says Victor Vanov, a spokesman for Toyota's U.S. manufacturing operations. Ed Miller, a spokesman for Honda's U.S. manufacturing operations, says Honda doesn't expect interruptions in production in the U.S.

The production delays in Japan may serve as a cautionary tale for the many manufacturers of all kinds around the world that are keeping smaller inventory and sourcing key parts from the same companies....

Nor is this the first time Toyota has been paralyzed by an unexpected disaster. A 1997 fire at a factory of Aisin Seiki Co., the main maker of the brake valves Toyota uses in most of its cars, forced the auto maker to shut down for five days, resulting in a production loss of about 70,000 vehicles.

Toyota admits that this type of unforeseen disaster is a big worry. "In the case of special parts [like piston rings], we don't have any backup," a company spokesman says.

Question 1: What is the problem statement for this argument? In other words, how is the problem framed?

Question 2: What are the ramifications of this framing? How does it affect the way you think about the problem? What solution(s) does it suggest?

Question 3: How else could you frame the problem? What problem statement would you use if you were writing this article?

Question 4: What alternative solutions does this new problem statement open up? What are the ramifications of your framing?

APPLICATION

Think about the problem you want to address. What's your default framing (in other words, how did you think about your problem before you read this book)?

"The problem is that _____

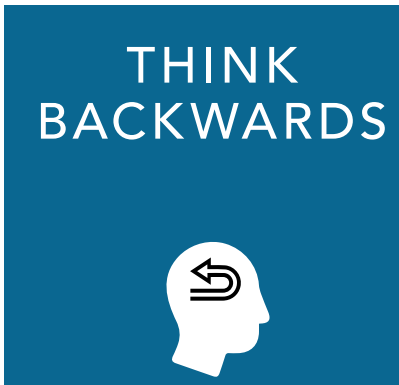
_____."

Now, provide three alternative frames/problem statements for that problem.

1. _____

2. _____

3. _____



Overview

The “fishbone diagram” provides a clean, graphical method of identifying the potential factors causing a problem. The factors are organized into logical groupings, which make the diagram look like the skeleton of a fish.

The fishbone provides structure and organization for your analytical brainstorming. More importantly, it encourages you to “think backwards”—to look for the issues that underlie the observable symptoms.

The individual fish bones are less important than the analysis they stimulate. The bones push you past the observable symptoms and encourage you to find root causes.

Key Points to Remember

1. The classic fishbone diagram has six categories of factors, but this isn’t a rule. You might have four categories or seven.
2. The categories on the major “bones” of the skeleton are just a prompt to help you organize your thoughts. The categories you use will vary according to the problem.
3. Depending on the problem you’re trying to solve, you might not need to identify secondary causes. Or you might need to dive down into tertiary causes.