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Innovation



How to Avoid Rushing to Solutions When Problem-Solving

Four steps to help you think things through. by Daniel Markovitz

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Richard Baker/Getty Images

Albert Einstein reportedly said that if he had an hour to solve a problem, he'd spend 55 minutes thinking about the problem and five minutes thinking about solutions. But Einstein wasn't trying to run a company in the midst of a pandemic, when most of us are working longer hours and making new decisions each day on issues from childcare to employee safety. Between our cognitive biases and our finite capacity for decision making, when our mental gas tank runs low on fuel, we tend to conserve energy by either avoiding decisions or

rushing to solutions before we have a chance to fully understand the problem we're grappling with.

It's understandable that we leap to solutions. Crossing items of one's to-do list and fixing problems provides a dopamine surge that is comforting, especially when the world around us feels more volatile and threatening. Nevertheless, an ineffective Band-Aid solution can make things worse, and can be just as damaging in the long run as the problem it's trying to solve. In my work as a leadership consultant, I've devised a simple, four-step process that can help you get past the urge to rush to solutions.

1. Go and See

It's easy to jump to lousy solutions when you don't have a strong grasp of the facts — and you can't get that if you don't leave your desk, your office, or your conference room. Gathering facts comes from close observation.

Spreadsheets and reports, which we often rely on are just data, two-dimensional representations of reality. Data tells you how often a machine breaks down on an assembly line. Facts — meaning direct observations — show you that the machine is dirty, covered in oil, and hasn't been cleaned or maintained in a long time.

Data tells you that workers are not on time for their Zoom meetings. Facts — garnered from interviews with your employees — reveal that 9:00am meetings are tough because parents are getting their kids settled for online school; 12:30pm meetings are challenging because they're making lunch for their kids; and that the headlong rush to videoconferencing has all but eliminated the necessary downtime between meetings, and people just need some time for rest.

Data without facts gives you a two-dimensional, black-and-white view of the world. Facts without data give you color and texture, but not the detailed insight you'll need to solve the thorniest problems. Therefore, to arrive at useful conclusions, take both into consideration.

2. Frame Your Problem Properly

Problem statements are deceptively difficult to get right for several reasons. For one, it's easy to mistake the symptoms for the underlying problem. For example, you might assume that to help a child in Flint, Michigan who has behavioral issues in school and struggle with reading comprehension, you need to focus on those problems. But those are only symptoms. The real problem is lead in the municipal water system.

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.

Consider these two problem statements:

- 1. Our hospital needs more ventilators.
- 2. Our hospital needs more ventilator availability.

Notice that the first statement isn't really a problem at all. It's a solution. The only possible response to needing more ventilators is ... to buy more ventilators. What's the solution to the second problem statement? It's unclear — which is a good thing, because it pushes us to think more deeply. Avoiding the implicit judgment (we need more machines) raises questions that help us develop better solutions: How many machines are currently being repaired? Are we doing enough preventative maintenance to keep all of them operable? Do we know where all of the ventilators are, or do nurses keep some of them in "hidden stashes" (a real problem at most hospitals). What's the

turnaround time to move a ventilator from one patient to the next?

Do other local hospitals have excess capacity, and is it possible to share with them?

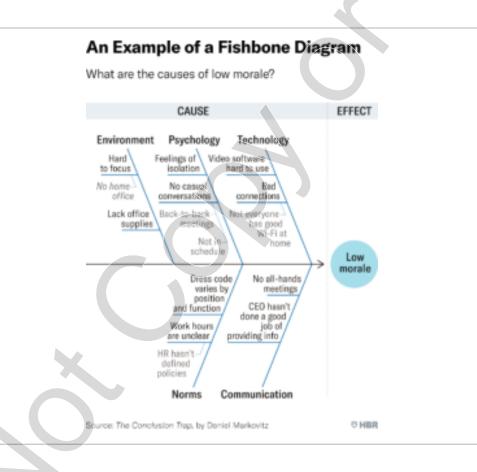
If you see that your problem statement has only one solution, rethink it. Begin with observable facts, not opinions, judgments, or interpretations.

3. Think Backwards

When facing a problem, instead of leaping forward toward a solution, go backwards to map out how you got here in the first place.

This fishbone diagram, also known as the Ishikawa diagram, provides a model for identifying potential factors causing your problem:

The classic fishbone diagram has six categories of factors, but this isn't a rule; you might have four categories or seven, and your categories might be different. Think of them as prompts to help you organize your thoughts. A law firm, for example, probably won't need the equipment category, while a software company might want to include a branch for programming language.



If your firm is struggling with lower morale and employee engagement during the pandemic, you might group contributing factors into the following categories: Work Environment, Technology, Psychology, Communication, and Norms. These prompts will lead you to examine how challenging it is for people to work from home; how well your collaboration software (and people's computer equipment) supports

group work; how effectively the company creates opportunities for people to connect with coworkers; how well leadership's messages reach employees; and what cultural norms and expectations are applicable to a work from home reality.

4. Ask Why

Asking "why" repeatedly before you settle on an answer is a powerful way to avoid jumping to conclusions or implementing weak solutions. Whether you ask five times, or three, or as many as 11, eventually you'll get to the root cause, as each question pushes you to a deeper understanding of the real problem. Finding the root cause ensures that you have a durable solution, not a Band-Aid that treats the symptoms. For example, asking, "Why aren't our employees wearing the mandated PPE all the time?" might reveal that you don't have enough PPE in stock, because of a holdup in purchasing. The obvious — and ineffective — solution would be to send a stern memo to the purchasing department instructing them to expedite shipments. But a deeper inquiry with further "whys" would reveal that suppliers weren't delivering on time because the accounting team was stretching out payments in order to conserve cash. . . at the direction of the CEO.

As H.L. Mencken said, "For every complex problem, there is a solution that is clear, simple, and wrong." These four steps don't actually guarantee a solution. But they will provide you with a more clearly defined problem. And although that's less immediately gratifying, it's a necessary step to finding something that really works.

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