

Problem Solving 2 - How to Actually Solve a Problem.

A step-by-step method for solving problems by working on expectations and negative consequences instead of the gap, with a fully worked company example.

In part one, we established a functional definition of the problem:

“A problem is a subjectively perceived negative consequence of the gap between expected state and current state”

Traditionally, we consider a problem to be simply the gap between what is supposed to be and what is — which makes a large part of problems unsolvable. Here, the emphasis moves away from a gap that in most cases can neither disappear nor unhappen. What is treated as a single, massive obstacle is untangled into precise expectations and consequences, where each can be addressed in multiple ways. The result is not a cosmetic change or a nice reframe, but a reality where every problem becomes addressable.

The gap

The gap is the easiest to observe and the most obvious part and, therefore, is often considered “the heart” of a problem.

We assume that if the gap created the problem (correct), then bridging the gap should make the problem go away (often incorrect).

Example: X missed the bus; now he has to wait for another one in a heavy storm. Standing there in the rain, is X really thinking about every single element: every single element: his expectations versus the current state; all the possible consequences he is facing? Probably not. What X likely sees is a radically simplified connection, which looks something like this: bus didn't come → troubles.

This approach often leads to wishful thinking: “If only the bus had come, I wouldn't be angry, worried, or anxious, so catching the next one means everything will be fine.” Unfortunately, in most

real-life situations, bridging the gap after the fact doesn't erase the damage. The meeting is already missed, the boss is already upset, and the stress has already taken its toll.

Another issue with fixating on the gap is that, in large-scale problems, the gap is either simply unbridgeable or so vast that any solution seems impossible.

The clearest examples of unbridgeable gaps are all the irreversible losses: death, chronic illness, species extinction, or the destruction of an artwork. Plastic pollution is a case of the latter: the gap between the current state — an Earth covered in microplastics — and the desired state — clean soil and water — is so large that recovery starts to seem undoable.

Expectations

Expectations are a fundamental part of every problem. In a world with no expectations about how things should be, there would be no problems — even if there were negative outcomes. Does this mean that expectations create problems?

Yes, in some cases — and these can be called **perception problems**.

Example 1: A is expecting great weather on his holiday. It's raining heavily, though. A feels disappointed and annoyed by the weather. He did not have any outdoor plans, he did not pay for anything in advance, so his negative feelings are the only negative consequence. If A had no expectations about the weather, there would be no negative results at all — A could enjoy the rainy day in a cafe or a spa.

“Perception problems” are not necessarily situations where the only observable consequence is an emotion. An objective negative consequence can exist as well.

Example 2: A and B both miss the bus. Both arrive late to work. Both get reprimanded by the boss. Objectively, the situation is the same.

But subjectively, it is not. A spends the whole day angry, replaying the situation, annoyed that the morning went wrong. B walks to work, takes the reprimand, moves on, and forgets about it before his first coffee.

The difference is expectation. A expects ordinary disruptions not to happen, so the delay and reprimand register as a violation of how the morning should have gone. B expects delays, interruptions, and annoyances as part of ordinary life, so the same consequence stays limited: unpleasant maybe, but not a problem.

The objective consequence is the same. The expectation determines whether it becomes a subjectively perceived negative consequence strong enough to count as a problem.

The role of negative outcomes, and why they are often overlooked

As previously stated, a subjectively perceived negative outcome is the core of a problem from this framework's perspective. Expectations (and a gap between them and current state) can exist without being considered a problem if there is no current, past, or future negative outcome.

Why are negative outcomes often overlooked?

The role of the gap

Example: School X has the worst scores on final tests in the region. There is obviously a gap between expected state (high scores) and current state (very low scores). The negative consequences are not even studied (students not getting admitted to schools, loss of their self-esteem, school ranked low). In the next semester, the school decides to bridge the gap aggressively: more class time spent preparing for tests, trial tests applied repeatedly, and teachers teaching “to test” instead of “to learn.”

Result? The school's overall result is the regional average. However, students do not feel more prepared for higher education, and although they can apply to universities, they fail initial tests there. The school ranking does not go up, as it takes into account other variables (university admissions, among others). In addition, the teachers face burnout, and students face higher levels of mental health issues.

Negative consequences are often tangled

Example: C. is on the way to the airport. There is an accident on the highway. He's very stressed. He arrives there two minutes after departure. C is now feeling unwell.

Bridging the gap here would either mean wishful thinking of making it on time to the plane that already left or trying to book the next available flight. But what are actually the negative consequences of C being late? Is it his negative emotions—being disappointed with himself, frustrated, or stressed? Is it a missed meeting with a client? Could it be troubles at work or the fact that his partner will give him a hard time? Is it that he now has to spend money on a new ticket, even though the money is tight? Is it that he would have to eat something at the airport but is on a strict

diet? All of the above. When we examine the actual negative consequences, it turns out that bridging the gap (catching the next plane) would actually leave most of them unsolved. C may have missed the meeting, and he may not even need to go where he was supposed to. The solution therefore depends entirely on what the negative consequences are.

One gap can create different negative consequences for different people

As already emphasized in Part One, the negative consequences can be diverse, and in fact, different for different people experiencing the gap. One power outage during a storm can cause physical discomfort from cold for A, anxiety for B who is afraid of thunder, work problems for C who was supposed to have an online meeting, stress for D who wanted to study for an exam, and nothing at all for E who loves storms.

It is substantially easier to perceive a problem through a gap (obvious) than through subjectivity of negative consequences (would require some detective work and giving voice directly to those experiencing the gap).

Then how should we actually solve complex problems?

The steps are as follows:

1. Examine the expectations, even when they are stated clearly.
2. Examine the negative consequences.
3. Examine the gap.
4. Untangle the problems.
5. Proceed to solutions.

Example: Z wanted to achieve an 80% score on his final test, but he got only 67%.

Examine the expectations, even when they are stated clearly

If the expectation is to “pass the exam with an 80% score,” what really stands behind that expectation? Is it arbitrary? Is the score supposed to allow Z to apply to the university? Is Z preoccupied with his self-worth or public image? Is it pressure from Z’s parents?

Examine assumptions. “I need 80% to be able to apply for...” Is that correct? Are there any other ways to achieve this goal?

Examine if assumptions were realistic. If only 0.03% of students achieve an 80% score, then the expectation may have been unrealistic, making it more than likely that negative consequences would arise.

Examine the negative consequences

Are they a direct result of unrealistic expectations? (If yes, change the expectations to eliminate the negative results)

What are the actual negative consequences? (Z will not get admitted to Yale) What are exaggerated consequences? (Z will not get admitted anywhere.) Are the negative consequences worth addressing? (Maybe it's just a slight inconvenience? If yes, move on.)

Which of the negative consequences are the most urgent to address? (In Z's case, it might be the stress and low self-esteem, not the university admission.)

Examine the gap

Would bridging the gap solve all (or most) of the negative consequences?

and

Is bridging the gap possible?

Maybe it is possible for Z to retake the exam. This does not solve all the negative consequences (he still is stressed, has to study for a new exam, etc.), but the solution is comprehensive enough to be worth considering. It might also be possible that Z does not have a chance to re-sit.

Untangle problems

Treat each negative consequence as a separate problem first. Then check if grouping is possible (finding a single solution that allows tackling multiple negative consequences).

When all the other steps are completed, proceed to solutions

A solution is one actionable step towards:

Converting a Negative Outcome(s) into a Positive One:

Z's negative outcome: His self-esteem took a major hit. Action/Result: Z saw this as a chance to prepare thoroughly for a re-sit, where he scored above average. His self-esteem is now higher than it was before the initial failure.

Eliminating a Negative Outcome(s):

Z's negative outcome: He wasn't admitted to his dream school. Action/Result: Z found out the school offers an extra exam for applicants with lower scores. He took it, passed, and was admitted.

Diminishing a Negative Outcome:

Z's negative outcome: The low exam score threatened to lower Z's final grades and complicate his admission chances. Action/Result: Z discovered he could boost his grades by joining certain school activities. He followed through, which resulted in a slightly higher final grade.

Opening the Most Doors for One of the Above to Become Possible Later:

Z's negative outcome: Once again, not getting into his dream school. Action/Result: Z did deep research and found he could enroll in an annual course in another city. This move would let him retake the exam, build confidence, or explore new career ideas. He decided to relocate specifically to open up those future possibilities.

This is set of potential approaches for dealing with negative consequences ranked by effectiveness, and at least one of these approaches is always accessible:

- change a negative outcome into a positive one (the best option),
- and if that's not available, eliminate the negative outcome,
- and if that's not available, diminish the negative outcome,
- and if that's not available either, then make a step that opens the most doors for the possibility of any of the above happening (not ideal short-term, but possibly very effective long-term).

All of these count as solutions. However, solutions that address several negative outcomes at once are usually more practical than solutions that address each negative outcome separately. This is why focusing only on bridging the gap can be misleading: one visible gap may contain several different problems.

Similarly, solutions that turn a negative outcome into a positive one are usually stronger than solutions that only create the possibility of solving it later — although the former are rarely

available, and the latter can be more effective in the long term.

The crucial element of this framework is the focus **on the next actionable step**. A solution that instantly turns a negative outcome into a positive one would obviously be ideal, but this is rarely available. What we call “a solution” is usually a series of individual steps applied one by one until the negative consequences are eliminated. A broad vision of the desired state remains useful as a direction, but the best decisions come from focusing on what can be done here and now, rather than on where this might lead in a few months.

PRACTICAL ANALYSIS

Example—Company Y, and a traditional approach that does not work

Company Y was expected to generate \$500,000 in revenue this quarter. The expectation was clearly stated, so this was not an unconscious expectation. The current state, however, was that the company generated only \$410,000. This was the gap.

The CEO and his team analyzed the figures and treated the missing revenue as the central problem. Their solution was to aim for around \$650,000 in the next quarter, which would both make up for the shortfall and exceed the next quarter’s target.

- The sales team was told to close deals faster and prioritize immediate revenue.
- Hiring was paused, and the work that would have gone to new employees was redistributed to the existing team.
- The company cut non-essential spending, including team events and bonuses.
- The previous strategy of working mostly with well-matched, high-quality clients was relaxed in order to bring in more revenue quickly.

Result: Company Y did generate \$612,000 in revenue the following quarter, but the problems started to multiply.

- Some of the new clients delayed payment, so the revenue looked better on paper than it did in practice.
- Several team members resigned because of the workload.
- Some long-term clients also left, citing a decline in service quality.
- Even though the company still had a realistic chance of meeting its annual target, investors were now questioning whether the recovery strategy was sustainable.

So what should have happened instead?

Step 1: Examine expectations deeply using “why”

The stated expectation was that Company Y would generate \$500,000 in revenue this quarter. But why \$500,000 specifically?

The number carried several expectations at once:

- show investors that the company was growing;
- demonstrate that the new CEO was effective;
- fund the planned expansion of the engineering team;
- maintain the company’s position against competitors.

So the \$500,000 target was not only a revenue target. It was a proxy for investor confidence, trust in the new CEO, team growth capacity, and market position.

Step 2: Identify actual negative outcomes from missing \$90,000

The company assumes: “We missed budget = we failed = everything is at risk.” But what are the ACTUAL negative outcomes?

Real negative outcomes:

- The lead investor has a check-in call scheduled next month and will ask about growth trajectory.
- The engineering team cannot be expanded as planned.
- The board will ask why the CEO missed the number.
- The marketing budget is not enough to counter the competitor’s campaign.
- Team morale is affected — people are wondering if layoffs are coming.

Assumed but false negative outcomes:

- “Investors will immediately pull out” — actually, they want to see a path to recovery, not just one quarter hit.
- “We’ve lost all credibility” — actually, one missed quarter is explainable, especially with a CEO hired six months ago.
- “We must hit \$650,000 next quarter, or we’re doomed” — actually, sustained smaller growth would be better than a forced revenue spike.

Step 3: Examine whether bridging the gap would solve these negative outcomes

Would making \$650,000 next quarter solve the actual problems?

- Investor confidence? Only if the revenue is stable enough to trust.
- CEO credibility? Not if the number is reached through rushed decisions that create new problems.
- Team expansion? Possibly, but not if the existing team burns out first.
- Competitive position? Not if service quality drops and good clients leave.
- Team morale? No. More pressure and fewer benefits would likely make it worse.

Step 4: Untangle - treat each negative outcome as a separate problem

Problem 1: Investor confidence at risk

Real negative outcome: Investors may doubt whether the missed target is a one-quarter problem or a sign of a deeper issue.

Solution that does not require \$650,000: Speak to investors before the check-in call, explain why the quarter came in lower, and present a realistic plan for recovery.

Result: Investors see that the company understands the miss and has a credible path forward.

Problem 2: CEO capability questioned

Real negative outcome: The board may start questioning whether the new CEO understands the company well enough to lead it.

Solution: The CEO explains why the target was missed, which assumptions were wrong, what was learned from the miss, and what will change in the next quarter.

Result: The board sees a CEO who can analyze a miss and adjust, rather than a CEO who is incapable of leadership.

Problem 3: Engineering team cannot be expanded

Real negative outcome: Product development will slow down because the planned hires cannot happen yet.

Solution that does not require \$650,000: Decide which product work is actually critical for the next quarter, postpone the rest, and use one or two contractors for clearly defined tasks if needed.

Result: Development continues at a narrower scope, without forcing the whole company into a revenue chase.

Problem 4: Team morale

Real negative outcome: Good people might leave, and productivity may drop.

Solution: Communicate clearly about the company's situation, protect core team benefits where possible, and involve the team in problem-solving.

Result: The team stays engaged instead of becoming reactive or disengaged.

What actually happened when the company addressed the negative outcomes instead of chasing the gap:

Quarter 2 actions:

- The CEO spoke with investors, explained the miss, and showed what would change next.
- The company hired one contractor for the critical feature and delayed the other two hires.
- Sales focused on closing two large enterprise deals properly, instead of chasing many rushed smaller deals.
- The team was told what was happening and involved in deciding what could realistically be delivered.
- The company made \$485,000, still below the original target. The gap remained.

Result: The enterprise deals closed, investors stayed on board, the team remained stable and engaged, and the company was in a better position than it would have been after forcing a \$650,000 quarter.

Even when the gap cannot be bridged, solutions exist, because the gap is not the only actionable part. This framework reveals multiple actionable angles: expectations, the gap, negative outcomes, and how they interact.

This expanded view changes what's solvable. From this framework's perspective, there is no truly unsolvable problem — because at least one of the four solution approaches is always available: converting negative outcomes to positive, eliminating them, diminishing them, or taking a step that opens the most doors toward any of these.

In Part 3, we'll explore why problems appear unsolvable when viewed only through gap-bridging — and how this framework reveals the solutions that were always there.

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