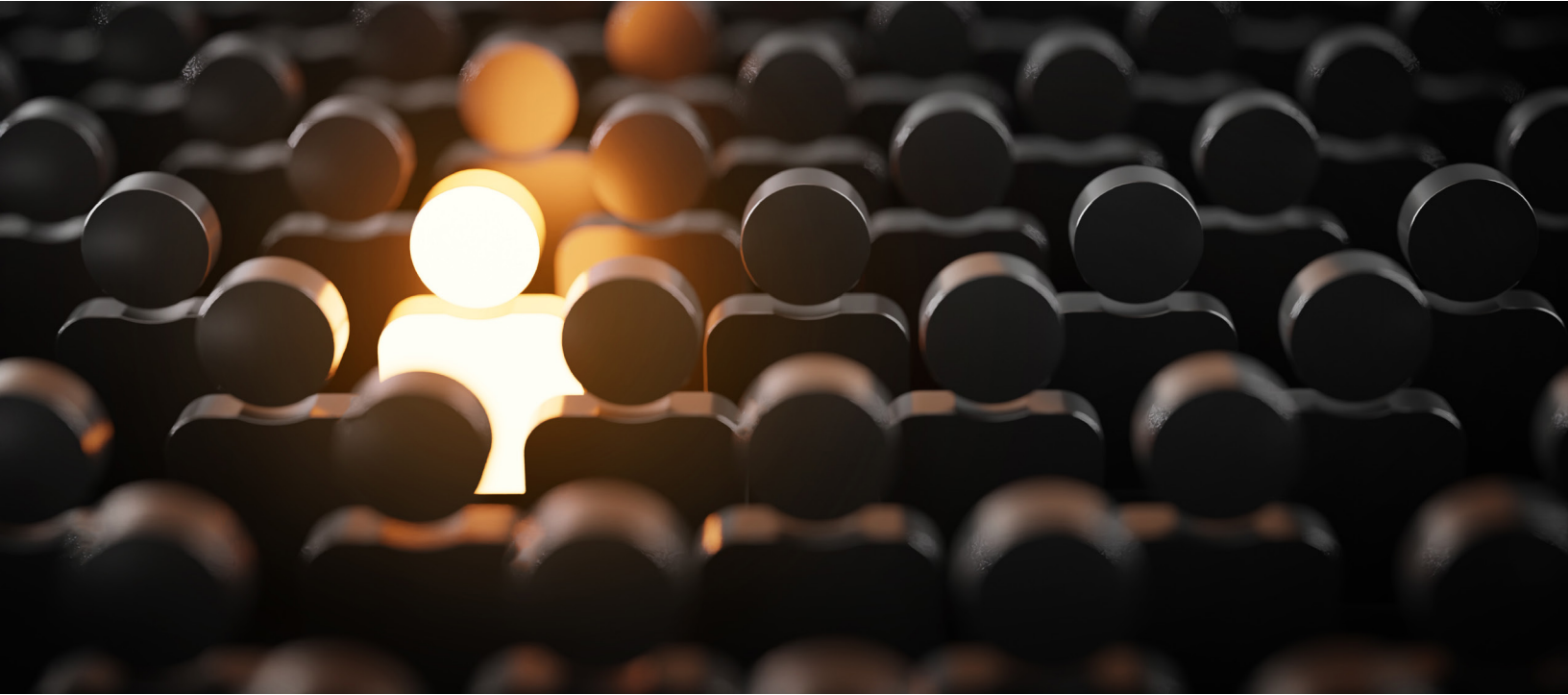# PROBLEM SOLVING

"Nothing in the world can take the place of perseverance.
Talent will not; nothing is more common than
unsuccessful people with talent. Genius will not;
unrewarded genius is almost a proverb. Education will
not; the world is full of educated derelicts. Persistence
and determination alone are omnipotent."

— Calvin Coolidge

INTRODUCTION

By nature, we do not like problems. Our instincts tell us to avoid them, or solve them as quickly as possible. As a result, we tend to select the first reasonable solution that presents itself and we find ourselves implementing marginal solutions that may only temporarily or incompletely solve problems. In some cases, our solutions create other problems elsewhere in our organization. Our goal needs to be finding optimal solutions that not only solve existing problems, but also take into account the impact on the process and organization.

As a manager, you are often perceived as the resident problem solver. Some of the problems you face are relatively straightforward. Information is accessible and there isn't a high degree of complexity. These problems require a systematic and thorough approach. Other problems are highly complex and information is extremely difficult, if not impossible, to gather. These problems demand creative solutions. Effective managers possess the skills to handle both kinds of problems.

PROBLEM SOLVING APPROACH

There are four steps to systematic problem solving that will direct you towards optimal solutions.

1. *Defining the Problem.* This is the most difficult of the four steps. Our instincts tell us to eliminate problems as soon as possible, which often tempts us to find and implement immediate solutions. Without further analysis of the problem, we may focus our efforts on symptoms while missing the problem all together. If you suspect that a problem goes deeper than you initially observe, gather together key players who may feel the impact of the problem and do an analysis. Be factual. Look at time lines, relationships between events, and cause and effect scenarios until you feel you understand the problem at its source. Participation from key players, each with a unique perspective, will also allow you to get a deeper and more complete view of the problem.

2. *Generate Alternative Solutions.* Once the problem is well defined, generate multiple solutions for the problem. If you immediately identify a solution and avoid exploring further alternatives, you are likely to solve the problem but not optimize the solution. In other words, you may not get the impact from the solution that is possible. At a minimum, brainstorm two or three possible solutions. Even if one seems to be the obvious answer, there may be pieces of the other alternatives that enhance the final solution.

3. *Evaluate and Select an Alternative.* Analyze each alternative before making a final decision. Evaluate each possible solution by looking at its strengths, weaknesses, resources needed, and impact on the organization. Use the effective ideas from all your alternatives to form the final solution for the problem.

4. *Implement and Follow-up on the Solution.* Don't jump from step one to four. Your richest solutions will result from following each step in the process. It is best to include key players in all four steps of the problem solving process, particularly in the evaluation and selection of the solution. If they are involved in selecting a solution they are more likely to support its implementation.

problem. Try to include people with different experiences and expertise to maximize the diversity of ideas generated in the brainstorming session. State the problem and begin brainstorming ideas.

Problem solving tips:
- Create safety by stating up front that all ideas, partial, off-the-wall, and impractical are helpful for generating more ideas.
- Encourage building on or adding to ideas that are presented.
- Write down ideas exactly as they are said.
- Keep all ideas visible by posting full flipchart sheets around the room. This prompts further creativity.

PROBLEM SOLVING APPROACH

In circumstances where solutions to tough problems are more difficult to find, use creative problem solving methods like the following.

Brainstorming. Bring together people who have influence over your problem or are influenced by your

- Refrain from judging or analyzing any idea until the end of the session.
- Encourage participation from all present.

Reverse Brainstorming. Reverse brainstorming is particularly effective when you want to identify things you may be doing to make the situation worse. Follow the instruc-

tions for a brainstorming session but present an opposite problem statement. For example, your problem is that your lines are too long. Instead of trying to generate ideas around shortening long lines, try to generate ideas on how to make lines even longer.

When you review the results of your brainstorming session, you may find that the ideas you come up with are things your organization are currently doing. The key is identifying and eliminating those practices.

Alternative Brainstorming. State your problem to the group. Then state a completely unrelated problem like "Socks always disappear between the hamper and clothes dryer." Brainstorm solutions to the unrelated problem then look for application to the real problem. For example, if your real problem is employee turnover, one unrelated solution might be to pin

your socks together before they go in the hamper. This solution could translate into a mentor or buddy program for new employees. With all of these creative problem-solving techniques, if your group isn't laughing, it's a sign that they are not pushing the limits of creativity. Off-the-wall ideas are often the ones that are the most effective at solving problems when put into a practical environment.

TO DO LIST

✓ Never accept and implement the first solution offered to fix a problem. Explore at least two or three alternatives and how they impact the organization before selecting and implementing a solution.
✓ Include key players in the idea generation and implementation pieces of the problem solving process. Their investment in your solution will pay dividends in the long term.

THE BOTTOM LINE

Fight the instinct to quickly, and sometimes superficially solve problems. Invest time and energy into optimizing solutions to make sure you're resolving the issue and considering the impact on your team, department, and organization.