

# **The Nine P's of Problem Solving**

## **Permanently Solving Important Organizational Problems**

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### **The Nine P's**

**Problems**  
**Problem**  
**Perfection**  
**Placement**  
**Pathology**  
**Possibilities**  
**Plausible**  
**Presentation**  
**Permanent**

Have you ever worked hard to solve a problem only to discover that nobody cares? Or that the problem doesn't stay solved? The technique described in this article ensures that the problems you resolve matter to your organization and that they stay solved. It is a technique that has been used by dozens of organizations with startling results.

### **What Happens When Problems Aren't Solved The Right Way**

- We work on the wrong problem.
- Nobody cares
- The problem doesn't stay solved
- The solution creates more problems than it solves
- We can't enlist the help of others to solve problems
- The organization's managers and workers continue to feel frustrated
- The organization fails to reach its full potential
- Money, time, and enthusiasm of the best people in the company are wasted

### **The Nine P's of Effective Problem Solving**

- Problems: conduct a whining session to identify issues
- Problem: select the one problem that is both solvable and important
- Perfection: Describe the ideal situation—what the organization would be like if the problem never existed or the problem were completely solved once and for all
- Placement: Define the problem as the gap between the ideal situation and the current situation
- Pathology: Analyze the problem to determine its root cause
- Possibilities: Develop a list of many possible solutions to the root cause of the problem
- Plausible: Select the best solution, which may be a single solution or a combination of several
- Present your recommendations to the managers who can implement the solution
- Permanent: Implement the solution and follow-up to ensure the problem stays solved

Each P corresponds to a step in a process that leads a team to discover lasting solutions to important problems. We discuss each of these nine steps in order in the paragraphs that follow.

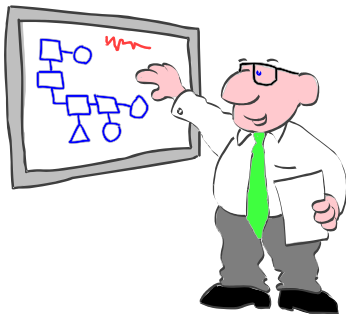


## Problems

A whining session is conducted to identify issues that bother the participants. The problem solving team engages in a brainstorming session at which complaints are encouraged. Ordinarily, many problems are listed. There is no need to be precise or to define the problems in some logical fashion—an excellent whining session results in a list of many emotional as well as rational ones.

## Problem

From the list of many problems, a single one is selected. It is essential that the solution to the problem be of value to the organization. We have all been frustrated to solve a problem that we believed to be important only to learn that upper management paid no attention to our solution and that it was never implemented. This frustration can only be avoided by ensuring, up front, that the problem selected for resolution be one of genuine value to the organization. It is equally important to know that the problem can be solved by the participants or at least by those whom they can influence. No problem is solved when a group—a quality circle, for example—recommends a solution. Problems are solved when the solution is implemented and proves to be effective. In this second step of the nine-step problem solving process, we conduct a brainstorming exercise that rank orders the problems and identifies those that are both solvable and important to the organization.



## Perfection

You can't solve a problem until you understand what a solution to it looks like. To this end, we spend a short period of time describing the "perfect state" for this problem—how would the situation appear if the problem has never existed or was completely solved. This defines the ideal state to which we aspire.

## Placement

Next, we compare the ideal situation to the current, actual situation. The gap between the ideal and the current situation is the definition of this problem. Wherever possible, we try to define the problem in quantitative terms, dollars or days or numbers of mistakes, for example. The more precisely we can define the gap between what we want and what we have, the clearer our path will be to achieve it. In our problem solving approach, we devote significant energy to clearly defining the problem as the gap between the ideal and the current situation.



## Pathology

The word “pathology” refers to an analysis to determine the “root cause.” By definition, the root cause is that source of the problem, which, if completely removed, will result in the problem being permanently resolved. At this stage in the problem solving process, we engage in a brainstorming session aided by the Ishikawa Diagram, or Fishbone Chart. This tool guides the team to systematically examine all possible sources of the problem and then reach a consensus about which possible causes may be the root ones. Experiments may be necessary to determine if the candidate issue is a root cause. The team designs realistic, effective, and practical experiments to unearth the root cause or causes of the problem.

## Possibilities

Once the root cause of the problem has been identified, the logical step is to solve the problem by removing the root cause. It may require that many different solutions be tried, some of them simultaneously, in order to find the best solution. At this stage of the process, we create a list of as many solutions as it is possible to imagine. A technique known as “Brute Think” is extremely effective in guiding the team to create many solutions that they might never have imagined without this effective tool.

## Plausibility

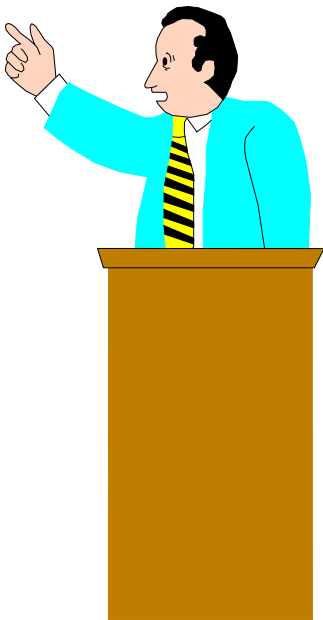
As stated in the last paragraph, it may be necessary to simultaneously try several different solutions in combination. Some of the possible solutions listed in the brainstorming session may be clearly inappropriate, but some may not be obviously ineffective. In this current stage of the process we need to determine which solutions are most promising. The team submits the entire list of possible solutions to a rigorous analysis of their feasibility and the effectiveness. When this stage is completed, we have a solution or combination of solutions that are very likely to solve the problem permanently.

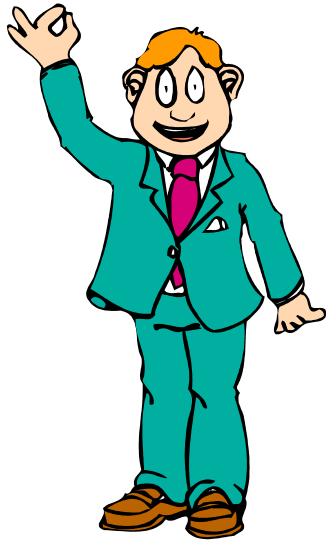
## Presentation

The problem isn't solved until the recommended solutions are actually applied and prove to be effective. The problem solving team must present the solution to those in authority who have the power to implement the solution, and the team must persuade the decision makers to make the necessary changes. If the charter of the team is to make lasting changes in the business operations of the organization, they have not done their jobs until they succeed in selling their ideas to those who can make the recommended changes. At this stage in the process, we learn how to identify those who can implement the solution and how to effectively convince them to do it.

## Permanence

The team must also develop a plan to periodically re-examine the situation to ensure that the problem was solved and that it stays solved. In the event the problem reappears, the team must honestly accept that its first attempt was not successful and dedicate itself to reassessing the root causes and possible solutions until it is permanently solved.





## Conclusion and Summary

The **Nine P's** provide a formula for permanently solving problems that have frustrated organizations. It is essential that a team be formed to solve the problem and that the team follow a systematic method to identify and define the problem and then solve it effectively. The most effective technique for solving problems that matter to the organizations is the **Nine P's**. There is one more **P** that warrants mention: **Practice**. You may not succeed the first time your team tries to apply this approach, but if you are **Persistent**, you will learn just how **Powerful** this technique is, and you will become more **Proficient** at applying it. **Please**, try it!

## Presentation Outline

I have found that if a problem solving team follows the following outline, a powerfully effective presentation to the managers and decision makers results. The outline is consistent with the Nine P's of Problem Solving described above, and with principles of effective presentations.

1. The Problem You Have Selected to Solve
2. Who Are The Members of the Team?
3. Why Did You Select This Problem?
  - a. Show That It Is Important to the Company To Have This Problem Solved
  - b. Show Why You Believe This Problem Can Be Solved
4. What is The Root Cause of the Problem?
5. Which One Solution or Combination of Solutions Do You Believe Will Solve the Root Cause?
6. What Is Your Team Willing to Do Differently To Solve This Problem
7. What Do You Believe Management Must Do to Solve This Problem?
8. What is your Follow-up Plan to Ensure The Problem Stays Solved?