The Seven Principles of Creative Problem Solving
from Breakthrough Thinking by Gerald Nadler and Shozo Hibino

The Uniqueness Principle: Each problem is unique and may require a unique solution.

Studies of effective people show over and over again that they do not assume that previous successful solutions should govern the current problem situation or that analysis techniques and data collection are at first critical. For example, achieving an industry benchmark leaves a company behind because the competitor has already moved ahead. Also, in trying to simply to match its competitor, the company may lose again, because it did not adhere to its own unique characteristics or market niche.

The Purposes Principle: Focusing on and expanding purposes helps strip away nonessential aspects of a problem.

The more intelligent problem solvers put more of their time 'up front' in problem solving, in order to enable themselves to operate more efficiently once they get down to details. In fact, they avoid the conventional urge to start by collecting data and analyzing the situation.

The Solution-After-Next Principle: Having a target solution in the future gives direction to near-term solutions and infuses them with larger purposes.

The successful people studied say lofty ideals and vision are essential if one is to enjoy continuing outstanding results. Conventional thinkers try to apply knowledge directly to the problem situation. Innovative thinkers use knowledge to stimulate new conceptions and of ideal solutions.

The Systems Principle: Every problem is part of a larger system of problems, and solving one problem inevitably leads to another. Having a clear framework of what elements and dimensions comprise a solution ensures its workability and implementation.

The successful solution-finders studied had a framework in their minds, one they used to formulate a solution of any sort. Intuitively, they were applying a systems perspective.

The Limited Information Collection Principle: Excessive data gathering may create an expert in the problem area, but knowing too much about it will probably prevent the discovery of some excellent alternatives.

The successful leaders and problem solvers studied know that it is impossible for data to be accurate. Realizing that there is no such thing as "hard" data, they know how to cope with "soft" data. They further realize that it is not possible to get all the data. Their advise is to identify the purposes of the information you think you need to collect about the system or problem and limit your data collection.
The People Design Principle: Those who will carry out and use the solution should be intimately and continuously involved in its development. Also, in designing for other people, the solution should include only the critical details to allow some flexibility to those who must apply the solution.

The concept of including many people in the solution process is not new. Yet a study showed that only 5% of companies had given employees any training in group decision making or problem solving in the past year.

The Betterment Timeline Principle: The only way to preserve the vitality of a solution is to build in and then monitor a program for continual change. The sequence of Breakthrough Thinking solutions thus becomes a bridge to a better future.

The successful leaders and problem solvers we studied sought to move as quickly as possible to achieve their ultimate vision. Therefore, change was continual through all of their efforts and was intuitively based on repeating the Breakthrough Thinking principles.