

“Those who cannot remember the past are condemned to repeat it.”  
-George Santayana

## Root Cause Analysis Corrective Action Tracking Lessons Learned System

A **Root Cause Analysis System** is designed for refineries that have made a commitment to operations excellence. The term excellence is not merely the turn of a phrase, but rather a firm resolve

1. to understand why problems are occurring in their operations;
2. to cost-effectively manage the correction of their problems; and
3. to preserve and communicate the knowledge learned from identifying and correcting the root causes of their problems.

### **Essential flexibilities list**

1. Flexibility in the system to address all different levels of problems, from day-to-day problems that occur on the shop floor to the major crisis that threatens the bottom line.
2. Flexibility in the system to address different kinds of problems from operating manufacturing, to quality, to reliability, to liability and claims to safety and the environment.
3. Flexibility in the interface of the system to accept shop floor and operator input so that every employee can contribute to improving the quality of the operation.
4. Flexibility in the training support that meets the differing needs of organizations to properly train and orient all levels within the organization conveniently and cost-effectively.
5. Flexibility in the system to identify all available prevention and control options; so that management can judge the best and most cost-effective solutions
6. Flexibility in the system to tailor and target lessons learned communication, so that data flow is efficiently directed to those who need the particular information as it relates to their responsibilities and tasks.

## What do you do to handle incidents?

1. What happened
2. What were the root causes of the problem
3. What internal options are available that will deal with the problem
4. What is the cost of acting upon each of the available options
5. Which decision options will provide the most cost-effective solution

## Why can't we get Lessons Learned to stick?

In the past decade, the impulse to “not re-invent the wheel” became “capturing and replicating Best Practices” which often translated into IT based knowledge management solutions. Computing is great, but as we all came to see, “Build it and they will come” failed to deliver on the promise. What is needed at this point in the coker is not more software, but a cultural adjustment.

### The first customer of learning must be the team itself.

What drives successful re-use of knowledge is a culture that has good reason to value learning through experience. That comes from people using learning to succeed in their own work, not from capturing “lessons” for others. The question; *When is a 'Lesson Learned' learned?* points out that Lessons Learned must be proven in the world of action by producing improved results—before becoming knowledge likely to be sought out for re-use.

### See that learning is part of leading.

The fastest path to a learning organization coming into being is leaders visibly and daily embodying learning themselves. When learning becomes a daily part of how leaders lead, through simple disciplines, a virtuous cycle is set in motion. But how? One proven process is an Action Review Cycle (ARC) The ARC came out of a study of an organization that has been hailed as “the world’s premiere learning organization.” Core to that organization’s success is this leader-led disciplined cycle of learning. The key elements of the cycle are — a clearly communicated Intent, Before Action Reviews (BAR) and After Action Reviews (AAR).



### Invest in learning where it matters.

No matter how efficient the process, deliberate learning requires some investment of time. The key is to invest that time where it will pay back many-fold. Learning for learning sake does not grow roots and becomes a flavor of the month or just another box to check. One of your solutions then will be sort out where learning is a wise investment of time, and how to conduct it efficiently.