

## Viewpoint: Root-Cause Your Successes

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Most plant personnel understand the value of root-cause analysis (RCA). Properly conducted, an evidence-driven RCA can be a strong performance-improvement tool. It fixes problems that waste time and resources, and it mitigates risk.

One of the advantages of the RCA method is that once the causes of one failure or problem are clear, you can look around to see if the same causes are at work elsewhere in the organization. Lessons learned in solving one problem can be used to identify and prevent the same type of problem from occurring in other places. In RCA parlance, this is referred to as "Extent of Condition" or "Extent of Cause."

For example, in a root-cause investigation, a certain machine was found to have failed due to a flawed bearing. With this in mind, the investigator checked to see if the same type of bearing was used anywhere else in the plant, and identified five machines where it was. He then scheduled those machines to have replacement bearings installed. In a sense, that first root-cause investigation "vaccinated" the plant against five more failures.

While most organizations have come to understand the value of using RCA techniques to fix and prevent problems, few—*if any*—recognize the value of using such techniques to determine the root cause of a success. The same way the understanding of one failure can be used to prevent others, the understanding of what causes a success can be used to promote and transfer success to other places.

Consider this scenario: A company president chooses a new manager for a failing department. Six months later, the department is handsomely profitable and efficient. The obvious difference is the new manager—*and the president congratulates himself on his selection*. Now that his handpicked protégé has proven himself so well, the president proceeds to move him around to let other departments benefit from his acumen.

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Truth be told, the real reason for the success wasn't the new manager at all. Analysis of the facts found that the improvement was due to two key employees in the department who took advantage of the management changeover to implement work-procedure changes. They had wanted to do this for years, but were kept from it by the old manager. The new manager was simply a coincidence, not the cause. (The reader may wish to look up the logic term, *post hoc ergo propter hoc*, which describes this situation.)

The improvement would have taken place no matter who was chosen to be manager. Thus, if the new manager credited with the success is transferred to another location, it's unlikely that success will transfer with him—*that is, not unless he also takes along the two employees who jumped on the opportunity to implement some very-needed changes in work procedures.*

In short, the RCA technique with which most companies are already familiar is not only good for determining the cause of a failure, it is also a valuable tool for determining the cause of success. In the same way that knowledge about one failure can be used to prevent others, knowledge about one success can be used to build others. **MT**

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