

## Effective Problem Solving - The Real Key to Success

By

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Increasing globalization has constantly been making businesses more and more competitive. Consequently, the role of various quality improvement programs has become increasingly crucial for any business to maintain its competitive edge. There is a growing need to continuously improve the quality of products and services by utilizing the well-established quality systems. According to the well-known US quality expert W Edwards Deming, who taught the Japanese the concepts of statistical quality control, “85% of quality problems are due to the systems and only 15% are due to employees”. Therefore, the importance of quality systems can not be over-emphasized. Since problem solving is a key element of the most quality improvement programs, it is extremely important to fully understand the significance of solving the problems effectively.

In whatever field we may be working, most of us spend a good amount of our time in solving and/or preventing problems. Many of us will probably be without work if there were no problems at our workplaces. The McMillan dictionary defines “*problem*” as “*something that causes trouble or difficulty*”. Problem solving is a fundamental part of quality management. A true quality professional always perceives a problem as the opportunity for improvement.

Simple problems may be solved by trial and error that involves attacking each probable cause one by one with the hope to solve the problem with each attempt. However, it

generally becomes necessary to utilize a structured problem solving technique to eradicate chronic and complex problems.

Various problem solving techniques may differ in terminology, but they all essentially contain the same basic steps involving identification of the problem, in-depth investigation of all possible causes to establish the root cause, and developing and implementing the solution. It is essential to verify effectiveness of the solution to ensure that the problem does not occur again.

The first crucial step in the problem solving process is to be aware of the existence of the problem, and to define the problem with the physical and statistical description. According to Albert Einstein, “*the formulation of a problem is the most essential part of problem solving*”. Secondly, a thorough investigation must be conducted to establish the root cause of the problem. Root cause is the ultimate cause of the problem, and simply put, it is one thing that causes everything else. Identification and elimination of the root cause is essential to ensure that the problem does not occur again. Thirdly, we must develop alternative solutions, and compare them in terms of their effectiveness and implementation cost. We should obviously select and implement the “best fit” and the most cost-effective solution. It is important not to jump to the decision of implementing the very first available solution without developing and evaluating the alternatives. Lastly, but the most importantly, we must

verify the effectiveness of the implemented solution to confirm its success in solving the problem without causing other unanticipated problems.

Well-established quality tools are available to systematically and effectively perform various steps involved in the problem solving process. Proper utilization of these quality tools for solving the problem effectively goes a long way in bringing about the desired results of various quality improvement programs.

Unfortunately, top managements do not always realize the importance of structured problem solving process for enhancing the business competitiveness. Sometimes, it may be due to the lack of formal quality management training at the upper management level. Thus there may be a tendency to solve even the crucial chronic problems by trial and error rather than utilizing the proven problem solving techniques. This may result in the failure to realize the expected results. Can a business afford to let it continue to happen? The answer, undisputedly, is a big “no”. We certainly can not afford to overlook the importance of effective problem solving, which is the real key to success in the prevailing globalized economic scenario.

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