Practical Problem Solving Overview

What is a Problem?

A problem can be defined as any deviation from the standard. It can also be defined as a gap between actual and desired conditions. And finally, a problem can be defined as an unfilled customer need.

Now, taking it a bit further, we’re often able to classify problems into one of three types. The first is when the standard is not achieved. In other words, if our target is 100% on time delivery and we experience a month of 82% on time delivery our actual performance doesn’t meet the standard.

The second type of problem occurs when the standard is achieved but a higher standard is now required. Staying with the on time delivery example… if we’re currently performing at 100% on time delivery at a quoted lead-time of 2 weeks, our customers may very well ask us to reduce our lead-time to 1 week while still maintaining 100% on time delivery.

Finally, the third type of problem occurs when our performance to the standard varies, meaning it’s not consistently achieved. This is actually a form of mura, or unevenness which we first learned about in the Transforming your Value Streams course.

Why Practical Problem Solving?

First of all, Practical Problem Solving enables organizations to have a common understanding and definition of what “a problem” actually is which in turn creates a fast and urgent initial response.

Next, a standard problem solving approach removes time lost in debate and discussion. In other words, organizations are able to focus their valuable time and energy on things that actually matter, such as solving problems.

Finally, thorough planning, root cause analysis, and the implementation of mistake proofing insures problems don’t reoccur since there’s nothing more disheartening then to see a problem reappear a few months after it was thought to be solved.
Problem Solving Approaches

There are many different types of problem solving approaches to choose from.

First of all, depending on the problem at hand… many companies utilize one of the simplest problem solving methodologies available today known as just do it!

In other words, for small problems that may not require much time or resources it’s sometimes possible to quickly fix them and move on. These might be likened to so-called low hanging fruit initiatives.

Next, Ford Motor Company adopted a problem solving process known as 8 Disciplines which takes 8 Disciplines and uses them to tackle engineering problems. Some actually confuse 8D with the 8 steps of Practical Problem Solving… and while they do share some similarities they are different.

Another extremely powerful problem solving approach finds its roots in the six sigma methodology. Specifically, six sigma practitioners around the world have used the DMAIC, or define, measure, analyze, improve, and control process to attack problems associated with variation and defects for many years.

The 8 Steps to Practical Problem Solving

1. The first step in the process has us clarifying the problem. In other words, we must clearly describe the current situation, while going to see with our own eyes in order to get the facts.
2. The second step of the process has us breaking the big vague problem down to its smaller, more specific problems.
3. Next, once we’ve scoped the problem it’s time to set a target that we will achieve.
4. Step 4 has us analyzing the root cause.
5. You and your team will need to make a plan that includes who, what, and when enabling you to pursue multiple countermeasures.
6. Step 6 has us seeing the countermeasures through as we implement our countermeasures quickly as a team.
7. Step 7 is often called the follow up phase as we evaluate both the results and the process.
8. Finally, step 8 of the practical problem solving method challenges us to standardize success using something the Japanese call yokoten, which loosely translated, means to copy and expand good kaizen ideas to other areas while also identifying unresolved issues.