

How Lean Problem-Solving Can Help Your Manufacturing Company

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Lean Problem-Solving Can Help You Move Forward

There are many good sources of information and agency guidelines available on worker safety. However, as these new procedures are implemented and new problems come up, the use of proven Lean concepts and tools can be very helpful.

Lean is an established method (developed by Toyota) that has been used by manufacturing companies to solve problems and improve important processes for the past 30-plus years. With new requirements to protect workers and related process changes that will need to be implemented, now is a good time to consider using Lean problem-solving and related tools for your Northeast Ohio manufacturing company.

Lean problem-solving has a proven track record with many companies who, in the past, have also needed to "recover and improve."



My Experience with Lean and the Toyota Method

As a young engineer, I often thought my focus should be on good technical design and managing projects. However, after working with Toyota on a Tier 1 supplier team, I

began to realize the benefit of developing the ability to first understand and then effectively solve the problem before starting to "design a solution."

I learned firsthand the Toyota eight-step (A3) problem-solving method. The steps follow the basic Deming PDCA (plan-do-check-act) model and are very effective.

A summary of the typical steps involved include:

- ✓ Going to the actual location where the problem is to observe the problem firsthand ("Go and See") and talk to the workers impacted. (You will not figure out a solution in the conference room.)
- ✓ Once you figure out the "root cause" of your problem (there are several helpful Lean tools to do this), you need to brainstorm possible solutions. Next, you need to determine which of the solutions proposed will work (in the field) to fix the problem. Run and review the results of the pilot test to confirm which works best.
- ✓ After the pilot test confirms a solution works in the field (after the Check step in the process), it is now time to complete the design and implement the solution.
- ✓ Tip: Follow the Plan-Do-Check-Act method for big issues and Rapid Kaizen for the many smaller problems that will come up.
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What Should Your Next Move Be?

As companies come back online, there will be many new problems management and operations teams will have to solve. Having a problem-solving process will provide a consistent approach to help find the true root cause and confirm which solution is best.

It can prevent the frequently used *fire, ready, aim method*. It can also help you train and engage your frontline workers to be effective problem-solvers. The Toyota Production System was built on a consistent practice and improvement of the scientific PDCA problem-solving process and developed into the Toyota eight-step (A-3) problem-solving process. It's a proven method that works and has been used by many other companies who have adopted it to effectively solve their problems and can work for your business and other manufacturing companies in Northeast Ohio in these challenging times.

The above concepts are easy to learn, but effective implementation of the process can be challenging. Toyota has been working on and improving its "problem-solving" process for over 40 years. The best way to learn this strategic process is from those who have "been there and done that." This article cannot provide you with all the information you need to implement this proven approach, but it's meant to make you aware of how effective it can be and the benefits of learning it. It is especially important now as many companies will have to address and effectively solve many new problems to "recover and thrive."

About the Author:

Ernie Kulik is a credentialed professional with a solid engineering background and an experienced project manager on over 100 projects. He developed a strong set of problem-solving, process improvement, and engineering skills by leading construction, engineering, and Lean/Ops Ex teams as Manager Facilities and EHS for over 128 facilities across North America. Kulik has a passion for sharing his expertise and helping companies as a hands-on engineer, project manager, Lean consultant, or as an effective trainer.

Need help?

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