

Collaborative Robots and Lean/Continuous Improvement

written by admin | October 31, 2017

I attended a collaborative robots (cobots) event yesterday that IMC cosponsored with the PA CareerLink for Columbia/Montour Counties and thought it worth a few observations within the context of lean/ continuous improvement.

The Perfect Process

Let's ask ourselves... What is the perfect production process? Well, a process that's being performed the "current one best way" (standard work) in a way that is 100% repeatable and predictable with no variation AND that can adapt if there are changes required AND can be continually improved.

We'd all love to have that, right? As we say, Lean/CI is about aiming for perfect yet knowing it isn't achievable (a golf score of 18). It's in the CI efforts that we keep getting closer and succeed as a result.

How Cobots Might Help

Cobots are a developing technology that can be an important part of our CI efforts. They're designed to work alongside people and to be able to do specialized tasks that may be mundane (lower value work) or unsafe (repetitive motion) or need to be very precise. They're small enough that they can be picked up and moved around easily and safe enough that they don't usually need guarding.

So if you think about Problem - Causes - Solutions (PDCA or DMAIC). Cobots can be a solution ***in the right situation***. But the key to successful application is to start by doing a great job of identifying the right problem, getting to root cause and then considering and prioritizing solutions. Not jumping to an assumed solution that a robot will save the day (oh yeah, we never do that).

Lean/CI More Than Ever

Like anything new, these technologies have the potential to separate winners from losers. And the winners will be the ones who have that CI operational culture and practices first and then apply cobots and other technologies as solutions to effective Lean/CI efforts.

Consider Getting to Know Cobots

My advice would be to identify an internal resource to stay attuned to this continually emerging and developing technology. Below is a link to an organization and a book called "*Lean Robotics*" that was mentioned yesterday by the presenter from Universal Robotics. I haven't read it but plan to check it out.
<https://leanrobotics.org/>.