

## Continuous Improvement Part 2 of 2

By Harold Chapman

### MUDA

In Part 1 of the series we discussed what we consider the “secret sauce”-- having a spirit of improving the business continually. As mentioned in last month’s newsletter, the first enemy to a successful work flow is Muda, commonly known as the eight forms of waste. We should have our teams constantly focused on reducing or eliminating waste in all of our processes.

### MURI

The second enemy to a successful work flow is what we refer to as Muri (overburden). Muri is the term we use to express the practice of forcing our processes, machines, products, or people beyond a reasonable workload. Overburdening is most commonly committed when it comes to our constrained processes. We put too much demand on the constraint process and fail to practice the Theory of Constraints to relieve the overburden. Additionally, we overburden the associates with broken processes, then work those same associates extra hours (overtime) to get a desired result. Working our associates in this manner will lead to high absenteeism, poor work quality, poor productivity and high turnover. The business then gets burdened with paying the cost to replace those associates. We also see overburdening with equipment when the equipment runs 24 hours per day and seven days per week with no time for preventative maintenance. Many companies practice the maintenance strategy of run-to-failure. Eventually, the equipment will deteriorate, which, in turn will require repair or replacement. Inevitably, the equipment fails at the worst time possible. We should never overburden our resources and expect those resources to perform with excellence.

### MURA

The third enemy to flow is Mura (unevenness, or variation). We insert variation into the process in the form of material, information, and work content. When workers have to deal with variation as it relates to the incoming material quality, output becomes difficult (if not impossible) to produce. Have you ever heard the old saying, “You can’t make chicken salad out of chicken crap?” Many companies try to do just that. In most cases the team will make heroic efforts to get the desired result while having to disregard the quality of the incoming material. This is often applauded, when it should be regarded instead as a huge problem. In this case, the company in essence is serving as a filter for the supplier’s poor quality. Varied information, on the other hand, results in ambiguity and confusion and prevents the workers from knowing what to build or how to build it.



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## MURA, CONTINUED...

Confusing or missing information lends itself to a disruption in the process because the folks responsible to carry out the processes are left to guess about what should be done in an effort to fill in the gaps. This method creates varied outputs in quality. Be assured our customers will see this.

## SCHEDULING AND VARIATION

Another form of information variation is scheduling. We schedule high quantities on one day and low quantities the next. This demand shift requires the team to work extra hard some days but have little work the other days. We need to balance the schedule to ensure balanced output based on customer demand. Finally, our final form of variation is work content. When we send varying work content through the same processes, we cause faster parts to slow down behind the high work content parts (creating the waste of waiting for the products), which will also cause the process to empty ahead of the high work content (creating wait time for the workers).

## IDENTIFY AND ELIMINATE

To be competitive in today's ever increasing global market, we must continually identify and eliminate inhibitors to an efficient flow in the manufacturing process (raw goods to finished goods), the business processes (order to cash), design processes (concept to launch), and support processes (HR, engineering, management systems, etc). We must be able to recognize Muda (waste), Muri (overburden), and Mura (variation) as enemies to effective flow and attack them using a standardized problem solving methodology. We should always be on the lookout for these enemies. They cost us money, yet we often don't even realize they exist. We are losing money as a result of waste, overburden, and variation but that loss is likely hidden – buried deeply within the accounting ledgers.

Believe it or not, we have been told by companies that they don't have any problems. In each and every one of those cases, we have gone to the process and found one, if not all, of the following items:

- Excess Labor
- Excess Inventory
- Excess Capacity
- Excess Space

All of the above items cost companies money and cover up the real problems, which in turn costs the company more money. This is a double negative impact to the bottom line. What we find interesting is that although most companies have these four



## IDENTIFY AND ELIMINATE, CONTINUED...

excesses, these same companies believe and communicate that they need more people, more capacity, more space, and more inventory!

## MORE THAN JUST CONTINUOUS IMPROVEMENT

Knowing we need to continuously improve isn't enough. We must manage this improvement engine on a daily or hourly basis. Putting in a monitoring process that highlights the team's performance on an hourly basis is just one management method for improvement. As part of our Lean Management System, we incorporate Managing Daily Improvement (MDI). As problems are exposed, they are solved. What if the team is always meeting its goals? That's good, right? Actually, this means we have too many resources to meet the needs of the customer. Those extra resources are costly. Problems can be seen as treasures when the team misses targets occasionally. If we see the team is failing to miss the goal thereby uncovering problems, we will set a new target or remove labor, capacity and/or inventory.

## LET US HELP

In our first installment, we shared the analogy of water dripping into a bucket and the different ways to interpret and respond to the dripping. Do you have water dripping into your bucket? Do you have the spirit of continuous improvement in your company? Have you trained your team to solve problems? If you answered no to any of these questions, **DRIVE** can help. We have experienced professionals that can lead you and your team to a culture of continuous improvement. For a no-obligation introduction meeting, please contact Paul Eakle at [paul.eakle@driveinc.com](mailto:paul.eakle@driveinc.com) or 865-323-3491.

