

Changeover Costs

Do you really understand the impact?

The following is an excerpt from John Henry's newsletter ...

So how many of you reading this know what your changeover costs are?

I ask this question a lot. I ask it when I speak at conferences. I ask it of clients. My experiences lead me to believe that probably less than 20% or so know how much a minute of changeover, or any other kind of downtime is worth. When I say "know" I do not mean a number that is basically pulled out of the air or even a value calculated by manufacturing or engineering.

No, to be useful in planning and cost justification, the cost must be established by the Finance or Accounting Departments. Only if it comes from them is it "official". Only if it comes from them will management accept it. Too many times I see people trying to justify dollars spent with minutes saved. This is apples and oranges. Costs may only be justified by comparing dollars spent with dollars.

The cost of downtime can be calculated in various ways depending on the company's fiscal philosophies and operational situation. Some may count just the **cost of labour**. Others may count the impact on **output or capacity**. Still others will look at impact on **inventory**. Most will look at a combination of the 3. In addition to these tangible or quantifiable costs, there will be other, intangible costs. The biggest among these is likely to be the ability to provide the service levels your customers demand.

I think that there are 3 reasons that many companies do not get serious about changeover.

First, there are still too many people out there who think like as I did back in the dark ages. They think that it is impossible to make a serious dent in changeover so they do not see the point of going to a lot of effort to accomplish relatively little.

Second, they think that the monetary benefits of changeover are not significant. Even companies that make fewer than one changeover a day and consider their costs in the hundreds rather than the thousands are still spending fairly significant amounts of money over the course of the year.

Finally, they are afraid that in order to reduce changeover they will need to spend huge amounts of money. Readers of this newsletter will know that this is false. Significant reductions in changeover time can be had for little or no out of pocket expense. A great deal of reduction can be had from operation issues. Eliminate the time waiting for materials from the warehouse by having it staged ahead of time. Small things like fixed gauges, multiple photo eyes, tool elimination can be done using in-plant resources and a few dollars from the maintenance budget. Even where capital expenditures are necessary, such as for custom change part racks, the total amounts compared to the dollars saved are peanuts. I typically find that reductions of anywhere from 25-50% can be had for little or no capital cost.

You have to know your costs. It is the only way you will be able to justify a changeover reduction program. It is the only way that you will be able to motivate the people who need to be involved i.e. everyone.

"Unless you try to do something beyond what you have already mastered, you will never grow."

Ronald. E. Osborn

Where Lean Thoughts can become Reality

INCENTIVES ACTUALLY INHIBIT CREATIVITY

Sometimes we get some insightful nudges by reading Jim Pinto's newsletter ... maybe you will enjoy the following article ...

In his pivotal book, "A Whole New Mind - Why Right-brainers will Rule the Future", Daniel Pink identifies the shift corporate culture must make from logical, information-based (left-brained) jobs, to conceptual, creative (right-brained) work where creativity and conceptual design dominate the landscape.

In his TED talk (weblink below) Daniel Pink's central thesis is that the best motivation comes from the performance of a task for its own reward.

Daniel cites numerous scientific studies, all showing that incentives actually INHIBIT creative problem solving. The nature of creative work - non-routine, artistic, empathic big-picture - requires intrinsic motivation to achieve good results.

The elements of "intrinsic" creative motivation are:

- * Autonomy: The urge to be self-directed.
- * Mastery: The desire to do better at something meaningful.
- * Purpose: The yearning to work at something larger than ourselves.

If Daniel is right (and he's sure he is, citing numerous studies that all point to the same conclusion) then it blows away all traditional ideas about rewards and incentives.

Rewards "narrow focus and restrict possibilities". When there's a defined task with a clear set of rules to follow, rewards stimulate desired behaviors, but tend to restrict possibilities. Incentives (sweeter carrots and bigger sticks) actually inhibit creativity.

For creative engagement, self-direction works best. To "think outside the box", rewards actually impede problem-solving abilities because they cause focus on only already proven ways to solve problems. Larger rewards actually lead to poorer performance.

In a nutshell, rewards work for tasks where thinking is not needed. As soon as any kind of creative thinking is required, rewards stop working, and even inhibit results.

It's interesting to note that at companies like Google, employees are encouraged to spend 20% of their time on their own creative projects. Indeed, some VERY productive ideas were born this way.

When I worked at Action Instruments, something that proved very productive for me personally (I encouraged others to do it too) was to spend every Friday afternoon (before the weekend) following projects and ideas, which I didn't have time for otherwise.

I must tell you - many of my best ideas were born this way.

Dan Pink's TED Talk - The surprising science of motivation:

http://www.ted.com/talks/dan_pink_on_motivation.html

The Bamboo Project Blog:

<http://tinyurl.com/mmunh9>

Review and Buy "A whole new Mind" on Amazon.com:

<http://tinyurl.com/4s78d9>

"You will never "find" time for anything. If you want time, you must make it." —Charles Bruxton

'Process' Ain't Sexy... But Your Business Is In Big Trouble Without It!

Lean Thoughts