## LEAN INSIGHTS



## Visual management: A picture really is worth a 1,000 words

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I t's more than story telling with pictures. Visual management allows for direct communication without the need for long reports. Visual management tools are all around us. We have gauges in our cars, but fewer than we used to. Some of our cars' systems have become reliable enough that we no longer have gauges or dials for cylinder temperatures, oil pressure and more. Gone are the days of unreliable Smith's gauges and Lucas ("Prince of Darkness") electrical systems! Instead, we have simple visual tools to tell us when something is awry.

The same simplicity comes from visual management. It's more than painted lines on the factory floor. It is a tool for communicating information efficiently, for knowing when a process is under control and stable, and for knowing when an operation is doing what it shouldn't.

One client that I had didn't know how much (or how little) they were producing. We arranged for an easel to be set up in the production area. It contained a card swipe unit (so that people would swipe in and out), the hand tools that they needed and a display. The supervisor wrote down the number of units that the team was supposed to make in 10 minutes. Above that they wrote the number that they were actually making in those 10 minutes. This easel was set up so that everyone could readily see it. The supervisor would randomly time out a 10-minute interval, count the units produced and amend the sign.



Visual management is where information is communicated by using visual signals instead of texts or other written instructions. The signals and signs reflect standard work and, therefore, require less policy. Their design focuses on allowing quick recognition of the information being communicated in order to increase efficiency and clarity. As well, these signs can take many forms - from different coloured clothing for different teams, to focusing measures upon the size of the problem and not the size of the activity, to kanban (a simple visual sign for replenishment), obeya (the large Lean "war" room) and heijunka boxes (used in load levelling). In The Toyota Way, it is also known as mieruka.

Visual management does not need to be expensive. It must, however, tell a consistent story. No more having each group with its own charts. Keep them simple, keep them obvious and keep them closely tied to the job at hand. No one should be running to a computer keyboard. This distracts them from the task at hand. Keep the visual management consistent across the factory, across the offices and across all of your value stream areas.

In another client, we had a tremendous problem with determining how long a process should take. It was taking up to 11.5 hours to do. They had been working at this speed for several years. The time that they wanted the job to take had become their culture. We asked their industrial engineering team in another plant how long it should take, and their team told us 2.5 hours.

To get them closer to the industrial engineering time, we created one of the first Andon boards in southwestern



Ontario. We took scrap 2x2-inch little metal squares from the metal shop, drilled holes in them and painted them red, yellow and green. The team decided that green would mean that they're right on time, yellow would mean that they should hurry up, and red would mean that they're going too fast and need to slow down. We had a little Andon board set up and I told them that they would each get a hand-made piece of chocolate when that board was all green. They were up to the challenge. Within about three weeks, I received a phone call telling me that I had better make good on my promise!

They never had any feedback about progress towards their goals. The simple visual management tool told them how they were doing and, importantly, how their success (or lack of success) was impacting the upstream and downstream processes. They saw that when they went yellow, everyone affected by that went yellow, too.

Lastly, we can think of visual management as being divided into two groups — display and control. A visual display group relates information and data to employees. For example, charts showing the monthly revenues of the company or a graphic depicting a certain type of quality issue that group members should be aware of. A visual control group is intended to actually control or guide the action of the group members. Examples of controls are readily apparent in our day-to-day lives: stop signs, handicap parking signs, no smoking signs, etc.

## Question from the floor

QUESTION: We've got Lean boards up throughout our factory now. Some teams are really taking to them, while others not so much. Is there any way to get them all up to the same rate of suggestions?

ANSWER: Watch out that some areas are not tackling more difficult issues than others. Is one group putting up more suggestions, but they're all a bunch of simple "just do its?" Is another group putting up fewer, but bigger suggestions? One thing that I like to do is to have a "kaizen off!" This is where all of the groups put forward their best idea for the month and then compete to see whose is the best, reduced the most waste, decreased the number of footsteps taken, reduced the number of mistakes and so on. Have a monthly meeting where the teams can present their kaizen suggestions and then let the people vote on which idea is best. Incorporate this idea into the monthly management meeting and gently shift the management meeting away from presenting dry reports to actively sharing within your facility the peoples' ideas and innovations. I think you'll find that the enthusiasm for using your Lean boards will go way up. For those of you who may not be familiar with the term "Lean board," it's a simple whiteboard that people put their kaizen suggestions on. It also serves as a communications tool, with people checking in to look at the status of their suggestions or even just checking in after they've been away for some time. 🌞

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## From the bookshelf... The Lean 3P Advantage: A Practitioner's Guide to the Production Preparation Process by Allan R. Coletta, Productivity Press

This book is another winner of the Shingo Research and Professional Publication Award, and readers know that I like to highlight these. "3P" stands for "Production, Preparation and Process," and basically means to try out the new process before you implement it. I've used this in sectors as diverse as manufacturing to health care, and people have always been impressed. You can literally "cut it out in cardboard" to demonstrate how a new process

will work. You can use paper representations of the actual workplace. In some cases, we taped off areas that corresponded to the proposed work flow areas. Or we can start with a "paper doll" layout. This uses an architectural layout and scale cutouts of tables and equipment. The book is really quite valuable because it provides details on how to design the 3P Lean design process a step at a time, all while



providing many real-world examples. It presents an operations-based perspective that combines the experience of many different companies.

The book details the 3P Lean design process, explaining how and why it works so effectively. You really can think of it as a guide to help you mock up your proposed changes, how to simulate them and what things you need to watch out for. It is a form of simulation that everyone can do in the gemba. *The Lean 3P Advantage* includes various product planning

and evaluation criteria, selection of alternatives, timing considerations, construction of prototypes, and measuring effectiveness. Reading and using this book will definitely help you to develop work layouts and other designs that will foster innovation. With greater innovation, shorter development cycle times and less waste, you will be able to meet or best your customer expectations.

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