$65 – £45 – €50

LEAN MANAGEMENT JOURNAL

Issue 8 Volume 4 | October 2014 | www.leanmj.com

YOU'VE GOT A FRIEND IN LEAN

Exploring how to be a good lean boss and the importance of employees in a lean enterprise

Organisations and interviews featured in this edition include: Nationwide Building Society, Hitachi Consulting, BMA Consulting, HP Tronic, Richard Schonberger, Chris Rowe, John Bicheno and Friedemann Lutz.

IN THIS ISSUE:

The lean CFO and the economics of lean
Nick Katko, senior consultant at BMA Consultants brings his expertise as CFO to LMJ and discusses the best way of implementing lean.

De-proliferation: the third path of lean
Researcher Richard J. Schonberger, Ph.D. analyses why lean fails at a supply level and how organisations can change this expensive cycle by embracing the third line of lean.

Tapping the reservoir potential: your employees
Friedemann Lutz, director at Valeocon Management Consulting, teaches how to unlock the most valuable resource a company has in terms of creating a culture of continuous improvement.

From process excellence to business transformation
Jonathan Gray, VP at Hitachi Consulting, explores why lean transformations fail despite the best expertise.

Beyond management by extremes

"People get awfully tired, get nowhere, pulling in opposite directions"

W. Edwards Deming

"While organisations pronounce that standards are everything, what can be said of the limits to uniformity and variability reduction pursuits, pulling towards zero? Does context matter?"

In this month's Lessons from Deming, LMJ editorial board member *Bill Bellows* explores the idea of what's better, diversity or the quickest process? Extremes or the measured response?

In the spirit of standardisation that is growing in popularity in organisations around the world, is there room for diversity? That is, is variety really the spice of life, or does it represent a non-value added effort, if not simply waste?

In other words, should variation always be reduced to zero? Is there a place for an aircraft manufacturer to offer their airline customers 108 shades of white paint, as did an aerospace company in the 1990s? Or, would it be better to remove colour as a potential market place differentiator and, instead, offer any colour you like - as long as it's white.

And what of inventories, always striving for zero; but what if less isn't always better? In consideration of the manufacturing concept of single-minute exchange of dies, why not single-second? In regards to finances, what can be said about cost goals? Should they, as well, always be less-is-better in purchasing, in which case we buy on price tag alone, even when selecting a surgeon? Can the same be said for cycle times or is fast not always better? At what expense? Is less fat always better, or, do whales, as well as humans, have body fat for a reason? What about salt intake? Is less always better?

A recent *New England Journal of Medicine* study found higher risks of high blood pressure for excessive salt intake, yet higher mortality from cardiovascular causes for low salt intake. Might there be value in a middle ground goal?

While organisations pronounce that standards are everything, what can be said of the limits to uniformity and variability reduction pursuits, pulling towards zero? Does context matter? In consideration of a greater system, is less variation always better, with a goal of zero, should everything be standardised, including language and right-handedness?

Or, should advancements in the implementation of standardisation include a context for advocating when and where to pursue standardisation? Can lean practitioners shift their achievements from compliance excellence of the tenets

> "In my studies of robust design under Genichi Taguchi, I was reminded of the grouping of zero and infinity as two of the three common goals when applying his methods of quality improvement"

of lean to contextual excellence and room for fat? At times, multiple languages and multiple software systems, assisted by translators, might provide a more systemic solution. A more economically viable solution, in which the investment in variety is off-set by the systemic savings.

From zero defects to JIT production, zero remains an admired stretch goal and also represents one of the two endpoints of management by extremes. The other is infinity, as in the pursuit of better, coupled with the ambition to continually improve. For example, a friend once shared her work goal of recruiting, week after week, new members to a health club. Upon suggesting to her supervisor that adding more members would eventually require a facility with more space and more exercise equipment, without which lines would form and members would defect to competitors, she was advised to focus on recruitment.

Meanwhile, working in isolation, a co-worker focused on reducing costs by not investing in additional space and equipment. As expected, customers came and left.

I liken this organisational behaviour to my left wrist and right wrist being given different goals for pulse, my lungs being given an independent respiration goal, with my vision system, and pulmonary system given their own goals. What would happen to my body if these goals were simultaneously achieved? While pulling in opposite directions, would I live long to tell about it?

In reviewing goal setting let me flash back to my engineering training in heat transfer and fluid mechanics, when my graduate advisor drilled me and my peers on how to address the technical assignments we would receive once employed. "There will be situations," he predicted, "where you will be given five minutes to perform an analysis and, in most cases, there will be three possible answers; zero, one, and infinity." He coached us on how to quickly assess the context and choose from these three options.

Little did I appreciate how often zero and infinity would appear together, as stretch goals, as they do in management by extremes. Years later, in my studies of robust design under Genichi Taguchi, I was reminded of the grouping of zero and infinity as two of the three common goals when applying his methods of quality improvement.

An early consideration was the selection of the performance characteristic for the product or process being improved, and its corresponding goal. Characteristics which were ideally zero were known as smaller-is-best. Those ideally infinite were labelled larger-is-best. The third category was reserved for situations where a finite value was ideal. As with salt intake, these were branded nominal-is-best characteristics. Upon reflection, Taguchi eventually explained the systemic weakness of both smaller-is-best and larger-is-best goals and encouraged the wider use of nominal-is-best goals, with appreciation of a greater system for end use.

As an example of a more systemic approach using a nominal-is-best strategy, consider the health care advances associated with removing a colon, a procedure known as a total colectomy. For patients with Crohn's Disease and diverticulitis, plus various forms of colon cancer, this procedure has been a life saver. Some 20 years ago, a surgical team could routinely perform a total colectomy in less than two hours, often performing multiple procedures in a single day.

Fast forward to today, when this procedure can be performed in eight to ten hours. With all of the advances in medical science, how could the added six to eight hours of process time possibly symbolise an improvement? Yet it does represent progress when considering the patient's recovery time, not to mention shorter hospital stays, faster return to diet, and less pain from the incisions. The longer procedure is needed to accommodate the use of an advanced laparoscope, one which requires several 6mm incisions and one 2.5cm incision. The lower overall cost of solutions, such as this advancement, represent an incentive to think systemically and well beyond the mechanistic attractiveness of management by extremes.

While Deming was an advocate for continual improvement, he appreciated that a focus on improvement requires a method. That is, by what method, including with what resources, will we perform the improvement? And, will the improvement be done with respect to a greater system of operation, or, are the so-called improvements achieved in isolation, pulling in opposite directions? Let goals of zero and infinity be reminders of the potential dangers of management by extremes.