



LEAN MANAGEMENT JOURNAL

September 2015 | www.leanmj.com

THE HIDDEN DETAILS

Looking at the unexpected discoveries from a lean transformation that can make a world of difference.

Organisations and interviews featured in this edition include: LMJAC, ETS Nord, EnstoNord, Autoliv, Duggan Associates, Valeocon Management Consulting, NTNU, PP Electrical Systems, Joe Bell and Bill Bellows.

IN THIS ISSUE:

LMJAC 2015: We review the annual LMJ conference and bring you all the highlights.

Lean travels - Estonia: LMJ editor Andrew Putwain travels to Estonia to visit manufacturers in the Baltic country and see how firms there are using lean to take on the world.

5S - We are doing it wrong: Torbjørn Netland teaches us all the errors and unknown details of 5S that we need to know.



Out of the blue: Wouldn't it be nice

In this issue of his monthly column, *Bill Bellows* whimsically wonders when organisations will start to acknowledge variation will always be there and how to deal with it.

Long before Adele and Lady Gaga spoke their first words, The Beatles and The Beach Boys were music industry leaders in the US and UK, as well as worldwide airwave competitors. While neither group may have heard of Alfred Politz, a pioneer in the field of market research, they would have surely appreciated his perspective on competition. “Nothing can do you so much harm,” he fancied, “as a lousy competitor.” For 50 years, Paul McCartney and Brian Wilson have acknowledged each other’s contributions to their own song writing. On several occasions, Wilson praised The Beatles’ album *Rubber Soul* as providing immediate inspiration for his classic love song, *God Only Knows*. In turn, McCartney has often placed *God Only Knows* at the top of his all-time favourites list.

My appreciation of Wilson and The Beach Boys has grown significantly in the past month after viewing the Brian Wilson “biopic” *Love and Mercy*. Through this blast from my past, I was reminded of another Beach Boys’ classic, *Wouldn't It Be Nice*, and the yearning, “Wouldn't it be nice if we were older, Then we wouldn't have to wait so long.” In reflecting on this adolescent wishfulness, I propose a wishfulness that organisations; public, private, and even governments; improve their understanding of variation and how it impacts the systems they design, produce, and operate.

Fourteen years ago, I visited the elementary school classroom of our then 8-year old son. At his request, I met with his classmates and shared stories about rocket science, given my employment in the industry. I presented several videos

While counting is quantity-based, wouldn't it be nice if we realised that the differences between the entities being counted is quality-based, with a focus on use //

of rocket launches, including the Space Shuttle. I also used the opportunity to expose these young minds to the concept of a theory, as well as the concept of variation. Given my daily efforts to explain these concepts to adults, including rocket scientists, I wondered how 8-year olds thought about theories and variation. Upon asking if any could offer a definition of a theory, one raised her hand and replied, with little hesitation, "a theory is a prediction of the future." Needless to say, I was astounded by the clarity of her answer. All I could add, quietly, so not to confuse her, was "with the chance of being wrong." To paraphrase Russell Ackoff, learning occurs when our predictions are wrong; when our best intentions lead to unexpected outcomes (as when the pattern of variation changes) and we see our theory in need of revision.

I thereupon seized the moment by inviting her to join me in front of her classmates to participate in an experiment with a small glass marble. The experiment involved holding the marble in my right hand, at knee-height, and, upon releasing it, asking her to predict where it would land. She predicted a location. The marble landed several inches away. The experiment continued with a location prediction when the marble was dropped a second time. With little hesitation, she predicted that the marble would land on the same location as the first drop. Wouldn't it be nice if it did? It didn't. As the experiment continued, she and her classmates learned about the inevitability of variation, that the marble would land in a different location with every drop. For a few minutes, we also explored the many causes of this variation in landing location, including subtle changes in the release height as well as orientation of the marble. Wouldn't it be nice if, years later, they entered the workforce with an ever-evolving appreciation of variation and its extensive causes? Wouldn't it be nice if they were mindful of Dr. Deming's adage, "*Variation there will always be, between people, in output, in service, in product.*"

In my November 2014 article, *Learning to Discern - Quantity and Quality*, (that article can be found here bit.ly/1VpSq0), I offered an everyday example of how we respond to variation when we enter a car park. I suggested that drivers readily discern differences in the location of each parking spot, as well as its width, length, and amount of shade cover. Yet, when counting the number of parking spaces available to customers or employees, the counting process ignores this variation and we tend to think of the spots as *absolutely* interchangeable. In such a *quantity-based*

system (parking spots are parking spots), these differences are not as important as matching the size of the parking lot with the level of employment or the expected number of customers. While counting is quantity-based, wouldn't it be nice if we realised that the differences between the entities being counted is *quality-based*, with a focus on use. Wouldn't it be nice if we realised that variation appears in *how well* the parts are eventually integrated into a system and, *how well* the system performs, day after day. Wouldn't it be nice if we shifted our thinking from the quality of parts, taken separately, to the quality of parts, *in use*?

For the 12 to 15 million spectators who watched this year's Tour de France, each one unique, the concept of counting stages and kilometres makes them all appear the same (without variation), as well as separate, as in counting the number of customers or suppliers for an organisation or the number of channels of cable television. Are customers and suppliers really separate from an organisation?

To the 200+ riders in the tour, who themselves are different, each mile is different and is seamlessly connected, as are members of a union. What Tour de France spectators see and what participants experience are worlds apart. Spectators observe, think of parts, count parts, but must inevitably cope with the great illusion of the separation of these parts. Genichi Taguchi used the concept of "loss" to describe the reality that managers of parts face, unless what they deliver to their customer is a collection of parts that lie in close formation, as when opening a box from Ikea. Like the riders in the Tour de France, those who use these "parts" know they are not parts at all, but rather "parts of something bigger," perhaps a book shelf. Participants understand and actively manage variation in stages, miles, customers, and parts, as they think of them with boundary-lessness, as a system. Wouldn't it be nice if we managed the variation in the parts as a being the parts of a system? In the spirit of Brian Wilson's adolescent wishfulness, wouldn't it be nice if the great illusion of independent parts was replaced by the realism of unity and interconnectedness and the amazing prospects for teamwork within any organisation.