

## Innovate or Die !! ... Why do so many lean efforts fail

Phil Ledbetter recently penned an article for Industry Week as a reflection on “Why so many Lean Efforts fail”. Although he covers many valid aspects in his article (which I have copied and pasted at the end of this newsletter) I think it is worth going deeper and adding some additional context ...

First, in many cases Desperation will spawn Innovation ... so a quick reflection about Toyota is required.

After the second world war Toyota was in essence not only bankrupt but their campus had been leveled due to war efforts. They still had an obligation to look after their employees (remember they believe in life-time employment and commitment)

At that time they were known for producing weaving looms ... but that market was no longer viable to support their employee base ... so they decided to manufacture automobiles and the operating protocol was simple and in essence is the base of the Toyota Production System ....

***How to procure parts, assemble them into a vehicle, sell that vehicle to a consumer and collect the payment before the suppliers were required to be paid !!***

Simple! The whole focus of production methodology revolved around anything that would decrease inventory levels or in essence improve inventory velocity. Once you grasp this all of the methodologies then start to make sense ... SMED, to reduce batch sizes ... smaller batch sizes means improved inventory velocity ... 5S or workplace organization reduces walk and searching making parts easily accessible hence also improving inventory velocity and the list goes on ... of course when Ohno visited Ford's assembly plant and witnessed the power of supermarkets it just added to the repertoire of improving inventory velocity.

But Why??? For any business, cash flow is KING and Toyota being near bankrupt this requirement was in the fore-front of their mind and hence the Toyota Production System was born and refined and defined ... yes it is a holistic system.

Unfortunately, as the methodologies migrated back to North America they were not embraced as a holistic method so companies just cherry-picked the Methodologies they resonated with thinking they were implementing Lean ... like 5S.

So for success of a Lean Implementation you need to find focus on an over-arching requirement like “Cash Flow” Which will then convert to improving Product velocity !!

With the advent of Covid I am certain a new TPS is being born somewhere since innovation is the mother of inventions So now read Phil's article with a new context ...

Where Lean Thoughts can become Reality

## Why Do So Many Lean Efforts Fail?

By Phil Ledbetter for Industry Week ...

There's been a problem simmering in the lean world for years. The problem is the overwhelmingly high failure rate. What failure means is subject to interpretation but the available surveys and studies done reflect a large problem. In my view, it's time for deeper reflection.

The results of lean implementations are discouraging. An Industry Week study in 2007, for instance, found that nearly 70% of all US plants used lean, but only 2% achieved their objectives. I could go on and on with literature reviews and case studies on the high failure rate of lean. Many have experienced disappointment and frustration. And after 30+ years it's not getting any better!

In the beginning, lean was based on the Toyota Production System (TPS). Over time, much has been added to lean practices, so that it no longer resembles the TPS. But don't take my word for it.

Since 1994, the largest Toyota factory and second largest automobile factory in the world, Toyota Motor Manufacturing – Kentucky (TMMK), has had a partnership with the University of Kentucky College of Engineering to teach Toyota Production System principles. Originally, they called the program "Lean," but later changed the name to "True Lean." The reason? To differentiate the TPS from the many additions to the lean world that don't line up with the Toyota Production System. Their website states the program's mission "is to systematically explore, study, and teach the workings of TPS. True Lean is a System. It is more than Kata, or Six Sigma, or a toolbox." I would add another popular tool, Value Stream Mapping, to this list.

Years ago Fujio Cho, former Chairman of Toyota Motor Corporation said in the Toyota Way, "Many good American companies have respect for individuals, and practice kaizen and other TPS (Toyota Production System) tools. But what is important is having all of the elements together as a system. It must be practiced every day in a very consistent manner—not in spurts—in a concrete way on the shop floor." In just a couple of sentences, Mr. Cho defined the difference between the Toyota Production System and the lean efforts of "many good American companies."

The system Cho references is Toyota's Just-in-Time system, and its importance cannot be understated. Taiichi Ohno, the Father of the TPS, believed that Toyota's Just-In-Time system was a "manufacturing advantage" for Toyota over the competition. In fact, for many years, he didn't allow anything to be recorded about it! Yasuhiro Monden, author of Toyota Production System: An Integrated Approach to Just-in-Time, has said that "the most important feature of the TPS is the "Just-In-Time" (JIT) concept... JIT is the central part of the TPS."

Monden and Ohno believed in the importance and advantage of Toyota's JIT system because of the many benefits it provided. Paced and synchronized workflow, reduced labor and inventory costs, improved manufacturing lead time, increased productivity, better quality, and increased on-time-delivery to name a few.

**Richard Kunst**

President and CEO

Tel: 519 651 2341 E-mail: [rkunst@kunstofsolutions.com](mailto:rkunst@kunstofsolutions.com)

Web: [www.kunstofsolutions.com](http://www.kunstofsolutions.com)

Lean Thoughts

## Output ... What is your role and accountability?

---

In *The Birth of Lean*, Koichi Shimokawa and Takahiro Fujimoto note that TPS “evolved gradually, step-by-step.” The founders contributed elements of the system and “worked heroically” to implement them. But none envisioned the TPS framework: “They were simply tackling problems that arose in the workplace, one-by-one, and their solutions accumulated and gradually became – collectively – what we now know as the Toyota Production System.”

The seed was planted in 1956 when, on a visit to the United States, Ohno saw how modern American grocery stores were using what we now call the pull method. Ohno adopted this method, and except for standard work, all of the tools and methods of TPS were developed to enhance and complement it. In fact, Ohno himself said that heijunka (level loading) and the kanban were countermeasures to problems encountered. They were “tackling problems that arose” using the pull method.

There’s no argument that the Toyota Production System is the gold standard for low-cost, high-quality, short-lead-time production. Given that lean is based on the Toyota Production System and that the JIT system is both “the most important feature and the central part of the Toyota Production System” and a “manufacturing advantage” for Toyota, why does lean fail so often?

There are many scholarly studies on the reasons for lean failure. One such study was published in February 2016 by the International Journal of Quality & Reliability Management.

The study systematically reviews 56 well-known academic papers published on lean, Six Sigma and LSS from 1995 to 2013. In the study, 34 failure factors were identified. According to the study “these 34 cover all others identified in other online articles.” None of these reasons for failure would be relevant with a full commitment to, and implementation of, a Just-In-Time system.

With a mishmash of tools, methods, and approaches one would think that one of these would work, right? Shouldn’t Agile, 6-Sigma, Theory of Constraints, Value Stream Mapping, Kata, Kaizen, or something else achieve success? While short-term improvement in some areas may happen, the results do not approach the efficiency of Toyota’s Just-In-Time system. Actually, this mishmash is the problem with widespread failure.

In a collection of his thinking on workplace management, Taiichi Ohno said, “The past is the past and what is important is the current condition and what we will do next to go beyond where we are today.” So, what should we do “to go beyond where we are today”?

The current lean smorgasboard is not based on Toyota’s Just-In-Time system. To be sure, there are some individual elements of the TPS like SMED, 5S, 8-Step Problem Solving, and TPM that can be implemented without addressing the production method. But these improvements, while desirable, do not result in a Just-In-Time production system.

What do we know today? Well we know the importance of Toyota’s Just-In-Time system and we know that it works. We also know what was done at Toyota to arrive at their JIT system. Shouldn’t any enterprise want a JIT system of their own and enjoy this “manufacturing advantage” for themselves?

*Phil Ledbetter worked in production leadership at Toyota Motor Manufacturing – Kentucky for 16 years. He’s the author of The Toyota Template, The Plan for Just-In-Time and Culture Change Beyond Lean Tools. Phil is the Principal Consultant at The Toyota Template.*

**Richard Kunst**

President and CEO

Tel: 519 651 2341 E-mail: [rkunst@kunstartofsolutions.com](mailto:rkunst@kunstartofsolutions.com)

Web: [www.kunstartofsolutions.com](http://www.kunstartofsolutions.com)