

Somewhere along the line a guy named Orlicky inventoried MRP, and it was ok. Basically it was a scheduling system that said if you want to sell one car (forecasted sales) you need to buy 4 tires to put on it (a calculated requirement). And it worked because it was just math, and people who understood it became experts. They dug trenches around MRP, put up barricades, and would sneer at times for no apparent reason at those who were not MRP experts. They would even sit at their own lunch tables and talking about BOM Explosions, and how often you should run MRP without making the system nervous, and things that most people did not understand. They sort of irritated people, but if it is any consolation to those who were irritated, the MRP guys probably did not date much, and most likely sex was completely off the table until well after marriage, if that was even in scope.

MRP worked until it did not work, and then came along Lean. Lean is about reducing waste, or as fancy pants people call it “muda” which is Japanese for waste. Lean brought with it a set of tools that allowed us to problem solve and take waste out. Just like a good saw can improve the rate at which you build a house, a good lean event can improve how you produced product to meet you customer needs. But when working with a saw, remember the goal is to build a house. The goal is not to saw, but to build. And when working with a lean tool, the same applies. The tool is not the goal, the goal is to meet your customer needs with good products.

Lean worked in some applications very well (repetitive), so we tried to make it work everywhere. In some low volume, high mix applications elements of lean worked well, but looked different than in completely lean environments. And sometimes “mixed” systems emerged, with both push (MRP) methods, and pull (lean) methods used in tandem.

Some companies got this and lived with it. MRP was a tool to drive forecast and some requirements. Lean was a method to reduce waste. But not all the Lean guys got it, and some became big giant penises. And these pricks really are annoying. And many of them are runners, so they are physically lean, so date and marry a nice looking person, which is fine as long as they do not piss me off, then I hate them for it, because I am really shallow that way.

Basically, these guy get themselves stuck on lean. More specifically, they get stuck on the tools, and the use of the tools becomes the goal. So a factory can build great Kanban systems, but if they missed the chance to flow, and provide better service, who cares how good the kanban system is? It is just the tool, I do not care what saw was used to build the house I bought, I just care about the house!

So how do companies hire these guys?

Lean Guys would get hired based on the interview process where they would tell you all about how they managed change at every level, saved hundreds of thousands of dollars in manufacturing costs, led kaizens, reduced inventories, all while improving customer serve to 10,000 per cent or more. They knew how to value stream map, talked of standard work for hourly and managerial employees, standard work in process levels (using the SWIP acronym), level loading, heijunka, voice of the customer versus voice of the process, waste and muda, and a boat load of other lean terms. Given the right audience to extol on the virtues of lean, they could go on forever about all the neat things they did before their factory closed and the jobs shipped out to Asia.

Done right, especially if there was another Lean Guy doing the interview, they could get hired in and do no wrong for at least the first six months of their tenure, while they were “fixing” things and changing culture.

Privately they would get together for lunch and coffee with the other Lean Guys who worked at companies that had done equally great things prior to closing their factories and sending the work to Asia, and explain all the errors of the prior management team. They would shake their heads in disbelief at the archaic thinkers that had preceded them, talk about muda, and sip their coffees to re-energize before hitting the floor again to change things.

A typical Lean Guy would start his journey by walking around the shop for a few days, “walking the process”. They would then crank out a few spaghetti diagrams. Sooner or later they would value stream map the FULL VALUE ADD process, often talking half the plant staff along for a week long voyage of discovery. Butcher paper rolls would be hung from walls, and every color of sticky note would come out and go up. Then they would draw little factories and arrows, and periodically put a kaizen burst up on the chart. After a week of bagels for breakfast and pizza lunches, things would need to be wound up as all them were now bound up and unable to crap, plus their bosses wanted to see the map, so they could show it to their bosses at some quarterly thing, and talk about how the culture was changing

Inevitably, a declaration would be made that the lead time assumptions we had built our business around were inherently wrong. We would be shocked to find that the real lead times were not 30 days, but closer to ONE FULL YEAR! We had been fooled because while we could often get our flour in one day, and that while we could bake the cakes, frost them, and get them distributed in two weeks, the reality was it took wheat ONE YEAR TO GROW!¹ So our full lead time was ONE YEAR. They would often get almost emotional, like they were on the cusp of getting little Timmy out of the well, and wait for the full weight of their discovery to sink in to their audience.

Then in almost hushed tones, they would tell you the path out of this situation, and how it was a journey, and would be hard but would really change everything about how we do our work and service our customers (presumably this was some code word for shutting down the factory and outsourcing everything to Asia). Occasionally, a term something like “not everyone will change” and “not everyone will make it” would be dangled (the dirty coppers just got Louie!) to make sure everyone would know things were really going to change this time.

Usually, at this point, an executive silverback would declare his absolute support for the coming change and make sure everyone knew he too was serious (occasionally it was a she, but most silverbacks are male).

Lean guys could also fail and blame others, for awhile at least, and this did cost people their jobs. One Lean guy, let’s call him Torch (who did not jog and had no woman) took the new VP around with the

¹ These guys would tell you the time it takes to crap is not ten minutes, because it would take ONE FULL DAY to eat, digest, and defecate. By logical extension, they would be claiming to be the Ex Lax (or really cheap beer) of manufacturing. Wow, I want to be one of them!

manufacturing and plant managers, and proceeded to show him all the areas he had put Lean in, and which the Manufacturing and Plant managers had failed to sustain it. Machine center after Machine center “Here I put in Kanban, but they failed to maintain it...” “Here I put in flow, but they failed to maintain it...” for a solid 30 minutes. Then half way through the VP said “Have you ever implemented anything that stuck?” and Torch went red faced.

Then he went to the next work station and said “And here I put in a Heijunka, which they failed to maintain” and the tour continued, with Torch tripping over his own dick every step of the way.

So do I have anything of real value to discuss here? Probably not, but if I did it might be below. It certainly is not above this line.

My own experiences with both push and pull systems includes a few fundamental observations:

First, neither push nor pull reacts terribly well to significant change, at least in the short term. With either one, you have to do the work to realign demand and inventory plans. With Push, you’ve got to ratchet down forecast and adjust safety stocks. With pull, there are a whole lot of kanbans to resize, and historical consumption maybe very misleading.

I also see the issue of plug it into the kanban calculator or economic order quantity calculator, call it what you want to, and take the value as the value. If you do not walk out and see what is happening, how things are sequenced on machines, how resources are used, you are going to have a frustrating experience, sooner or later.

Ideologues are also a major issue. People who just don’t see that you have to take what you can from both and make it work even if it is only 80% “correct”. The Quality of a solution times the acceptance of the solution will give you the value. You can be the smartest person with the best solution, but if no one is interested, not much is solved.

Regarding SAP, my own experience is that transactions are the enemy. Reducing locations, BOM levels, and transaction points are critical. Point of use kanbans, purchasing cards, etc., all work great with SAP, as long as you have a clean material and transaction flow. Do a spaghetti chart every time you are trying to figure out flow, both for materials, but especially for transactions. And don’t be an ideological a\$\$.

And lastly, pay attention to “gut” instincts from experienced people. Don’t just label them as “resistant to change”. They may be doing things for a reason. These darn informal systems exist for a reason, and it’s not because people were bored. It is not push or pull if it is just plain bad. Bad flow, bad quality, bad planning and execution cause a lot of stuff to happen, for a reason.