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SOLVING YOUR DAM PROBLEMS

Why Lean, Six Sigma and TOC Methodologies will DAM Up Your Company

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It isn't the ideas and tools contained in methodologies that are bad for you; it's using a methodology of any kind that will kill your business. If you want Lean to work, then you must not apply it as a prescription for everyone to follow, but something else. In order to get at the something else you need to make a simple choice between waiting for others to tell you what to do or moving forward with all of the help you can find right now and deal with immediate reality. The former describes a stationary state, or what I call a DAM thinking state. The latter describes a dynamic state, or what I call a FLOW thinking state.



was. Great fanfare. Great expectations. And then the slow, steady, grinding halt. Why?

I remember the success I had personally with Lean. And then I watched others try to do the same thing and fail. Why? I remember when Theory of Constraints (TOC) consultants attempted to fix a lamination plant where I worked and they failed, too. Why?

Is there something wrong with us in our industry, where we continually fail with the latest and the greatest? If it is any comfort to you, we aren't alone. Consider the learning organization with its systems thinking and how the best and the brightest companies, like Polaroid and Kodak, fell short. Or reengineering organizations with its massive employee cuts, causing companies like Walmart and McDonald's to rise to the top and our most innovative companies like Hewlett Packard to falter and lose their way. All methodologies have a litany of failure. All methodologies inevitably halt the flow of change and progress. Picture a methodology as a dam blocking up all of your company's potential.

All methodologies are destined to fail within a complex system by definition. What is a methodology? It is about following a set of rules, in a disciplined and unvarying way. If you don't get the results you need, then you have non-believers who must be punished for not following the rules. Or, if the methodology

The Trouble with Methodologies

Don't get me wrong. I am not against the content that any of these methodologies provide. As I look back at this industry and my career, when I was a chemist working in a small board shop in Salt Lake City, Utah, called Beehive Circuits, I remember my first exposure to methodology. Remember Quality Circles? The promise? The excitement? I remember watching a film shot at Hewlett Packard, espousing the great results they got with this methodology. I also remember how spectacularly it failed at Beehive. Why?

I remember being taught Six Sigma at AlliedSignal and being part of the first wave of black belts before GE even knew what it

is bad, you need to follow a different set of rules. In the former, you fire people or ostracize people and in the latter you adopt a different or newer methodology. Ever wonder why Six Sigma became something like a religion? Because it wasn't really about solving problems as much as it was about following rules. Challenge the rules or break the rules and you risk facing the inquisition!

The real tragedy with these methodologies is they contain powerful tools and techniques; however, once a methodology fails to eliminate all of our problems we say, "The methodology doesn't work and I want nothing more to do with it or anything concerning it." I know of a plant that brought in Eliyahu Goldratt's company and now will not touch, think or consider anything associated with the Theory of Constraints again, ever! When the methodology fails, because the expectations are set way too high, they are banished to the great scrap heap of ideas, never to be considered again. Consequently, we are left with an ever-diminishing set of tools to solve exponentially growing problems. This is a scenario for disaster! It is the main reason why I feel so many board shops have had to close down here in the United States.

When I first stumbled on the Theory of Constraints, I was told to go out on the factory floor and find out what operation had the greatest amount of WIP in front of it. Once found, it would be a simple matter to just focus on speeding up set ups, reducing the number of steps, ensuring adequate human, material and equipment resources, and then realizing a huge return. Well, if you were like me, all gung-ho ready to go, you went out on that plant floor and found there were piles in front of almost every operation! Where is this so called constraint? The theory was fine, but the prescription was wrong and useless. Theory of Constraints should not be applied as a methodology, but rather as a construct.

What is a Construct?

Consider the literal definition found in Merriam-Webster's dictionary: to make or form by combining or arranging parts or elements. Last month I presented you with a problem that was very Theory of Constraints-like and I presented as a construct. I didn't tell you what steps to follow: 1, 2, 3. Instead, I offered a detailed scenario for you to think about, experiment and model. I showed how the constraints change depending on product mix. In this case it wasn't about finding and improving the constraint, but rather discovering how optimizing on the product mix can maximize your plant's profitability. In fact, this fact, which is very real, has created yet another methodology called Throughput Cost Accounting, or TCA. As a methodology, TCA has its believers and non-believers. As a construct, on the other hand, we can all learn, discover and make our manufacturing operations better.

Where Does That Leave Lean?

What about Lean? Lean can be spectacularly successful or marginally successful or it can completely bomb. This perplexed me for the longest time. We have all heard about the seven forms of waste, such as over processing, inventory, waiting, etc. However, there is an eighth form of waste that isn't discussed in Lean: the waste of human potential. This is discussed indirectly, when people write about the Lean culture, employee participation and cross-functional teams. In this type of cultural context Lean becomes a construct, something from which we can all build. However, if we are looking for a methodology, a perfect way to solve our problems, then Lean will bomb. As a construct, there must be flexibility on who should be on the team, which tools to be used and in which order, and how to allow a free-flowing interchange of ideas in an egalitarian and meritorious sense. When it becomes a

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rigid, intolerant, top-down thing, i.e., when Lean becomes a methodology, then it fails.

Because of this observation, I came to look at the world as a choice and so can you. You can make the choice, to wait for others to tell you what to do and remain stationary, or you can make the choice not to wait, seek out all the help you can find, deal with immediate reality and just do it fast. Once again, the former is a stationary state, or DAM thinking; the latter is a dynamic state, or FLOW thinking. Around this idea I designed a simple construct in order to help me predict business outcomes.

Let me give you an example. Let's say I went to all of the training, did all of the project work required and became not a Six Sigma Black belt, but a Six Sigma Master. Let's say you are just a green belt. If you are in a meeting with the Master and he tells you how great he is, are you going to want to work with him? This is the ego DAM and blocks productivity.

Consider another example: If you think the project management system derived from TOC, known as Critical Chain Project Management methodology (CCPM) is the pinnacle, will you entertain a discussion with me about the SCRUM Project Management construct? No—why would you? This is the learning DAM and this blocks discovery. Now, when we have both the ego DAM and the learning DAM, we say two things to ourselves: 1) we are better than anyone else and 2) we know it all. When we are like that, we are perfect! And, if we have a burning need to be perfect, and we believe the Lean methodology is perfect, and we have been trained in that methodology in order to attain perfection, then we have become a Crusader! Like the old Norse battle cry I learned at St. Olaf College, I say to you, "Fram Fram Christman Crossman!" Slay all of the non-believers as you waste and strip all of your company's human potential.

Conclusion

Our industry has been afflicted with numerous methodologies. We should be open-minded to the ideas contained within these methodologies and realize we aren't perfect; likewise, we should not expect the methodologies people come up with to be perfect. What we should focus on is designing our own constructs that engage people productively into solving complex problems. Unfortunately, as I look back, too many of us are still looking for that perfect methodology

that will remove all of our problems and trouble. This is unproductive thinking. Problems are good. Create a population of messengers that will bring problems to you, because your growth and your progress will stop immediately when you stop discovering problems. That is what I talked about in my October column, [Don't Shoot The Messenger: Make Your Quality Meetings Fun](#). If your quality meetings aren't fun, why aren't they? Your people will lead you to the promised land. Don't impose a methodology that will sap them of all of their thinking, desire and creativity. Looking forward, we have an opportunity to think differently and make our businesses much more competitive, just by making a simple choice between being a DAM thinker or being a FLOW thinker.

Methodology or construct. What is your choice? **PCB**

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