

Failure to Launch?

The Top Five Reasons Why Lean and Six Sigma Initiatives Fail

Reason 4 – Missing Foundations

September 20, 2014

This is the second installment of a series of five papers that will run between now and the end of 2014 on why Lean and Six Sigma initiatives fail and what to do about it. The number one reason will be available in December!

Here is the fourth most important reason for failure – **Missing foundations**. The traditional approach to Six Sigma or Lean Six Sigma starts by identifying opportunities to improve processes. In the first installment we discussed how picking the right opportunities or projects was critical and that choosing the wrong projects was a frequent cause of failure. However, a common reason for not choosing the right process for improvement is because the organization hasn't yet formally identified or defined what their processes are, have no formally stated quantifiable goals for judging the success of a process or don't have systems established to collect data to assess performance. There is ***no foundation for assessing and selecting improvement projects and no infrastructure for regular assessment of process performance.***

What does a solid foundation look like? How can you assess whether your organization has an adequate foundation and what can you do if it doesn't?

A sound foundation looks like this.

- There is a well-defined and documented business management system. Process documentation should include descriptions of what are the core processes needed to run the business and thrive, their inter-relationships, the process owners, the procedures and work instructions that support them, what resources and capabilities are required to execute them and who's responsible for maintaining them and maintaining process stakeholders current on changes to them.
- The process should have clearly defined metrics that allow the organization to monitor them and conclude if the processes are performing as intended.

- There should be infrastructure in place to enable the regular collection of process metrics.
- There should be a culture of regular review of performance metrics.

You may recognize these characteristics as those that are required for ISO 9001 certification. In fact those same characteristics are indeed the basis and are fundamental for ISO 9001 certification for an organization's quality system. So, **is possession of an ISO 9001 certification a guarantee that the organization does have an adequate foundation for successful implementation of Lean and Six Sigma? It depends.** ISO 9001 is concerned with the quality system, not all aspects of the business. One has to also consider how well founded the certification is. Unfortunately, there are many organizations that manage to squeak by and pass the audits by going through motions that ISO requires to certify but they don't really live it. This of course depends to a great degree on the rigor and experience of the ISO auditor. Other organizations do have good quality systems that certainly do warrant the ISO certification but they haven't extended the same process structure, definition and execution to other business processes. That said -- the **ISO norms provide an excellent model for an organization to assess readiness for Lean and Six Sigma.**

The reference to ISO certification begs the question -- "**well, if we are ISO certified, we really do live it and we do apply the principles, why do we need Lean and Six Sigma?**" The answer is -- you may not. But only if you can confidently say and demonstrate that not only are you disciplined in the execution of processes but that the processes are highly predictable, competitively performing, maximally efficacious and are continually improving at a competitive pace. If you have accomplished that and can show the evidence with data, you don't need Lean and Six Sigma because that is what Lean and Six Sigma methodologies do. ISO certification doesn't require that the organization is competitive or best in class only that you have a system with the characteristics described above and that you are continually working to improve performance at some measurable pace. Lean and Six Sigma are methodologies designed to accelerate the pace of continual improvement.

The Process Maturity Model is a model that has wider applicability and provides a framework for assessing and guiding an organization in its quest to beat the competitive and maximize its use of resources to achieve its mission. The concept of the Process Maturity of an organization is a concept that Phillip B. Crosby wrote about in his book *Quality is Free* in 1979. It talks about five stages or levels of maturity with level one typical of new organizations just starting out with most processes ad

hoc, undocumented and not so repeatable with unpredictable outcomes and Process Maturity Level five (PML5) with highly predictable disciplines documented processes that are continually improving.

The maturity levels go like this:

- PML 1 – Processes ad hoc
- PML 2 – Processes somewhat repeatable due to sheer repetition but not well disciplined or documented
- PML 3 – Process documented and disciplined but weak on application of metrics to manage and control processes
- PML 4 – Characteristics of PML 3 but with effective process metrics and control of processes, understanding and management of special cause variation and therefore predictable
- PML 5 – Characteristics of PML 4 but continually improving and innovative, continual reduction of all sources of variation – special and common cause

So, for the balance of this paper, we can refer to PM level as a short-hand for the state of readiness of an organization for Lean and Six Sigma. The ideal foundation we are talking about here would be PML 3 or 4. **Lean and Six Sigma are vehicles for getting the organization to PML 5.**

So what's a girl to do if the organization is PML 2 or between PML 3? If we had data and a frequency histogram available on where organizations are in terms of PML, we probably would find the inner quartiles (the middle 50%) would be somewhere between PML 2 and 3. This will vary industry to industry. In some industries, just to stay in business for very long, they better be at least PML 4. In others, you might not find any organizations with more than PML 3. However, a good cross section of all industries, public and private, PML 2 to 3 is pretty typical. So, we better talk about what to do for those cases.

The further along the PML scale the organization is, the easier it will be and the more likely it is, all other factors aside, that the organization will be successful. But it is possible at any level -- as you will see once we issue the installments on the 3rd, 2nd and 1st most important reasons why organizations fail. For a PML 2 organization, there are **two basic approaches that can work**. Both require strong committed leadership but especially the first one. The first approach is to bring the whole organization up as a whole, little by little. First identify all core processes and accurately document them. Next assign some key performance indicator metrics to them and lead regular reviews of them. Once that is part of the

culture and people are able to visualize their processes and recognize the challenges, you are ready to introduce Lean and Six Sigma as strategies to begin improving them. Getting to that point will depend on the size and culture of the organization but could easily take two to five years.

The second approach will allow you to begin much sooner with the application of Lean and Six Sigma.

I like to refer to the second approach as going long and deep -- as opposed to broad and shallow. Identify an area that has good visibility and is generally recognized as essential to the business. In a manufacturing organization, you might choose a significantly important manufacturing line. Put together a team of very willing and capable members that represent a cross-section of the functions necessary to execute and support those processes. In the manufacturing example, that might be process equipment operators, quality engineers and technicians, maintenance support and supply chain personnel. Be sure that the team includes members representing different levels of the organization chart. You will need process experts, the people who do the actual work of transforming inputs (raw materials) into the outputs (the products), those that others naturally follow and those that have positional authority to remove barriers and provide credibility to the idea that management is indeed committed.

Once this team is assembled, **prepare them with the tools via formal training and practice that they will need to complete the model Lean and Six Sigma project with clear benefits to the organization.** If the organization is a PML 2 organization, you will need to identify processes that you can get up and running with good and plentiful data relatively quickly. Take a Lean Six Sigma approach. Document the current processes, begin to take data, identify the improvement opportunities, improve their design with Lean process design principles, apply Six Sigma analytical techniques to understand them deeply and optimize them.

Once completing the model Lean Six Sigma projects and communicating the success to the rest of the organization, **look to the team members as possible trainers and coaches** of others in the organization. Have them develop the strategy and roadmaps. Supplement their efforts with external support to assure they have the necessary guidance and support to be successful.

In summary, having the **right foundations** will be important to success in Lean and Six Sigma implementation. Lack of a solid foundation is a frequent cause for failure. The **Process Maturity Model**



provides a good framework for assessing readiness or more correctly how ease it will be to be successful. A **“going long and deep” approach** with the proper commitment and support and a **balanced enthusiastic team** or teams to carry the pilot projects can work for organizations at any level of process maturity – PML 1, 2, 3 or 4. PML 5 is the goal.

That’s what we have for you this time. Projects are key. Foundations are important. But, good projects and foundations alone aren’t all you need. Look for the October installment for reason number three in the count down.

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