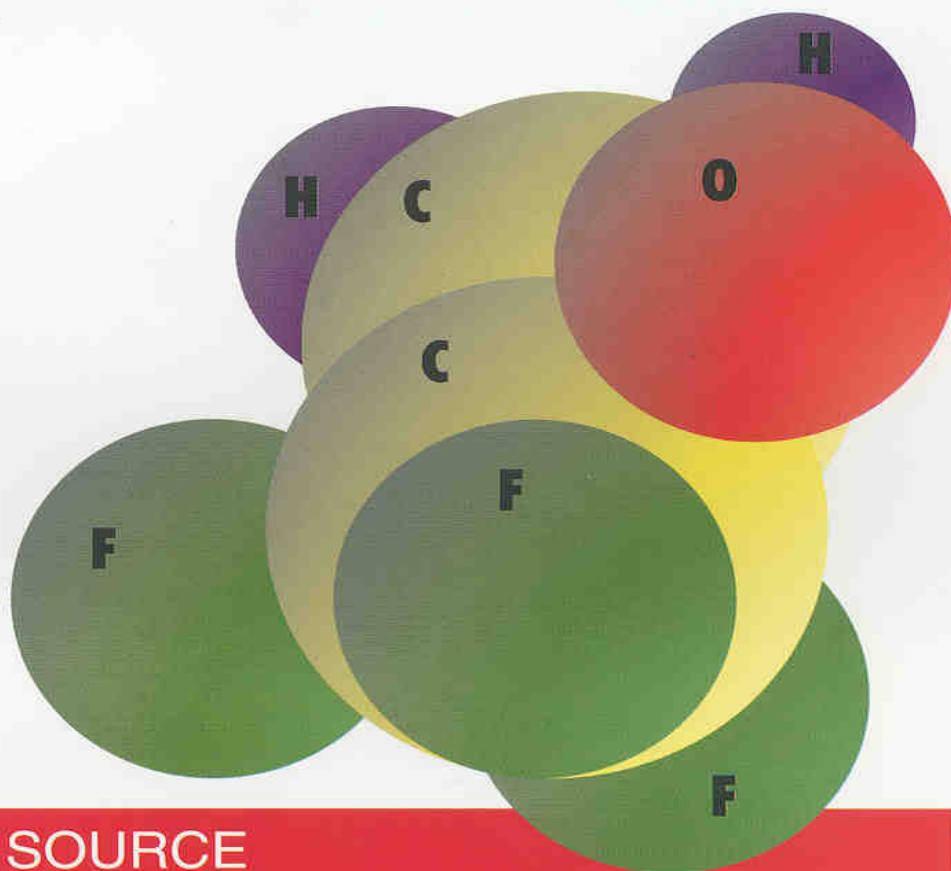


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The Lean Perspective

Lean Transformation...A Framework for Making the Transition to Lean (The ninth in a 9 part series on Lean Enterprise and the tools and techniques employed to affect change) by **Patrick Lucansky, Larissa Potapchuk and Robert Burke.**

Lean transformation is a lengthy, gut-wrenching journey for any company. The expedition can be fraught with many perils; disillusionment, missed expectations, cost-overruns, lost business, and worst of all, unemployment. The theories of the Lean transformation process evolved with the advent of Total Quality Management in the 1970's moved through Just-In-Time and Reengineering in the 1980's, World Class in the early 1990's and Lean/Six Sigma in the later 1990's to the present day. In a study conducted with 45 companies spanning six industries, research shows that over 70% of all transformation efforts fail to deliver the desired results while almost 50% of all Lean transformations equally failed. Whatever title is attributed to this, 'the journey to Lean is truly about people and processes efficiently delivering value to the customer, the stakeholder and the company.'

Journey Justification



Why do companies embark on these transformations if the road to success is long, difficult and mostly likely to lead to failure? The payback is tremendous when you succeed! Companies that have been successful in transformation have reaped the benefits of reducing cycle-times by 95%, improving quality by 300-400%, reducing space utilization by 50%, improving customer service 100% on-time every time and reducing unit costs by 30%.

Companies are pressured to make changes and produce results from a myriad of forces. Internal pressures come from Boards of Directors who are under fire to increase shareholder value and meet Wall Street expectations, from owners who desire to increase their net worth, from employees who want to build a world class organization that meets and exceeds customer expectations, and finally, from suppliers and customers who have already made the journey.

Change can be driven from additional external pressure points, such as industry moving into new technology, competition becoming lean or introducing a new product/process, end-users demanding next generation or new technology, regulators requiring greater 'control' over your processes, or the economic climate changes due to world politics.

It is no wonder senior management staffs are having trouble deciding what to do, when to do it and what to expect. The good news is there are firms succeeding. Opportunities abound even though only about 10% of companies today have truly achieved a lean transformation with realized expected results.

Model and Road Map for Change

While lean is about principles and rules in addition to tools and techniques, lean transformation is about learning and experimentation, not just project management. It is important to understand that the organization will be embarking on a journey altering the decision points and business behaviors supporting operations, more than just implementing new tools and techniques. The focus needs to shift and the organization needs to think from an enterprise point of view while connecting it back to corporate strategies and customer needs. Hence, the goal is to provide for sustainable long-term success, not just the short-term 'bounce' from tool and techniques. It is critical to understand that these journeys extend well beyond the factory floor and into all functional departments that incorporate the business, including the front office, sales and marketing, finance, engineering, quality, etc. Lean transformations encompass strategic, operational and tactical improvement programs which truly represent a change in the mindset of business operations.

Reason for Change

The initial first step in any transformation is to identify a need or reason for change. These needs must be strategic in focus, like improved customer service (i.e. improved on-time delivery to 98.5%, improve order fill-rate to 100%), reduced cycle-time, increased speed to market, etc.

Change should not be done for change sake but be driven by customer demands and stakeholder requirements. Once a strategic need has been identified, it must be linked back to the corporate vision through corporate-wide communications. Senior staffs need to feel that they can not only support the change but they can participate in the achieving the change. No single person or department should be held accountable for the entire transformation except for the most senior staff...CEO/President/Owner. Employees throughout the organization, from middle level managers to floor level associates need to be on board with the transformation, know what is coming their way, and how it will affect their jobs.

Prioritization

The next step is to determine the prioritization of the 'lean transformation program' as this is a key ingredient to success. Every member of the organization 'from the bottom to the top' needs to know the importance level of the effort, i.e., where it ranks on their priority list. Experience shows that, if the lean program is not ranked within the top two priorities, it will not succeed and should be halted.

Change Readiness

During the assessment of priorities and the placement of the lean transformation program, an assessment of the organization's 'readiness for change' needs to be completed. Multiple factors need to be understood to assess 'change readiness', through a few different methods. An understanding of change readiness will result from a review of the type of activities, pressures, and successes the

organization is facing. Included in this are the most recent change programs undertaken, organizational rumors, key personnel placements/shifts, industry/external pressures, past successes and failures, etc. This is accomplished through a number of different tools and surveys, such as management interviews, town meetings and surveys given to the entire organization. Organizational surveys are especially critical in assessing change readiness. Besides providing critical decision-making information, this type of pulse-taking highlights the need and importance of organizational involvement. If the organization has seen a few change programs not succeed, then a review of these failures should be undertaken to understand how the lean transformation needs to be addressed in order to avoid the pitfalls of prior programs.

Most companies underestimate the power of an existing culture to squash transformations, especially one where previous hostility and animosity has reigned. The distance between current state and future state can be wide and deep. The cultural openness to the transformation process is the critical component to making the change sustainable and palatable. It is imperative to know who to involve, when to involve them and why. The use of outside behavioral consultants can provide a cleaner look and smoother approach in this area.

Urgency and Risk

A key step in the transformation effort is to understand and communicate the sense of urgency and associated risks to the organization. Experience has shown if companies fail to grasp the importance of moving rapidly through strategic project planning/management, there will be added bureaucracy, missed expectations and unnecessary meetings. Senior management must provide timescales for completion that test and even stretch their staff's abilities and resolve. With the exception of cultural change, most well managed operational transformations can be achieved in relatively short time frames, such as 3-12 months. From a cultural point of view, these efforts can take upwards of 24 months to become fully imbedded.

The company must also assess the riskiness of each project and component of the transformation effort. Some efforts are "no-brainers" and receive immediate approval while others may require extensive research and negotiations with external regulatory entities. Organizations should form an internal review board tasked with the responsibility of deciding within the timeframe of a single meeting whether a change effort or solution is acceptable (in terms of risk) or needs further review. In this way, transformation teams can continue working with minimal interruption.

Organizational Communication

The next step is to *Communicate, Communicate, Communicate*. People at all levels want to be informed and feel that they are wanted and needed. The only way to do so is to provide as much information to them as possible. Moreover, it

is critical to provide them access to any information (sensitive or not within reason) they need to succeed. Organization's implement the use of 'program/project rooms' to highlight the importance of the transformation and provide information about the effort, progress achieved, project plans, team activities, accomplishments and lessons. This is an effective way of sending a message of 'two way communication', accountability, involvement, and progress to the organization. Key members of the transformation team would be responsible for updating the communications on a periodic basis, generally related to milestones on the project plan. Companies who withhold information are condemning the transformation even before it gets started.

Change Justification and Measurement

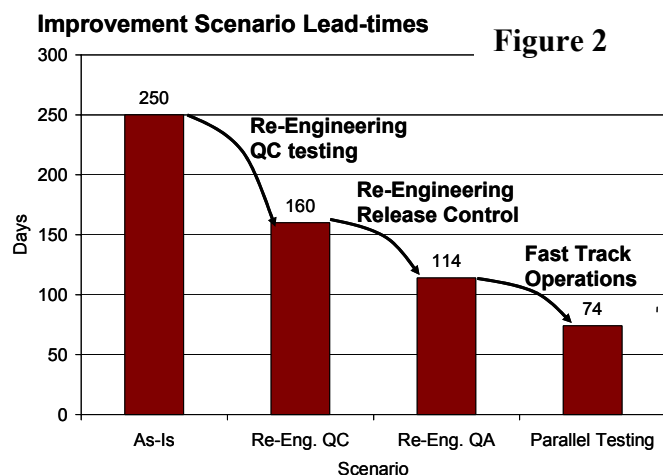
The next step is to make the case for change and formalize the benefits. This entails collecting and analyzing the data, understanding the implications of action or inaction, producing a clear statement of the transformation, and finally, attributing the benefits expected to be achieved through the change effort. Collecting data can be the first test of your success. In some cases, measurement devices or tools need to be implemented to obtain the data as it did not exist or was being captured in the wrong format. Once the data is gathered, a period of analysis should occur looking for trends, gaps, omissions, issues, and even successes.

From the data analysis, a statement of need should begin to emerge. This statement may be in the form of a question (see figure 1). To solve the issue at hand, the appropriate tools and techniques can be selected to provide the desired outcomes (See figure2). When agreement has been reached within the organization, the measures of success and the approach for the overall change effort can be developed

What actions must ABC Biotech take to ensure that QC does not become a constraint as production constraints are released?

Figure 1

A measurement system to track progress and a metrics system to change behaviors must be designed. The measurement systems should consist of the tools by which success or failure can be determined. This should be simple to read, easy to analyze and producible by those affecting change. Many companies err here by using purely financial measurements produced by the



finance department. While these measures are important, sole reliance on them will alienate the teams, drive the wrong behavior, and send the wrong message to future teams. Management and staff alike will need to have personal measurements (potentially as part of their career review process) which stress the importance of the change efforts and the desired results. If [customer service needs to be improved, measuring sales on volume and production on pieces produced will not only hurt customer service, it will put both in a completion for the same resources. It is highly effective to align the measures and the metrics with organizational goals and needs in order to achieve a better recipe for success.

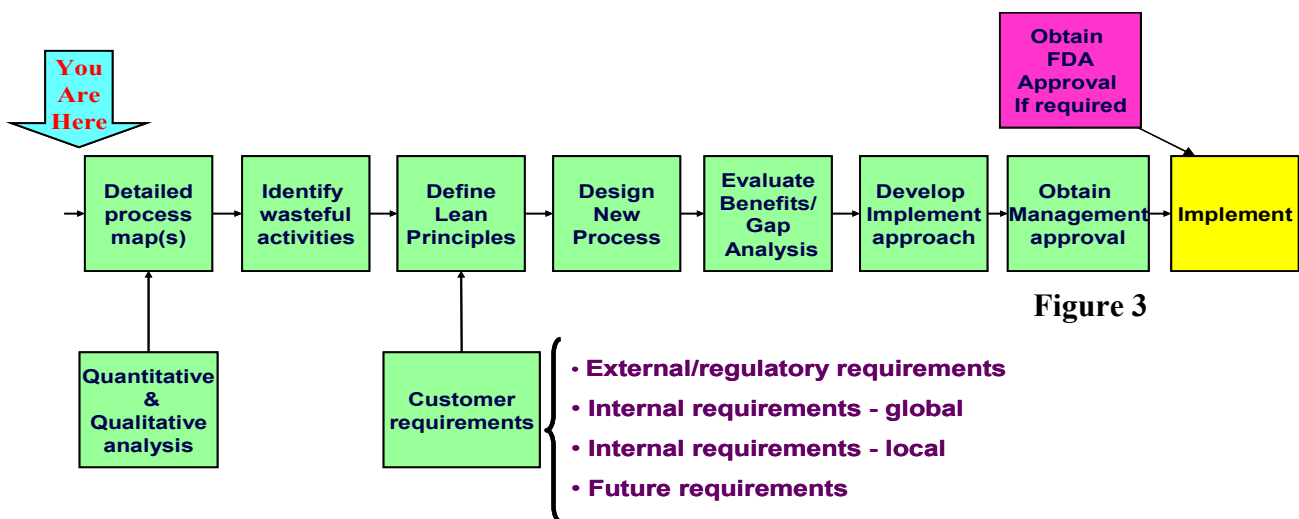
Roles and Responsibilities

As operations transformation to lean, job roles and responsibilities change. Greater interaction, communication, information exchange naturally occurs between functions. As a result, job responsibilities become more cross functionally dependent. As processes and information availability change, so should the expectation of job activities reliant on this new operational environment. Measures of performance can be tied to the effectiveness of sharing information across functions. Historically, this has been challenging since tools to facilitate this information sharing across functions have not been integrated into operations.

Structured Methodology

Selecting a transformation model or an approach for disciplined change is the next step in the process. While there are many models and derivatives of models available to choose from, it is strongly suggested that following a disciplined approach like “Plan, Do, Check, Act”, “Six Sigma” or our structured management program “Lean Management System (see figure 3). The key is to select a methodology that best suits an organization's needs and follow it religiously. Most failures occur at this stage due to a lack of a solid methodology, inconsistent adherence to operational plans or halfhearted support of the vision.

Once the methodology has been chosen, key strategic projects should be



identified and 'owners' should be assigned. These operational projects which will accomplish [the organization's higher order goals established earlier. Here, the tools for a successful change effort can be connected to each project. Implementation design and planning are the critical components to success.

Celebrate your Successes

Celebration of successes and acknowledgement of failures is the next step in the transformation process; this allows staff to be rewarded and recognized for success. Accordingly, this attention to results allows for failures to be accepted and reviewed for flaws. It is strongly recommend that punishment for failures be avoided as this will only serve to destroy faith and confidence throughout the different levels of associates and management within the organization.

Continuous Improvement

The last step in the transformation is continuous improvement. Once the projects have been successfully concluded, a post project review should be completed which should encompass the search for the next barrier. This program further serves to reinforce the importance of what was accomplished and that continued change is necessary.

Pitfalls

Many companies have attempted various lean initiatives with limited success and poor sustainability. The major reason companies do not succeed is that they find it difficult to articulate the importance of the program, its fit into the strategic direction and vision of the company, its linkage to external demand and its ability to meet internal expectations. Further, organizations often attempt transformations without sponsors, process owners, metrics, disciplined change processes or infrastructure necessary to support change. Many times, critical questions are overlooked: what is the ideal state?, can the ideal state be translated into action plans?, where do you begin and why? Is there ownership beyond the CEO-level? These items need to be articulated, tested [see Change Readiness above], and incorporated into the communication plan for the transformation.

Typically, transformations will enjoy some "quick-hit" successes as well as setbacks, while some initiatives take longer than expected. Lack of progress can often be attributed to a piece-meal, bottom-up approach or a hollow top-down mandate rather than an enterprise-wide comprehensive disciplined

Figure 4

- Ensure "no-blame" culture
- Positive, clear communications
- Staff involvement at every stage
- Agree design principles with All
- Fix the root cause not the symptom
- Incorporate Continuous Improvement
- Work through cross functional teams
- Process maps on display for comments
- Ensure solution supports departmental interfaces
- Remove non-value added steps, hand-off's, rework loops

approach. Many companies fail as result of attempting to apply the tools and techniques without understanding the rules and principles of change efforts.

Summary

To achieve lean transformation, a company must be working at the enterprise level where creating value goes beyond identifying better ways to do a distinct job. Waste must be eliminated at all levels (see figure 4) through strategic alignment of change efforts that are linked to specific, identifiable needs. The journey is accelerated through sustained knowledge sharing, innovation, open-book policies, and constant two-way communications. Successful transformation efforts can make life for a company's competition difficult, while the company reaps the benefits of being a leader, not a follower. Imagine the results that can be achieved by decreasing unit cost by 50% or attaining six-sigma quality or increasing productivity by 40% without adding staff, equipment or space.

For question or comments relating to the article or lean tools and techniques, please email authors.

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